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SUBORDINATE FINANCIALISATION: A study of Mexico and its non-financial corporations

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Thesis submitted for the degree of PhD in economics 2013

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Declaration for PhD thesis

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This thesis analyses financialisation in developing countries. Financialisation is first theoretically located within the distinctive characteristics of the contemporary world market, namely the internationalisation of the circuits of capital and the use of the dollar as world money. This context presents novel sources of funding and investment opportunities and places new demands on enterprises, banks and households.

As a consequence, characteristic sectoral transformations – the tendencies of financialisation – can be identified across advanced and emerging economies. I find that enterprises use retained earnings and market-based finance to engage in financial investment; banks exploit global pools of liquidity and draw profits from investment banking and household loans; and households have become reliant on financial intermediation, increasing indebtedness and assuming market risk. Significantly, these tendencies are not homogeneous; their particular form reflects their institutional context.

The form taken in the periphery is theorised to be subordinate, shaped by imperial relations between states. Subordinate financialisation involves the subjugation of domestic monetary policies to the imperatives of international capital; the turn of domestic corporations to global markets requiring engagement in derivatives, the assumption of market risk and the surrender of profits to foreign investors; and debt-financed consumption by an elite who seek to hold their wealth in world money.

The foundations of subordinate financialisation in Mexico lay in the state’s response to crises, and the failure to establish developmental finance. Financial statement analysis reveals that listed enterprises have turned away from banks and towards bond financing; fixed investment has fallen while investment in liquid financial assets has grown, reflecting involvement in the carry trade. Econometric evidence corroborates the financialisation postulate that the availability of different forms of financing influences firms’ financialised investment behaviour. Foreign investors have participated in the financialisation of the Mexican enterprise, while the Mexican state’s defence of their interests and those of the firms they invest in has ominous implications for development.
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This thesis is dedicated to Jude and Isla. Uh-oh…
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According to the Bank of Mexico, the external debt of private companies operating in Mexico reached 92 billion dollars by the end of 2012, a 15.4 per cent increase over the record level achieved in 2011. (Zúñiga, 2013, author’s translation)

The group of financial institutions, a majority of which are controlled by foreign firms, earned net profits last year of 87,126 million pesos, 20.6 per cent more than those of 2011 and growing at a rate five times that of the expected rate of economic growth for the same period, according to a report from the National Commission on Banking and Securities. (Amador, 2013a, author’s translation)

The payday loans of nearly half a million workers that have borrowed from commercial banks are non-performing, representing 10.21 per cent of such loans outstanding, said the National Commission for the Defence of Financial Services Users. (V. Cardoso, 2013a, author’s translation)

Industrial firms’ integration into international financial markets, record profits of banks emanating from investment banking activities and lending to individuals, and rising levels of household indebtedness: In this thesis I will argue that these are not a series of unconnected stylised facts, but systemic characteristics reflecting a structural transformation in the relations between enterprises, banks and workers. This transformation, representing the financialisation of the process of capital accumulation, has unfolded amongst the advanced internationalisation of the world market. As such, the tendencies of financialisation are global, while the form in
which they are experienced in any one time or space is contingent on an array of institutional factors. In emerging capitalist economies, such as Mexico, the particular form taken, as shaped by imperial relations, is a subordinate one. This has critical implications for investment, employment, growth and stability.

In the following section, I outline my motivation and objectives in carrying out this research and the original contributions of this thesis to academic understanding of the issues which it addresses. This demands first a brief discussion of the understanding of ‘finance’ and its role in capital accumulation which I will draw upon. In the second section, I present the research questions posed, hypotheses advanced and methodologies employed in each of the three major parts of this work.

1.1 MOTIVATION, OBJECTIVES AND CONTRIBUTION

The motivation for this thesis came from my personal experience with and academic interest in finance\(^1\) as a pivotal issue for development. I lived in Thailand during the Asian crisis of 1997-8, Argentina during the collapse which began in 2001, and the UK when the bankruptcy of Northern Rock ushered in what is now referred to as the ‘Great Recession’. In each instance, finance lay at the heart of both boom and bust, with severe consequences for people’s livelihoods. For a long time economists of disparate political orientations have agreed that finance plays a decisive role in the process of capital accumulation and its vicissitudes (for example Marx, 2004[1867]; Schumpeter, 1912; Keynes, 1930; Sayers, 1960), though this judgment has not been without its dissenting voices (for example Walras, 1954[1874]; Arrow & Debreu, 1954; Fama, 1980; Rochon, 1999). These differences of opinion over finance emanate from different analyses of the origins of finance and the role it is assumed to play.

\(^1\) Throughout this work, the term ‘finance’ (or ‘financial system’) is used as a highly abstract term encompassing financial institutions and financial capital. ‘Financial institutions’ are understood as those agents whose primary interest lies in the circulation of financial capital, including, but not limited to, the central monetary authority, commercial banks, investment banks and non-bank financial intermediaries. ‘Financial capital’ is employed here heuristically to refer to forms of capital apart from commodity capital and productive capital. This includes money-dealing capital, interest-bearing capital, loanable money capital and fictitious capital (more on these in footnote four); these forms of capital should be understood as distinct from the agents which deal in them. Finally, ‘financial capital’ must be distinguished from the term ‘finance capital’, a historically-specific term developed by Rudolf Hilferding (1981) to describe the amalgam of banking and industrial capital.
Finance pre-dates capitalism but, in parallel with the emergence of the multiple conditions necessary for the capitalist mode of production\(^2\), it assumes an expressly capitalist form. Emerging spontaneously from the circuit of capital, finance initially takes the form of merchants’ credit granted to one another, and the accumulation of hordes by capitalist producers themselves\(^3\). Banks develop as specialised money-dealing institutions that sit outside the circuit and yet are integral to it. They perform multiple functions including, but not limited to: centralising social capital through the aggregation of idle and interest-bearing capitals\(^4\); accelerating the turnover of the circuit through the specialised provision of credit; and allocating loanable money capital between capitalist producers, thereby supporting the equalisation of the rate of profit across sectors of the economy. As capitalism matures, a market is established between banks to allow them to carry out their functions on a national and eventually international scale. The central bank emerges at the apex of this system, regulating the money market, standing at the confluence of capital and the state, and intervening on behalf of the interests of national capital in the development of the world market.

From these various functions emerges the influence of the financial system over the pace and direction of capital accumulation, and hence its attraction to governments as a lever of power. At the same time, from the outset there exists a tension between finance and industry. Finance earns a share of the total surplus value generated by industrial capital in the sphere of production. While the malleability of financial capital gives it its power to expand the process of

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\(^2\) These include, but are not limited to, the alienation of the working class from the means of production, the subsumption of labour to capital, the development of the forces of production, and the presence of money.

\(^3\) This understanding of the emergence and development of finance draws heavily upon the work of Lapavitsas (1999; 2003, 2013).

\(^4\) Within a Marxian framework, I draw upon the work of Lapavitsas (1999; 1997, 2000, 2013) in my understanding of the various forms of financial capital. Money-dealing capital, which develops into banking capital, performs integral services for the sphere of circulation, such as account-keeping, holding deposits, transferring funds, etc. For this it receives the average rate of profit obtained by commercial and industrial capital. Interest-bearing, or loanable money capital, both gathers idle funds outside the circuit of capital and creates new liabilities endogenously within the credit system. These it directs towards productive and non-productive activities and consumption. It earns a share of total surplus value, but, unlike money-dealing or banking capital, it earns interest rather than the average rate of profit. Fictitious capital refers to the advance of money capital in anticipation of future surplus value production rather than representing already realised surplus value; it is remunerated by a discounted stream of future revenues.
accumulation and accelerate the turnover of capital, thereby indirectly contributing to the generation and realisation of surplus value, it may also give rise to speculative bubbles in economic activity and even outright ‘predation, fraud and thievery’ (Harvey, 2003, p. 147). This pro-cyclical and predatory behavior can damage the prospects for surplus value creation.

According to this understanding of finance, the critical question for development is not how to deepen financial markets per se, but rather what is the appropriate form and size that finance should take, and what are the appropriate functions that it should serve? I want to pose these questions not only because of their importance for accumulation and economic growth, but also because of their influence over a range of real outcomes including wages, employment, levels of inequality and environmental sustainability.

Finance is therefore a critical issue for development. This is how I approached the phenomenon of financialisation, or, as it is broadly characterised, the “… increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and the international economies.” (Epstein, 2005, p. 3) From this perspective, the extant scholarship on financialisation exhibits three major weaknesses. First, the literature limits its focus to a handful of advanced capitalist economies, and either explicitly or implicitly places financialisation within the pro-crustean container of the nation-state. Second, the literature dichotomises the interests of predatory finance against those of the ‘real’ economy, and focuses on flows of capital from the latter to the former. Third, the rise of finance is ascribed to policy errors, or a bureaucracy which has been captured by a financial elite, often described as a rentier class.

In contrast to this, my objective is to assess whether and how financialisation is occurring in the periphery. This demands, first, a global theory of

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5 In an international context, the ‘core’ is normally used to indicate the advanced capitalist economies of Western Europe, the United States, Canada and Japan. These economies are traditionally associated with higher-profit, higher-technology, higher-wage, and more diversified production. The remaining countries form the ‘periphery’, trapped in lower-profit, lower-technology, lower-wage and less diversified production. Some authors (Marini, 1972; Wallerstein, 1976) have argued that hegemons in each region, such as Mexico, Brazil and South Africa form a semi-periphery, having characteristics of both core and peripheral economies. Within the core itself, regions such as Southern and Eastern Europe are often said to form a periphery (Lapavitsas et al., 2012). For the purposes here, these terms are to be understood as indicators of countries’ relative place in relation to global production chains and financial markets, and not as teleologically-derived or static categories.
financialisation; second, an understanding of the impact of core-periphery relations on that theory; and, third, rigorous investigation of the empirical purchase of this theoretical framework in emerging capitalist economies. In support of the formulation of such theory, I employ an understanding of finance which, while in tension with industry, sees it as integral to capital accumulation and, far from serving as a residual pool of capital, possesses its own distinctive and coherent institutions and imperatives. Finally, while I acknowledge a critical role for policy, I want to explore the structural dynamics of financialisation.

In this thesis, I make three original contributions to the field. First, I develop a global theory of financialisation which locates the phenomenon within the contemporary characteristics of the world market. This will allow the elaboration of the essential tendencies of financialisation, to be distinguished from the varying forms it may take reflecting specific institutional configurations. Second, I argue that as a global phenomenon, financialisation must reproduce the hierarchies of imperial relations, resulting in a distinctive form of financialisation in the periphery, which I have called subordinate financialisation. While incorporating the essential tendencies of financialisation as witnessed in the core, financialisation in the periphery will exhibit distinctive characteristics. Third, in support of these arguments, I provide original empirical evidence of the tendencies and forms of financialisation across both advanced and emerging capitalist economies. The highlight of this is a detailed study of the financialisation of the non-financial corporation in Mexico using financial statement analysis and innovative econometric techniques.

1.2 RESEARCH QUESTIONS, HYPOTHESES AND METHODOLOGY

This thesis is organised in three parts. Before the first part begins, chapter two is devoted to an elaboration of both the broader methodology and the specific methods adopted. I will argue that the problems which this thesis addresses demand the use of critical political economy; within this methodological framework, empirical investigation of the specific research questions addressed has required the analysis of
national accounts, historical analysis of class relationships, and the application of econometric techniques to firms’ financial statement data.

In the first part of the thesis, comprising chapters three and four, I assess the literature and set out a general theory of financialisation in a capitalist world market; this theory is supported by original empirical analysis of financialisation in advanced capitalist economies (ACEs)\(^6\). In the second part, chapters five and six, I turn to the development of a theory of financialisation in the periphery, or subordinate financialisation, and assess empirical evidence from a survey of emerging capitalist economies (ECEs), with a focus on Mexico. The third part, covering chapters seven to nine, descends from the higher level of abstraction of the previous chapters to account for the institutional specificities of financialisation in Mexico, with a focus on the non-financial corporation. Each of these parts addresses a particular set of research questions, advances distinctive hypotheses and employs a variety of methods. I turn to these now.

### 1.2.1 Financialisation in a capitalist world market

The extant literature, examined in chapter three, fails to address financialisation as a global phenomenon. Instead financialisation has been investigated as if it emerged out of the conditions of the nation-state, predominantly in the countries of the core. This emergence is linked causally either to policy decisions taken under the influence of a rentier class, or to inadequately specified structural forces. In contrast, my hypothesis is that financialisation is a global phenomenon reflecting an epochal transformation in the relations between the agents of capitalism and located within the contemporary characteristics of the world market\(^7\). Therefore, I expect to see the essential tendencies of financialisation reproduced across a range of countries, but taking on distinctive forms related to specific institutional configurations.

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\(^6\) I use the terms ‘advanced capitalist economies’, or ACEs, and ‘core countries’ interchangeably. Similarly, ‘emerging capitalist economies’, or ECEs, and ‘peripheral countries’ are intended to refer to the same group of countries. This avoids the increasingly anachronistic term ‘industrialised economies’ and the problematic differentiation of countries according to income levels (‘high-income’, ‘medium-income’, etc.). See footnote five.

\(^7\) The concept of the world market is discussed in detail in chapter three.
Chapter 1 *Introduction*

The stagnation of accumulation and falling profitability experienced in the economies of the core in the 1970s provided the conditions from which these states and their constituent capitalist classes were able to advance a neo-liberal agenda, marked by the liberalisation of trade and financial flows, and the repression of labour. The ensuing period of development of the world market has been characterised by the deepening of the internationalisation of the circuits of commodity and money capital, the unprecedented internationalisation of the circuit of productive capital, and the role of the US dollar as world money. It is important to note that these characteristics of the world market are distinct from those which prevailed during previous periods of financial expansion.

The work of Lapavitsas and the *RMF School* (for example 2009a, 2011, 2013) has revealed how transnational corporations have exploited these conditions to access a growing global pool of liquidity that has itself been fed by pension privatisation and financial deregulation. As a result, enterprises have replaced external financing from commercial banks with the issuance of market-based securities, and acquired the capacity to engage in both hedging and speculative financial investment. Banks have become increasingly active in international capital markets, and have compensated for the decline in their traditional commercial loan portfolio with an increased role in investment banking activities and the intermediation of household reproduction. In combination with wage repression, this has led to increasing household indebtedness in an attempt to maintain living standards.

From this theoretical framework, in chapter four I construct innovative sectoral indicators – using national accounts, banking and industrial data – that capture the presence of the tendencies of financialisation. What emerges from the application of this analysis to a selection of advanced capitalist economies is, first,
that firms across the sample are turning away from finance through relationship lending and towards retained earnings and market-based finance, and re-orienting their business to hold a greater share of financial relative to fixed assets. These trends are particularly pronounced in large enterprises. Second, banks have moved to a smaller loan share of assets, shifting from income on long-term interest spreads to short-term spreads on repo markets and fees on investment banking activities. Within the loan portfolio, there has been a pronounced shift to lending to households and for real estate. The banks’ source of finance has moved from traditional deposits to short-term borrowing from the money market, especially from other financial institutions. Within this overall story of convergence, Japanese and German banks retain a distinctive character, though evidence is provided of the financialised path taken by large German banks. Third, in the household sector, Japan and Germany stand apart from the general trend towards falling deposits and increased holdings of market-based securities. Housing loans account for three quarters of liabilities in the US, the UK and France; while in Germany and Japan, though the trend is rising, housing loans still only represent half of household liabilities. These differences reflect variations in industrial policies, pension and housing provision and the organisation of finance in these countries.

1.2.2 Subordinate financialisation in the periphery

The literature has only begun to investigate financialisation in the emerging capitalist economies. As far as I am aware, there is as yet no theory which coherently accounts for the distinctive nature of financialisation in the periphery. Drawing upon the theoretical foundations that are established in chapter three, I argue in chapter five that as financialisation is a global phenomenon located in the contemporary characteristics of the world market, and since the world market is itself moulded by imperial relations, I expect financialisation to take a subordinate form in countries of the periphery.

At the macroeconomic level, subordinate financialisation will not be reducible to the quantity or direction of capital flows at any one time, but discernible by the volatility of these flows and the subjection of domestic monetary policy to the
imperatives of international capital markets. The characteristic turn of large non-financial corporations towards market-based finance in advanced capitalist economies will see firms of the periphery turn disproportionately to foreign capital, allowing the extraction of a share of the domestically-generated surplus. Globally-integrated firms, operating from open economies which do not issue world money, must participate in derivatives markets and will come under increasing competitive pressure to assume speculative positions in a range of financial assets. As in advanced capitalist economies, banks’ tendency will be towards greater reliance on international money markets, and a turn towards lending to households. They are subject to increased price risk, while the macroeconomic impact of lending to households will be limited by the distinctive class structure of ECEs. The turn of corporations, both financial and non-financial, to international capital markets may hold back the development of the domestic financial sector, dependent on state-capital relations. Finally, as in advanced capitalist economies, it is expected that financialisation in ECEs will be marked by households’ increasing indebtedness accompanied by rising holdings of financial assets. This will be distinguished by the markedly different class structure in ECEs, and the desire of wealthy households to hold a greater share of their assets denominated in world money.

In chapter six, I deploy similar techniques to those used in chapter four, in constructing indicators of financialisation for a sample of emerging capitalist countries, including Brazil, South Korea, South Africa, Thailand and Turkey\(^\text{12}\). National accounts, banking and industrial data are drawn upon; a range of additional data sources\(^\text{13}\) are accessed to provide further insight into the particular transformations of the Mexican economy.

At the macroeconomic level, the footprint of the financial sector as a share of economic activity and profits is rising across the sample, with the exception of Thailand in the wake of the 1997 financial crisis. While similar in trend, the

\(^{12}\) The choice of countries is meant to be indicative of trends in emerging capitalist countries, and not a statistically representative survey. It encompasses two countries from Latin America, two from East Asia, one from Africa and one from Central Asia. By income, four of the countries are classified as upper middle income, while Thailand is considered lower middle income and Korea high income.

\(^{13}\) These include: IMF balance of payments data; the *Orbis* database of listed firms’ financial statements; Bank for International Settlements’ tables on cross-border banking claims; data from the Banco de México (Banxico) and the banking regulator, the Comisión Nacional Bancaria y de Valores (CNBV); and the Mexican national statistical office (INEGI) household survey results.
financial sector in Mexico has the smallest footprint in terms of its level. A number of indicators are presented which support the hypothesis of subordinate financialisation in Mexico. These include the volatility of real net capital flows and the increase in deposits held abroad since 2000.

Establishing the tendencies of financialisation in the non-financial corporate sector is made difficult by the absence of national accounts data in levels in virtually all emerging capitalist economies. Looking specifically at Mexico, preliminary evidence is provided to suggest that loans are falling in relative importance as a share of external funding, while financial investment is increasing in importance relative to fixed investment. The subordinate nature of the financialisation of the Mexican non-financial corporation is indicated by the increasing reliance on foreign capital.

Data is more readily available for the banking sector in ECEs, where the tendencies of financialisation in advanced capitalist economies are echoed. There has been a modest decline in the share of deposits in total liabilities since 2000; in Mexico there has been increasing reliance on foreign funds. On the asset side, with the exception of Turkey, banks across the sample have witnessed commercial lending levels stagnate or fall. In Mexico, a fall in lending to central government has been compensated by an increase in consumer loans. The share of total interest income derived from this consumer lending has risen from insignificance to over fifty per cent in the last decade. Like their non-financial counterparts, Mexican banks have become heavily engaged with derivatives markets, and submit a significant portion of their profits to non-resident shareholders.

Finally, in the household sector, the tendency of increasing household indebtedness as a share of income is repeated across the sample after 2000. Mexico follows the trend but from the lowest level. Increasing indebtedness in Mexico has been accompanied by a falling wage share and the assumption of greater market risk with increasing flows into market-based pensions. I provide evidence that while Mexico is undergoing a particular form of financialisation, it is nonetheless under-financed by orthodox measures. However this should not be seen as a paradox, but characteristic of subordinate financialisation.
1.2.3 Financialisation in Mexico

Research into financialisation in Mexico is in its infancy. Initial examples have emphasised linkages with deficiencies in the productive sector (Correa, Vidal, & Marshall, 2012), the nature of the integration of the Mexican economy into the world economy (Levy-Orlik, 2012), and the fusion of domestic and foreign capital in the interests and actions of the Mexican state (Marois, 2012). In chapters seven to nine, I contribute to this literature by pursuing the hypothesis that what is unfolding in Mexico is in fact a form of subordinate financialisation. In order to understand why financialisation has taken the form that it has in the Mexican context requires recourse to the analysis of inter- and intra-capitalist relations. In chapter seven, particular attention is paid to the historical transformations of bank-firm relations, the relation of Mexico’s capitalist classes with the state, and their place in relation to the world market.

Through periods of bank nationalisation, re-privatisation and eventually ‘extranjerización’, bank-firm relations in Mexico have been dysfunctional for national development. As a result, the characteristic turn of large non-financial corporations to international and market-based finance in the contemporary period has been done from a position of weakness. Smaller firms remain reliant on retained earnings and the internal capital market. This has created a bifurcated funding structure which limits the growth potential of the endogenous credit cycle, distributes rather than expands existing domestic wealth, and surrenders a portion of the domestic surplus to foreign financial capital. This structure has facilitated financial profits through the accumulation of both public and private fictitious capital, but has failed to stimulate fixed investment and employment.

The Mexican state has facilitated these behaviours through its management of crises in the 1980s and 1990s, by enabling reliance on non-productive accumulation, and pushing aggressive financial and trade liberalisation measures. Macroeconomic policies designed to attract foreign capital, requiring high interest rates and an over-valued exchange rate, undermined the dynamism of the domestic market. The structural subordination to foreign capital allied with a domestic elite, has left the economy vulnerable to volatile portfolio flows and burdened with trade deficits owing to its place in production chains led by US corporations. The transfer of the
ownership of the banking system has allowed foreign shareholders to claim an increasing share of domestically-generated surplus.

In chapters eight and nine, I investigate the hypothesis that the financialisation of the Mexican non-financial corporation will share the tendencies exhibited in advanced capitalist economies, but with distinctive features owing to the subordinate nature of financialisation in the periphery. My focus is on the non-financial corporation for two reasons. First, Marxian theory places emphasis on the sphere of production as the locus of the creation of surplus value, and therefore the driver of capital accumulation in the first instance. Large corporations are the institutional embodiment of industrial capital in the contemporary era of monopoly capital. Second, as the analysis in chapters six and seven reveals, the financial sector in Mexico is under-developed and has had a dysfunctional relationship with industrial capital. This suggests that study of the non-financial sector be prioritised.

To this end, in chapter eight, I carry out an original, exhaustively detailed examination of the financial statement data of listed non-financial firms. I find that in the 2000s, listed non-financial corporations have satisfied external financing requirements through long-term bond issuance rather than bank borrowing. On the asset side, fixed investment has fallen, while holdings of highly liquid financial assets, derivatives and intangibles have increased substantially. Evidence is provided that the holdings of liquid assets indicate participation in the carry trade, refuting the assertion that access to deeper financial markets will necessarily result in more efficient capital allocation. Dependency on foreign capital inflows has committed the Mexican state to a strong peso policy and low inflation anchored by the domestic interest rate. On the back of these commitments, large corporations have adopted profitable strategies to exploit the availability of cheap international funding and invested these funds in domestic financial instruments. The participation of foreign investors in this behaviour marks it out as a symptom of subordinate financialisation; the increase in Mexican non-financial corporations’ investment in financial assets between 2000 and 2011 coincides with a dramatic rise in the purchases of Mexican securities by US residents.

Finally, in chapter nine, I deploy innovative econometric techniques of panel time series analysis to address the question of whether access to cheaper funding from international investors on bond markets is inducing Mexican firms’ investment
in liquid assets. This is a key assertion of the theory of financialisation presented in this thesis, namely that transformations in firms’ funding opportunities have altered their investment behaviour. On balance, the findings suggest that an increase in the ratio of financing received from long-term bonds is more influential on the cash holdings ratio than the availability of internal funds. It appears that the change in the availability of funding opportunities has permitted firms to increasingly act as balance sheet managers. The distinctively subordinate nature of this behavior is down to its reliance on and surrender of tribute to, international financial capital, and its vulnerability to changes in the relative value of the domestic currency vis-à-vis world money.

While I have not set as one of my objectives the delineation of the consequences of financialisation for real economic variables, the final chapter draws out a number of inferences which flow from the analysis. These suggest that financialisation in the periphery threatens both fixed investment and the establishment of a developmental system of finance. State policies designed to defend strategies of financial accumulation are both costly to maintain and ultimately detrimental to growth and stability. The Mexican economy is characterised by low levels of investment and growth and high levels of underemployment and inequality. For these reasons, there is an urgent need to re-consider the accepted wisdom of ‘financial deepening’ which has guided the development of finance for the past forty years. New thinking is needed about how to harness finance for equitable and sustainable development.
Chapter 2

Methodology

2.1 INTRODUCTION

While methods can be understood as particular tools or techniques, methodology refers to “… a combination of techniques, the practices we conform to when we apply them, and our interpretation of what we are doing when we do so.” (Olsen & Morgan, 2005, p. 257) Methodologies have embedded assumptions about the nature of reality and human behaviour (ontology) and the way that social reality can be understood and truth claims made about it (epistemology). Significant debate exists, both across the physical and social sciences, and more narrowly within the economics discipline, over whether particular methods presuppose particular methodological assumptions (for example Lawson, 2003).

This thesis is based on the premise that specific methods of analysis are not ineluctably linked to a particular methodology. This allows for the possibility that different methods, through the transformation of their practice and interpretation, can be combined in analysis (Downward & Mearman, 2007). Andrew Sayer (2000) has argued that with such a mixed method approach the key issue is to match the chosen methods with an appropriate level of abstraction and with the material under investigation; that is the challenge confronted in this work.

In this thesis I make original contributions to both the theoretical and the empirical understandings of financialisation. I develop a global theory of the tendencies of financialisation which embeds them within the contemporary characteristics of the world market, and outline the specifically subordinate form that
financialisation may take in the periphery. I attempt to capture empirically the
tendencies and forms of financialisation across advanced and emerging capitalist
economies, and document the phenomenon as it is manifest in Mexico, with
particular attention paid to the financialisation of the non-financial corporation. The
formulation of a middle-range theory of subordinate financialisation requires a
theorisation of the agents of capitalism, and their changing relationship with each
other, the state and the world market. Immanent in this is an understanding of power
and its exercise across space and time. The empirical investigation and specification
of the concrete manifestations of subordinate financialisation in the Mexican setting
demand the exploitation of a variety of data sources and analytical tools that are
available at the international, national and sub-national levels, and the integration of
different sectoral vantage points. For these tasks, a mixed method approach, unified
within a framework of critical political economy, is most appropriate.

This chapter will begin by contrasting the central methodological tenets of
critical political economy against its classical and neoclassical variants, showing how
the former is what is required to address the problematic posed by this research. In
the subsequent section of the chapter, I will describe the specific methods which
have been adopted in this thesis and their relationship to the broader methodological
framework of critical political economy. This will involve a discussion of: the
political economy of national accounts and the nation-state; the use of historical class
analysis; and econometric analysis as applied to the financial statement data of the
firm.

2.2 THE METHODOLOGIES OF POLITICAL ECONOMY

Different strands of political economy have adopted a variety of methodologies,
sometimes in agreement and other times at odds with one another. In the works of
seminal authors such as Adam Smith (1910[1776]) and David Ricardo (1971[1817]),
classical political economy constituted the study of production and exchange, their
relationship with the state, and the distribution of wealth. While methodological
assumptions were rarely made explicit (Blaug, 1980, p. 56), the classical political
economists presented their work as objectively materialist. They believed, first, that
an objective understanding of the reality of the human condition was possible, and, second, that it could only be gained through an analysis of the material conditions of the world around them. However, contradicting these beliefs was a certain ontological essentialism in the form of a postulated eternal human nature existing outside of particular material conditions. Human society was seen as a mirror of the natural world, obeying its own metaphysical laws. Famously, this is reflected in Smith’s caricature of man’s inherent ‘propensity to truck, barter and exchange’ (1910[1776]).

In terms of epistemology, the classical political economists associated themselves with the empiricists. Following in the tradition established by John Locke (1998[1690]), and as contemporaries respectively of David Hume (2003[1739]) and John Stuart Mill (1859), Smith and Ricardo believed that truth claims arise out of sensory experience. However, it can be argued that this perception too was in tension with that part of their work which followed a deductive method, starting from general propositions about human nature and moving towards concrete hypotheses about specific behaviour. This tension would be resolved in the neo-classical school through the articulation of empiricism in the method of hypothetico-deductivism.

In their support for a labour theory of value, the classical political economists showed themselves to be epistemological essentialists; that is, they looked for inner essences of social relations, the elucidation of which could not be grasped by the mere examination of surface phenomena. They practiced a form of linear and logical abstraction from the concrete to the conceptual. This would be abandoned by neo-classical economists in favour of nominalism, or the acceptance of the accidental or contingent as explanatory ends in themselves.

As with the classical political economists, so too Karl Marx devoted little time to the exposition of his method (Sayer, 1987, p. 1; Schmitt, 1988, p. 441). However, from a broad reading of his work it becomes apparent that Marx’s critique of classical political economy marked a break from some of its methodological underpinnings, while remaining consistent with others. With the classical political economists, Marx shared an objective materialist ontology. Marx’s worldview was premised on the notion that the fundamental human motivation lies in social reproduction, to which labour is the defining component: “… men must be in a
position to live in order to be able to ‘make history’ … the production of material life itself… ” is “… a fundamental condition of all history” (Marx & Engels, 1968, p. 39). With his emphasis on social reproduction, Marx suggests that the forces and relations of a particular mode of production have primacy in explaining social systems (Callinicos, 2004, p. 40). This is not to deny in any way human agency, for famously according to Marx, “Men make their own history, but they do not make it as they please; they do not make it under self-selected circumstances, but under circumstances existing already, given and transmitted from the past.” (2009, p. 9)

Unlike his classical predecessors, Marx was not an ontological essentialist. True to his materialist grounding, Marx’s analysis was rooted in the historical specificity of the object of his analysis, namely the capitalist mode of production. Capitalism is a class-stratified social system marked by the exploitation of the labourer by the owner of the means of production. Central to historical materialism is the appreciation that analysis of the relations between capitalists and labour, and between different fractions of the capitalist class, provides indispensable insight into complex social phenomena. This is reflected in this thesis both in the use of the case study method more generally, and in the deployment of both qualitative and quantitative analysis of changing class relations more specifically.

While Marx was assiduously empirical, as can be observed in his meticulous examinations of trade flows, input-output tables and the like, he was decidedly not empiricist (Paolucci, 2011, p. 47). His essentialist epistemology (not to be confused with his non-essentialist ontology) was marked by a search for the essence of phenomena. In contrast to the classical political economists’ belief in linear logic, Marx believed that this essence could only be discovered through a combination of inductive and deductive method, abstraction, and the dialectical process. This thesis will use a variety of techniques in its attempt to distinguish the essential tendencies of financialisation from both counter-tendencies and differences related to institutionally-specific forms.

Importantly, Marx’s epistemology demands that the social world be understood in its dynamic totality. Abstraction may be employed to focus in on a

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1 Critics of Marx view this assertion itself as a form of metaphysics (Carlson, 2000).
2 Whether or not Marx’s method is able to overcome the problems which plague either purely deductive or purely inductive method is a point of some contention (Carlson, 2000).
particular aspect of this totality from a certain vantage point, but this abstraction must always be understood in its relation to the larger whole. In contemporary terms, this places Marx within the ‘open system’ perspective, one shared with other strands of what might be termed ‘critical’ political economy. Open systems methodologies reject the central positivist thesis that causal relations can be directly drawn between variables in complex social systems. In Marx’s work, the notion of causality itself is replaced with that of tendencies and counter-tendencies, the essence of which may be obscured by contingent phenomena.

Marx shared some of the methodological underpinnings of classical political economy and shed others. However, Marx’s work anticipated a much wider break with subsequent methodological developments in the discipline of neoclassical economics, as first developed in the foundational work of Carl Menger (1950[1871]), Léon Walras (1954[1874]), William Jevons (1875), and Alfred Marshall (1890) and culminating in the work of Kenneth Arrow and Gérard Debreu (1954). This is not to suggest that Marxian political economy rejects outright all aspects of neoclassicism’s underlying methodological positivism. As argued cogently by Paul Paolucci (2003), while Marx was against positivist tenets such as universal laws, predictive theory, a priori conceptualisation, and individualistic reductionism, he supported the use of abstraction, controlled comparison and quantitative and deductive analysis where appropriate.

Unlike classical political economists, neoclassical economists have attempted to break from the other social sciences through claims to superior scientific methodological rigour, and then, more recently, colonise these same disciplines with the methods developed since the marginalist revolution (Fine & Milonakis, 2009). The methodological foundations of neoclassical economics are ill-suited to the problematic of this thesis. Neoclassical economics stakes a claim to ontological realism, as against either idealism or subjectivism. However this claim is undermined by its ultimate recourse to the ‘black box’ of subjective utility functions as the prime determinant of economic interaction. From classical political economy, neoclassicism adopts its essentialist view of human nature as eternal; in its extreme form, all structural constraints on human behavior are abandoned in favour of a purely atomistic and instrumentally rational portrayal of human agency.
This ontology is the basis for a ‘closed systems’ epistemology. The method of hypothetico-deduction sees the formulation of predictive hypotheses from universal laws regarding human nature and social interaction. Complex social phenomena are understood as aggregations of their constituent, independent parts. Manifestations of these variables are believed to be directly observable through their phenomenal appearances. Therefore, the hypotheses can be tested, and the general propositions they support either verified or falsified, reflecting a crude version of the positivism of Karl Popper (1959)\(^3\). This epistemological foundation has enabled the application of increasing mathematical formalism rooted in the assumption that social phenomena always and everywhere tend towards a general equilibrium. In sum, neoclassical ontology and epistemology are anathema to the aims of this thesis, which seeks to distinguish between tendencies and counter-tendencies, and locates the complex phenomenon of financialisation within the social relations of a particular historical epoch and spatial hierarchy.

2.2.1 A short note on dialectics and abstraction

While there is general agreement that Marx’s dialectical method emerged from his study and critique of Georg Wilhelm Hegel’s dialectical idealism (1964 [1807]) via Ludwig Feuerbach’s materialism (Feuerbach, 1972 [1839]), there is great debate as to its precise content and import. Since this is not a thesis in philosophy, in what follows I rely considerably upon the understanding of Marx’s use of dialectics and abstraction as presented by Bertell Ollman (2003).

Dialectical thinking replaces the study of ‘things-in-themselves’ with that of things which are inherently understood to also be part of both processes and relations. A *process* contains both its past and its future; *relations* contain within themselves their ties to other relations. This is important for the present study for a number of reasons. First, financial capital is not understood in this thesis as a mass of wealth, or increased profits held in the form of financial assets by a bank. Rather

\(^3\) It is important to note that this neglects subsequent attempts even within the positivist tradition itself to nuance Popperian falsification in the wake of the Duhem-Quine problem (Lakatos, 1970), which states that no hypothesis can be definitively falsified since it must be tested in conjunction with auxiliary conditions. This is aside from developments outside of the positivist tradition (Kuhn, 1962).
it is seen as process and relation *simultaneously*. It is both an integral part of the ceaseless process of accumulation, its form in constant flux following the requirements of continued accumulation, and an expression of the constantly evolving relationship both between fractions of the capitalist class and between capital and labour more generally. In this understanding, financial capital can not be located within simple dichotomies between productive and unproductive, or between industrialists and *rentiers*.

As both a method of inquiry and exposition, dialectics does not seek to go back to ‘first causes’ for the purposes of predictive power. Much of the critical scholarship on financialisation seeks to root the increasing profitability of the financial sector in such policy-induced changes as increased shareholder value orientation (Lazonick & O’Sullivan, 2000) or the impacts of pension privatisation (Toporowski, 2000). While valuing such efforts, a dialectical approach recommends that ‘causes’ should be understood in the specific context from which they emerged (often that of the United States in this case), and might themselves have been immanent in the conditions which preceded their emergence. Where complex social systems are the subject matter of inquiry it is more powerful to consider numerous factors and relationships that may determine (or over-determine) the phenomena of interest. Description of these factors and clarification of their inter-relationships provides significant insight without artificially introducing simple causality.

Against those who would argue that financialisation can only be a temporary cyclical phenomenon, dialectics offers the possibility that the quantitative change which characterises cyclical phenomenon can, at a certain point, result in qualitative systemic transformation. Michael Williams argues that supercession is latent in cyclical development, pointing to the “… imperative to investigate the conditions under which systemic transformation might occur” (2001, p. 567). This points to the need to examine the underlying changes in social relations which have emerged from a succession of liberalisation measures to examine at what point a systemic transformation in capitalism might occur. This transformation is discussed at a more general level in relation to advanced capitalist economies in chapters three and four, and in more detail in the Mexican case in chapters six and seven.

Dialectical thought emphasises that the interconnections between different relations of the capitalist system must be understood in their interdependence with all
other relations. This interdependence is the ‘whole’ or the ‘totality’ in which the relations must be conceptualised. The totality itself is, of course, not knowable, but it expresses itself through its constituent relations. Applied to the present analysis, this suggests that transformation in financial capital in one context must be placed within an understanding of changes in the broader capitalist system. This commends a theorisation of financialisation in the context of the world market, which will be discussed subsequently. Importantly, awareness of the whole does not imply that there is homogeneity in relations and processes; in unity there is distinction. While this study posits an underlying essence of financialisation, it acknowledges differences in its manifestations, since they are reflected and refracted through different institutional contexts.

It is in this spirit that the case study country, Mexico, is analysed in relation to the broader unfolding of financialisation. This approach enriches the understanding of what is happening in Mexico, but equally an understanding of what is happening in Mexico deepens the understanding of the broader process. Philip McMichael describes this method as ‘incorporated comparison’, "... in which inter-related instances are integral to, and define, the general historical process ... the particulars directly realise the general..." (1990, p. 389) If financialisation is understood as a process emerging out of the productive and financial integration of emerging capitalist societies and successive and ever more deeply penetrating rounds of the liberalisation of capital, then the Mexican experience should be seen as a 'moment' of this process, as the particular with the power to reveal the general.

Abstraction, as defined by Ollman (2003), is both a verb for the mental activity of sub-dividing the world in to manageable parts in order to better understand it, and a noun representing the results of this process of sub-division. Marx’s method starts from the ‘imagined concrete’, that is the given world of phenomenal forms, and proceeds through abstraction to capture the essential relations which explain these forms, ending back at the ‘thought concrete’, that is how the whole is understood in the mind. The process of abstraction, of setting the boundaries of investigation, is critical in determining which relations will be emphasised and how they will be understood.

As dialectics require that social phenomena be understood as dynamic, that change is a part of what things are, abstraction serves to isolate particular temporally-
isolated moments or spatially-isolated forms. This is in stark contradiction to the understanding in neoclassical economics that social phenomena always and everywhere tend towards an equilibrium.

Ollman describes three modes of abstraction:
- Extension – abstracting boundaries in space and time;
- Generality – abstracting from most specific (the person) to the most general characteristics (natural world); and
- Vantage point – abstracting to the viewpoint of different places within a relation.

In this work, spatial abstraction will by necessity shift from nation-states to the world market and then back to a chosen nation-state within that world market, its analysis reflecting what was learned at the global boundary. The contemporary Mexican experience is understood as a moment of the global unfolding of financialisation. The temporal boundary of primary interest is the last decade in emerging-capitalist countries, but to understand this period, it will be necessary to extend the analysis to the period of post-war capitalism. Abstraction in the level of generality will be limited primarily to Ollman’s level two, that is “… what is general to people, their activities, and products because they exist and function within modern capitalism.” (2003, p. 88) Some space, particularly in chapter seven, is devoted to level one, the influence of particular individuals on the relations of interest. Abstraction to the differing vantage points of non-financial corporations, financial firms and households will be a central theme of this work.

### 2.3 SPECIFIC METHODS EMPLOYED

While critical political economy should reject empiricism’s mystification of phenomenal essences in outward appearances, it must nonetheless employ rigorous empirical methods of investigation. Concrete data are critical for understanding processes and relations, selecting the appropriate mode of abstraction, and specifying the move from the imagined concrete to the thought concrete. For present purposes, empirical analysis is required in order to grasp and specify the contingent from the determinant in the phenomenon of financialisation, and to avoid falling into the trap of purely deductive supposition.
In this thesis, three different methods of empirical analysis are employed. First, national accounts data are analysed in chapters four and six in order to evaluate the theory of financialisation as outlined in chapter three and its subordinate form developed and elaborated in chapter five. Second, inter- and intra-class relations will be examined in chapter seven to provide an understanding of why the phenomenon appears in the form that it does in the Mexican context. Finally, chapters eight and nine are concerned with specifying the transformation of the behaviour of the financialised large Mexican firm. This demands careful analysis of financial statement data, including the use of econometric techniques. While only the second method is by definition a method of critical political economy, I will show in what follows that the other two methods, often mistakenly associated with Keynesian and neoclassical political economy respectively, can be interpreted in ways consistent with the broader methodological framework of critical political economy.

2.3.1 The political economy of national accounts and the question of the nation-state

The System of National Accounts

Chapters four and six employ sectoral analysis based largely on data from the System of National Accounts (SNA). The SNA is divided into a set of current accounts which detail flows in the current period, and the accumulation accounts which identify investments in real and financial assets whose lifespan extends across periods. The difference between net savings in the current period and investment in real assets must be financed by changes in financial assets (incurring liabilities), with the latter enumerated in the financial accounts

The accounts are divided into four domestic sectors (households, financial corporations, non-financial corporations and government) and a sector representing the rest of the world. By construction negative balances for the domestic economy

4While the financial accounts show changes in assets and liabilities by sector, so-called flow-of-funds tables, where sufficient data is available, go one step further to identify for each instrument which sector is the creditor and which the debtor (European Commission, IMF, OECD, United Nations, & World Bank, 2009).
must be offset by positive balances for the rest of the world account (and vice-versa). Similarly by construction, the sum of the sectoral domestic balances must equal that for the domestic economy as a whole. Each of the four major domestic sectors is further disaggregated into sub-sectors\(^5\).

The current account matches, on the one hand, revenues generated by the production of goods and services and, on the other hand, the income received for this production in the form of wages, interest, rent, and profits (and how this income is re-distributed in the form of taxes, transfers, etc.). From this figure for total output/income, final consumption is subtracted to arrive at a figure for net savings. The capital account next calculates total capital formation as fixed capital investment in construction, machinery and equipment, less consumption of fixed capital (depreciation), variation in inventories, and the acquisition/disposition of assets. The difference between net savings and capital formation gives net borrowing. The financial account describes changes to financial assets, divided into eight categories\(^6\); changes in these assets cover both the gap between investment and savings in the current period, as well as additional investment in financial assets as an end in themselves.

The SNA was developed during wartime Britain to provide a basis for the formulation of war budgets (Hartwig, 2006). It took shape at a time when the Keynesian view that output is determined by aggregate demand was dominant. Hugo Radice (1984) argues that national accounting also in part reflects John Maynard Keynes’ view of the importance of the self-sufficiency of the sovereign state\(^7\) – an empirically justifiable view for the period from 1930 to 1950 when trade retreated as a share of output – and therefore its appropriateness as a unit of analysis. Use of the SNA spread as post-war economic growth unfolded, and has become

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\(^5\)The household sector is divided into households and non-profit institutions serving households; Government is divided into central, state and local government; financial corporations are divided into nine sub-categories including the central bank and depository institutions; non-financial corporations are divided into private and public corporations.

\(^6\)Gold, deposits and legal tender, securities, loans, equities, insurance and pension funds, derivatives and other accounts payable.

\(^7\)Radice quotes from Keynes’ paper *National Self-sufficiency*: “… economic internationalism embracing the free movement of capital and of loanable funds as well as of traded goods may condemn my own country for a generation to come to a much lower degree of material prosperity than could be attained under a different system.” (Keynes 1933, 762-3)
entrenched through the efforts of a number of UN agencies and a series of revisions over the subsequent decades.

The SNA offers a number of significant analytical insights. It provides the analyst a view of the whole economy, the internal interactions of its constituent sectors, and its relationship with the rest of the world. By design it draws attention to both stocks and flows, and both assets and liabilities. This contrasts markedly with neoclassical models which often neglect the impact of financial wealth (or debt) or heterodox theories on the rise of finance which neglect the two-sided nature of the balance sheet. Accounting identities, by definition, provide data which is free from causal inference.

Nonetheless, the SNA is subject to a number of limitations, some of which lie within an orthodox understanding, while others are only revealed by political economy analysis. Dealing first with limitations of the SNA on its own terms, there are important capacity issues which impact upon the availability and quality of the data. This has been aggravated by the fact that different generations of the SNA have required burdensome revisions. Mexico, like many emerging capitalist economies, does not provide the financial account (or for that matter the flow-of-funds) in terms of stocks (levels).

Changes in SNA classification have also introduced concerns over temporal consistency. Generations of the SNA prior to SNA93, for example, witnessed fundamental – and some would argue ideological – revisions to the accounting for the contribution of the financial sector to national output (Christophers, 2011). The analysis herein therefore uses data from approximately 1980 for high-income countries which have had the opportunity to reconcile previous editions of the SNA; detailed analysis of Mexican data in chapter seven focuses on data from a period for which SNA93 was applied consistently (1993-2009).

There are also issues of consistency and harmonisation in construction across countries, introducing concerns over spatial equivalence. As the level of detail of presentation has increased in each subsequent generation of SNA standards, this has run up against real differences in the way that different economies are organised, and therefore differences in the way that data are consolidated, classified and compiled (Research and Statistics Department, 2000). In this research, these differences will
be highlighted where possible, but it has also led to less emphasis on the importance of comparative levels between countries than on the identification of common trends.

Finally, there are technical difficulties, the solutions to which pose additional challenges for temporal and spatial consistency. Large statistical discrepancies in the calculation of the underlying data often result in significant revisions for several years after initial SNA accounts are published. Research has also shown how differences in the choice of deflator (Hartwig, 2006) and methods of capital valuation (Kennedy, 1988; Murinde & Green, 2003) can have significant influences upon the SNA. This can be particularly important in emerging capitalist countries which have suffered from high inflation rates. According to International Accounting Standard 29 on ‘Hyperinflationary Economies’, the last hyperinflationary period for the Mexican peso was in 1998. This recommends caution in the interpretation of trends in the early 1990s in the lead-up to and immediately following the peso crisis.

The political economy of national accounts and the nation-state

In terms of consistency with the broader methodological framework, first, it must be readily conceded that the SNA and similar data sources use orthodox economic categories, which are conceptually distinct from Marxian categories\(^8\). This means, for example, that categories such as output, wages, fixed capital and profits include what, in Marxian terms, would be considered non-capitalist production, such as peasant agriculture, as well as the unproductive functions of supervision, circulation and distribution, and social maintenance. However, the conception of distinct Marxian categories remains an issue of much debate within Marxist scholarship itself (for example Moseley, 1992; Shaikh & Tonak, 1994), and poses significant challenges in terms of estimation, particularly in the context of emerging capitalist countries such as Mexico (Mariña-Flores & Moseley, 2000). Therefore,

\(^8\)Thanks to Professor Jan Toporowski for pointing out that the understanding of the economy as a circular flow originates in François Quesnay’s *tableau économique* (economic table) (1972 [1758]), and travels via Marx’s reproduction schema (1992[1885]) and Kalecki’s ‘Essays in the theory of economic fluctuations’ (1939), before informing the work of Keynes and the creation of the System of National Accounts.
conventional categories are analysed for the trends which they reveal over time, keeping in mind their conceptual basis in epistemological nominalism.

Second, use of the SNA poses a challenge in terms of the level of disaggregation. Important dynamics within sectors may be obscured from view. Distribution within the household sector between different classes, or even between a proxy for class in the form of income groups, is unavailable. For non-financial corporations, the SNA does not allow the analyst to draw out differences between firms of varying structural characteristics. For these reasons, SNA analysis is complemented in this thesis with survey data, wage data and industrial data where available and appropriate. Teasing out these important differences in the non-financial corporate sector has demanded recourse to the analysis of firm-level data (see discussion below). This requirement to change the level and vantage point of abstraction is illustrative of how an investigation can lead to its own logic of analysis.

Finally, the use of the SNA raises a more profound theoretical debate about the acceptability of the definition, measurement and analysis of macroeconomic aggregates over a given geographical-political space. As earlier alluded to, it was only in the inter-war period that this practice became broadly accepted. Radice (1984, p. 122) points out that subsequently economists could make, “… theoretical propositions about economies defined empirically in geopolitical terms – which have the same theoretical status, the same measurability, the same behavioural foundations, and the same methods of testing and proof, as the more conventional theoretical propositions about markets.” That is, the characteristics of a national economy may be understood through its internal dynamics, and the influence of ‘external’ factors on those internal dynamics.

The positivist tradition embodied in neoclassical analysis has unquestioningly taken the nation-state as a self-evident unit of analysis. This neglects the fact that neoclassicism’s analytical premises are rooted in markets, not states. Markets which, in neoclassical terms, clear supply and demand functions which are themselves aggregations of the maximising behaviour of individual firms and consumers; firms and consumers which increasingly operate across borders. Since the end of the era of relative national self-sufficiency, the world market has undergone rapid
internationalisation in terms of not only commodity exchange and capital flows, but also in the ownership of assets and the organisation of production.

This poses a challenge not so much to the national accounts data themselves, but to the inferences that are drawn from them. Charles Gore has argued that the key defining feature of what he terms methodological nationalism is that “… it isolates and separates the influence of internal factors from external factors.” (1996, p. 81) More sophisticated explanations, he suggests, interrelate the ‘internal’ and the ‘external’ to such an extent that these terms become virtually meaningless.

Dialectics provides precisely this kind of penetrating insight into the complex relationship between the national and the global, without resorting to a complete dissolution of the distinction. Marx argued in the Grundrisse (1993, p. 408) that “… the tendency to create the world market is directly given in the concept of capital itself. Every limit appears as a barrier to be overcome.” The question of the relation between the nation-state and the world market was a preoccupation of the first generation of Marxist theorists of imperialism (Bukharin, 1966; Hilferding, 1981; Kautsky, 1970; Lenin, 2010). While divisions remained on the question of whether the world market or the nation-state was the proper unit of analysis, the particular form of the world market was understood not as a teleological corollary of the workings of capitalism, but as a hard-fought creation of the capitalist classes of the imperial nation-states.

More recently, as part of the German state derivation debate, von Braunmühl argued that capitalist relations of production emerge on the basis of a world economy “… within which statehood arises and consolidates itself”(1978, p. 167). Only after Great Britain’s development of industrial capitalism and imperial expansion, does the tendency of nationalisation emerge predominant. That is, the world market shapes the formation of capitalist nation-states, only then to have the actions of those nation-states become constituitive of the world market. The important corollary of von Braunmühl’s argument is that the historical development of class relations and the state apparatus within the nation-state "… bear in a specific manner the imprint of that country's position on the world market." (1978, p. 171)

This dialectical understanding of the relationship between the nation-state and the world market is essential to: the theory of subordinate financialisation elaborated in chapter five; the empirical case for subordinate financialisation in
Mexico in chapter six, where foreign capital has played a key role; and to the historical examination of class relations in Mexico in chapter seven. The argument has a number of key implications. National data must be seen in the context of the international processes out of which they emerge. This is accomplished by moving the vantage point of abstraction from countries in the core to those in the periphery, and then moving back to an understanding of global processes unfolding through the specificities of the nation-state. At the national level, it demands a sophisticated understanding of the evolution of both the qualitative and quantitative interaction of Mexican capital with ‘foreign’ capital, and stresses the importance of seeking out data sources which capture this interaction

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2.3.2 Class analysis and finance

This thesis concerns itself with the increasing role of finance and what it means both as a process and relation emerging globally, particularly as manifest in emerging capitalist countries. My interest is in what this reflects in terms of the changing relationship between workers and capitalists, that between different forms of capital, and the articulation of those interests in the actions of the state. Neoclassical analysis is blind to these lines of investigation, seeing only the results of the decisions of optimising agents in the sphere of exchange amidst a vast array of institutional transaction costs.

Examining these relationships demands recourse to class analysis. Marx’s pioneering work in, for example, *The Eighteenth Brumaire of Louis Bonaparte* (2009 [1852]), illustrates the method of an historical analysis of Bonapartism through the tensions that lie both between classes, and between fractions of the capitalist class. It was in this tradition that Rudolf Hilferding (1981 [1910]) analysed the increasing dependence of industry on the banks in late 19th century Germany. Due to the increasing volumes of capital which investment in large-scale industry required and the complexities of cash flow management in such operations, industrialists were

\[9\] For example, in chapter eight, data from the US Treasury International Capital Reporting System is used to afford analysis of the linkages between Mexican firm behaviour and a proxy for gross foreign portfolio inflows.
forced both to channel their existing capital and to acquire additional capital via the
banks. In return, the banks were investing a larger part of their capital in industry.
Due to the endogenous nature of loanable capital (and hence the money supply),
banks were able to insert themselves into the accumulation processes of industrial
capital. Hilferding coined the term ‘finance capital’ to describe that “… bank capital …
which is actually transformed … into industrial capital.” (1981, p. 225)

It is important to point out that Hilferding did not portray finance capital as
necessarily in conflict with industrial capital, as is the wont of much contemporary
work that sees finance only as a rentier layer. Instead, he viewed the two fractions of
capital as an amalgam, with industrial capital having a direct interest in the
profitability of financial operations. Hilferding was unable to anticipate the precise
form of the relationship between banks and firms as it would manifest itself a century
later, but his work points out that it is only through analysis of this relationship that a
full understanding of the circuit of capital and the generation of (financial) profits
can be gained. The analysis of this relationship is a key theme of this thesis.

Class itself is, of course, an elusive concept (Wright, 1997). Proper
elucidation of the debates over its meaning and import is beyond the scope of this
chapter, but sufficient for the present purposes here, is the position of Nicos
Poulantzas that “… social class is defined by its place in the social division of labour
as a whole. This includes political and ideological relations.” (1974, p. 14) Within
these classes can be distinguished fractions, such as industrial and financial
capitalists, and social categories including the state bureaucracy and intellectuals.
These sub-groups do not exist separate from class; their members are drawn from
social classes which may have taken up different class positions. Poulantzas argues
that whether a social class, a fraction or a category forms part of an alliance of
dominant classes “… will depend on the social formation, its stages, phases and
conjunctures.” (1974, p. 24)

This insight gives a framework within which to understand the changing
alliances of the bourgeoisie and the bureaucracy in contemporary Mexican society,
as analysed in chapter seven. Depending on the social formation and requirements of
accumulation, fractions of the capitalist class may variously oppose, ally with or
merge into one another. The boundaries of a ‘fraction’ may change spatially or
become porous as different institutional forms engage with different forms of capital.
All of these inter-relationships are reflected in the form and actions of the state, the primary location for the reproduction of social relations, remembering that the apparatus of the nation-state bears the imprint of its historical relationship to the world market.

While the struggle between the capitalist classes and the working class occurs primarily in the sphere of production, exploitation of different layers of the working class may occur in the sphere of circulation. This is critical for an understanding of the role of the financial sector in the current period of financialisation. Drawing on Marx’s concept of ‘profits by deduction’ (1991, p. 1001), Paul Baran (2012) argued that when wages rose to a level significantly higher than the socially necessary minimum and when the bulk of output is sold at monopolistic prices, as is the case in many advanced capitalist countries in the contemporary period, price policy can be used to extract surplus value in the sphere of circulation. Costas Lapavitsas (2009b) uses the term ‘expropriation’ to describe the actions of financial institutions to capture profits from workers in the sphere of circulation. These profits do not originate in the creation of additional surplus value. Instead they may emanate either from the capture and re-distribution of existing surplus value (or rents), or in the expansion of the circuits of loanable money capital. Exploitation in the sphere of circulation may mark an attempt by capital to lessen direct confrontation in the sphere of production in a way deemed more socially acceptable or at least less visible.

In sum, this class analytical approach differs fundamentally from the methodological individualism of neoclassical economics, but also from other heterodox traditions such as post-Keynesianism. For neoclassicals there is no class interest, only the aggregated outcomes of the profit-maximising behaviour of individuals and firms. The state apparatus is seen as somehow external to this activity, though since it is composed itself of utility-maximising individuals, the state bureaucracy attempts to capture rents. This rent-seeking behavior is to the detriment of what would otherwise be Pareto-optimising market outcomes.

Post-Keynesian analysis draws inspiration from the class analysis of Marx, particularly work in the Kaleckian tradition (1971). However, for the most part, it has set up a dichotomy between industrial and financial capitalists, the latter taking
the form of a *rentier* class which undermines the productivity of the former. Problematically, post-Keynesianism lacks an explicit theory of the state and its relation to class structure. This results in an emphasis on policy fixes to capitalist crises, with the state implicitly posited as a neutral arbiter of conflicting interests.

### 2.3.3 Firm financial statement data and econometric analysis

This thesis focuses on the actions of the large non-financial corporation as critical to understanding the dynamics of financialisation, both advanced and subordinate. This focus is consistent with the central role attributed to the productive sphere in Marxian theory, and also emerges from the empirical analysis of bank-firm relations in Mexico in chapters six and seven. This poses the challenge of specifying changes in the behavior of these enterprises, and examining the relationship between these changes and broader societal transformation. As touched upon in the section above on national accounts, the SNA does not offer sufficient disaggregation or detail for this task. For this reason, additional insight has been sought in chapters eight and nine from the examination of the firm-level financial statement data of those entities listed on the Mexican stock exchange.

Financial statement analysis has been conducted in order to provide an initial indication about the behavioural changes of interest, broken down along the lines of firm size and sector. Corporate financial statements are, of course, not unbiased presentations of reality. While only annual statements are fully audited, quarterly data have been used in order to maximise the ability to capture the potentially more volatile flows of financial assets. Even in the case of audited statements, individual firms may employ transfer-pricing techniques in order to minimise tax payments. In consideration of this likelihood, and to avoid double-counting, consolidated financial statements have been used. Additional accounting techniques involving the manipulation of, for example, depreciation methods and accruals, may allow

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10 This literature is discussed in detail in chapter three.
11 The data come from the financial statements of publicly-listed non-financial firms, as aggregated in the *Economatica* database.
12 Data limitations made it impossible to examine compositional effects related to ownership structures and degree of export orientation.
enterprises to present their year-end results in a more favourable light, understating cash and overstatement fixed investment for example. However, through the use of a longer time series and the analysis of sectoral and aggregate transformations, such firm-specific effects should be mitigated. Aggregate irregularities over time, such as changes in accounting standards, have been noted in the analysis. Finally, as was the case with national accounts data, so too the use of line items from corporate financial statements is at odds with Marxian categories, only this time on a micro level. However, an assessment of changing sources and uses of funding, as compared to an assessment of, for example, output and profitability, does not suffer unduly from this fact.

The first-cut analysis in chapter eight highlights secular changes in large non-financial corporations’ management of highly-liquid assets and in their capital structure. However, at the level of aggregated data, compositional effects may be obscuring any relationship (or suggesting a relationship at the aggregate level when one does not exist at the individual firm level). In order to attempt to unravel the potential relationship between capital structure and investment behaviour, panel time series econometrics is employed in chapter nine.

Classical econometrics was designed to seek confirmation of stable, usually linear, causality in the equilibrium relationship between independent and dependent variables. This reflects both an essentialist and atomistic ontology of agents’ behaviour, and a closed-system epistemology of causality. For these reasons, economists from a number of schools of thought, from Keynesians (Keynes, 1939; P. Davidson, 1996) to Austrians (Hayek, 1948) and more recently critical realists (Lawson, 1997), have been skeptical if not altogether dismissive of the practice. The abuse of econometrics, particularly cross-country macroeconomic testing, has led to the charge from within the econometrics profession itself that the ‘arm-waving’ of rhetorical economic debate based on deductive assertion, “… has been replaced by $t$ coefficient waving.” (Mayer, 1980, p. 166).

However, more recent methods, such as the mean group panel time series analysis employed in chapter nine, have loosened the restrictions on linearity and parameter stability. This allows for both agent and temporal heterogeneity and is more consistent with a materialist ontology, that is, it allows relationships to change following changes in material conditions. As a result, statistical relationships may be
interpreted as either manifestations of spatially and temporally transient causality, or replace causality altogether with a more complex understanding of tendency and counter-tendency.

The issue of ontological essentialism may be addressed by adopting a critical attitude towards the interpretation of results, rather than accepting statistical relationships *prima facie*. Indeed, combined with analysis from multiple vantage points of abstraction, econometrics can deepen an understanding of the real mechanisms and structures shaping agents’ actions. Results should be understood as a description limited to the spatial and temporal context out of which they emerged, rather than as the purely instrumental basis upon which to conduct formal modeling and statistical inference (often over fundamentally different contexts). The rejection of predictive econometrics in favour of qualitative characterisations of patterns in data is shared by a number of schools of thought, including institutionalists (Wible & Sedgley, 1999). By limiting the use of this technique to the microeconomic level, and testing for structural composition effects between firms in the sample, the specificity of agents’ actions can be even more firmly rooted to their material context. Finally, caution must be shown in imputing motivation to the interpretation of firm financial statement data; between intention and outcome lies dynamic change and fundamental uncertainty.

### 2.4 CONCLUSION

This chapter first sought to lay out the political economy methodology motivated by the requirements of this research project. The ontological argument was made that an attempt to grasp the complex relations between finance and broader social reproduction must root its analysis in historically-specific material conditions. This has compelled the usage of a country case study to delve more deeply into dynamics revealed by empirical work with national statistics. Dialectics, reflecting both an ontological understanding and an epistemological approach, permit an appreciation of finance simultaneously as both a dynamic process and a relation between fractions of capital and between social classes. The approach adopted herein, which places the changing nature of finance within the context of transformations in the world market
is evoked by the interdependence of the particular to the totality which characterises dialectical thought. The technique of incorporated comparison seeks to illuminate the general phenomenon of financialisation from the particular reality of subordinate financialisation in the case study context. Abstraction of level, generality and vantage point will be conducted in order to provide a rich and varied understanding of the dynamics under study.

Against those who argue that methods are indelibly marked with the methodological premises from which they emerged, I have argued that with the appropriate qualification and through careful interpretation, mixed methods may be successfully employed in a way which is consistent with the broader methodological framework of critical political economy. This thesis employs three primary methods of analysis: national accounts statistical analysis, historical class analysis, and the econometric analysis of firms’ financial statement data.

First, the use of national accounts requires consideration not only of their technical limitations, but also an appreciation of the epistemological nominalism which they reflect. Rejecting causal inferences which take the nation-state as a self-evident unit of analysis, I have argued for a consideration of the data in the context of a dialectical relationship between the nation-state and the world market.

Second, to understand the particular manifestation of subordinate financialisation in the Mexican context would be impossible without careful historical class analysis. Drawing upon the tradition of Marx and Hilferding, I have argued that it is only through analysis of the relationship between different fractions of capital that a full understanding of the circuit of capital and the generation of profits can be gained. This insight provides the framework within which to understand the changing alliances of the bourgeoisie and the bureaucracy in contemporary Mexican society.

Finally, as macroeconomic data are unable to provide sufficient disaggregation, panel time series econometrics has been conducted on the financial statement data of listed Mexican firms. This was compelled by the need to more accurately specify changes in the behaviour of these enterprises, and to examine the relationship between these changes and broader societal dynamics. Agent and temporal heterogeneity afforded by the chosen panel time series method allows for greater consistency with the broader onto-epistemological approach. Caution in
interpretation implies the characterisation of patterns, rooted in a specific temporal and spatial contexts, where the relationship between intention and outcome is understood to pass through multiple mediations.
Chapter 3

Financialisation in a capitalist world market

3.1 INTRODUCTION

The driving interest of this thesis is the question of whether and how financialisation is occurring in emerging capitalist economies. One possible hypothesis is that financialisation is a phenomenon unique to the Anglo-Saxon states to which it is most closely associated. However the empirical evidence, as pointed to in the opening chapter and as will be developed in more detail in subsequent chapters, does not support the ‘financialisation in isolation’ hypothesis, nor does it support financialisation as a ‘zero-sum game’\(^1\). The presence of what might be crudely described as the ‘symptoms’ of financialisation in a range of countries suggests that a theory of financialisation must be able to account for both the common tendencies of the phenomenon as well as the divergent forms that it takes across a range of institutional contexts\(^2\).

This chapter serves two purposes. I will review the financialisation literature, making an original contribution by examining whether, and if so how, the literature relates financialisation to transformations in the capitalist world market. To do this, I will first outline the concept of the world market as it has emerged from Marxist scholarship, and then reconsider the concept in light of the new material realities which characterise the contemporary global economy. The second purpose of the

\(^1\) Christophers (2012, 2013) has suggested that financialised economies are capturing the financial activities of the non-financialised economies.

\(^2\) Within the financialisation literature there are increasing calls for just such a global theorisation of financialisation (for example Montgomerie, 2008; Christophers, 2012).
chapter is to build upon these foundations and elaborate the theory of financialisation which will guide this thesis.

The literature on financialisation will be broken down into five currents. The first is the predominantly Marxist work which relates financialisation to a crisis in productive accumulation. This category incorporates four sub-currents which variously link the rise of finance to problems of surplus absorption, falling profit rates, a new regime of accumulation, and cyclical historical shifts in hegemonic power. The second current in the literature emphasises the role of global financial liberalisation. Policy changes assume causal importance in post-Keynesian work, whereas they are treated as proximate factors in Marxian analysis. Two seminal elements of the broader liberalisation agenda, namely capital account liberalisation and banking liberalisation, are highlighted. The third current includes those themes which are decidedly post-Keynesian in orientation: corporate governance and shareholder value orientation, the rise of a rentier class, and the role of inequality and global imbalances. The fourth distinctive current in the literature is that which argues that financialisation signals an epochal change in capitalism. This is attributed to the emergence of a ‘knowledge-based economy’\textsuperscript{3}, or more convincingly in the work of Costas Lapavitsas and the \textit{RMF School}\textsuperscript{4}, it is located in fundamental changes in the relationship between firms, banks and workers. The fifth, and final, current in the literature is represented here by a selective synthesis of work from critical strands in sociology, geography and political science. These document how social institutions such as pensions, housing, and government interact with financialisation. The review reveals that, while the literature on financialisation contains numerous attempts to link the phenomenon with observed changes in the international economy, none of it locates financialisation within a theoretical framework of the development of the world market.

In the final section of the chapter, I elaborate a theory of financialisation building upon the work of the \textit{RMF School}. An epochal transformation in the relations between firms, banks and workers is understood to pivot on the turn of the

\textsuperscript{3} This term is used as a catch-all for literature which talks about ‘cognitive capitalism’, ‘bio-capitalism’, ‘knowledge-based regimes of accumulation’, etc..

\textsuperscript{4} Research on Money and Finance (RMF), based out of the Department of Economics, SOAS, University of London.
non-financial corporation toward international capital markets, and the banks’ turn towards households and expropriation from workers’ wages. My theoretical contribution is to argue that these transformations in the behaviour of the fundamental agents of capitalism should be located within the development of the world market. The contemporary world market is uniquely characterised, first, by the deepening of the internationalisation of the circuits of commodity and money capital; second, by the unprecedented internationalisation of production; and, third, by the pivotal role assumed by the US dollar as quasi-world money. These historically-specific features of the world market provide the essential context in which the changed behaviour of the agents of capitalism can be situated.

3.2 THE DEVELOPMENT OF THE WORLD MARKET

The concept of the world market adopted here has its origins within Marxian scholarship. While Marx’s planned volume on the world market was never completed (Rosdolsky, 1980), he provided the starting point for this line of inquiry in the *Grundrisse* (1993, p. 408) where he argued that “… the tendency to create the world market is directly given in the concept of capital itself. Every limit appears as a barrier to be overcome.” Marx argued that the drive towards expanded accumulation of surplus value is immanent in the capitalist mode of production and shapes social relations both within and between states. It is experienced by the capitalist as a ceaseless competition for profits across time and space. The use of the term world market, suggesting an emphasis on the sphere of exchange, reflected the specificities of 19th century capitalism. High tariff barriers between imperial powers limited the internationalisation process to the circuit of commodity capital, and to a lesser extent the circuit of money capital, with the global restructuring of production and ownership which is now so familiar only coming much later.

The question of the relation between the nation-state and the world market was a preoccupation of the first generation of Marxist theorists of imperialism. Rudolf Hilferding believed that ‘finance capital’ (1981[1910]), an amalgam of the

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5 Theories of imperialism and the role attributed to finance therein will be examined in greater detail in chapter five.
Chapter 3 Financialisation in a capitalist world market

interests of industrial and bank capital, sought to counter the tendency of the rate of profit to fall in the domestic market by exporting capital to foreign countries, and then called upon the state to protect its investments. Nikolai Bukharin (1966[1918]) subsequently argued that these blocs of finance capital took on a national character because the 'labour aristocracy' in the imperial country gained. Building on Hilferding, Bukharin envisioned the merger of finance capital and the state to form ‘state capital trusts’. Hilferding, Bukharin and Vladimir Lenin all believed that military and political rivalry over control of the world market would develop between these states. This was pointedly in opposition to Karl Kautsky’s theory of ‘ultra-imperialism’, which envisioned a division of the world market between powerful states without violent conflict, the “... joint exploitation of the world by internationally combined finance capital” (1970[1914] in Lenin (2010, 117)). What is clear in all of these formulations is that the world market was understood not as a teleological corollary of the workings of capitalism, but as a hard-fought creation of the capitalist classes of the imperial nation-states.

Several decades later, in response to the ravages of the Great Depression and the Second World War, came a period of regulated national capitalism under the international auspices of the Bretton Woods system and the gold dollar standard. This served to insulate the nation-state for a time from the global movement of capital. GDP and productivity growth were strong, while labour in the core countries gained in terms of an increasing wage share (Marglin & Schor, 1990). Corporations of the core continued to expand operations to overseas markets, though trade and financial barriers remained high. However, by the late 1960s and into the early 1970s, the economies of the core were entering into crisis. The increasing strength of labour had put pressure on profits. Unemployment and inflation were rising in concert. Barriers to trade, capital flows and asset ownership limited the

6 Though divisions remained on the question of whether the world market or the nation-state was the proper unit of analysis for the purposes of historical materialism (Howard & King, 1992, p. 214).
7 Claudia von Braunmühl has argued that the organisation of capitalist relations on the basis of a world economy was, in fact, the norm from which the period of national autarchy was a deviation. Capitalist relations of production first emerged on the basis of a world economy “… within which statehood arises and consolidates itself” (1978, p. 167). Only after Great Britain’s development of industrial capitalism and imperial expansion, did the tendency of nationalisation emerge predominant.
8 Indeed, Keynesian analysis, grounded in the notion of a largely self-sufficient sovereign state, had been an empirically justifiable view for the period from 1930 to 1950 when trade had retreated as a share of output (Radice, 1984).
Chapter 3 Financialisation in a capitalist world market

breadth of capital accumulation. Rising monopoly protected by a ‘big state’ checked Schumpeterian processes of creative destruction. The result was falling profitability and an end to the post-war productivity ‘miracle’ (Armstrong, Glyn, & Harrison, 1991; Brenner, 2003).

The breakdown of the Bretton Woods system, and the model of accumulation of which it was emblematic, set the stage for a period of rapid liberalisation of trade and financial flows, inaugurating a new period in the development of, and academic inquiry into, the nature of the world market. In an impressively prescient piece, Stephen Hymer described the evolving interlocking system of world capital and world labour into an integrated worldwide structure as one which “…completely changes the system of national economies that has characterised world capitalism for the past three hundred years.” (1972, p. 92) Hymer assigned a key role in the transformation of the world market to the expansion of multinational corporations, both pulled by opportunities for expanded markets and the prospects of cheaper labour, and pushed by oligopolistic competition. The financing needs of these large enterprises fed the expansion of international banking and the development of international capital markets, helping to “… forge an identity of interests between competing national capitals.” (1972, p. 99) Underplayed in Hymer’s account is the key role played by technological advances, particularly in communications and transportation, which I can only mention here but whose complex relationship with the development of the world market requires extensive study of its own (see for example Pérez, 2003).

As a result of these changes, it was increasingly the case that the passage of capital through its various forms – from money capital to productive capital to commodity capital, and back again – could not be realised within a single capitalist social formation, or nation-state. As argued by Christian Palloix (1975, 1977, p. 20), “… the commodity can only be conceptualised, produced and realised at the level of the world market.” Whereas the process of the internationalisation of capital had previously been limited to the circuits of commodity capital and money capital, it now for the first time included the internationalisation of production⁹.

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⁹ The periodisation of the development of the world market into the internationalisation of the commodity, money and productive circuits of capital, was similarly laid out by Fine and Harris (1979). In the understanding employed in this thesis, I will consciously avoid the implication that the
Palloix argued that there are two aspects to the internationalisation of capital: a functional one and a structural one. The functional character of internationalisation includes those dynamics described by Hymer: the purchase of cheap labour and means of production from around the globe and the realisation of profits on a world level by the multinational firm. But Palloix cautions that the multinational firm is only the form that the internationalisation of capital assumes. The structural character of the internationalisation of capital relates to the fact that that these dynamics tend towards both an equalisation of the conditions of production and exchange, but at the same time to a differentiation of these same conditions in relation to the aim of the production process, the extraction of surplus value. This differentiation reflects Leon Trotsky’s law of uneven and combined development (1969). An important implication of this differentiation is that international value is chaotic, constantly negated and reborn. From this arises the difficulty in standardising international rates of profit, giving “… free rein to the international differentiation of rates of profit among the more or less hegemonic strata of capital and to their engagement-disengagement in different industrial and financial branches.” (1977, p. 24) This possibility for the differentiation of rates of profit will be seen to play an important role in financialisation.

Palloix is adamant that the state, far from withering away under trans-historical processes of internationalisation whose agency is unspecified, has been the spearhead of this latest transformation in the world market. With the interpenetration of productive processes, the nation-state’s effectiveness now lies in establishing, at the national level, “…a monetary standard which conforms to the internationalisation of capital and to the fractions of capital with which it is allied.” (1977, p. 13) This points to the new importance assumed by the management of the exchange rate by the central monetary authority, and the role played by world money.

In Marxian monetary theory, money initially emerges as the commodity which assumes the monopoly over the prerogative to buy, rooted in and affording to development of the world market follows a linear trajectory through a series of distinct, ordered phases.

10 The hypothesis of a withering state is embodied in world systems theory (Wallerstein, 2004), and has echoes in more recent theorisations of a transnational capitalist class (Robinson, 2001; Sklair, 2000; van der Pijl, 1998).
its holder economic and social power (Lapavitsas 2003). This is contrasted with, though not set in opposition to, credit money which represents trust, based on domestic customs and practices, that is socialised on a capitalist basis. Since customs and practices underpinning trust relations vary between countries, for credit money this can give rise to “… conflicts of probity and reliability, as well as of means and methods of payment. … the use of particular monies in the world market is subject to political and military interaction among states.” (Lapavitsas, 2006, p. 135) The money which emerges from this interaction as world money is that which “… serves as the universal means of purchasing, and as the universally recognised embodiment of all wealth.” (Marx, 2004, 3c. 240)

While the self-expansion of capital creates the world market, it does not create a world state (Nachtwey & ten Brink, 2008, p. 46). One of the most important implications of this asymmetry is the resolution of the contradiction between the function of money as universal means of purchasing and its function as a store of value, not in the money of a world state, but in the use of the money of the world hegemon, a form of quasi-world money. The use of quasi-world money offers differentiated opportunities and challenges for capitalists across the hierarchy of states to exploit the malleability of the relationship of the circuit of money capital to the commodity and productive forms. This fact will be crucial to the theory of subordinate financialisation developed in chapter five.

In sum, this discussion highlights two aspects of the contemporary features of the world market which I will argue are critical to a theorisation of financialisation. First, the period since the end of the Bretton Woods system has seen the consolidation of the internationalisation of the money circuit of capital, and for the first time the internationalisation of the productive circuit of capital. These processes have been shaped by, and at once transformative of, the nation-state. Since the early work of authors such as Hymer and Palloix, these processes have been deepened through the increasing interpenetration and new forms of private ownership of capitals. This has created new opportunities for the differentiation of profits and the extraction of surplus value across borders. Second, this unprecedented internationalisation of capital has resulted in exchange rate management becoming the pivot of the nation-state’s insertion into the world market, and placed increased importance on the role of world money.
3.3 THE LITERATURE OF FINANCIALISATION AND THE WORLD MARKET

As the literature on financialisation matures, what becomes clear is the multidimensionality of the phenomenon. Within the literature, there is both contradiction but also complementarity between accounts drawn from different disciplines and sub-disciplines. The typology adopted herein therefore necessarily involves a subjective assessment of the relative emphasis given by different authors in their accounts of the origins and manifestations of financialisation. This emphasis reflects the level of abstraction from which the phenomenon is viewed, which, rather than representing an explicit choice, may be a corollary of disciplinary methodology. Much of the literature on financialisation from within radical currents in sociology and geography, for example, provides detailed and insightful portrayals of the mechanisms and impact of financialisation on a range of social institutions and relationships. Implicit in this is a methodological rejection of the meta-narrative. In contrast, within political economy, where meta-narrative is more readily acceptable, there is an important distinction between Marxist accounts of financialisation which tend to emphasise its material roots, and Keynesian scholarship which places more emphasis on the power of ideas as evinced through policy change. As such, there is often overlap in the agreed elements of financialisation, but disagreement over causality and emphasis.

Four currents mark out the literature which attempts to explain the providence of financialisation: stagnation of production; global financial liberalisation; the rise of the rentier, shareholder value orientation, inequality and global imbalances; and epochal changes in capitalism. A fifth current, that of critical sociology, geography and political science, seeks to elucidate the appearances of financialisation, but, as argued above, tends to steer away from questions of the origin of the phenomenon. In what follows, I will look briefly at the understanding of financialisation central to each current, and ask where the changes in the world market enter each account.
3.3.1 Stagnation of production

Within this first current are four different sub-currents of analysis, with the common thread being that the emphasis is placed on the slowdown in productive accumulation. Many of these accounts were originally theories of capitalist crisis which have been adapted to accommodate financialisation. Emphasis in all of these accounts is on the material drivers of financialisation, reflecting their predominantly Marxist foundations. These authors generally see financialisation as either a medium- or long-term cyclical phenomenon.

First, the important contribution made by Harry Magdoff, Paul Baran and Paul Sweezy and the Monthly Review School to contemporary understandings of financialisation should be recognised. Famously in Monopoly Capital (1968), Baran and Sweezy argued that rising monopolisation results in an increasing flow of profits, but falling demand for additional investment in ever more tightly controlled markets. The resulting surplus must be absorbed in unproductive consumption. One such method of surplus absorption is for profits to be diverted into financial activities rather than fixed capital formation\(^{11}\) (Baran & Sweezy, 1968; Sweezy & Magdoff, 1987; Sweezy, 1997). In parallel with this financialisation of the behaviour of non-financial firms, Sweezy drew from the work of Hilferding (1981) in an earlier period of financial sector growth to argue that investment banks are allowed to keep extraordinary profits because they play a vital role in facilitating the monopolistic positions of non-financial firms\(^{12}\).

Certainly the focus in Baran and Sweezy’s work was on the performance of the US economy. However, there have been attempts more recently within the Monthly Review School to place their theory of financialisation within the context of the internationalisation of accumulation. John Bellamy-Foster has initiated work to document the rise of international oligopoly in the form of the transnational corporation (2009; 2011a; 2010a, 2010b). Following a consistent logic to the earlier work of Baran and Sweezy, growth of this form of monopoly has given rise to

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\(^{11}\) Initially, in the post-war era of restrained finance, Sweezy relegated finance to a means “... on an equal footing with the sales effort” by which a capitalist economy absorbs surplus (Baran & Sweezy, 1968, p. 143).

\(^{12}\) This was a correction of an earlier dismissal of investment banks’ power due to the ability of monopoly capital to self-finance, and the growth of institutional investment (Sweezy, 1953).
financialisation, "... as the giant firms, unable to find sufficient investment outlets for their enormous economic surpluses within production, increasingly turn to speculation within the global financial sphere." (2011a, p. 20) This speculative activity of monopoly-finance capital has been propped up by rents extracted from ‘the South’ through the integration into capitalist production of a global reserve army, resulting from de-peasantisation of the periphery and the integration of the erstwhile socialist countries (2011b, p. 6).

The role of monopoly in a number of the theories of financialisation, both within and outside Marxist scholarship, owes a debt to Baran and Sweezy’s work. There are echoes of it in David Harvey’s influential characterisation of capitalist crises as ‘blockages’ to accumulation (2005, 2006a, 2006b, 2011). These blockages are overcome through spatial, temporal and financial ‘fixes’. Harvey’s keen awareness of capitalism’s spatial nature ensures that these ‘fixes’ are not constrained to the unit of the nation-state.

The second major strand within analysis which emphasises productive stagnation is that work which links rising financialisation with overaccumulation and Marx’s tendency of the rate of profit to fall (TRPF). Under this heading come a number of different accounts of what causes the profit rate to fall and conflicting evidence of its empirical purchase. Examples include:

Robert Brenner (2003, 2004, 2006a), reflecting a form of Smithian Marxism, argues that increased international competition has resulted in overproduction and lowered profit rates since the 1970s. Firm exit, and with it a restoration of profit rates, has been prevented by the interventions of the modern state. Avoiding use of the term financialisation, Brenner sees the flight of capital into the sphere of finance as a natural response to declining profitability in production.

Anwar Shaikh (2011) links declining profitability in the post-war period to the rising organic composition of capital. This trend was halted by the attack on labour in the 1980s which resulted in over three decades of wage stagnation. Together with a fall in interest rates this led to a surge in debt and borrowing. Fred Moseley (2010) offers a similar explanation, however placing emphasis on the rising costs of unproductive labour in the 1960s. This was counteracted by increased labour exploitation and increased credit flows to both firms and households.

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13 See, for example, Crotty’s use of ‘co-respective competition’ (2003, 2008).
Gérard Duménil and Dominique Lévy (2005) stress that a rise in real interest rates in the US from the 1980s onwards led to increasing profitability in the financial sector and the migration of non-financial corporate capital into the development of financial activities. They document the rising share of the top one per cent of households, drawing a distinction between France, where the distance between the managerial and capitalist classes remains considerable, and the US, where a “… big capital-top management ‘love story’” has emerged (2006, p. 18). Less emphasis is placed on falling profitability in this account than in changing relative rates of profit linked to changing class configurations.

Data restrictions mean that work on the TRPF has tended to focus on the US economy, or at best advanced capitalist economies, assuming that from there the rest of the world takes its cue. There is less attention paid to the profit dynamics in the periphery, or the impact of the changing relationship between peripheral states and the world market on the profit rate in the periphery.\(^{14}\)

The third strand within the literature which emphasises stagnation in production is that of the French regulationist school. Régulation theory examines how the institutions which are embodiments of social relations stabilise a particular accumulation regime, how they enter into crisis, and how they renew themselves (Boyer & Saillard, 2002). François Chesnais (2001) asks whether a new ‘finance-dominated’ regime is emerging following the decline in productive accumulation and the demise of the capital-labour compromise purportedly embodied in the Fordist growth regime. Michel Aglietta (1998) has suggested that the formation in the United States of a growth regime based on finance prefigures the ‘capitalism of tomorrow’ in advanced capitalist countries. Robert Boyer’s (2000) model of an ‘equity-based regime’ combines finance-based growth, wage flexibility, a shift from manufacturing to services, the rise of shareholder power and a diffusion of information technologies.\(^{15}\)

While typically accumulation regimes have been seen as anchored in the institutions of the nation-state, Aglietta (2008) has noted the need to think about global accumulation regimes. This is not a new idea and, indeed, understanding the

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\(^{14}\) Bellamy-Foster (2010b) does however relate financialisation in the core with rising industrialisation in the periphery and its impact on the profitability of industry in the core.

\(^{15}\) Despite criticisms which suggest otherwise, Boyer questions the viability of the model even in the United States itself, and cautions other governments against mimicking American institutions. He has argued that the sub-prime crisis was “… probably the end of an epoch both for financialisation and for sources of growth in the United States” (2009, p. 23).
The world market as the ultimate horizon of accumulation has been a central preoccupation of both the Grenoble and Amsterdam schools of Regulationist thought for many years (Jessop & Sum, 2006). Becker and Jäger (2010) take up the challenge, outlining a number of dichotomies of accumulation. They distinguish productive vs. financialised accumulation based on the primary sector of investment; extensive vs. intensive accumulation based on whether increases in surplus value emerge from increased work intensity or relative surplus value from cheapened consumption goods; and introverted vs. extroverted accumulation determined by the relative emphasis of production for domestic against international markets. In a further piece, Becker et al. (2010), drawing on case studies from Brazil, Chile, Serbia and Slovakia, draw two further dichotomies of financialisation. They distinguish between financialisation based on fictitious capital in the core, and that based on interest-bearing capital, and therefore high interest rates, in the periphery; similarly, they make a distinction between the ‘popular’ financialisation of the middle classes of the advanced countries, from the ‘elite’ financialisation in the emerging capitalist economies.

The spread of regulation theory to Brazil has led a number of authors there to formulate theories of financialisation in regulationist terms (Araujo, Bruno, & Pimentel, 2012; Paulani, 2010; Prates & Paulani, 2007). According to these accounts, Brazilian policy makers have introduced institutional changes allowing the valorisation of fictitious capital as part of Brazil’s insertion into a global regime of financial accumulation. This has resulted in de-industrialisation, an explosion in the trade in fictitious financial instruments, and subordination of the wage-labour nexus.

The final strand of analysis emphasising the role of productive stagnation is drawn from the output of the Annales School, and its influence on World Systems theorists. Leader of the Annales School Fernand Braudel (1981) claimed that structural cycles of the ‘longue durée’ mark the rise and fall of leading powers.\textsuperscript{16} The phase of decline, which Braudel termed the ‘autumn’, is associated with an expansion in financial activity. Braudel’s thesis has been influentially adopted by Giovanni Arrighi (1994, 2007). Arrighi has argued that the cyclical financial

\textsuperscript{16} Braudel described this process for Venice and Genoa in the 13\textsuperscript{th} to 15\textsuperscript{th} centuries, Antwerp in the 16\textsuperscript{th} century, Amsterdam in the 16\textsuperscript{th} to 18\textsuperscript{th} centuries, and London in the 18\textsuperscript{th} and 19\textsuperscript{th} centuries.
expansion allows the transformation of capital from its fixed form into more liquid ones, such as money and credit. This facilitates its escape from confinement in increasingly less productive activity of the declining hegemon, and allows it to flow into new regions and channels of surplus value creation\(^{17}\). While the historical sweep of Arrighi’s work is impressive, its thesis is at odds with current realities. First, the current period of the rise of finance in the leading power, the United States, has been accompanied not with an outflow of capital to new, rising centres of power\(^{18}\), but an inflow to the US from the rest of the world. Despite such problems, Arrighi’s work has been influential on the groundbreaking empirical work of Greta Krippner (2005, 2011), tracing the rise of financial profits in both the financial and non-financial sectors in the United States.

The association of financialisation with the declining hegemonic power in the work of Arrighi, provides an opportunity to contrast the literature which comes to the opposite conclusion, namely that the current hegemon, the United States, uses financial expansion precisely as a tool to project its imperial power. Indeed Leo Panitch and Sam Gindin (2004) argue that Arrighi confuses Asian ownership of US treasury bills with a genuine shift in the distribution of power. They counterargue that liberalised finance was key to the United States’ ability to overcome the profit squeeze of the 1970s caused by rising wage and commodity prices, and spiraling military expenditure. As such, the American state has played the lead role in reproducing global capitalism; not only creating the conditions for the expansion of multinational corporations and the internationalisation of production, but in the liberalisation and expansion of finance by acting as the dominant regulatory innovator in the governance of global finance (Panitch & Gindin, 2012).

In a similar fashion, Peter Gowan (1999, 2003, 2009, 2010) advances a theory of the ‘Dollar-Wall-Street regime’ as a response to an overproduction crisis in the leading capitalist nations. This regime allows the United States to maintain low interest rates, benefit from seigniorage from the use of the US dollar as world money, and use international institutions to both set institutional norms worldwide and to bail

\(^{17}\) Original credit for this concept should be given to Rosa Luxemburg (2003 [1913]).

\(^{18}\) Arrighi has struggled with the question of who should be the successor to the United States as the hegemonic power of the next cycle, first arguing that it could be Japan (1994), and later examining the possibility of China (2007).
out US financial institutions during crisis periods. These institutional reforms have ensured that industrial companies worldwide have become dependent on international securities markets and that foreign takeovers have been permitted. In times of crisis, this has meant not only governments and banks, but also industrial companies would require American finance to tide them over, “… giving American finance capitalism ever widening circles of control over international capitalism.” (2003, p. 41)

Prabhat Patnaik (2003, 2005, 2009) has argued that the leading capitalist economy necessarily plays a role in diffusing capitalism, but as rivals catch up, the imperion’s current account surplus turns to deficit. This is a particular problem for the US, since unlike previous eras of imperial control, it can not directly expropriate from its colonies. Instead, continued confidence in the US dollar as world money in the face of growing deficits is maintained through its control over both the capitalist hinterland of developing economies and global energy reserves.

All of the arguments in this sub-strand consciously address issues of global as opposed to purely national accumulation. Missing however are finer grain analyses of the transformations in the relations between the agents of capitalism both within and across borders, and their specification within a changing world market. As such the arguments struggle to account for the specificities of the rise of finance in the periphery.

3.3.2 Global financial liberalisation

The second strand in the literature on financialisation, focusing on the role of global financial liberalisation, is one which threads its way through accounts from a wide variety of disciplinary perspectives and levels of abstraction. In post-Keynesian work, the liberalisation is itself the causal factor leading to the financialisation of the economy, driven by the rise of a rentier class and accompanying inequality. In Marxian accounts, liberalisation is a proximate factor, leaving open the possibility that liberalisation is itself reflective of deeper structural transformations in capitalism. In the literature which stresses the role of financial liberalisation, there is a broad acceptance that financialisation is a secular phenomenon (or, if cyclical, of a
long-term duration), if disagreement over whether its course can be halted and a lid put back on Pandora’s box. This is a large literature, so I have chosen to limit the exposition to exemplary references of two seminal elements of broader financial liberalisation: capital market liberalisation, and foreign bank entry.

Capital market liberalisation involves the removal of constraints on both incoming and outgoing monetary flows, be they direct investment, portfolio flows, or cross-border lending. Advocates argue that the consequent deepening of financial markets improves both access to capital and the price discovery process, resulting in the more efficient allocation of funds (McKinnon, 1973; Shaw, 1973; Fry, 1997). In economies of the periphery, capital market liberalisation has been variously undertaken at a country’s own behest, as an urgent necessity during times of crisis, or as a contractual requirement; the latter stipulated by loan conditionalities, or bi-/multi-lateral investment and trade agreements.

Against orthodox accounts, the literature on financialisation finds that, by enlarging domestic capital markets and allowing access to international capital markets, capital market liberalisation has facilitated increased investment in financial assets by non-financial corporations, with negative implications for levels of productive investment. This has occurred in countries as diverse as the United States (Orhangazi, 2007, 2008, 2011), India (Sen, 2008), South Africa (Mohamed, 2009), Mexico (Vidal, Marshall, & Correa, 2011), Argentina, Mexico and Turkey (Demir, 2009a), and Hong Kong, Singapore, Indonesia, Korea and Malaysia (Yan, 2010). Declining productive investment may either be the result of improved relative profitability in finance following capital market liberalisation, or simply from the ensuing volatility discouraging real investment (Demir, 2009a; Stockhammer & Grafl, 2010). Financial investors have taken advantage of capital market liberalisation to ‘hollow out’ productive firms through the leveraged purchase and subsequent break-up and sale of firm assets in countries such as Mexico (Correa, Marshall, & Vidal, 2010). Governments have had to adopt monetary and exchange rate policies which protect the financial gains of investors at the expense of domestic fixed investment and employment, as documented in Mexico (Levy-Orlik, 2008), Brazil and Korea (Kaltenbrunner, 2010; Painceira, 2010).

A second central tenet of financial reforms over the last three decades has been the opening up of domestic banking markets to foreign competition. The
arguments advanced in favour of foreign bank entry (Claessens, Demirgüç-Kunt, & Huizinga, 2001; Claessens & van Horen, 2010; Levine, 1996) can only be summarised in general terms here. First, benefits are said to be derived from increased competition. Larger foreign banks are able to access more diversified funding sources, and invest in a more diversified range of assets. This allows them to lower funding costs, and achieve higher returns through better risk diversification. Customers then stand to benefit from a decreased interest rate spread, resulting in more efficient allocation of resources. A second set of benefits is related to positive spill-over effects. Along with greater size and reach, foreign banks introduce best-practice policies and procedures, more experienced staff and cutting-edge technologies. It is hoped that competitive pressures will force domestic banks to adopt such features. This leads to both greater efficiency and stability. Third are governance benefits. Foreign banks reputedly demand improved systems of regulation and supervision from regulatory authorities, and reduce the influence of the government on financial sector allocation decisions. They may also serve to weaken cronyism in lending between units affiliated to family-based conglomerates.

In contrast to this ruddy prognosis, there is increasing evidence that the claims in the orthodox literature are overstated. A similarly large body of literature finds evidence that foreign bank entry may lead to decreased competition (Beck & Martinez Peria, 2010; Kim & Lee, 2004; Lensink & Hermes, 2004; Levy-Yeyati & Micco, 2007; Schulz, 2006; Tregenna, 2009), a fall in access to credit for certain sectors (Berger, Klapper, & Udell, 2001; Gormley, 2010; Mian, 2006), and weakened governance (dos Santos, 2007). However, what is of greater interest to the present discussion is the literature which looks at the relationship between foreign bank entry and the financialisation of accumulation. Foreign banks may face an environment in which large firms are self-financing, but lack the local relationships and monitoring skills to profitably exploit SME markets. This fact, combined with the technical expertise developed in advanced economies for the securitisation of household lending for housing and consumption, induces a turn of the banks towards the household (dos Santos, 2009a; Gorton, 2009; Kregel, 2010). In developing country contexts, this change may be accompanied by banks’ reliance on investments in government securities. These critical changes in bank behaviour have been claimed in, for example, Eastern Europe (Raviv, 2008), the Balkans (Ćetković,
2011), Korea (Crotty & Lee, 2005), Turkey (Karacimen, 2013), India (Chandrasekhar, 2007) and Mexico (Levy-Orlik, 2009).

By construction, literature focusing on the import of global financial liberalisation for financialisation integrates analysis of the changes on the countries of the periphery. As such, it provides significant empirical insight into the commonalities and the divergences between how these processes are experienced in different institutional settings. Without specifically linking these processes to transformations in the world market, it suggests that financialisation is related to the nature of a state’s insertion into the global economy.

3.3.3 The rentier, shareholder value, inequality and imbalances

Under the third heading, I have included a number of factors linked with financialisation which are often discussed together, particularly though not exclusively in the post-Keynesian literature, namely, the rise of the rentier, shareholder value orientation, inequality and global imbalances. This literature also frequently highlights the role played by global financial liberalisation as previously outlined. Much of the empirical purchase of this work is accepted by scholars of other traditions, however for Marxists, these factors are understood to be symptomatic of underlying material realities, such as the stagnation of production (discussed above), or epochal transformations in the relations of capitalism (discussed below).

Ground-breaking to the post-Keynesian understanding of the role of finance in contemporary capitalism was the work of Hyman Minsky. A number of post-Keynesian writers have argued that Minsky’s well-known financial instability hypothesis (FIH) can be adapted to explain a secular (or, at least, medium-term) rise in the weight of finance in the economy. As originally argued, the FIH explained the rising indebtedness of firms over the business cycle (Minsky, 2008). Firms’ willingness to assume debt in order to fund investment is conditioned by both future profit expectations and financing costs. At the peak of the business cycle, interest rates rise and growth slows, leading firms’ whose income-to-debt relation was originally classified as hedge (meaning that both principal and interest can be repaid
from profits), to first become speculative and eventually ponzi (where new loans are required to meet interest payments on existing debt). Avoiding mass bankruptcy requires the injection of liquidity by the central bank in its role as lender of last resort, and/or big government.

In his later writings, Minsky (1992; 1996; 1996) introduced the concept of ‘money manager capitalism’ (MMC), a fifth financial stage of American capitalism, in which he saw an increasing proportion of financing taking place through markets rather than through intermediaries. MMC was a consequence of the privatisation of the American pension system which led to the dominance of institutional funds and shareholder value orientation in the financial structure. Randall Wray (2011) argues that Minsky’s MMC can be interpreted to foretell a number of key transitions in the US economy, including the rise of financial innovation and shadow banking, pressure for deregulation and desupervision, and increasing household debt. Thomas Palley (2011) believes that the work on MMC suggests a ‘super-cycle’ involving the twin developments of regulatory relaxation and increased risk-taking, leading an economy over the medium-term to move from systemic stability to systemic exuberance and finally to systemic vulnerability. As is the case with Minsky’s original FIH, the MMC theory of a ‘super-cycle’ rise in finance is centred upon policy changes in the United States, offering scant direct insight into financialisation in the economies of the periphery.

According to much of the post-Keynesian literature which has been produced since Minsky’s path-breaking work, lying at the root of the changes which characterise financialisation is the rise of a rentier layer, whose interests lie in the perpetuation of financial profits at the expense of productive investment and broader welfare. The rise of such a layer is linked with a series of policy initiatives

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19 Maria Ivanova (2013) has summarised the criticisms of the FIH, including its failure to go beyond ‘animal spirits’ in its explanation of the boom, its purely microeconomic basis, and its empirically-unfounded contention that leverage increases during periods of economic expansion. Gary Dymski (2010) has succinctly summarised the problems that Minsky’s FIH encounters in trying to account for the dynamics of the crisis which began in 2007-8.

20 Minsky’s five financial stages of American capitalism are: commercial capitalism, industrial capitalism and wild-cat financing, financial capitalism and state financing, paternalistic, managerial and welfare state capitalism, and money manager capitalism (1996).

21 Epstein and Jayadev define the rentier share as “… the sum of profits of the financial sector plus interest income of the non-financial sector and households” (2005, p. 50). However, defined in this way, the agency of such a diverse grouping is unclear.
undertaken particularly in the United States (Dore, 2008; Duenhaupt, 2012; Epstein, 2005; Lazonick & O’Sullivan, 2000; Lazonick, 2008, 2010, 2013; Pollin, 2007), though accounts of the rising rentier share have been produced for other countries such as Germany (Duenhaupt, 2012), OECD economies more generally (Epstein & Jayadev, 2005), Mexico (Babb, 2005), Turkey (Akyüz & Boratav, 2005), Brazil (Barbosa-Filho, 2005) and Korea (Crotty & Lee, 2005). While this work is commendably global in its outlook, the interconnections between the rise of the rentier layer in such a diverse range of institutional contexts are under-explored.

One of the key consequences of the increasing power of the rentier are changes to corporate governance, captured by the term shareholder value orientation (SVO). The post-Keynesian theory of the firm distinguishes workers, management and rentiers (Lavoie, 1992). In the age of ‘managerial capitalism’ in the United States, it was commonly understood that managers’ preference was for growth, while shareholders’ was for profits (Chandler, 1977). The alignment of managers’ preferences with those of shareholders, and resolution of what was problematised as a principal-agent conflict (M.C. Jensen & Meckling, 1976), was achieved through two key institutional changes: the use of performance-related pay and stock options in managerial compensation, and the growth in mergers and acquisitions. William Lazonick’s work (Lazonick & O’Sullivan, 2000; Lazonick, 2008, 2010, 2013) has been instrumental to understanding the impacts of a range of measures including executive stock options, share buybacks and increased mergers and acquisition activity, as firms move from an outlook of ‘retain and invest’ to one of ‘downsize and distribute’.

Innovative contributions for the purposes here look at the impact of SVO on the financialisation of the firm. Engelbert Stockhammer (2004) finds evidence in France, the US and the UK, that the share of income paid out in dividends and interest is negatively associated with real investment. Özgür Orhangazi (2007), using US firm level data, finds that increased financial profit opportunities may have crowded out real investment by changing the incentives of firm managers, shortening planning horizons and increasing uncertainty. James Crotty (2003) and Eckhard Hein (2009) find that in the US since the 1980s, pressures to increase dividend payments and/or share prices (through share buybacks) have led to the substitution of
own capital with borrowed capital. This has driven up the debt-capital stock ratio, forcing firms to cut labour costs and investment or else face rising indebtedness.

Emphasising a different aspect of firm behaviour under financialisation, Claude Serfati (2008, 2011) posits the transnational corporation (TNC) as a locus of the valorisation of capital, where productive and financial valorisation are intertwined. A key aspect of financial valorisation has been the growth in intangible assets due to their positive impact on shareholder value. Similarly within a view to the role of intangible assets, Hugh Willmott (2010) looks at brand value, arguing that capital invested in brands yields a higher return in terms of market capitalisation than investment in production.

William Milberg (2008; Milberg & Winkler, 2010a, 2010b) has argued that SVO has driven the re-structuring of production across borders. Lead firms in global value chains are able to exert oligopsony power to drive down input costs, allowing them to maintain profits even in the context of slower economic growth. This, he says, has helped to sustain financialisation by easing managerial opposition to the use of profits in dividend payouts, share buybacks and mergers and acquisitions. Perhaps surprisingly, this is one of the few contributions in the financialisation literature which explicitly addresses the impact of the global re-structuring of production on the relation between financial and industrial capitals. However, Milberg’s suggestion that global re-structuring has eased the tension between shareholders’ and managers’ interests sits at odds with Lazonick’s managers whose incentives lie precisely in executive stock options, share buybacks and mergers and acquisitions. What is critical however, is the observation that financial and industrial capitals are now integrated within the form of the TNC, opening new spaces for surplus value extraction and re-distribution.

Within much of the post-Keynesian stream, the reasons for the rise of a rentier layer (or equally why the policies which have emboldened this layer have occurred when they did) are inadequately specified. Stronger material grounding is given in Jan Toporowski’s theory of ‘capital market inflation’ (2000, 2009, 2010a,

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22 Serfati uses ‘intangible assets’ to refer to patents, copyrights, licences and trademarks.
23 Baud and Durand (2012) take a sociological lens to the analysis of retailers’ use of overseas expansion, increased pressure on labour inputs and working capital management, and the resultant financialisation of assets.
The post-war baby boom and strong economic growth in the United States created a middle class demand for higher-yielding assets for savings purposes. Pension fund privatisation allowed this demand to be channeled into corporate securities. Since share prices, unlike bonds, have no 'par' value, their prices rise disproportionately with increased inflows to stock markets. This capital gain is paid not by the company that issued the share, but by the next buyer in the stock market. In contemporary finance, this ‘next buyer’ is an institutional investor who is more interested in capital gains (‘flipping’ shares) than in long-term sustainable profits.

In this environment, corporations are tempted to issue excess capital and increase their borrowing. This results in interest and dividend obligations rising faster than their cash-generating capacity is expanding. For such ‘over-capitalised’ companies, it is safer to hold financial assets against liabilities, rather than tie up funds in plant and equipment whose yields are subject to the caprice of the business cycle. As a result, rather than investing in production, corporations buy financial assets, and engage in mergers and acquisitions and/or balance sheet restructuring. In a financially developed economy, Toporowski (2008) argues that all sectors manage their liquidity with excess capital. Households, for example, hold increasing bank debt against real estate and financial assets, with the middle classes increasingly relying on housing inflation rather than income for consumption.

Toporowski’s arguments provide a powerful analytical basis for understanding the financialisation of the US economy, without recourse to a mysterious rentier layer. However, it should be noted that in Toporowski’s formulation, financialisation (a term which he avoids) is decidedly cyclical. He has gone so far as to argue that “… financialised capitalism is over” (2009, p. 146). Furthermore, the impact of capital market inflation in the advanced economies on emerging capitalist countries awaits further elucidation, though presumably capital market spillovers and the changing investment patterns of transnational firms would figure prominently.

A further theme common to much of the literature on financialisation is the interdependence of the phenomenon with rising inequality. In the post-Keynesian literature this rising inequality is linked to a neoliberal policy agenda which has empowered a small minority whose wealth emanates from financial profit. Seminal
examples which describe the class and race implications of this growing divide, particularly in the United States, include the work of Gary Dymski (2005) and Gabriel Palma (2009). Within a Marxist framework, Photis Lysandrou (2011a, 2011b) has argued that the effects of increased exploitation have resulted in an excess demand for the financial securities which act as ‘wealth containers’. The argument is extended globally, observing that this excess demand is exacerbated by growing inequality and wealth in emerging market economies which has not been matched by growth in their domestic capital markets.

A large body of post-Keynesian macroeconomic research has focused on the implications for growth of the growing inequality linked to financialisation (Hein & Van Treeck, 2010; Hein, 2010; Lavoie, 2008; Onaran, Stockhammer, & Grafl, 2009; Skott & Ryoo, 2007; Stockhammer, 2010; Zalewski & Whalen, 2010). While a detailed examination of these papers is impossible here, all of these models critically pivot on assumptions made about the labour market, and the specification of investment and consumption functions. Accordingly, a 'finance-dominated' regime can lead to an expansionary (though unstable) outcome, but can equally lead to 'profits without investment' or 'contractionary' outcomes.\(^{24}\)

Stockhammer (2012a, 2012b; Stockhammer & Onaran, 2012) has extended this analysis to the global level, where he argues that financial deregulation has allowed certain countries to run protracted current account deficits. In reaction to stagnant domestic demand in both deficit and surplus countries, two growth models have emerged, respectively debt-led and export-led. In the former countries, households maintain consumption levels in the face of stagnant or falling wages through increased borrowing. In the latter countries, wage repression supports export competitiveness, with profits recycled as capital account outflows to the deficit countries.\(^{25}\)

Summing up this section, a number of important contributions can be highlighted. Changes in corporate governance associated with financial imperatives

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\(^{24}\) Paulo dos Santos (2013), while agreeing with the policy objectives of the post-Keynesian work on wage-led growth, argues from a Marxist framework that, rather than being an exogenous variable which can be related to output, the distribution between wages and profits is endogenous to the relationship between the decision to produce and the decision to consume, and therefore holds no causal power.

\(^{25}\) Examples of research into the relationship between global imbalances and financialisation from a Marxist perspective include Guttmann and Plihon (2010) and Lucarelli (2012).
in policy-making have influenced relative levels of investment in fixed, intangible and financial assets. The interpenetration of industrial and financial capital in the form of the transnational corporation has opened up new opportunities for surplus value extraction and redistribution. At the domestic level, financialisation and inequality appear to be mutually reinforcing in a number of countries, while at the international level, a pattern has emerged of complementary debt and export-led growth models.

3.3.4 Epochal transformation in capitalism

Underlying much of the literature which has been reviewed to this point is an understanding, whether made explicit or not, that financialisation is a cyclical phenomenon of varying durations. The rise of finance can or will be checked, either by the perspicacious actions of concerned policymakers, or by the counterveiling tendencies of the operation of the capitalist economy. In this section, I examine two currents within the literature which emphasise the secular nature of financialisation, that is, the argument that financialisation signifies an epochal transformation in capitalism.

The first example of this current is that which, broadly put, places emphasis on the impact of the emergence of a new knowledge-based economy. From within a post-Keynesian framework, Bernard Paulré (2010) suggests that the uncertainty and instability associated with the knowledge economy make finance and its ability to control and limit risk more important. This, of course, assumes that finance does these things. From within a Marxist framework comes the work of Carlo Vercellone (2007, 2008) on the development of ‘cognitive capitalism’. This he defines as a new phase of capitalism, where labour organises itself autonomously, primitive accumulation is based on financial logic, and the extraction of rents dominates. A similar argument is developed by Teixeira and Rotta (2012) that the ‘new enclosures’ of intellectual property rights allow the transformation of knowledge into a monopolised commodity, the revenue from which should be understood as a form of rent. Related to the notion of ‘cognitive capitalism’ is Christian Marazzi’s ‘biocapitalism’ (Marazzi, 2010), where investment in apparatuses of producing and
capturing value outside of directly productive processes permeate human lives, resulting in a lengthening and intensification of the working day from which financial profits may be drawn. This literature on ‘cognitive capitalism’ and ‘biocapitalism’ is refreshing in its outlook, but lacks a well-defined international perspective; as such, the relationship between the rise of the knowledge economy in certain regions and the global re-structuring of production is not sufficiently explored.

The second example which I will focus on is that of the body of work developed by Lapavitsas (2008; 2009a, 2009b, 2010, 2011, 2013) and the RMF School, which builds upon Baran and Sweezy’s (1968) argument that the existence of increasingly large monopolistic enterprises in the contemporary period is the result of the immanent capitalist tendencies to centralisation and concentration. The stagnation of productive accumulation\(^{26}\) in the countries of the capitalist core has added impetus to these large monopolistic enterprises’ push for reforms which facilitate their expansion. This has resulted in trade and capital account liberalisation, but also the weakening of that domestic regulation which constrains foreign ownership, profit-making and the reach of the private sphere. With the substantive achievement of these policy objectives by the neoliberal state, and aided by technological developments in communications and information technology, large firms have become increasingly self-financing. Where external funds are required (and/or part of a profitable investment strategy), the firms draw upon market-based securities rather than loans, thereby empowering investment banks relative to commercial banks.

The increased ability of corporations to self-finance constitutes the push factor behind a transformation in commercial banking. Pull factors include: first, the aforementioned changes in regulation combined with developments in information technology which have led to liquidity-enhancing financial innovation, namely credit scoring and securitisation (dos Santos, 2009a); and second, the privatisation of social services, which has introduced financial intermediation into a growing share of household reproduction. As a result of these factors, commercial banks have turned

\(^{26}\) The declining rate of growth in labour productivity in the US, UK, Germany and Japan is documented by Lapavitsas (2013).
to the individual as a source of revenue, and act more like investment banks, turning over the balance sheet to satisfy demands for increased profitability. This turn has resulted in profits from expropriation\textsuperscript{27} from workers' wages. Where workers' wages have been stagnant, this expropriation has only been possible due to the expansion of consumer indebtedness. These profits originate, not thanks to the creation of additional surplus value, or even in the capture and re-distribution of existing surplus value\textsuperscript{28}, but in the expansion of the circuits of loanable money capital. It is important to point out that this fact is what ensures that such expropriation is in the broader interest of capital (at least in the short-term), and not simply in the predatory interests of bank capital as against industrial capital. For this reason, Lapavitsas (2013) argues that loanable capital, not fictitious capital, lies at the root of financialisation. Taken together, these transformations in the behaviour and inter-relationships of non-financial enterprises, banks and households constitute an epochal change in capitalism.

The \textit{RMF School} has taken a lead role in attempts to both theorise the links between financialisation in developed and developing countries (Lapavitsas, 2009c, 2013)\textsuperscript{29}, and to document the phenomenon in emerging capitalist economies (Ergunes, 2009; Kaltenbrunner, 2010, 2011; Karacimen, 2013; Panceira, 2009, 2010, 2011). Their argument centres around the impact of capital account liberalisation and developing countries’ ensuing obligation to hoard reserves of US dollars in their function as quasi-world money in order to participate in these flows. This has resulted in net capital flows from developing to developed countries, and imposed significant opportunity costs in the form of reserve accumulation. With developing countries’ exchange rates functioning as an asset class for international investors, and central banks’ commitment to inflation-targeting regimes, foreign capital inflows have had to be sterilised, encouraging the growth of domestic bond

\textsuperscript{27} The concept of expropriation bears similarities to Marx’s concept of ‘profits by deduction’ (1991, p. 1001), as surplus value extracted in the sphere of circulation resulting from pricing policies characteristic of an environment where wages are higher than the socially necessary minimum and the bulk of output is sold at monopolistic prices. Marx believed that the opportunity to earn such profits would be fleeting, but, as argued by Baran (2012), the requisite conditions are characteristic of many advanced capitalist countries in the contemporary period.

\textsuperscript{28} Baragar and Chernomas (2012) argue that increased working-class debt in the United States and Canada has allowed value created in the non-financial sector to be transferred to the financial sector.

\textsuperscript{29} Lapavitsas (2013) draws upon the concept of ‘subordinate financialisation’ first developed in this thesis.
markets and the financial institutions which service them. A key role has also been assigned to foreign bank entry in introducing new techniques for securitised lending to individuals for mortgages and consumption.

### 3.3.5 The financialisation of everyday life

Finally, from within radical currents in sociology, geography and political science, come perceptive readings of how financialisation has interacted with a variety of social institutions. This is a large and growing literature rendering an exhaustive review impractical; what follows is therefore a highly selective synthesis.

The influential *cultural economy* approach\(^{30}\) places central importance on the ‘wall of money’ which entered Western financial markets post-deregulation. The creation of this flow is attributed to a range of material and psychological conditions, including low interest rates, middle-class saving and ‘irrational exuberance’. The capital market is understood as a social construct, standing between households and firms and the securities they invest in, acting not just as an intermediary but shaping the behaviour of the agents themselves\(^{31}\). Julie Froud et al. (2002) have coined the term ‘coupon pool capitalism’ to describe these changing relations. This approach draws upon shareholder value theory, but injects a healthy dose of skepticism concerning its limitations as an explanatory factor. There is a gap, they point out, between saying and doing, and while shareholder value may “… set management on a utopian quest for growth and higher capital returns”, the actual consequences of this “social rhetoric” are uncertain (2006, p. 65).

Pension systems are a critical element in a number of accounts of financialisation (Blackburn, 2006; Dixon & Sorsa, 2009; Engelen, 2003; Langley, 2004; Macheda, 2012). Robin Blackburn has coined the term 'grey capitalism' to describe an economy in which the relations of ownership and responsibility become blurred, as citizens place their future income security in the hands of institutional...

\(^{30}\) Associated with the Centre for Research in Socio-Cultural Change (CRESC) at the University of Manchester, much of whose work is summarised in Engelen et al. (2011).

\(^{31}\) This notion of the ‘performativity’ of markets can trace its intellectual origins through Donald MacKenzie (2008a, 2008b) to Michel Callon (1998).
investors. The cancellation of pension promises – what he calls 'exploitation over time' – is crucial in attempts to prolong the current regime of accumulation.

A number of authors point to the importance of cultural attitudes towards home ownership and the role of the state in housing provision in the rise of financialisation (Aalbers, 2008; Leyshon & Thrift, 2007; Schwartz & Seabrooke, 2009; Watson, 2008). Matthew Watson has argued that the political consequence of the combination of privatised pension provision and liberal housing regimes, is a populace which punishes political parties which do not protect asset wealth, locking in processes of financialisation.

One of the few authors to approach the question of what financialisation means applied to the government sector is political scientist Iain Hardie (2011, 2012). Hardie defines financialisation simply as the trading of risk. Comparing the bond markets of Lebanon, Turkey and Brazil, Hardie argues that the dominant presence of foreign investors in Brazil’s highly liquid bond market has encouraged the shorting of government bonds. This has undermined debt sustainability by pushing up borrowing costs, and increased the severity of crises. In contrast, the Lebanese bond market is dominated by a handful of domestic commercial banks, whose interest is in holding government bonds as an investment, helping to calm bond markets at times of political upheaval.

As this selective review illustrates, while this current within the financialisation literature does not provide a theoretical account of the emergence of financialisation across the world market, it does provide a rich diversity of case studies of the impact of financialisation on all aspects of life in a variety of institutional settings.

3.4 A THEORY OF FINANCIALISATION: AN EPOCHAL TRANSFORMATION IN CAPITALIST RELATIONS AND THE CAPITALIST WORLD MARKET

What this review suggests is that financialisation has an enormous reach and diversity of appearances, and that its emergence is both multi-faceted and mediated in complex ways. In this thesis, I have chosen to base my theorisation of financialisation on the analysis of the RMF School. However, I will argue that the
epochal transformation of the relations between the fundamental agents of capitalism must be located within the development of the world market. Not as a transhistorical abstract logic of a capitalist world system, but as a process driven by and contingent upon the specific actions of states and their capitalist classes. The contemporary distinguishing attributes of the world market are, first, the deepening of the internationalisation of the circuits of commodity and money capital, including the interpenetration of capital ownership; second, the unprecedented internationalisation of production; and, third, the pivotal role assumed by the US dollar as quasi-world money in a flexible exchange rate system.

In seeking to explain the origins of financialisation, a central role is played by the stagnation of productive accumulation and falling profitability in the advanced capitalist economies which led to the breakdown of the Bretton Woods system. Rather than drawing a direct causal link from this stagnation to financialisation, as in those accounts which depict a flight of capital into finance, the impact of the slowdown arrives via the liberalisation in trade, capital flows and asset ownership, and the repression of the wage share, which it fostered

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The ensuing expansion of the world market was characterised by both the deepening of the internationalisation of the circuit of money capital, and, for the first time, the internationalisation of the circuit of productive capital. With the internationalisation of these two circuits came an acceleration in the interpenetration of capital across nation-states. The central agent in these changes is the transnational corporation, supported by the actions of the state, overcoming crisis through the restructuring of the relations of production and the exploitation of new productive technologies, especially those in communications, information technology and transportation. Integrating the stagnation of production in this way, as a mediated factor catalysing the development of the world market, allows for financialisation in contexts where productivity and/or profitability is rising, such as those of the emerging capitalist economies.

32 Whether these changes resulted in a recovery in the rate of profit is a contested empirical issue, which I need not resolve here.

33 The importance and specific role of technological change deserves far more attention than I am able to give it in this work.
As they have re-structured their productive activities across the globe, corporations have extracted surplus value under circumstances where revenues and expenses are drawn from different social formations reflecting chaotic standards of value. The rise of intangible assets, irregularities in transfer pricing, and increased tax arbitrage all trace their origins to these transformations in the behaviour of the corporation. In this environment, the non-financial corporation has become increasingly able to finance itself out of retained earnings (Lapavitsas, 2013).

Where external financing has been required, capitalist enterprises have exploited capital account liberalisation to access a global pool of liquidity, the latter spurred on by pension privatisation and financial deregulation. This has had three key corollaries. First, enterprises have replaced commercial bank borrowing with the issuance of market-based securities. Second, in the context of a global system of floating exchange rates, this has necessitated engagement in interest rate and exchange rate derivatives. Third, corporations have acquired the capacity to engage in financial investment. This increase in hedging and speculative activity reflects both the increased opportunities for surplus value extraction opened up by global productive re-structuring and the unfolding of the world market in the absence of a world state which might regulate the predatory tendencies of finance; both reflect capital’s quest to escape the constraints of productive valorisation.

These processes have driven financial innovation and empowered investment banks relative to commercial banks. The ensuing growth in fictitious capital is certainly characteristic of financialisation, but it is viewed here as symptomatic rather than causal. Similarly, the importance of shareholder value orientation, rising inequality and global imbalances are all accepted in this account, however these behavioural and distributional aspects have been embedded within the context of deeper structural transformations in capitalism.

Commercial banks have witnessed a decline in their loan portfolio with the largest enterprises. In parallel, financial liberalisation has led to a rising demand amongst the upper classes for wealth instruments driving financial innovation, while privatisation has introduced financial intermediation into increasing areas of household reproduction. Particularly in those countries where the repression of wages has been successful, this has resulted in increasing recourse to indebtedness in
order to maintain living standards\textsuperscript{34}. Taken together, this has allowed commercial banks, employing new technologies in support of innovative financial products, to make profits from expropriation from workers’ wages.

In conclusion, the development of the world market under particular historical conditions has provided the context for a fundamental restructuring of the relations between enterprises, financial intermediaries and workers. However, this restructuring will be uneven, taking different forms across the nation states which are constitutive of the world market, as it is mediated by domestic institutional formations and the hierarchical nature of each state’s insertion into global processes of accumulation. In the periphery, for example, capitalist enterprises’ access to international pools of liquidity has proven a mixed blessing in the context of flexible exchange rate regimes held together by the US dollar acting as a form of quasi-world-money. Governments in the periphery, furthermore, have adopted monetary policies to attract capital flows, with sterilisation efforts driving the growth of domestic bond markets. A theorisation of the distinctive process of financialisation as it unfolds in the periphery, characterised as \textit{subordinate} financialisation, will be developed in chapter five. However, before this, in the next chapter, I set out original empirical evidence of the tendencies of financialisation as they manifest themselves across a range of advanced capitalist economies.

\textsuperscript{34} The connection between the wage share and indebtedness is mediated by changing prices of the worker’s consumption basket owing to the global re-structuring of production, as well as by government policies towards pensions, housing, healthcare, education, etc..
Financialisation varied: Financialisation in advanced capitalist economies

4.1 INTRODUCTION

Most macroeconomic research into the phenomenon of financialisation has focused on the United States (for example Krippner, 2005; Orhangazi, 2008; Evans, 2009). This is both since it is assumed, correctly or not, to be the ideal type of a financialised economy, and for more practical reasons of data availability\(^1\). There have been forays into the phenomenon as it manifests itself in the UK (Stockhammer, 2004), France (Chesnais, 2001; Duménil & Lévy, 2005), Germany (Duenhaupt, 2012) and a number of other single countries, but little truly comparative work (with notable contributions from Epstein & Jayadev, 2005; Lapavitsas, 2013). The present chapter attempts exactly this, in order to come to better grips with the empirical realities of financialisation in advanced capitalist economies.

In the previous chapter I developed a theory of financialisation based upon Lapavitsas’ work on epochal changes in the behaviour of and relations between the

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\(^1\) Significant portions of this chapter have been incorporated into a joint paper with Professor Costas Lapavitsas (2013) which has been accepted for publication in the Cambridge Journal of Regions, Economies and Societies.

\(^2\) Any cross-country survey of the peculiarities of financialisation presents numerous statistical difficulties. Beyond basic data availability, there are maddening problems with the use of varying and opaque categories in national accounts, and with differing methods and degrees of aggregation and consolidation. In some cases, these difficulties simply reflect the very different nature of the way that different economies function. Added to this is the fact that, no matter how much effort is put in to reconciling these issues, a central development within financialisation has been the skyrocketing growth of off-balance sheet activity.
key institutions of contemporary capitalism – banks, enterprises and households. I located these transformations within the historically-specific characteristics of the world market. This theorisation provides a testable hypothesis that the tendencies of financialisation should be observable as a global phenomenon, rather than something which is limited to archetypal financialised states. I want to emphasise that this is not an argument that financialisation will be experienced in a homogenous fashion across countries. Instead the essential tendencies of financialisation are expected to manifest themselves unevenly across the nation states which are constitutive of the world market, mediated by domestic institutional formations and the hierarchical nature of each state’s insertion into global processes of accumulation.

An implication of this argument for divergence within convergence, which will mark a sub-thesis of this chapter, is that it runs against the thrust of the comparative capitalisms literature. The chapter will re-visit the bank-based versus market-based typology (BBMB) which is so central to the comparative capitalisms work. Does the bank-based versus market-based typology still hold, and if so, how has it been transformed in an era of financialisation? What emerges is that while key BBMB differences remain, these differences have come under heavy pressure from and been transformed by processes of financialisation.

In the advanced capitalist economies, firms are turning away from finance through relationship lending and towards retained earnings and market-based finance, and re-orienting their business to hold a greater share of financial relative to fixed assets. Preliminary evidence suggests these trends are particularly pronounced in large enterprises. However, the turn away from relationship lending has been less pronounced in Germany, France and Japan. While French firms’ holdings of financial assets appear to mark them as financialisers par excellence, historical analysis links this to a wave of corporate re-structuring in the 1990s coming in response to the very particular way in which French cross-shareholdings have been unwound. After binging on financial assets during the 1980s bubble, Japanese corporations have in some sense de-financialised, perhaps offering a glimpse of the future for firms in countries such as the UK.

Banks have moved to a smaller loan share of assets, shifting from income on long-term interest spreads to short-term spreads on repo markets and fees on investment banking activities. Within the loan portfolio, there has been a
pronounced shift to lending to households and for real estate. The banks’ source of finance has moved from traditional deposits to short-term borrowing from the money market, especially from other financial institutions. Within this overall story of convergence, Japanese and German banks retain a distinctive character. While the trends are the same, the levels of lending to corporations versus households still cleaves to the bank-based typology. Once again, there is evidence of a distinct financialised path of large international banks, which emphasises the importance of institutional specificities and policy environments in the evolution of bank-based and market-based systems.

In the household sector, Japan and Germany again stand apart. French households have moved rapidly towards the US/UK model, with deposits falling sharply and increased holdings of equities and pension funds invested in private marketable securities. Japanese households keep their pension and insurance reserves in government bonds, while the Germans come out somewhere between the Japanese and the rest. On the liability side, housing loans account for three quarters of liabilities in the US, the UK and France; while in Germany and Japan though the trend is rising, housing loans still only represent half of household liabilities. These differences reflect variances in housing and pension policies and the organisation of finance in these countries.

The chapter is structured as follows. The next section highlights relevant aspects of the comparative capitalisms literature, both to draw out lessons for the analysis and to distinguish the analytical approach employed in this chapter. The third section provides empirical evidence of the transformations at the macro-economic level, as well as that of non-financial enterprises, banks and households. The investigation deploys national account, flow of funds as well as non-financial and banking data for the USA, the UK, France, Germany and Japan. The final section concludes.

4.2 BANK-BASED VS. MARKET-BASED IN AN ERA OF FINANCIALISATION

For over three decades, a vibrant literature on what Jackson and Deeg (2008) term ‘comparative capitalisms’ has evolved. These comparative studies, which take the nation-state as their point of departure, have been wide-ranging in their institutional
approach. They have variously focused on labour, industrial organisation, production regimes, financial systems, corporate governance, legal systems, welfare regimes, systems of innovation, and more. In their survey, Jackson and Deeg draw out three common principles that unite this enormous literature. The first is the grounding of the economic in the institutional settings of the social. Second is an understanding of the various institutions within an economy as complementary, and therefore as a potential source of comparative advantage. Finally, and critically for the argument here, there is a presumed institutional path dependence which prevents system convergence.

A strand within this broader literature is the bank-based vs. market-based framework (BBMB). The typology was originally set out by John Zysman (1983) who examined the changing relationship between governments and markets in bringing about industrial change. The distinction also plays a decisive role in Michel Albert’s (1991, 1993) influential depictions of Rhineland vs. Anglo-Saxon capitalism.

Any financial system, regardless of its institutional specificities, has to fulfil a number of basic functions. These include, but may not be limited to, capital allocation, risk sharing and corporate control. According to conventional understandings, in a bank-based system, as typically represented by Germany or Japan, commercial banks act as ‘delegated monitors’ (Diamond, 1984), collecting information about borrowers and channelling depositors’ savings to investment opportunities. In so doing, banks provide both intergenerational risk-sharing and smoothing to their creditors (Allen & Gale, 2000), and have a stake in monitoring borrowers’ behaviour (Stiglitz, 1985). In contrast, in a market-based system, typified by the US and the UK, price revelation through debt and equities markets plays the lead role in capital allocation. Risk-sharing is accomplished through each individual investor’s portfolio diversification, and corporate control is exercised through arm’s-length financial market discipline, chiefly through takeovers (M.C. Jensen & Meckling, 1976; Lazonick & O’Sullivan, 2000). There are substantial literatures which debate both these conventional understandings themselves and the relative merits of bank-based vs. market-based systems for growth and development, an examination of which is not germane for present purposes. Common to all of this

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3 Note that this may involve a considerable, perhaps increased role for investment banks, but diminishes the importance of retail commercial banking.
literature however is a tacit assumption that finance plays a central if not the central role in determining the nature of a capitalist system.

It is in this sense that another strand of the comparative capitalisms literature can be clearly distinguished. What has become known as the ‘varieties of capitalism’ approach (VoC), after the pivotal book by Hall and Soskice (2001) of the same name, places the firm, not finance, at the centre of its analysis of capitalist divergence. Following VoC analysis, four institutional domains define firms’ incentives and constraints: financial systems and corporate governance, industrial relations, education and training systems, and the inter-company system (Deeg & Jackson, 2007). Asserted strong complementarities between these four domains mean that any coherent system can confer on its firms an institutional comparative advantage. From their analysis of these institutional domains across a range of national settings, Hall and Soskice draw out two ideal types: that of the liberal market economies (LMEs), represented by the US and the UK, marked by short-term capital, deregulated labour markets, general education and inter-firm competition; and that of coordinated market economies (CMEs), represented by Germany, characterised by long-term capital, regulated labour markets, vocational training and inter-firm coordination. In terms of the financial system domain, the VoC approach maintains a similar dichotomy as the BBMB method.

A number of critiques have been levelled at the VoC approach, of which only a few will be highlighted here. Foremost is the charge that due to the assumption of strong institutional complementarity and path dependence, the approach is relatively static. There is no theory of when and how capitalist systems change from one configuration to another (Crouch, 2005; Hancké, Rhodes, & Thatcher, 2007). There is in fact much evidence of institutional incoherence (Crouch, Hall, Streeck, Boyer, & Amable, 2005), and that both incoherence and complementarity can either facilitate or hinder institutional change (Amable, 2003; Aoki, 2001). Second, the firm, according to some critics, should be given more agency and not simply viewed as an ‘institution-taker’ (Hancké et al., 2007). Power and politics must be brought into consideration to understand how firms attempt to build and link coalitions with political processes and institutions. Third, a number of authors caution against over-emphasising national boundaries, suggesting that there is a much wider scope for hybridisation of different institutional configurations that change the
complementarities and linkages within national boundaries, between different sectors and layers of the economy (Aoki & Jackson, 2008; Deeg, 2009).

For the purposes of this chapter, both the innovations of VoC analysis and a number of criticisms of the same can usefully be considered in relation to a revisiting of the BBMB analysis in an era of financialisation. First, the understanding in what follows is not that capitalist accumulation is either finance or firm driven. Rather, the interaction between the two and with households and the state will be examined. Second, the meso-level insights of the more recent dynamic VoC literature will be drawn upon to better understand how material reality and policy have interacted resulting in institutional and system change. Third, the analysis will look at the dimension of firm (and bank) size to offer some initial indication of the presence and degree of intra-national institutional hybridisation.

Most importantly, against the central tenet of the comparative capitalisms literature that institutional path dependence will prevent convergence, the chapter will present empirical evidence of convergence across countries despite their historical, political and institutional specificities. Within the theoretical framework of this thesis, this is to be expected; the transformations in the behaviour and relations between enterprises, banks and households elaborated in chapter three have emerged within the historical and political context of financial liberalisation, labour market deregulation and ideological domination of free markets since the 1970s. The epochal features of financialisation are historically and institutionally specific, reflecting the shifting balance of class forces between capital and labour. Hence, financialisation has varied at different times and in different countries.

4.3 FINANCIALISATION VARIED: THE EMPIRICAL EVIDENCE IN ACES

Using national flow of funds data, this section analyses the degree and trajectory of financialisation at the level of the macroeconomy, and then in, respectively, the non-financial corporate, the bank and the household sectors of the USA, the UK, Japan, Germany and France. The procedure allows for a comparative study of financialisation across advanced countries, while remaining aware of institutional and political specificities in each country. Three empirical questions arise from the approach to financialisation proposed above and serve as testing ground for its
validity. First, for enterprises, is there a turn away from bank loans in favour of borrowing from open financial markets, and has there been accumulation of financial relative to other assets? Second, for banks, is there an increase in the relative weight of lending to finance, insurance and real estate as well as to households? Third, for households, has there been increasing acquisition of financial liabilities relative to the ability to pay, and have financial assets shifted away from deposits? These questions are examined in the following sections by constructing appropriate empirical indicators.

4.3.1 The macroeconomic picture

One simple way to capture the increasing role of finance is to look at total financial sector assets as a share of GDP (see figure 4.01; for source notes, except where otherwise noted, see Appendix A). A caveat is first required that too much emphasis should not be placed in the interpretation of cross-country differences in levels, due to the many difficulties in constructing comparable data sets as enumerated above. Having said this, through the 1990s, the UK, France, the US and Germany all show parallel growth trends starting from different levels. In the 2000s, financial sectors in the UK and France rise rapidly while their US and German counterparts continue on their earlier growth path. The exception to this story is Japan. After explosive growth during its bubble period in the 1980s, and then slower growth in the 1990s, the financial sector has shrunk as a share of GDP in the last decade.

Comparing figure 4.01 with the growth of bank assets as a share of GDP (figure 4.02) counsels against making any simple macroeconomic distinctions between those economies which are traditionally thought to be bank-based and those which are not. The growth in the financial sector in Japan in the 1980s is due to the growth in bank balance sheets, but since that time, any growth relative to GDP has come in the non-bank financial sector. For the UK and France, most of the growth in the financial sector in the last two decades is accounted for in the growth of banks; however, in the US and Germany, the opposite is true. Grasping the bank-based market-based typology and the transformation of banks in an era of financialisation clearly requires nuanced investigation.
Typically the relative importance of market-based finance is gauged by looking at stock and bond market development (Beck, Demirgüc-Kunt, & Levine, 2009; Demirgüc-Kunt & Levine, 2001). Figure 4.03 shows stock market capitalisation as a share of GDP, while figure 4.04 shows private bond market capitalisation as a share of GDP. Stock markets have grown in size relative to GDP across the sample in the last two decades, however, clearly they are more central to
the market-based economies of the US and UK. Private bond market capitalisation defies easy classification. It is at similar levels and shows no growth for all countries, except for the US where it is at both a much higher level and increasing in relative size.

**Figure 4.03:** Stock market capitalisation as a share of GDP  
*Source: WB financial structure dataset, from Standard & Poor’s emerging market database*

**Figure 4.04:** Private bond market capitalisation as a share of GDP  
*Source: WB financial structure dataset, from BIS *Quarterly Review*
A number of other measures have been used to show the increasing 'footprint' of the financial sector. These include the increasing share of the Finance, Insurance and Real Estate sectors (FIRE) in GDP, while its share in employment has remained stagnant. US data on wages from the FIRE industries shows that after two decades at a stable 15 per cent, the FIRE share of domestic private income rises to over 20 per cent in the 1980s, where it has stayed for the last two decades. A number of attempts have been made to unravel the complexities of accounting for financial profits as a share of total profits. The first work on the US economy was done by Krippner (2005), while that on France by Duménil and Lévy (2004a). Lapavitsas (2013) confirms Krippner’s finding that financial profit as a share of total corporate profit in the United States has been rising from approximately ten per cent in the 1940s and 1950s to reach nearly 35 per cent before the crisis of 2007-8; to this he adds the findings that the pre-tax profits of financial corporations as a share of total pre-tax profits have risen in the UK from below ten per cent before 2000 to above 35 per cent before the crisis, and have risen in Japan from approximately ten per cent in the early 1980s to 20 per cent in recent years.

But while such measures illustrate the undeniable growth in the size, share and reach of finance, they do not provide a deeper understanding of the structural transformations going on within and between key sectors of the economy, and how and why those transformations differ across countries. It is these processes of the penetration of financial motives into the operations of and relations between firms, financial intermediaries and households which characterises financialisation.

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4 Tracing such a ratio using data from OECD.stat shows the FIRE sector growing in all countries of the sample from approximately 15 per cent of GDP in 1970 to 30 per cent in 2008, with the exception of Japan which grows from approximately 10 per cent in 1970 to 17 per cent recently. The direct contribution of finance is masked in such calculations by the inclusion of real estate. However, data for the finance sector alone are both less reliable due to differences in categorisation and available for a much shorter time period. Efforts by Lapavitsas (2013) to reconcile individual national accounts data estimate the growth of the finance sector from approximately five per cent in the early 1980s to between seven and eight per cent more recently, with the exception of Germany, the ratio for which moves around five per cent since data become available in 1991.

5 Using data from OECD.stat shows employment in financial intermediation at approximately 4.5 per cent in the US and UK, 3.5 per cent in Germany and France, and 2.5 per cent in Japan.

4.3.2 Non-financial corporations

According to the theory of financialisation adopted here, it is expected that non-financial corporations (hereafter just corporations) will, first, turn away from bank loans towards open financial markets and, second, accumulate a greater proportion of financial relative to other assets. The bank-based versus market-based distinction has historically pivoted on the degree to which corporations seek financing from ‘patient’ relationship-based bank lending as against ‘impatient’ open market capital. Examining loans as a share of liabilities (figure 4.05) suggests that overall there has been a secular decline in the use of loans as corporations turn to self-finance. However, two distinct levels persist. Germany and Japan on the one hand, and the US and UK on the other, with France moving from the former towards the latter.

![Figure 4.05: Non-financial corporations’ loans as a share of total liabilities (and linear trend)](image)

Some care should be taken in drawing any firm conclusions about the magnitude of the move away from bank borrowing. The classification of what is a loan is critical. As an example, the line given in figure 4.05 above shows loans from only UK MFIs (monetary financial institutions) as a share of liabilities. If total loans is used instead, the UK appears to join the bank-based group. But total loans masks
both increased borrowing from foreign monetary financial institutions (MFIs), and more importantly from increased ‘direct investment loans’. The latter represent cross-border borrowing and repurchases between affiliated enterprises, where an MFI does not participate as a lender or borrower. In effect, a form of short-term internal credit which masks the fall in bank borrowing.

The impact of financialisation comes out more starkly with examination of the uses side of the balance sheet (figure 4.06). For France, the US and the UK, there is a marked secular rise in the ratio of financial assets to fixed assets, reflecting the shift in corporate holdings of financial versus ‘productive’ assets. Once again, Japan and Germany appear to be marching to a different tune, in trend if not in the level of this ratio. All five countries exhibit cyclical fluctuation, however finer analysis would be required to disentangle asset price inflation from net acquisition of financial assets.

A number of interesting stories suggest themselves here. First of all is that of Japan. The ratio rises spectacularly during the bubble decade of the 1980s, reaching 240 per cent. This then falls back to hover around 150 per cent for the next two decades, with a second smaller period of inflation between 2002 and 2006. This flattening out of the trend post-1990 suggests that Japanese corporations, due to their earlier experience, have become reluctant to or are unable to re-engage in financialisation.

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7 It would have been desirable to only include what might be termed ‘tradeable’ or ‘portfolio’ assets in the numerator, however, at the national flow of funds level, differences between countries’ categorisation makes interpretation of such a ratio difficult. By using ‘total financial assets’, I can be sure that I am not missing part of the story due to different classification systems. Fixed assets was used to avoid volatility in land prices (included in tangible assets) and cyclical inventory stocks (included in produced assets).
The second interesting story is that of France. From 1982 to 2000, the ratio explodes from about 70 to 270 per cent, far exceeding the levels of both the Anglo-American economies and Japan. This is particularly notable in that it occurred during a period of the “unravelling” of the French system of cross-shareholding (Morin, 2000). In the first round of privatisations of state-owned enterprises in the 1980s, French businesses were sold to five categories of investors only: a core of stable shareholders (‘noyau dur’), the workforce, public, French and foreign institutional investors. Thus, according to Bob Hancké (2001, p. 320): “… an ownership structure of loyal investor cores emerged, which consisted of groups of banks, insurance companies, and industrial companies that acted as long-term institutional investors and were supposed to help govern the company and protect it from takeovers.” This explains the relatively high level of corporate holdings of financial assets from the outset of figure 4.06. Then in 1993, the French government resumed those privatisations which had been earlier postponed and allowed sales of the core shareholdings which had been meant to protect the newly privatised companies. In late 1996, one of the two major cross-shareholding structures collapsed. This led to a wave of merger activity, with the amount of equity raised by French corporations increasing by 38 per cent (Culpepper, Hall, & Palier, 2006).
French companies during this period also looked abroad for acquisitions and joint ventures.

The third question which arises from figure 4.06 is the contrasting movement of US and UK corporations during the most recent decade. Decomposition of the ratio shows that for the US, both financial and fixed assets continue to grow but at an equal (nearly exponential) rate. While in the UK, the stock of financial assets continues to grow post-2001 on a near-exponential trend, but growth in fixed assets is clearly linear. This suggests that the difference in behaviour is down to the relatively slower growth of UK corporations’ fixed investment. This view is partially explained by higher rates of gross fixed capital formation in the US over the past two decades, though the difference here does not seem to fully justify the trend in the ratio of financial to fixed assets.

**German and Japanese corporations apart**

Further insight can be gleaned through the examination of the historical changes of corporations’ balance sheets\(^8\). On the asset side, levels of corporate deposits decline in the US, France and Germany, coinciding with the rise of the use of money market instruments. This has eaten into the liability side role of banks in these countries. The exceptions are Japan and the UK. However, if deposits with foreign MFIs are subtracted from UK corporate balance sheets, the UK joins the ranks of the former group.

Trade credit is squeezed in the eager financialisers much more so than in Japan and Germany. This follows the financialisation story: corporations are pushed towards the use of factoring to turn over their trade receivables as quickly as possible. Japan stands out for its persistently high level of trade credit. This reflects both the more export-intensive and manufacturing-based nature of its economy, as well as the history and customs of the physical payments system. Germany shows an increase in trade receivables (though not payables) over the last decade. This might reflect

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\(^8\) The analysis here reflects the author’s analysis of national accounts data, plotting the change in the portfolio composition of the balance sheets of non-financial corporations over the period in question.
Growing German strength (both absolutely and relatively) in export markets where credit terms may be longer than for domestic production.

Equity holding trends increase universally with cyclical fluctuations. Levels reflect national institutional histories. France stands out for the reasons explained above. In Japan, corporations’ holdings of shares and equity increase dramatically, first during the infamous bubble period in the 1980s, but then again more recently between 2002 and 2006. However, what is interesting to note is that in the earlier boom, a doubling of bond issuance and a 50 per cent increase in loans (in absolute terms, on the asset side) suggests that corporations were ‘in on the party’. Industrial firms reduce their own borrowings, and begin lending their surpluses to others, leading to a rise in financial assets to liabilities and an increase in financial profits (Calder, 1997). Financial manipulations, known as zaitech (‘financial technology’) become a key source of profitability. In contrast, during the 2002 to 2006 period, there was a modest decline in absolute holdings of securities and loans, pointing to a more conservative corporate response.

On the liability side of the balance sheet, there is both an increasing share of equity, and within credit market instruments, a shift towards securities and away from loans and mortgages. However, German corporate liabilities are distinctive both for their composition and the stability of that composition. Securities make up a much smaller share of liabilities than in other countries. Loans make up both a higher share of liabilities throughout the period and are consistently of a longer-term nature, made up of 70 per cent ‘longer-term loans’.9

A number of attempts have been made to move German corporations towards the Anglo-American model of shareholder value orientation. This includes, for example, the 1998 Law for Control and Transparency in Large Companies which authorised the use of stock options for managers and share buy-back programmes (Vitols, 2001) and measures to allow greater foreign equity ownership and introduce hostile takeovers. All have been met with a lukewarm reaction from German business. According to Beyer and Hopner (2004), most firms still fund from retained earnings and bank finance, and cross-shareholdings have shifted but not enough to

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9 According to 1993 System of National Accounts (SNA) guidelines, long-term loans must be greater than one year, but may be greater than two years to accommodate national variation. Loans may include repo where it is not included in the broad money definition.
end firm protection from hostile takeovers. Unlike France, growth of foreign ownership has been stable at 23 per cent during the 1990s (Gourevitch & Shinn, 2005) and what entry there has been has happened through lower-turnover pension funds rather than hedge and mutual funds (Goyer, 2007).

The picture of French corporations’ financial liabilities is broadly similar to those of UK corporations. There is an increasing holding of securities, made up of negotiable debt securities (over 50 per cent) and derivatives (over 10 per cent) rather than bonds, which have shrunk from 100 to 30 per cent. The breakdown of loans has edged slightly more towards short-term loans. This reflects both the liberalisation of the system of industrial credit starting in 1984, and increased access to money markets granted large enterprises starting in 1985 (Loriaux, 1997).

*Corporate size matters*

Other things being equal, large non-financial corporations, corresponding to the ‘monopolistic’ capitals of Marxist analysis, are expected to be more financialised than their smaller counterparts. They have the easiest access to open financial markets, facilitating acquisition of financial skills and extraction of financial profit. The European Commission’s Bank for the Accounts of Companies Harmonised (BACH) database provides a unique way to test this hypothesis. BACH contains the harmonised annual accounts of non-financial enterprises for 11 European countries (not including the UK), Japan and the United States. Importantly, BACH provides aggregated accounts of non-financial enterprises divided by size.\(^{10}\)

Despite heroic attempts to harmonise diverse national accounting standards, the creators of the BACH database emphasise that while trend comparisons can be made, comparisons in terms of level should be done with considerable caution (DG ECFIN, 2006). A preliminary investigation was conducted using the data for France, where the growth in the ratio of financial to fixed assets has been most pronounced. The French data gives a flavour of the internal variation of corporate behaviour according to firm size. Figure 4.07 provides support for the hypothesis that large

\(^{10}\) Small enterprises are those with turnover less than 10 million euros; medium enterprises between 10 and 50 million euros; and large enterprises those with turnovers exceeding 50 million euros.
corporations are leading the turn away from bank-based finance, though corporations of all sizes appear to be returning to bank loans in the two years before the current crisis. Figure 4.08 shows large corporations leading a general trend towards increased reliance on financial relative to productive income. Figures 4.09 and 4.10 show the ratio of fixed financial assets\textsuperscript{11} to tangible fixed assets\textsuperscript{12} (respectively flows and stocks). In both cases, the upward trend is clear across the three size categories. The lower-than-expected level in the ratio of stocks of financial assets relative to tangible fixed assets for large enterprises could reflect differences in sectoral composition or business model, but would require further investigation. Pending further analysis, these data provide qualified support for Deeg’s (2009) theory of internal capitalist diversity, which highlights the differentiation between ‘traditional’ SMEs versus highly-financialised international firms.

![Figure 4.07: French non-financial corporations’ loans (short and long-term) to total liabilities (stocks)](image)

\textsuperscript{11} ‘Fixed financial assets’ includes holdings of stocks and bonds, but does not include ‘current financial assets’ of trade credit and cash in hand. The latter are included in ‘total financial assets’.

\textsuperscript{12} ‘Tangible fixed assets’ refers to land and buildings, plant and machinery, other fixtures, and assets in construction.
Chapter 4  Financialisation varied

Figure 4.08: French non-financial corporations’ financial to total income (flows)

Figure 4.09: French non-financial corporations’ acquisition of fixed financial assets to tangible fixed assets (flows)
To recap, corporations across this survey of advanced capitalist economies are financialising, as they are moving away from relation-based lending and acquiring more significant portfolios of financial assets. However, resistance to both trends is more marked in Japan and Germany. French firms appear to have rapidly financialised, though finer historical analysis suggests that this is related to a very particular institutional development. There is some preliminary evidence to suggest that financialisation is more pronounced among large corporations. All of this suggests that while the bank-based vs. market-based typology still holds, it is being eroded by the process of financialisation.

4.3.3 Banks

For banks, financialisation can be expected in the form an increased reliance on market-based funding, and a rising trend in the relative weight of lending to finance, insurance and real estate as well as to households. This would relate to the decline of traditional intermediation activities with large corporations, and towards liquidity management, fee-based services and lending to workers and households. According to conventional understanding, in a bank-based system commercial banks intermediate between household depositors and corporate borrowers. Banks manage
the ensuing maturity mismatch, and both risk and profitability hinge on the banks’ abilities to construct interest-earning loan portfolios. In a market-based system, companies seek short-term financing from money markets, and longer-term funds from debt and equity issuance. Investment banks play the role of underwriter, market maker and trader, and collect fees for these services.

Analysis in this section is based on the aggregate bank balance sheet of the five countries. Examining first the liability side, the deposit-to-liabilities ratio shows little difference between them (figure 4.11). Moreover, the ratio does not conform to the expectation that banks should hold relatively less more expensive deposits during upswings (and vice-versa). In fact, what more detailed balance sheet analysis illustrates is that ‘deposits’ as a category has been transformed. Increasingly, it is capturing overnight and short-term repurchase agreements (‘repos’), and may include holdings of short-term certificates of deposit. Banks have substituted these market-based deposits both as their needs for sourcing funds have risen and as traditional depositors have moved increasingly into money market funds. In the US, for example, while money market mutual funds first appeared in 1971, it was not until 1983 that legislation was passed ensuring that the underlying net asset value of a fund’s assets would support the guarantee of one-dollar-per-share value that allowed it to compete with bank deposits (Kregel, 2010). Without being able to disentangle this shift towards short-term and market-based deposits, the ratio reveals little about structural changes in the banking sector. Even so, it appears that banks are holding less deposits as a share of liabilities, with the notable exception of Japan after the collapse of the bubble of the 1980s.

On the uses side of the balance sheet, examination of the ratio of non-FIRE corporate lending to total financial assets in figure 4.12 below provides more telling results\(^\text{13}\). Overall, there is a clear secular decline in the ratio. Japanese banks start from a radically higher level, reflecting the integrated position of banks within

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\(^{13}\) This is meant to capture the change in banks’ attitudes towards holding productive loans as against lending to finance and real estate. This has the advantage of being the only item that is ‘clean’ in terms of being solely for productive purposes, and is less likely to have been securitised (though even here increasingly these loans are sold, see footnote 14 for US) and taken off the balance sheet. Attempting to capture ‘portfolio’ assets inevitably introduces definitional confusion and issues of data availability. Once again, some care should be taken with cross-country comparisons. The category of commercial banks was used for the United States, the UK and Japan, however data limitations forced the usage of the broader ‘monetary financial institutions’ in the case of France and Germany. Despite the above concerns, the universal trend emerges clearly.
industrial *keiretsu*. However, the ratio falls from 60 to below 30 per cent during the 1980s bubble, recovers to 40 per cent by 1993, and then plummets to much more similar levels as the other advanced capitalist economies in recent years. Germany also starts from a much higher level, but falls steadily to reach similar levels as France and the US\(^{14}\).

*Figure 4.11: Banks’ deposits as a share of total liabilities*

*Figure 4.12: Banks’ non-FIRE loans as a share of total financial assets*

\(^{14}\) On-balance sheet figures underestimate the extent of commercial and industrial loan origination due to securitisation, though perhaps less than would be the case in household lending. Gary Gorton (2009) provides data which suggests that in the US the ratio of secondary market loan sales to commercial and industrial loans outstanding reached an estimated 25 per cent in 2007.
The banks’ non-FIRE loans to assets ratio is in some ways the mirror image of the loans to liabilities ratio constructed for non-financial corporations in the section 4.3.2 (see figure 4.05). Comparison between the two ratios is instructive. In the 1980s, the banks are following the corporations, that is both ratios are declining in Japan, both are flat in the US. In the early 1990s recession, they continue to run in parallel, rising in Japan and the UK and flat in the US. For the most part this carries on with growth in the 1990s (except in France where loan share falls for corporations but rises for banks), but then the parallel movement falls apart after the crash of the dot-com bubble in 2000-1. Across the five countries, corporations’ loan share rises after the bubble bursts, falls during the subsequent four-year expansion, and then rises with the onset of the current crisis. However, on the bank side, non-FIRE loan share falls throughout. This suggests that in the last decade, rises in finance, real estate and household lending have replaced corporate lending as the driving factor in banks’ loan portfolio. This will be reinforced by more detailed examination of household balance sheets in section 4.3.4.

_Lending to finance, real estate and households_

Looking at the historical evolution of the composition of bank balance sheets yields a number of insights. Most importantly on the asset side, a finer picture emerges in the shifting nature of banks’ loan portfolios. While the data does not provide comparable sectoral disaggregation across all countries, the flavour of the results is clear. Over the past three decades, there have been significant increases in the share of lending to real estate (for example, in the US from 14 to 35 per cent); to financial intermediaries (for example, in Germany from 15 to 40 per cent); and to individuals, especially for housing (for example, in Japan from 10 to 23 per cent). Figure 4.13 captures an approximation of bank lending to households. US securitisations of household loans is hidden until 2004 when the category ‘closed-end residential loans’ is introduced.

\[\text{The analysis here reflects the author’s analysis of national accounts data, plotting the change in the portfolio composition of the balance sheets of commercial banks over the period in question.}\]
It is important however not to overstate the uniformity of the changes. While the trends are similar across the sample, German banks have decreased their lending to individuals. Bank holdings of both securities and equity are increasing across the sample. In France, rising securities holdings are increasingly made up of derivatives; in the US mortgage-backed securities; and in Japan Treasury bills. French banks hold the largest share of equity.

**Figure 4.13: Banks’ loans to households as a share of total loans**

On both the asset and liability side, analysis of compositional changes is complicated by the rising importance of repurchase agreements. Some countries do not even make available disaggregated information about repo levels. Such data is available in the UK, where from 12 per cent in 1997, reverse repos reached over 25 per cent of assets by 2005, at which level they stayed until the crisis (figure 4.14). The big growth here was in repurchase agreements with UK banks and non-resident agents, especially those denominated in foreign currency. Such stock figures underestimate the true importance of the turnover of the repo market to bank financing. While there are no official statistics about the size of the overall repo market, unofficial estimates put the US market at around $10 trillion, equalling total assets of the regulated US banking sector (Gorton, 2009).
On the liability side of the balance sheet, there is some evidence that even taking into consideration the transformation of what is considered a deposit, that they are falling as a share of liabilities. Once again, however, Japan is an outlier. There appears to be two distinct periods. The first period ends in 1986, during which time deposits decline from 68 per cent to 54 per cent of liabilities, with a corresponding increase in banks’ holding of shares and other equities. This period includes the introduction of both certificates of deposit in 1979, and money market certificates in 1985 (Calder, 1997). During the second period from 1987 until 2008, deposits recover their share of liabilities, while securities, equities and accounts payable all shrivel. This structural break is reflected in the composition of deposits themselves. Transferable deposits fall from 35 per cent to below 20 per cent of deposits between 1979 and 1989, with a corresponding growth in foreign currency deposits. This is then reversed, as transferable deposits rise to over 50 per cent of deposits, and both foreign currency and time and savings deposits fall back. This is the opposite of what has been witnessed in other countries as households switch from transferable into savings accounts, and the repo market expands time deposits. The difference is the zero interest rate policy of the Bank of Japan which led to indifferent yields between transferable and savings accounts.

Where loans are increasing, for example in the US, this is increasingly borrowing from non-bank entities on money markets. Securities are rising in all
countries but Japan where their level is stable. Equity financing has risen drastically in France from 5 to 25 per cent, while it has been stable in Germany, and followed cyclical fluctuation in Japan.

**What role big banks? The German case**

Given the theoretical framework employed here, it would be expected once again that the financialisation of banking would be more pronounced amongst larger multinational banks. Investigation of this question also sheds light on the question of intra-national hybridity highlighted in the critique of the varieties of capitalism literature. The availability of Bundesbank data disaggregated by bank type allows for preliminary investigation of the question in the German case. This is particularly interesting due to the historic role of banks in German capitalist development.

There is a lively debate about whether the German economy is truly bank-based or not (Corbett & Jenkinson, 1997; Hackethal, Schmidt, & Tyrell, 2005; Hackethal & Schmidt, 2004). Michel Goyer (2007) argues that the bank-based system of German corporate finance has crumbled due to deregulation and capital account liberalisation which has allowed the entry of foreign investors and the rise of shareholder value. According to Richard Deeg (2005), this process was facilitated by a domestic reform coalition of big banks allied with external investors. The German government responded to this pressure with the Second and Third Laws for the Promotion of Financial Markets in the 1990s (Vitols, 2004). In 1999, the capital gains tax was abolished on the sale of inter-corporate shareholdings to allow large German banks to reduce their involvement in the management of domestic enterprises in order to focus on global markets (Hall, 2007).

While acknowledging the far-reaching impact of these changes, Vitols (2004, p. 1) responds that the bank-based nature of the German financial system is driven by “… complementarities and continuities in household savings and investment behaviour and in patterns of company sector demand for finance.” Change could occur if income inequality were to increase and pensions reform were to allow more private retirement savings. Also key is the publicly-owned municipal savings bank sector (Sparkassen) which lends to the vast Mittlestand (SMEs) and accounts for more than half of all banking system assets in Germany (Vitols, 2001).
However, in the last decade, market share has shifted towards the big banks. Savings banks’ assets as a share of total MFI assets have fallen from 17 to 13 per cent, while big banks’ assets have risen from 15 to nearly 20 per cent (while Landesbanken have stayed fairly consistent at 20 per cent). Indicative is the changing behaviour of these banks. Figure 4.15 shows the change in the levels of non-bank loans (a proxy for ‘productive’ loans given data limitations) as a share of total assets by bank type. While savings banks consistently hold about 65 per cent of their assets in the form of non-bank loans, both the big banks and Landesbanken (state-owned regional banks) have seen a marked decline in the ratio.

![Figure 4.15: Non-bank loans as a share of total assets by bank type, Germany](image)

**Figure 4.15:** Non-bank loans as a share of total assets by bank type, Germany  
**Source:** Bundesbank

As shown in figure 4.15 above, like other countries Germany has seen a decline in bank lending to non-FIRE corporations, and a marked rise in lending to other banks, foreign enterprises and households. The flipside has been the growth in bank holdings of securities and equity. As Vitols argues, “… although not as extensive as the Japanese keiretsu, the core shareholders of the large German banks include other banks (through cross-shareholdings) as well as insurance companies.” (2001, p. 355). For all MFIs (including big banks), lending to other financial
institutions peaks at just under 40 per cent in 2008. For big banks alone, this figure reaches 44 per cent\textsuperscript{16}.

Providing evidence against any simplistic assertion that it is only Germany’s big banks which are financialising, Hardie and Howarth (2009) find a sharp increase in German (and French) banks’ holding of ‘trading assets’ relative to total assets for both flag-carrying German banks such as Deutsche, Dresdner and Commerzbank, but also for the smaller Landesbank. On the liability side, from the late 1960s non-bank deposits fall from 53 per cent to under 40 per cent. For big banks, non-bank deposits falls from over 70 per cent of total liabilities in the 1960s to drop below 30 per cent in early 2001.

To sum up the argument for the banks, deposits have fallen as a share of banks’ liabilities and the nature of deposits themselves has become more short-term and market-oriented. Japan is the exception to the rule. Across the sample, lending to non-FIRE corporations is falling, though once again Japan stands out for the continued relatively high level of such loans. There has been an increase in lending to finance, real estate and households, though the shift is less marked for both Japanese and German banks. Preliminary evidence in the German case suggests that these trends are more accentuated in the big banks, though the behaviour of the Landesbanken in the recent crisis\textsuperscript{17} suggests that this is not an unambiguous separation.

### 4.3.4 The household sector

Perhaps the most simple and telling measure of the financialisation of the household\textsuperscript{18} is the level of household total financial liabilities as a share of gross national disposable income (figure 4.16). This ratio illustrates the increasing assumption of financial liabilities relative to the ability to pay.

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\textsuperscript{16} Source: Bundesbank MFI lending to MFIs (OU0081) and big bank lending to MFIs (OU0828).

\textsuperscript{17} Landesbanken accumulated upwards of $80 billion of US sub-prime mortgages in the run-up to the crisis of 2007-8 (Reuters, 2008).

\textsuperscript{18} For statistical purposes, this refers to households and private non-profit institutions’ serving households. Unlike the non-financial corporate and financial sectors, intra-sectoral consolidation is not a significant issue here.
Figure 4.16: Household financial liabilities to gross disposable income

Clearly, the data indicate two distinct trends. US household indebtedness rises steadily from 1955 until 1991, but then accelerates markedly from the late 1990s until 2007\(^\text{19}\). UK household indebtedness rises rapidly from 1997, accelerates through the housing price bubble, and crests at 175 per cent of disposable income in 2007. French household indebtedness has historically been quite low, however in the last ten years it has started to grow at Anglo-Saxon rates, surpassing indebtedness levels of German households.

The other pattern is that of the Japanese and Germans. Japanese levels rise during the 1980s, flatten out in the 1990s, and then start to fall in the 2000s. Levels never exceed 90 per cent of disposable income, half the level reached by the UK. The levels of liabilities of German households grow from 1991 to 2001. Like Japan, these liabilities have fallen off as a share of disposable income in the past decade. It is interesting to note that the counter-movement in German and French levels coincides with the introduction of the euro.

\(^{19}\) Note that these figures underestimate US household indebtedness relative to the other countries, due to the US custom of excluding sole proprietorships from the household category. Inclusion of non-farm non-corporate data in the calculation, which takes US indebtedness above that of the UK, would equally overestimate the level.
Critical roles for pension reform and housing finance

On the asset side there are two distinct patterns at work through the 1980s and 1990s. Households in the US and the UK hold relatively lower levels of deposits and higher holdings of market-based assets (either direct holdings of shares and other equities, or life insurance and pension fund reserves invested in the securities markets). Even within deposits, this is increasingly made up of money market mutual fund share holdings. In both the US and the UK, securities holdings shift away from government securities and towards corporate and foreign bonds, though from a lower level in the UK.

The others hold higher deposits and lower market-based assets. Japan is unique in several respects. In terms of deposits, Japanese households have been increasing their share of assets held in deposits while households in all the other countries have moved in the opposite direction. In terms of securities, they have been increasing the share of government securities. In the equities category, Japanese households hold more in insurance than pension reserves (though falling from 80 to 55 per cent of the combined total). In the 1980s, private Japanese insurance and pension funds held a roughly equal portion of loans, securities and equities, while public pension funds held over 70 per cent of their assets in deposits with the government-sponsored Fiscal Loan Fund. Through the 1990s, private insurance and pension fund holdings of loans and equities fell, while holdings of securities rose (mostly government bonds). In public pension funds, the decline of holdings with the Fiscal Loan Fund to near zero starting in 2000 is mirrored by a rise in holdings of government-sponsored securities.

However, from the crash of the dot-com bubble in 2000-1, household balance sheets in all countries start to move in unison: an increasing share of deposits in the wake of the crash, then falling in the subsequent mini-boom, then rising once again entering the current crisis. There is now an interesting change in levels. From ‘Anglo-saxons and the rest’ at the start of the 1990s, there now appears to be the Americans at one extreme, the Japanese at the other, and a convergence of the Europeans in the middle.

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20 The analysis here reflects the author’s analysis of national accounts data, plotting the change in the portfolio composition of the balance sheets of households over the period in question.
One of the most dramatic transformations revealed by this research is that experienced by French households. Deposits have fallen by half. Holdings of shares and equities grew significantly in the 1980s after reforms which made investing in stocks more appealing to households. Most dramatic however has been the growth in life insurance and pension fund premiums, claims and reserves from seven per cent in the late 1970s to 40 per cent last year. These funds went from 30 to 50 per cent invested in equities during the 1990s, with the rest in securities. A back of the envelope calculation suggests that within a generation French households have moved from a situation where only approximately five per cent of their financial assets were subject to capital risk to one where 20 to 25 per cent are so subjected today.

On the liability side, one important trend jumps out. Across the five countries mortgages make up an increasing share of household liabilities. However, there are two distinct levels. On the one hand the US, UK and France; on the other, Japan and Germany (US – 65 to 75; UK – 65 to 80; FRA – 62 to 75; JPN – 30 to 47; DEU – 30 to 52). Contrary to what might be considered ‘common knowledge’, there is no clear trend in levels of consumer credit.

The overall picture of household financialisation is reinforced by a partial view of the household income statement. In the US, dividends as a share of total income rise from ten per cent in the early 1980s to over 15 per cent more recently. Duménil and Lévy (2006) calculate total financial incomes as the aforementioned plus a measure of capital gains corrected for inflation. As a share of total income it

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21 Up until 1996, this growth was in mutual fund shares and money market mutual fund shares. After 1996, the share of mutual funds falls back, and the growth is in unquoted shares. Quoted shares make up about 15 per cent throughout.

22 Insurance and pension fund holdings of securities has moved from being almost entirely in fixed coupon longer-term bonds to 30 per cent short and medium-term negotiable securities since 2003. Equities holdings have moved from less than 50 per cent mutual funds in the early 1990s to nearly 70 per cent more recently. Eighty per cent of mutual fund holdings are in general investment funds. Direct holdings of shares and other equities has seen a growth in unquoted shares from less than 50 to over 70 per cent.

23 In 1980, ten per cent of household assets were in shares and equity, of which about a third were in quoted shares and general investment mutual funds. Less than ten per cent was in pension funds, of which 25 per cent was in equities, about half of which was subject to capital risk. In 2008, 25 per cent of household assets were in shares and equity, of which about 40 per cent were subject to capital risk. A further 40 per cent of assets were in pension funds, of which about 40 per cent were in equities, over 60 per cent of which are invested in either quoted shares or general investment mutual fund shares. Note that Charlemagne, in The Economist (2010) says: “…three-quarters of all French household financial assets are free from capital risk” – while this is true, the change in risk profile over time is nonetheless significant.
oscillates around ten per cent through the 1950s, 1960s and 1970s, before beginning an ascent to 40 per cent before the collapse of the dot-com bubble. Their data show a similar trend for France. On the expenditure side, US household outlay on financial services and insurance rises from four per cent in the early 1960s to nearly ten per cent recently\textsuperscript{24}. Meanwhile, the US household debt service ratio has crept up from 11 per cent in 1980 to 14 per cent in 2008\textsuperscript{25}.

In a nutshell, the household sector is clearly divided between the ‘eager financialisers’ and the ‘reluctant financialisers’. The division replicates the traditional market-based versus bank-based divide, though this is not to suggest simple causation from changes in finance to changes in the household balance sheet. France is moving from the latter in to the former. For the former, economic growth over the last decade or more is being driven by rising household indebtedness. For the latter, growth (if there is any) has to be found elsewhere. The composition of pensions is critical in judging the degree of household financialisation, as is the issue of the financing of home ownership. On both counts, Japan and Germany stand apart.

4.4 CONCLUSION

This chapter has, first, provided empirical evidence in relation to the theoretical framework established in chapter three; this framework understands financialisation as a global phenomenon representing a structural transformation of relations among non-financial corporations, banks and households, located within the contemporary characteristics of the world market. Second, within this analysis, I have argued that the ‘diversity within convergence’ which is suggested by this thesis, marks a refutation of the divergence hypothesis common to much of the comparative capitalisms literature. Specifically, I expected that while bank-based vs. market-based differences would still have purchase, these differences would be systematically eroded by the process of financialisation.

What has emerged is that corporations are indeed moving away from bank-based borrowing and are, at the same time, acquiring portfolios with an increasing weight given to financial assets. However, resistance to both trends is more marked

\textsuperscript{24} Source is NIPA table 2.3.4 personal consumption expenditures.
\textsuperscript{25} Source is Federal Reserve household debt service ratio.
in the traditionally bank-based countries of Japan and Germany. French firms appear to have joined the eager financialisers. For banks, deposits have fallen and have themselves become more market-based, and lending to corporations is falling. Once again Japan stands out for both the resilience of its traditional deposit base and the continued relatively high level of corporate lending. There has been an increase in lending to finance, real estate and households, though the shift is less marked for both Japanese and German banks.

This picture is one of a complex of inter-related processes which are variously facilitated, restrained or blocked by regulatory, cultural and technological change. The corporate turn to self-finance is universal. But should this imply a universal turn to investment in financial assets? Not necessarily so. But if, at the same time, household assets are shifted out of deposits and into market-based pensions or direct equities, there is pressure on the corporate sector for higher, short-term returns (exemplified by the twin movement of French household and corporate assets). This move away from holding assets in deposit form – facilitated by policy change – in turn also puts pressure on the liability side of the bank balance sheet. Banks replace these funds with those raised via the repo-securitisation complex. On the uses side, banks shift away from long-term relationship lending to corporations and towards lending to individuals, real estate and other financial institutions. Not surprisingly, though certainly not unavoidably, this leads to increased household indebtedness.

This inter-related web of transformations can of course be altered or broken. Policy and culture in Japan mean household assets have stayed within bank deposits or with pension funds which invest in state bonds. This puts less pressure on the liability side of the banking sector balance sheet, at the same time as it may reduce the pressure for non-financial corporations to invest in financial as opposed to fixed assets. Similarly, cultural norms and institutional history in Germany and Japan mitigate against households assuming high levels of mortgage debt, meaning overall indebtedness is more manageable. However, it would be disingenuous to suggest that German and Japanese corporations do not feel the pressures of financialisation via international market competition. Indeed, large banks and firms must either play the game, or find other ways to squeeze costs and force profits up.
Having empirically established the presence of the tendencies of financialisation across a range of institutional formations, in the next chapter I will develop a theoretical framework to account for the distinctive form of financialisation in emerging capitalist economies, or what will be termed *subordinate* financialisation.
Chapter 5

Imperialism, dependency and finance in the periphery: Towards a theory of subordinate financialisation

5.1 INTRODUCTION

In chapter three, after an examination of the literature on financialisation, I argued in favour of a theory of financialisation centred around an epochal transformation in the behaviour of and relations between firms, banks and households (Lapavitsas, 2011, 2013). My original contribution was to locate these transformations within the contemporary characteristics of the world market (Hymer, 1972; Palloix, 1975; Fine & Harris, 1979), namely: the deepening of the international circuits of commodity and money capital, extending to the interpenetration of capital ownership; the internationalisation of production; and the pivotal role assumed by the US dollar as quasi-world money. My hypothesis, validated empirically in chapter four, was that the tendencies of financialisation, reflecting its global character, would be observable across a range of advanced capitalist economies, while its particular form in any one country would reflect institutional specificities.

In the current chapter I turn to the question of whether and how the behavioural transformations characteristic of financialisation will be experienced in emerging capitalist economies (ECEs). The focus in the financialisation literature has been on its emergence and proliferation in advanced economies. In what ways might financialisation in ECEs be similar, in terms of causation, nature and impact, and in what ways distinct? How is financialisation in the one set of countries related to the other? If there is a distinctive essence to financialisation in ECEs, how should
this be theorised? These questions have only begun to be addressed (see for example Lapavitsas, 2009c, 2013; Becker et al., 2010; Panceira, 2010; Kaltenbrunner, 2010; Marois, 2012), and are far from satisfactorily understood.

I contend that the experience of financialisation in ECEs must be indelibly marked by contemporary imperialism, that is to say it will be shaped by the exercise of international power manifested through productive and financial, as well as political (and military) means. In order to elaborate the implications of this contention, in the next section I will critically examine the literature on imperialism and dependency\(^1\), with a focus on its treatment of finance\(^2\), especially in the periphery\(^3\). There have been three generations of imperialist scholarship, which in my estimation have been rooted in the specific material conditions of the periods out of which they arose: the colonial, post-colonial and neoliberal periods, respectively\(^4\).

For the periphery, each of these periods is distinguished by characteristic transformations in the capitalist world market relating to: the global organisation of capitalist production; the degree of trade and financial openness; the nature and extent of state autonomy; and, a key factor which is often overlooked, the form of world money.

In the third section, I will draw out a number of insights from this review of the literature of imperialism which should inform a theorisation of financialisation for countries of the periphery. These relate to the drivers of imperialism, the nature of the state, the relationship between finance and industry, and the form of world money. These insights are put to use in the fourth section of the chapter, in formulating a number of hypotheses about the form that financialisation is expected

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1 The term ‘dependency’ is used here as an ill-fitting shorthand for an amalgam of overlapping yet sometimes contradictory writing under the headings of the ‘development of underdevelopment’, ‘world systems analysis’, and ‘autonomous development’.

2 On the use of ‘finance’, ‘financial capital’ and ‘finance capital’, see chapter one, footnote one.

3 On the use of ‘core’ and ‘periphery’, see chapter one, footnote five.

4 Both the precise meaning and temporal boundaries of these three periods are heavily contested. For the purposes of this chapter, the following definitions are followed. The colonial period refers to the period of direct colonial rule of European powers (dating as far back as the sixteenth century, though the discussion here will begin from the nineteenth century) coming to a close, for the most part, at the end of the second world war. The post-colonial period refers to a proliferation of independence struggles which took place in Asia, Africa and the Middle East from the end of the second world war until the early 1970s; economically, it is a period associated with Keynesianism. The neoliberal period, marked by an often contradictory amalgam of liberal ideology and mercantilist praxis resulting in an increasing share of wealth accruing to capital as against labour, can be dated from the early 1970s until present (Saad-Filho & Johnston, 2005).
to take in ECEs. While sharing the characteristic tendencies of financialisation in advanced economies, I will argue that financialisation in ECEs will exhibit distinctive forms which I characterise as subordinated financialisation. The final section will conclude.

5.2 THEORIES OF IMPERIALISM AND FINANCE IN THE PERIPHERY

This section will review the literature of imperialism and dependency, highlighting the analysis of the role of finance therein. I will look at the evolution in the understanding of the drivers of imperialism, the relationship between finance and industry in the imperial project, and the extent of state autonomy. Additionally, I will assess to what extent the form of world money has been considered. I will argue that the understandings of these matters have emerged out of the particular material conditions of the colonial, post-colonial and neo-liberal periods, each distinguished by characteristic conditions in the development of the world market.

5.2.1 Colonialism and classical theories of imperialism

Finance plays a key role in Karl Marx’s description of capitalist expansion. In the shadow of the rise of large corporations, Marx (2004[1867]) described the credit system as constituting "… a new and terrible weapon in the battle of competition and is ... transformed into an enormous social mechanism for the centralisation of capitals." (2004, pp. 625–6) Through the creation of debt, the credit system acts as a "… means of transferring surplus capital from declining to rising centres of capitalist accumulation." (2004, pp. 755–6) Giovanni Arrighi (2007, p. 85) has argued that, in this understanding of the role played by finance, Marx "… does not refer only to capitalists operating within a given political jurisdiction but also to capitalists operating across jurisdictions." That is to say that finance may play an important – if inadequately defined – role in imperialist expansion.

The colonial period of the late nineteenth and early twentieth century was marked by relatively high trade tariffs generally, and especially by barriers between spheres of imperial influence (Coatsworth & Williamson, 2002). Capital flowed
freely through these channels, but less easily across them, and monetary policies of
the periphery were determined by imperial powers. Colonial state structures were
clearly under the command of their respective metropolises.

John Hobson (1902), writing in the midst of the ‘scramble for Africa’,
reasoned that rising cartelisation and monopolisation, as well as unequal income
distribution caused excessive saving by capitalists. This created crises in capitalism,
reflecting a dual problem of over-accumulation and under-consumption. Imperial
projects, he argued, provided a convenient channel both for the investment of surplus
capital and for the development of new markets. Hobson’s view of financiers,
tainted by his anti-semitic beliefs, was that they were central in building a 'pro-
imperialist' coalition. Finance was able to profit from bankrolling foreign nations
“… where it is a chief instrument or pretext for encroachment” (1902, pp. I:VII, 36),
but just as importantly it would finance the large domestic debt which the imperial
project entailed, winning important political influence at home. Convinced that
imperialism was of dubious benefit to British manufacturing, Hobson argued that “…
the modern foreign policy of Great Britain is primarily a struggle for profitable
markets of investment. To a larger extent every year Great Britain is becoming a
nation living upon tribute from abroad…” (1902, I:IV, 27).

The introduction of a central role for finance in the theory of imperialism was
seized upon by Austrian social democrat Otto Bauer. Bauer (2000[1907]) was
witnessing the rise of industrial cartels and the concentration of capital in banks in
the Austro-Hungarian empire. He argued that tariff barriers acted as protection for
cartels and their banks, creating ‘spheres of investment for domestic capital’ and
ensuring profitable returns on their investments. Imperialism is accelerated as the
military is placed at the service of these cartels and their desire to open up new
spheres of investment. In contrast to Hobson’s emphasis on the parasitic interests of
finance, Bauer underlined the role of financial institutions in coordinating the
imperial project. Banks, he asserted, "… are able to plan and direct the emigration of
capital into subjugated regions" (2000, p. 378).

5 “United by the strongest bonds of organisation, always in closest and quickest touch with one
another, situated in the very heart of the business capital of every State, controlled, so far as Europe is
concerned, chiefly by men of a single and peculiar race, who have behind them many centuries of
financial experience, they are in a unique position to control the policy of nations.” (1902, I:IV, 34)
Rudolf Hilferding (1981[1910]), the Austrian-born economist who would go on to be the minister of finance in the Weimar republic, first put forward a detailed explanation of the rise of ‘finance capital’ and its relationship with imperialism. Bank credit, Hilferding said, was increasingly needed in mature capitalism as investment requirements rose and turnover times lengthened. This made industrial capital increasingly reliant on the banks. But equally, with such large sums of capital locked up in these investments, the banks took an ever-greater interest in industrial management. This fusion of the interests of industrial and bank capital he termed ‘finance capital’.

Following Marx, Hilferding believed that along with the rising concentration of capital, there would be an increase in the organic composition of capital and therefore a tendency for the rate of profit to fall. Finance capital could use its influence in a number of ways to counteract this tendency, but for present purposes one of the most important factors stressed by Hilferding was the export of capital to foreign countries, where it would enjoy a lower organic composition of capital and higher rate of profit. This obviated the need for imperialism to be driven by an accumulation of surplus capital.

Having invested in new territories, the capitalists call for the imperial state to protect their interests: “… thus the export of capital encourages an imperialist policy” (1981, p. 322). Through conditions attached to loan capital, the capital exporting country can then perpetuate its dominant position in the provision of industrial goods. For this reason, the struggle for markets for goods “… becomes a conflict among national banking groups over spheres of investment for loan capital” (1981, p. 324). Hilferding supposed that ‘advanced’ finance capital countries such as Germany and the United States, where industrial and bank capital were closely interlinked, would export capital by direct investment; while less advanced finance capital countries such as the UK would do so by portfolio investment. Through these channels, the drive for colonial expansion, he argued, would generate increasing conflict among powerful states.

Both Vladimir Lenin (2010[1916]) and Nikolai Bukharin (1966[1918]) would side with Hilferding in the debate over the relationship between imperial expansion and conflict. As summarised by Anthony Brewer (1980), Bukharin believed that blocs of finance capital took on a national character because the 'labour aristocracy'
in the imperial country gained. Building on Hilferding, Bukharin envisioned the merger of finance capital and the state to form ‘state capital trusts’. Like Hilferding, and against Hobson, Bukharin did not believe that imperialist expansion was predicated on the accumulation of surplus capital. This assumption was unnecessary he believed, when, returning to an analysis that borrows from Marx, “the expansion of capital is conditioned by the movement of profit, its amount and rate…” (Luxemburg & Bukharin, 1972, p. 255) This view was reinforced by Lenin’s evidence of the predominance of capital flows between imperial countries rather than between the same and their colonies (2010 [1916]).

Lenin asserted that, by allowing for the payment of wages higher than would otherwise be possible, imperialism “…creates the economic possibility of corrupting the upper strata of the proletariat, and thereby fosters, gives form to, and strengthens opportunism.” (2010, p. 131) Military and political rivalry then develops between national blocs. The theories of both Lenin and Bukharin, developed in a climate of growing inter-imperial animosity, both served as pointed rejections of Kautsky’s theory of ‘ultra-imperialism’, which had envisioned a division of world markets between powerful states without violent conflict, the “… joint exploitation of the world by internationally combined finance capital” (1970 [1914] in Lenin (2010, 117)). Lenin criticised Kautsky for envisioning inter-state relations as that between isolated units. In his discussion of the ‘division of the world among the great powers’, Lenin offers that relations between ‘big and little states’, marked by political independence together with varying degrees of financial and economic dependence, become a general system in the epoch of capitalist imperialism, and “… become links in the chain of operations of finance capital.” (2010, p. 106)

Lenin adopted an extreme position in the agency he granted to banks as ephors, or overseers: "They can ascertain exactly the position of the various capitalists, then control them, influence them by restricting or enlarging, facilitating or hindering their credits, and finally they can entirely determine their fate, determine their income, deprive them of capital..." (2010, p. 38). In relation to imperialism, banks played this ephor role by founding branches in the colonies to direct the spread of finance capital.

Controversially, Lenin considered that this exploitation of the colonies could lead to a slowdown of capitalist development in the imperialist countries, as
entrepreneurs seek profits from ‘clipping coupons’, that is investing in financial assets rather than in production. At the same time, he observed that imperialist capitalism was growing more rapidly than it had before, but with the growth becoming increasingly uneven and the decay of countries which were richest in capital. This question of the relation between the rise of finance and capitalism’s functionality presages part of the contemporary debate over financialisation.

In his analysis of the slowness of capitalist development in Russia (1956 [1899]), Lenin highlights three factors: the survival of traditional structures of society, competition from Western Europe, and the weakness of the Russian bourgeoisie. As discussed by Gabriel Palma (1978, p. 892), the latter weakness is linked by Lenin to the ambiguous role played by foreign, particularly financial, capital; on the one hand accelerating the process of industrialisation, while on the other creating a weak and dependent bourgeoisie. The linkage between foreign capital and the inability of a domestic bourgeoisie to lead a process of autonomous development resurfaced a half-century later in the writings of the dependency school.

Finally, any discussion of finance in classical theories of imperialism should give space to the ideas of Rosa Luxemburg (1972[1921]; 2003[1913]). Luxemburg’s economic basis for imperialism has been widely criticised. Despite this, her contribution is important for at least two reasons. First, against the dominant view of imperialism as a ‘stage’ of capitalism, she attempted to understand it as a phenomenon deeply rooted in the process of capital accumulation itself:

“… capitalist accumulation as a whole, as an actual historical process, has two different aspects. One concerns the commodity market and the place where surplus value is produced … [the other] concerns the relations between capitalism and the non-capitalist modes of production

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6 As discussed in chapter three, in its regulationist / post-Keynesian guise, this debate centres on the possibility for finance-led accumulation. In Marxian debates, the debate focuses on the functionality of financialisation for profit levels.

7 See, for example, Panitch and Gindin (2003, p. 5); Milios & Sotiropoulos (2009, p. 101) cite the critique of Tugan-Baranowsky (2000 [1969]). Unlike other theorists of imperialism who had emphasised the central role of monopolies, Luxemburg insisted that all capitalists are required to sell to buyers outside of the capitalist system in order to valorise the circuit of capital, condemning capitalism to collapse before it would be able to become a universal form of production. The mistake was in not appreciating the role of hoarding and dishoarding in perpetuating realisation (Marx 2004 [1867], vol. 1, ch. 3, section 3b), and both the credit system and crisis as means of restoring dynamic equilibrium. The same conclusion can be arrived at from Marx’s analysis of the ‘Reproduction and circulation of aggregate social capital’ in Volume II of Capital (1992[1885]).
which start making their appearance on the international stage. Its predominant methods are colonial policy, an international loan system – a policy of spheres of interest – and war.” (2003[III:31])

Second, in opposition to Bukharin’s assertion that capital export would accelerate development in underdeveloped areas, Luxemburg defended a more nuanced posture. Through a detailed analysis of British and German loans to Egypt and Turkey respectively, she contrasted the role of international loans in the ‘emancipation’ of emerging capitalist states but also as “… the surest ties by which the old capitalist states maintain their influence, exercise financial control and exert pressure on the customs, foreign and commercial policy of the young capitalist states.” (2003[III:30])

In summary, in classical theories of imperialism, finance was seen to play a coordination role, if an ambiguous one from the perspective of the colonised. The increased alignment of industrial and bank capital of the capitalist core was necessitated by both industrial catch-up and the challenge of overcoming tariff barriers between imperial ‘spheres of influence’. The partial exception to this view of finance came from Hobson and Lenin, who drew attention to a parasitical role, first pointing out the potential dangers of the rising influence of a ‘rentier layer’.

Inter-state relations are treated in an instrumental fashion in these theories. The capitalist classes of the colonial states in the periphery act as agents of the interests of the capitalist classes of the core. Lenin highlighted the critical role of finance capital in acting as the link in the imperial chain between the capitalist classes of core and periphery.

The role of world money is notably absent from this first generation of theorists of imperialism. This is not because it was not a significant factor in imperial relations, but because the relative stability of sterling as world money had caused it to fade from view. Until the first world war, sterling had enjoyed a near half-century of unquestioned supremacy supported by British imperial leadership. Vasudevan (2009) describes how Great Britain had been able to finance its deficits with the United States and the other European imperial powers through the surpluses of empire, especially those drawn from the Indian sub-continent. The colonies adopted some form of the gold exchange standard, holding sterling reserves as a form of defence against a currency crisis. On the back of this ‘willingness’ to hold
sterling deposits in London, British banks were able to extend greater quantities of credit, acting as a global lender of last resort. World money had begun to take on the form of credit money of the imperial power. This conferred numerous benefits on the issuer, including seigniorage, investment gains and avoidance of adjustment costs: "While on one hand Britain recycled liquidity to the periphery through capital outflows, it could, by sharply curtailing investments and lending, redistribute the real burden of adjustment to the periphery during times of crises." (Vasudevan, 2009, p. 482) With its status as financial centre of the British empire, Britain could attract inflows of gold simply by raising the central bank interest rate.

However, this situation was not to last. As argued by Itoh and Lapavitsas, with the collapse of convertibility of credit money into gold following the first world war, the defence of the core capitalists’ participation in world markets “… acquired a more complex meaning.” (1999, p. 163) With confidence in the value of world money shaken, new arrangements would have to be put in place to secure capitalist profit-making in the world market.

### 5.2.2 Post-colonialism and the dependency school

Palma (1978, p. 895) argues that the Sixth International of the Communist International in 1928 marked a turning point in Marxist analysis of imperialism. From this point forwards, the ability of capitalism to develop the social forces of production was understood to be limited by an alliance between imperial powers and traditional elites (land-owning, merchant and money-lending bourgeoisies). The possibilities of development therefore depended on the capacities of national bourgeoisies to overthrow the ‘feudal-imperial alliance’ to begin the process of industrialisation and autonomous development. This ‘simple analysis’, according to Palma, dominated Latin American left-wing thinking until the 1960s.

Independence struggles and social revolutions across the periphery saw the burgeoning of post-colonial analysis\(^8\), and provided the political context for a

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\(^8\) This wave of independence struggles began with the ending of the second world war, gathering pace through the 1950s and 1960s: in Asia, independence was won in countries including India (1947), Indonesia (1949), Indochina (1954), and Malaya (1957); in the Middle East and North Africa, it was gained in Libya (1951), Tunisia, Morocco and Sudan (1956), Iraq (1958), and nominally-independent...
growing split over the possibilities of development in the periphery. On one extreme were those dependency theorists, such as Andre Gunder Frank (1967), who saw development in the periphery as inimical to the interests of the core, and therefore only possible after a socialist revolution; at the other end of the spectrum were structuralists, such as Raul Prebisch (1963), who sought to apply more Keynesian and nationalist analysis in pursuit of autonomous development. Both currents were grappling with the implications of core corporations’ establishment of plants in the periphery, created to exploit domestic markets behind tariff barriers.

Two, often overlooked, points will be highlighted here. First, the view taken by the different schools reflected their understanding of the role to be played by financial capital: dependency theorists focused on its role serving the interests of core capitalists, variously extracting or absorbing surplus capital; conversely, structuralists entertained the possibility that finance could be managed, offering the national bourgeoisie the opportunity to undertake autonomous development. This understanding would, in turn, be profoundly shaped by their analysis of the state in the political space opened up by, first, the transition between declining British and rising American imperial hegemony, and subsequently the Cold War. The changing status of world money is important in this regard.

**Development of underdevelopment**

Paul Baran’s work provides the central building block for subsequent theories of the development of underdevelopment. In his seminal work with Paul Sweezy, *Monopoly Capital* (1968), Baran elaborates the implications of the expansion of an era of giant firms with oligopoly powers. Baran and Sweezy argue that monopolies invest less than competitive firms, and restrict their output to defend their profits. This leads to a dual crisis of overaccumulation and underconsumption. From this

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Egypt fought a battle over the Suez Canal (1954-6); and in sub-Saharan Africa, numerous countries gained their independence, including Ghana (1957), Congo (1960), Nigeria (1960), Uganda (1961) and Kenya (1962).

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9 Only later would this management of finance come to be pejoratively labeled as ‘financial repression’ (McKinnon, 1973; Shaw, 1973).

10 Brewer (1980) has argued that Baran and Sweezy failed to give Hobson, and his analysis of cartelisation, due credit for laying the groundwork for their theory of monopoly capital.
viewpoint, imperialism serves to open up new channels for the investment of accumulated surplus\textsuperscript{11}. However, since successful foreign investment serves to transfer surplus from abroad to the investing country, it “... aggravates rather than helps to solve the surplus absorption problem.” (1968, pp. 107–8)

Within the *Monthly Review* school, Harry Magdoff accepted the linkage between rising monopoly and overaccumulation, but not that between surplus capital and capital export (2003 [1968]). In Magdoff’s analysis, capital exports were associated with the classical age of imperialism due to a number of factors including: the proliferation of states seeking to challenge British imperial supremacy; efforts to jump over protective tariff walls; the growth of industries requiring vast quantities of fixed investment; the growth of joint stock companies; and the expansion of financial markets which more efficiently mobilised capital. The ability and desire of giant corporations to control markets provides “... another major incentive for the expansion of capital abroad”. (2003, p. 95)

Baran’s earlier work had a major influence on the initial output of the dependency school. In his ‘*On the political economy of backwardness*’ (1952), which was immediately translated into Spanish, Baran argued that while it is possible for developing country states to overcome backwardness through a series of measures including fiscal policy, land reform and price, import and capital controls, it is implausible. This, he says, is because the alliance of property-owning classes can not be expected to implement a set of measures which runs counter to “... each and all of their immediate vested interests.” (1952, p. 80) He framed the choice of the capitalist middle-classes in so-called backward countries as that between overcoming their myopia, or facing a socialist revolution.

Frank’s theory of the ‘development of underdevelopment’, builds on Baran’s foundation of the rise of monopoly corporations (1967). Frank argues that after the Korean War, US monopoly investment finance sought to take over Latin American manufacturing and service industries, seeking high profits behind tariff walls, and creating a putting-out system to service raw material exports and the consumption of

\textsuperscript{11} In relation to both domestic and international means to absorb surplus, Baran and Sweezy came to view the financial sector as a critical outlet (1987; 1997). However, in earlier writings during the post-war era of restrained finance, finance was relegated to a means “... on an equal footing with the sales effort” by which a capitalist economy absorbs surplus (1968, p. 143).
the domestic elite in the periphery. Unlike the earlier Marxist theorists of imperialism who believed that post-colonial states could begin the process of late industrialisation, Frank argued that the new international division of labour, demanded by changing conditions in the core, required industrial development in the periphery. However, he insisted that import substitution strategies could not create an internal market since they depend on the export of raw materials and consumer manufactures.

On the role of financial institutions, Frank was critical of American banks which lent Latin American deposits to American corporations. He attempted to document the outflow of foreign exchange earnings through profit remittances, capital transfers and foreign debt servicing. Frank believed that this extraction of additional surplus forced local capitalists to exploit workers ‘ever more’ (1967, p. 314). This ensured that the domestic bourgeoisie would be unable to secure their political support. He also argued that this additional exploitation interfered with domestic savings for investment, obliging domestic capitalists to seek still further foreign finance. Frank’s analysis was politically in keeping with Baran’s implausibility thesis, but whereas Baran had recognised a tension between surplus moving to and from countries in the periphery, in Frank’s work imperialism had become primarily a channel of surplus value extraction. The only remedy against the causes of underdevelopment according to Frank was “… the revolutionary destruction of bourgeois capitalism and its replacement by socialist development” (1972, p. 136).

World-systems analysis

World-systems analysis attempted to move beyond the analysis of capitalism in a single nation-state or in that relationship between nation-states, to that of the international division of labour in a ‘world-system’. Cross-disciplinary in his approach, sociologist Immanuel Wallerstein (1974, 2007[1980], 1989, 2004) argues that through the centuries-long history of colonialism, the Western imperial powers have been able to render the periphery dependent on the core. Imperialist powers have used economic, military, political and cultural systems to control and benefit
from an expanding sphere of influence. They have imposed a system of unequal exchange which has resulted in unequal development. In the contemporary period, Wallerstein introduces the notion of the semi-periphery as a zone which mixes core and peripheral production processes, and where therefore industrialisation is deemed possible. His work focuses on the organisation of industrial production, with relatively little attention given over to financial institutions.

Egyptian-born economist Samir Amin brings the role of finance into the centre of his analysis of a global system of accumulation. Historically, he writes, core states exported capital to peripheral ones, reinvesting profits during the prosperous periods of colonial development, and then subsequently repatriating them (1976, p. 250). This created a growing financial dependency. In the next stage, the monopolistic industrial enterprises of the core states penetrated underdeveloped countries with financing secured from either commercial banks in their home country, or local branches of the same.

Amin continues that the 'monetary problem' of underdevelopment lies in the working of the banking system in the periphery: "... it exists in order to facilitate the growth of a capitalism ultimately based on the external market, which is the essential element in underdevelopment." (1976, p. 484) The constitution of the network of commercial banks is critical; that is whether it serves what Amin calls ‘extraverted’ or ‘autocentric’ activities. In autocentric economies, financial institutions transform savings into long-term investment, while in underdeveloped countries these are used either for short-term financing of the economy or for financing state expenditure. However, it is unclear in Amin’s writing what factors determine whether the banking network will be developed in one way or the other.

In his discussion of social formations in Latin America, Amin argues that after the Great Depression and through the Second World War, a new industrial bourgeoisie attempted to challenge the power of the landowners and traders. This represented a movement beyond Frank’s implausibility thesis to the analysis of the concrete conditions of social struggle which autocentric development required. The new industrial bourgeoisie gave support to populist regimes, such as that of President Lázaro Cárdenas in 1930s Mexico. But this was soon replaced with what Amin describes as the technocratic ideology of desarollismo (‘developmentalism’) and compromise with foreign capital. The new bourgeoisie, often from the same families...
of the great landowners and traders, allied itself with foreign capital in order to defend its hegemonic position.

Giovanni Arrighi (1994), following in the tradition of Ferdinand Braudel (1981), examines the rise and fall of hegemonic countries over the longue durée. In opposition to both the classical thesis of finance capital as the highest stage of capitalism and earlier world-systems writing which posited Western finance as the apex of colonial exploitation, Braudel had characterised finance as a sunset industry of imperialist powers. Within the world systems school, this understanding has come to predominate\(^{12}\).

In Arrighi’s final book, *Adam Smith in Beijing*, he argues that the capitalist developmental path of Europe has been a “… sequence of endless accumulation of capital and power” (2007, p. 93)\(^{13}\). This has been achieved through the synergy of militarism, industrialism and capitalism, and sustained by ceaseless overseas expansion. Each time that accumulation stagnated in one centre of power, the financial system facilitated the migration of capital to a ‘larger container’ where expansion could resume on a greater scale\(^{14}\). Long periods of financial expansion which accompanied over-accumulation crises “… provided the means of payments necessary to force the economic system into new channels.” (2007, p. 93) This rise and fall of finance implies that Lenin’s theory of inter-imperialist rivalry and Kautsky’s ‘ultra-imperialism’ may not have been mutually contradictory, but rather different cycles in capitalist development. Periods of imperial dominance may be marked by coordination, followed by increasing emphasis on finance in the ‘autumn’ of the hegemon, which, in turn, may be followed by increasing belligerence during the transition to a new imperial configuration. From this vantage point, the ‘decay’ of capitalism in one container may reflect the rude health of the system as a whole.

In his understanding of how imperial powers attempt to maintain their dominant position, Arrighi argues against a narrow focus on profitability in manufacturing, stressing the monetary foundations of the world capitalist order.

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\(^{12}\) In his later work, for example, Wallerstein (2004, p. 86) argues that falling profits in production, linked to the post-1968 decline of western capitalism, led capitalists to seek profits in finance.

\(^{13}\) Arrighi’s distinction between European capitalism and Asian ‘market society’ has come in for heavy criticism. See, for example, Leo Panitch (2010) and the special issue of *Historical Materialism* in which his article\(^{19}\) appears.

\(^{14}\) Original credit for this concept should be given to Rosa Luxemburg (2003 [1913]).
Following a brief period in the 1970s of what he describes as ‘world monetary disorder’, the US used the Volcker interest rate shock of 1979 to 1982 in order to compete aggressively for global capital inflows. Arrighi argues that the dollar has not enjoyed the same privileges as sterling did during the British imperial epoch since the US lacks a territorial empire from which to extract tribute, or what he calls ‘hegemony without hegemoney’.

Autonomous development

Though they developed their ideas independently, Argentine economist Raul Prebisch (1950, 1963) and German economist Hans Singer (1969), are best known for the Singer-Prebisch theory, or the theory of unequal exchange. Both were influenced by the Keynesian response to the Great Depression and its impact on underdeveloped economies. They believed that, due to the higher income elasticity of primary as compared to manufactured goods, countries in the periphery faced declining terms of trade relative to those of the core. Prebisch advocated state intervention to advance industrialisation in the periphery, accompanied by tariff protection to shelter the development of domestic industry. In the interim before achieving industrialisation, protection of the prices of raw materials would also be needed. These ideas became the foundations of the work of the UN Economic Commission for Latin America (ECLA) and were influential on Latin American policymakers through the 1970s.

For Prebisch, and for many who would follow and extend the ECLA analysis, emphasis was placed on production and particularly trade, with less attention given over to the role of finance. Placed in the context of a managed international currency system and widespread financial restraint, such a focus seems understandable. The central problems of unequal exchange were eventually seen to be aggravated by financial arrangements that brought with them increased volatility, particularly after the breakdown of the Bretton Woods system (see Chilcote, 1984, p. 26).

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15 Important amongst these is Arghiri Emmanuel (1972).
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Chilean economist Osvaldo Sunkel (1970, 1973a, 1973b) drew attention to the critical role of the multinational corporation. By introducing capital-intensive production techniques and promoting forms of conspicuous consumption which could only be accessible to the elites, multinationals would co-opt the domestic bourgeoisie, preventing autonomous development. Brazilian Celso Furtado shared much of the analysis of his sometimes co-author Sunkel (1976). His examination of the role of financial flows in external dependency focused on the penetration of American multinationals into Latin American manufacturing and service sectors. Echoing the analysis of Frank, he found that some four-fifths of the expansion of US subsidiaries in Latin America in the 1960s was funded by local resources, and a similar percentage of profits were subsequently remitted to parent companies (1976, pp. 199–201). Examining the social structures of Brazil, Furtado concluded that the absence of a clearly formulated working-class ideology left national development plans to the conflict between intra-elite interest groups. This resulted in a form of imitative capitalism unable to innovate and dependent on external intervention, both economic and political. Overcoming this required central planning to promote autonomous development.

Fernando Henrique Cardoso and Enzo Faletto, in their classic *Dependency and Development in Latin America* (1979), share Furtado’s emphasis on examining the social structures of concrete situations of dependency. They argue that external forces, such as multinationals and international finance, may appear as internal forces where their interests coincide with those of local groups. Therefore, industrialisation in the periphery provides products not for mass consumption, as in the centre, but for consumption by the bourgeoisie. Distinct from Prebisch, Cardoso argued that what was possible in the periphery was only a form of ‘associated dependent development’, where industrial firms, owned by domestic or foreign capital, respond to markets, investment and decisions outside the country. Unlike Furtado, Cardoso insisted that dependent states are subject to national class struggle and hegemonic crisis just as dominant states.

One of the few authors from this tradition who has focused on the role of the financial sector is Brazilian economist Maria da Conceição Tavares (1985). Her work, dating from after the breakdown of the Bretton Woods system and the beginnings of financial liberalisation, foreshadows the discussion in the next section.
Her argument points to the inability of peripheral countries to borrow in their own
currency, or as it is known in the economics mainstream, ‘original sin’ (Eichengreen,
Hausmann, & Panizza, 2003). The lack of finance, in particular foreign finance, and
the limits imposed by the balance of payments constraint, lead to low growth rates.
This interpretation of dependency puts “… international money – and not technical
progress – as the expression of financial capital domination over the periphery in the
last 150 years.” (Tavares, 2000, pp. 131–2)

In summary, the dependency school, understood in its broadest terms, shifted
attention from economic processes in the core, the focus of classical theories of
imperialism, to social formations and impacts in the periphery. This reflects the
shifting historical context from colonialism to post-colonialism, marked by the rise
of Southern-based intellectuals. Within this framework, and as argued by Vernengo
(2006), Marxist-inspired dependency theory emphasised the agency of external
actors and the implausibility of development, while structuralists stressed internal
agency and the possibility of autonomous development.

Differences in the understandings of the factors feeding imperial expansion
are reflected in the various analyses of the role of finance. While classical theories
of imperialism concentrated on the role of core banks as the ephor of finance capital,
dependency theory began to examine the role of banks in the periphery, first
investigating the role of the branches of core banks, and then that of the peripheral
banks themselves. In Amin’s arguments, the constitution of commercial banks is
central to the question of whether or not autocentric development is possible.

It is not surprising that the earlier work in this tradition paid little attention to
the role of world money. In the inter-war years, when the periphery did not play the
role of a buffer absorbing adjustment costs, there were more crises in the core
countries (Eichengreen & Bordo, 2002). During the post-war period of recovery
under the gold-dollar standard, the periphery enjoyed a period of growth and relative
stability. As a result, attention in the 1960s focused on the unequal terms in the
growing economic activity driven by the multinational corporations of the north
drawing in an exploited labour force in the south. However, the institutional and
conjunctural specificity of world money as manageable policy construct was soon
laid bare. After the collapse of the Bretton Woods system, the manipulation of the
dollar as de facto world money, and the proliferation of crises in Latin America and
Asia, is rightly regarded in the later writings of authors such as Arrighi and Tavares as a central element to understanding imperialism under the neoliberal conjuncture.

5.2.3 Neoliberalism and the ‘new imperialism’

The neoliberal period is marked by the extension of global production chains, and catalysed by trade and financial liberalisation, including the liberalisation of exchange rates. In an attempt to understand the impact of these changes for interstate relations, a third wave of imperialist scholarship takes as its starting point the fall of the Berlin Wall, America’s new status as sole global superpower, and crucially for my purposes, the explosion in finance following two decades of liberalisation in the wake of the collapse of the Bretton Woods system.

Contemporary scholars in the Monthly Review tradition re-visit the question of the relation between monopoly capital and imperialism (Foster et al., 2011b; Foster & McChesney, 2009; Foster, 2007, 2008, 2010a, 2010b). John Bellamy Foster draws on Rosa Luxemburg to argue that Marx’s analysis of the reserve army of labour needs to be extended in a global context in order to understand contemporary imperialism. The formation of a global reserve army of labour, driven by the de-peasantisation of the periphery and the integration of the erstwhile communist countries, allows multinational corporations to extract an ‘imperialist rent’ “… through the integration of low-wage, highly exploited workers into capitalist production.” (2011b, p. 6)

Financialisation in the core, driven in the first instance in Foster’s analysis by the deepening tendency to overaccumulation, is exacerbated by these inflows of imperial rent which can nowhere be profitably absorbed within production. At the same time Foster notes a rise of financialisation in the periphery itself, citing real estate bubbles in Asia (2010b, p. 10), though it is not clear why this should be the case. He approvingly quotes Amin (2009) who argues that the “… dominant force in

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16 This is linked to the lack of price competition in monopolistic industries together with continually rising productivity.
17 Foster’s description of multinational corporations’ extraction of ‘imperial rent’ echoes William Milberg and Deborah Winkler’s (2010b) analysis of global commodity chains. However, the latter relate the investment of these additional profits in financial rather than ‘productive’ channels, not to overaccumulation, but to diminished shareholder imperatives for re-investment in fixed capital.
today’s financialised globalisation is the imperialist ‘capitalism of oligopolies’, of which financial oligopolies now constitute the ‘headquarters’, backed up by the power of the states of the triad’ and the international financial institutions (2010b, p. 11).

Following in a line of analysis extending from Hobson through Baran and Sweezy, Marxist geographer David Harvey agrees that in the era of classic imperialism, rising monopolisation led to the accumulation of surplus capital, which, when unable to find profitable employment at home, generated pressure for imperialist practices (2003, p. 107). However, in describing the contemporary era of US imperialism, Harvey foregoes the use of surplus accumulation as his key variable, emphasising instead a ‘profit squeeze’ resulting from a combination of wage pressure, fiscal tightening related to increases in military expenditure and falling international competitiveness. Transcending static depictions of imperial powers and subjugated states, Harvey suggests the replacement of an understanding of a singular imperialism with a “… series of different imperialist practices dispersed through the uneven geography of capital surplus distribution.” (2007, p. 70) This allows for a more fluid interpretation of the actors, motives and processes which characterise imperialism.

In Harvey’s writing, financial institutions act as agents of ‘accumulation by dispossession’ (2003, p. 145), a controversial re-interpretation of Marx’s notion of primitive accumulation. Financial capital, in its various forms, plays a central role in privatising environmental commons, cultural forms and other formerly public assets. He highlights an orchestrating role for international financial institutions in imposing limited crises which serve to devalue assets so that they can then be put to profitable use under the command of dominant class alliances in imperial states.

But Harvey also makes the case that finance maintains aspects of ‘predation, fraud and thievery’ (2003, p. 147). Financialisation, he says, has been characterised by speculative and predatory practices such as asset-stripping, debt peonage, and corporate fraud. These features ensure that capitalism is both ‘contingent and haphazard’. This suggests a fluidity and ambiguity in the role of finance which is

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18 For a critique of Harvey’s ‘accumulation by dispossession’, see Ben Fine (2006) and Robert Brenner (2006b).
missing in some of the earlier theorists of imperialism. While Luxemburg had argued that finance played an ambiguous role in relation to development in the periphery, she had still believed that the role of finance was functional as viewed through the lens of the capitalist classes of the imperialist countries.

In contrast to both Harvey and the Monthly Review School, Leo Panitch and Sam Gindin (2003), authors in what might be termed the York School of Marxist political scientists, insist that imperialism is not, and was never, driven either by the pressure of an overaccumulation of capital resulting from rising monopoly, or by declining rates of profit in the core countries. They appear to be in agreement with Harvey however that the current phase of US-led imperialism comes instead as a predictable response to competitive pressures and opportunities in a capitalist world economy. Though even here, Albo (2003) argues that Harvey’s ‘spatial fix’ unnecessarily recalls classical imperialism’s focus on outlets for surplus capital. He argues that contemporary imperialism should be viewed as an "… expression of the expansionist tendencies of capital to internationalise and constitute a world market for its valorisation." (2003, p. 90)

According to this group, Lenin, symptomatic of classical theorists and their contemporary adherents, wrongly translated particular conjunctural conditions into historic inevitability. This led him to depict the emergence of cartels in an era of inter-imperial belligerence as the defining characteristics of capitalist expansion in the monopoly stage, the highest stage of capitalism. Most damaging for the classical theorists according to Panitch and Gindin is their economic reductionism and instrumental treatment of the state. Capitalist imperialism "… needs to be understood through an extension of the theory of the capitalist state, rather than derived directly from the theory of economic stages or crises." (2003, p. 7)

For their understanding of the state, Panitch and Gindin draw heavily on Nicos Poulantzas (1974), who viewed the internationalisation of capital in terms of “… the internalised transformations of the state itself” (Poulantzas, 1974, p. 81, quoted in Albo 2003, 94). According to this understanding, the export of capital is not in itself an imperialist practice. What is pivotal is the way that foreign investment affects class structures and state formations. American direct investment which spread capitalist production across core states in the post-war era led to the creation of tensions and alliances within domestic capitalist classes: "Domestic
capital tended to be 'dis-articulated' and no longer represented by a coherent and independent national bourgeoisie." (Panitch & Gindin, 2003, p. 19) In the third world, "… globalisation internationalises domestic capitalist classes, shifting their orientation towards global accumulation… ", this "… undermines the base for domestic bourgeoisies to create the national economic coherence fundamental to capitalist development." (2003, p. 34)

Panitch and Gindin share the analysis of Tavares discussed in the previous section, that the imperial basis of financialisation lies in the acceptance of the dollar’s role as the fulcrum of the international financial system, allowing the American economy to attract global savings (2004, pp. 65–69). They place finance at the heart of the contemporary accumulation process, reaping speculative gains but equally keeping profits higher than they would otherwise have been. The rise of finance, they conclude, has been functional for global accumulation and US empire, but "… this certainly does not mean that it is not attended by contradictions, let alone grotesque inequalities and injustices." (2004, p. 69)

This examination of the role of finance resonates with the work of Marxist scholar of international relations Peter Gowan, whose analysis of imperialism centres on what he has termed the ‘Dollar-Wall Street Regime’ (1999, 2003, 2009, 2010). This term refers to the measures adopted by the US government to ensure the centrality of the dollar as both an international exchange medium and store of wealth, such that most states must hold their reserves in dollars placed within the financial system controlled by Wall Street. Gowan asserts that the US broke the Bretton Woods System in order to be able to “… unilaterally subordinate international monetary conditions to the perceived requirements of American capitalism." (2003, p. 39) The new flexible exchange rate system, based around the dollar as world money, has provided Washington with multiple benefits: seigniorage, a source of credit-creating power, and freedom from the payments disciplines applying to other states.

Contra Arrighi, Gowan rejects the idea that the expansion of US financial capital necessarily represents a hegemonic crisis (2010, p. 160). Part of the establishment of an ‘imperial economic framework’ has involved pressing for institutional reforms which have ensured that industrial companies worldwide have become dependent on securities markets and that foreign takeovers have been
permitted. In times of crisis, this has meant that not only governments and banks, but also industrial companies would require American finance to tide them over, “...giving American finance capitalism ever widening circles of control over international capitalism.” (2003, p. 41) International monetary instability serves to enhance this control. Gowan makes the point that despite what might be otherwise expected, the capitalist classes of dominated states have supported these measures: “For they can take advantage of the free movement of capital enforced by the US and its allies to transfer their assets into metropolitan financial centres and live as rentiers rather than risking their wealth in hazardous development strategies locally.” (2010, p. 161)

Finally, two more recent contributions directly addressing the relationship between imperialism and financialisation merit discussion. Milios and Sotiropoulos (2009) call for a ‘re-thinking of imperialism’. They cast off both classical and dependency accounts of the drivers of imperialism, namely monopoly and surplus absorption on the one hand, and unequal exchange and surplus extraction on the other. Instead they support the notion of an inherent capitalist drive to expanded accumulation, driven on by class struggle. In relation to the role of the state, depictions of both an instrumental state, found in various dependency theories, and of capital dis-articulated from the state taking on autonomous characteristics, as advocated by some theorists of the new imperialism, are rejected; instead they defend the national character of the capitalist state reproduced through internal struggle, but also insist that no social formation exists in isolation, but “… occupies a specific position (necessarily one of inequality) in the global imperialist chain” (2009, p. 195). On the question of the role of finance, the pair set themselves firmly against both post-Keynesian and Marxist theories of financialisation which emphasise the detrimental impact of finance on capitalist accumulation. Instead they argue that the explosion of financial markets has “… provided sites for the monitoring of the effectiveness of individual capitals.” (2009, p. 179) That is to say that finance plays a disciplining role in the process of capital accumulation, driving exploitation and maintaining profits.

The work of Bichler and Nitzan (2010) is a provocative appeal to abandon the ‘nexus’ between imperialism and financialisation altogether. Their argument is primarily framed as a rejection of the hegemonic transition thesis, most cogently put
forward by Arrighi; namely, that having once been weakened, the hegemon will seek to maintain its position by promoting a process of financialisation. At the first critical step in their argument, they provide data showing the declining profit share of US corporations relative to those in the rest of the world, from which they find that “… ‘financialisation’ has not worked for the hegemonic power” (2010, p. 20); a conclusion which, they point out, is not at odds with the theory of hegemonic transition. This evidence however, is problematic for empirical reasons which are for the most part enumerated, though glossed over, by the authors themselves. The second, more important step in their argument is built on the assertion that, if financialisation is to be understood as a survival strategy of a declining hegemon, then US financialisation must precede and be bigger than financialisation in the rest of the world. Using data on the profit shares of listed finance, insurance and real estate corporations (FIRE), they find that it did not, and it is not. Beyond the numerous empirical problems related to this data set, it is not clear why the authors should: a/ not conclude that the initial difference in the level of the profit shares of listed FIRE companies is related to historically-specific structural differences in bank-firm relations in countries going through industrial catch-up; or b/ not conclude that the more rapid increase in profit shares of US listed FIRE corporations after 1980 (and concomitant expansion of Anglo-Saxon finance worldwide) drives the increase in the rest of the world.

Despite the fact that their argument is problematic at both critical stages in its elaboration, what underlies it is an appeal to confront financialisation as a secular trend which must be accounted for in its own right, rather than a mechanistic outcome of a historically-recurring process. They perhaps go too far however, in demanding that the connection between imperialism and financialisation be severed altogether. Consistent with their underlying appeal is the idea advanced here that the

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19 Potential problems mentioned by the authors include: the limitation of the data set to publicly listed firms, creating problems due to the explosion of listed firms in Europe and emerging markets from the 1980s (acknowledged), difficulties matching the location of listing with the location of operations (acknowledged), but also potentially reflecting the fact that industrial firms are less likely to be publicly listed in non-US countries relative to financial firms (unacknowledged); difficulties in determining a firm’s ultimate ownership (acknowledged), as well as the likelihood that US investors would receive greater profits from capital invested in minority stakes in foreign firms (unacknowledged).

20 This is the focus of Michael Hudson’s comments, which led Bichler and Nitzan to revise the paper in 2010 which had been originally published in 2009.
phenomenon of financialisation, and how it is experienced in different social formations, is itself *shaped by*, rather than *driven by* imperial relations. The transformation in the relations of the fundamental agents of capitalism described in chapter three, and documented in chapter four, marks a new epoch, but an epoch in which imperial relations are nonetheless present.

In summary, shaped by the material conditions of the neoliberal era, theorists of the ‘new imperialism’ have sought to break away from some of the shibboleths of both classical theories of imperialism and dependency theory. In terms of the drivers of imperialism, all question previous accounts centred either upon the rise of monopoly and over-accumulation, or the imposition of unequal terms of exchange and surplus extraction. Instead, there is increasing agreement that, in the words of Milios and Sotiropoulos, "… there is an immanent imperialist tendency for territorial expansion inside every capitalist state" (2009, p. 108) driven by the capitalist imperative of accumulation through competition. Against this, Foster and the *Monthly Review* School hold fast to theories of monopoly capital and over-accumulation, to which they have added the impact of ‘imperial rents’ extracted through the exploitation of a global reserve army of labour.

Panitch and Gindin provide a convincing argument that what is pivotal in the imperial relationship is not the flow of capital but the way that foreign investment affects class structures and state formations, shifting the orientation of domestic capitalists. While Milios and Sotiropoulos might disagree if this were understood to imply a logic of capital dis-articulated from national struggles, there is in fact considerable alignment between the two groups. This can be seen in the argument of the latter that the historical form that imperialism will take "… depends on the way in which the 'external' situation (that is to say the international correlation of forces) not only overdetermines but also constrains the practices that emerge out of the evolution of the internal class correlations." (2009, p. 197) Their notion of the global imperialist chain, drawing upon Lenin, is a way of conceptualising the “… complex economic, political and ideological interconnections that develop between different social formations.” (2009, p. 215)

Financial liberalisation and the subsequent growth of finance have left an indelible mark on contemporary theories of imperialism. For both Harvey, and Panitch and Gindin, finance plays an ambiguous role in relation to capitalist
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expansion, at times functional for imperial-led accumulation while at other times prone to ‘predation, fraud and thievery’. Milios and Sotiropoulos question any association of the rise of finance with theories of capitalist decay, arguing forcefully that finance plays a key role in disciplining capital and accelerating exploitation. Both Panitch and Gindin and Gowan incorporate an understanding of world money into their work on imperialism. The manipulation of the dollar has played a key role in US ascendancy. However, Gowan rejects Arrighi’s argument that the rise of Wall Street necessarily denotes hegemonic decline. Bichler and Nitzan reinforce this position that mechanistic understandings of the relationship between imperialism and financialisation should be subject to severe scrutiny.

### 5.2.4 A reconsideration of imperialism and finance

During the colonial era, the classical theorists of imperialism documented the pivotal role of the rise of monopoly firms in generating expansionist pressures. According to Hobson, the rise of monopoly capitalism drives a process of overaccumulation, with the resulting surplus relieved through the imperial project. While for others, such as Hilferding and Bukharin, monopoly generates only the structures to allow expansionist tendencies in response to profit opportunities to move across borders, without the need for this expansion to be driven by *surplus* capital. Trade barriers between the various ‘spheres of influence’ demanded the cooperation of banking and industrial capital in order to exploit new profit opportunities through the establishment of overseas operations.

The prevalent theory of the state was that it served as an instrument in the hands of dominant ruling classes. Banking capital was placed in a lead role in an alliance with both industrial capital and the state; Bukharin’s notion of the ‘state-capital trust’ takes this analysis to its logical extreme. These blocs lay at the root of what these theorists saw as inevitable inter-imperial rivalry. Inter-state relations were portrayed by Lenin as a ‘global imperialist chain’, where the social formations of various states occupy necessarily unequal positions in a global hierarchy. Within this imperial chain, finance capital and its institutional manifestations act variously as coordinator and parasite. Lenin saw that the rise of finance in the imperial states
risked diverting capital from productive to speculative activity, a form of decay from within. In the periphery, according to both Luxemburg and Lenin, capital imports threatened to create perpetual servitude through a weakening of the domestic bourgeoisie. Perhaps understandably, theorists of classical imperialism took as given that the role of world money was immutable; as such, it faded from view. However, with hindsight it is clear that the imperial powers, but especially Great Britain, were able to defend their positions in part through the formal exploitation of their status as issuers of world money.

Disagreement over the role of surplus capital in relation to imperialist expansion carried over into the post-colonial period of scholarship. Dependency school analyses credited the imperial project with powers to variously absorb surplus capital in the core or extract it from the periphery. Much stress was placed on the role of colonial history in cementing unequal exchange in trading relationships. World-systems analysis attempted to move beyond this dichotomy in its description of a new international division of labour, wherein the direction of the flow of capital at any one time became less important than the hierarchical relationship which it reflected and enforced.

Theories of the state during this period grappled with the impact of domestic social formations in the periphery itself. Theorists of underdevelopment such as Frank suggested that dependent states are instruments of the ruling classes of core states in alliance with a comprador bourgeoisie. Contra to this, authors such as Prebisch and Cardoso, maintained the ultimate importance of domestic class struggles in the states of the periphery, suggesting the possibility for autonomous development or, at least, a form of autonomous development.

The view of the role played by finance was important in this respect. Frank pursued the analysis of the deleterious effects of capital imports on the domestic bourgeoisie, seeing branches of imperial banks as coordinators and conduits for the extraction of surplus value. Amin’s more nuanced analysis submits that both international and national banks may serve either autocentric or extraverted objectives. However, for much of the dependency school, unlike the classical theorists, finance was not in the lead role, and emphasis was placed instead on industrial capital and trade relationships. Again, this corresponds to the material context in which these theories evolved. Under the post-war Bretton Woods system,
finance was managed at both the international and domestic levels, meaning that the periphery enjoyed temporary relief from its role as global buffer against adjustment. Meanwhile, despite the maintenance of trade barriers, US corporations were aggressively expanding their operations across Latin America.

During the contemporary neoliberal period, there appears to be a growing acknowledgement that none of the more purely economic factors which dominated earlier generations of theory – the rise of monopoly, levels of capital accumulation, trends in profit rates, international division of labour – can on their own be determinant in imperial expansion (or dependency). The exertion of social, cultural and political power, reflecting the agency of historically-specific social formations must be brought into the analysis. This demands a well-developed theory of the capitalist state and inter-state relations. Milios and Sotiropoulos defend the primacy of the social formation of the state. They invoke an interpretation of Lenin’s imperialist chain, wherein external practices are seen both to overdetermine and constrain what emerges out of internal class struggles. Authors of the *York School* have argued that capital exports from core states penetrate and influence the domestic social formation, undermining national economic coherence.

Following in the wake of the demise of the Bretton Woods system and financial liberalisation, contemporary theories of imperialism have returned to a focus on finance, with many of the same tensions and ambiguities that were present in earlier eras. For Harvey, finance is both at the core of accumulation by dispossession and at once ‘contingent and haphazard’. Finance has moved to the heart of accumulation and the maintenance of higher profit levels across the globe, according to the *York School*, and yet is attended by contradictions and injustices.

With the collapse of the Bretton Woods system, the introduction of liberalised exchange rates, and the implementation of broad-based financial liberalisation, imperialist theories have been forced to confront the implications of the hegemony of the US dollar as world money. From Tavares, Gowan, and Panitch and Gindin, a central element of US imperial strategy is seen as its ability to set international monetary conditions according to the needs of the American economy. This provides not only seigniorage benefits, cheap savings and credit, and freedom from payments disciplines, but it has allowed the prising open of the markets of
competitor states through the exploitation of crisis and the outward growth of US corporations through acquisition.

5.3 INSIGHTS TOWARDS A THEORY OF SUBORDINATE FINANCIALISATION

Following the hypothesis that the form of financialisation in ECEs will be shaped by contemporary imperial relations, the insights obtained in the previous section through a survey of the literature of imperialism should inform a theorisation of financialisation for countries of the periphery. These insights relate to the drivers of imperialism, the nature of the state, the relationship between finance and industry, and the form of world money.

5.3.1 Drivers of imperialism

Imperialism eludes any simple causal explanations, be it the absorption or extraction of surplus found in classical theories of imperialism, the differential marginal gains from exchange which typify dependency theory, or movements in relative profit rates found in some of the theories of the new imperialism. As was documented in chapter three, many of these hypothesised drivers of imperialism have echoes in contemporary theories of the emergence of financialisation. Problems of overaccumulation form the basis of a number of such theories, invoking the properties of finance to variously absorb (Foster, 2010a) or extract surplus value (Gowan, 2010; Panitch & Gindin, 2004). Similarly, profitability, be it the tendency of the rate of profit to fall (Brenner, 2003) or changes in relative profit rates (Duménil & Lévy, 2004b), figures prominently. Unequal terms of exchange are internalised within the multinational corporation in the work of William Milberg (2008; Milberg & Winkler, 2010b), reducing pressure on managers to maintain fixed investment levels.

Wary of essentialism, I maintain that in a world market marked by deep and complex trade, finance and production linkages, an understanding of imperialism must be sought in the multi-faceted way that the forces and relations of production in the periphery respond to the imperatives of the capitalist classes of powerful nations.
in the core. Therefore, in order to construct theory for the periphery, I will need to consider how these imperial relations will shape the tendencies of financialisation.

5.3.2 Financial capital and the state

In classical theories of imperialism, the state was seen implicitly as a *thing*, functional to the needs of the capitalist classes. However, this requires political unity of the fractions of the capitalist classes pre-existing outside of the state. Finance capital was assigned the role of *ephor* of imperialist capitalist expansion in the project of the state-capital trust. The antithesis of this understanding found expression in those dependency theorists who advanced the theory of the state as *subject*, instrumental variously to a parasitic comprador class (in alliance with the capitalist classes of the imperial power) or to the developmental interests of a domestic bourgeoisie. The orientation of finance was critical in this regard. But this required the state to be external to class struggle with its own will.

Rather than as a thing or a subject, the state needs to be seen as a *relationship*; as Poulantzas (2000) described it, ‘a material condensation of the class relationship of forces’, both that between fractions of the capitalist class and that between dominant and dominated classes. Viewing the state as a relationship allows for its character to change as capitalism develops (McMichael, 1987). To play its constitutive role, the state must enjoy *relative autonomy* of particular interests. This does not mean that state autonomy is set against the fractions of the capitalist class, Poulantzas tells us, but that autonomy is the result of what takes place within the state. This understanding allows us to simultaneously consider both a state project and an internally contradictory state.

Capitalism reproduces territorial divisions with the goal of mobilising nationalism in the pursuit of competitive accumulation. This provides for the possibility that “… cross-class coalitions will come into being with the goal of securing shared competitive advantages in the world market” (Hirsch & Kannankulam, 2011, p. 21). However, it is by no means certain that this will result in the formation of a coalition which functions in the interests of the advancement of
a national bourgeoisie. Poulantzas argued that the history of the bourgeoisie was that of oscillation between identification with and betrayal of the nation.

Theorists of the transnational capitalist class (Robinson, 2001; Sklair, 2000; van der Pijl, 1998) argue that the capitalist state is being re-organised according to the demands of an alliance of the ruling classes that operates across borders, deracinated or denationalised. While provocative, this goes perhaps too far. Clearly, within a dynamic global hierarchy, states occupy differentiated positions. The possibility for movement within this hierarchy is affected by the inter-relationship between the state, its constituent social relations, and external forces. This recalls Poulantzas’ (1974) notion of the ‘internal’ (or ‘interior’) bourgeoisie, with its complex interdependency with foreign capital, yet retaining its own base of capital accumulation. In assessing this notion in the contemporary era, Jens Wissel (2011, p. 224) argues that “… there is really no such thing as external factors on the one hand, acting purely from 'outside', and opposed to internal factors 'isolated' in their own 'space'”. In this understanding, domestic social struggle should be seen neither as isolated from cross-border influence, nor determined by the same. The room for and direction of movement, may change across particular conjunctures, as international configurations of power shift and especially during periods of transition or crisis. All of this suggests that the form of financialisation in any particular conjuncture can not be universalised; it must emerge from a careful historical analysis of state-class relations.

5.3.3 The changing relationship of industrial and financial capital

While financial capital first emerges from the circuit of capital, its potential to reproduce and expand in relation to the material confines of production, means that it enjoys a unique malleability. It is precisely the exploitation of this malleability which explains the ability of financial capital to re-shape social formations. It is this characteristic which has made financial capital such an appealing lever of power throughout history.

In Volume III of Capital, Marx (1991 [1894]) describes the challenge of the financing of capitalist production as that of achieving balance in the proportions of
money and commodities. In expanded reproduction, accumulation requires the hoarding of surplus value by capitalist producers, which is then placed under the control of bankers as representatives of social capital. The financing challenge involves the correct adjustment of hoarding and dishoarding, thereby introducing uncertainty and with it complex psychological dynamics. In an advanced capitalist economy, this passage of money capital into and out of the circuit of production, becomes irretrievably intertwined with the extension of interest-bearing capital by banks. The balance of forces between lenders and borrowers in a particular social formation determines the division between interest and entrepreneurial profit out of total profit. As Marx says, it is “… only the division of capitalists into money capitalists and industrial capitalists that transforms a part of the profit into interest and creates the category of interest at all.” (1991, p. 493)

It is crucial to note that the object of Marx’s analysis was a closed economy. However, in a world market where transnational corporations organise production across liberalised borders, the financing of capitalist production has undergone important transformations. The hoarding of surplus value can now be effected by transfers within the same corporate unit across territories, preventing the socialisation of the investment process according to the constrictions of the nation-state. In the periphery, large transnationals acting as balance sheet managers, access finance in international markets and channel it to borrowers both within and outside of their corporate networks.

Perhaps surprisingly, there is very little in the financialisation literature which attempts to link the phenomenon with these broader changes in the structure of global production. Milberg & Winkler (2010b; 2008) stand out for their examination of how the creation of global value chains has impacted shareholder value orientation of the corporations of the core. But what is missing for the focus here is an examination of how changes in the financing of capitalist production which have accompanied these transformations have affected the role of financial capital in the periphery.
Chapter 5  
Imperialism, dependency and finance in the periphery

With peripheral interest rates driven by the role of the exchange rate as an asset class in a small open economy (Kaltenbrunner, 2010), corporations able to access international markets enjoy a substantial advantage over those confined to domestic funds. This bifurcation of capital structures has decisive impacts upon investment allocation and broader national development trajectories, particularly in economies where SMEs play a predominant role in terms of employment and fixed capital investment (Toporowski, 2010c, p. 922). The participation of corporations in supra-national financial circuits has the further corollary that it may limit the capacity of domestic banks to centralise money capital and act as ‘representatives of social capital’. This may result in domestic financial under-development. The flipside of this is the ability of foreign capital to participate in a profit rate which is determined by the social formations predominant in the periphery (importantly reflecting low labour costs). Where the result of these changes in financing is stagnation in productive investment, this may have the unintended consequence of driving policy changes which attempt to catalyse growth through the expansion of household debt-fuelled consumption.

5.3.4 US dollar as world money and flexible exchange rates in the periphery

As previously elaborated in chapter three, the money which emerges from the spontaneous economic, political and military interactions of states “… serves as the universal means of purchasing, and as the universally recognised embodiment of all wealth.” (Marx, 2004, pp. 240–4) Suzanne de Brunhoff (1978) has argued that the reproduction of money as general equivalent requires the interplay of three levels; that is bank-created credit money, national currency and world money. Constantly evolving according to the changing needs of accumulation, this interplay between the three levels of money will be experienced differently in countries occupying distinct positions in the international hierarchy of states. In the world money-issuing country (or countries), there is little or no difference between national currency and world

21 Note that Marx foresaw this, arguing that the world market “… exerts a direct influence on the establishment of the interest rate”. (1991, p. 490)
22 Not only do these firms not have to borrow at these higher interest rates, but they may borrow abroad at lower rates and invest in government securities, exploiting the difference.
money, conferring a range of benefits, as pointed to by a number of authors previously discussed. However, in peripheral countries, there is a sharp distinction between national and world money. For the state, the central bank must navigate the interaction between these two spheres. Costas Lapavitsas and Makoto Itoh argue that the “... possession of a hoard of international money is a pre-condition for the defence of national bourgeois interests in the world market” (1999, p. 160). Whether by choice or by necessity, central banks are driven by the requirements of inflation targeting and international competitiveness in an open economy to sterilise foreign capital inflows. Juan Pablo Painceira (2009, 2010) has shown how this creates a linkage between reserve accumulation and domestic public debt in middle-income countries. The proliferation of domestic public debt instruments may create an incentive for domestic capitalists (both financial and non-financial) to invest in financial assets over productive activity.

For capitalists in the periphery, the compulsion to transact in and hold world money may prove irresistible. Tony Smith (2005, p. 230) enumerates the reasons why this may be so, including: funding cross-border production chains, joint ventures, and mergers and acquisitions; responding to overcapacity difficulties in home markets by either entering foreign markets or shifting accumulated surplus value into the financial sector.

To reiterate, world money is in increasing demand to facilitate production and circulation carried out as part of increasingly global networks. This is rooted in the relative price and liquidity of US markets, themselves characteristics derived from the status of the US as ‘banker to the world’. World money is also sought after in its function as primary means of payment and store of value. This latter point poses a number of risks for the periphery. First, firms accessing world money encounter exchange rate risk and incur fees and intermediary costs which are a deadweight loss to the domestic economy. Second, the increasing recourse to world money threatens to perpetually stunt the development of domestic financial markets.

23 This is leaving aside the potential for domestically-based branches of international corporations, both financial and non-financial, to transfer profits abroad in the form of dividends (Ortiz, 2012).
5.4 SUBORDINATE FINANCIALISATION

Consistent with the methodology employed thus far, understanding the role of finance in the periphery today requires an updated assessment of the characteristics of the world market in the current historical conjuncture:

- The liberalisation of trade has continued, facilitating the continual re-organisation of production chains and trade channels driven by profit imperatives. This re-organisation is carried out by corporations, both of the core and increasingly of the periphery, constantly re-shaped by incessant pressures of centralisation and concentration. Importantly, these units are more and more able to access cross-border market-based sources of finance and circulate these funds through their production networks.

- Industrialisation certainly can and has occurred in the periphery, and is not constricted, as envisioned by dependency theorists, to goods either for export or for elite consumption. However equally, de-industrialisation can take place where local conditions no longer fulfill the requirements of capitalist production. The outcome in any particular context rests on a host of factors which impact upon the profitability of the firm, including technological innovation, temporal and spatial re-organisation, and the strength of working class organisation.

- Finance, both financial institutions and financial capital, has risen in importance across the globe, in both creditor and debtor nations, and in both core and periphery. This has been supported by and given support to financial liberalisation. The growth in capital flows has become increasingly de-linked from the growth in trade flows; the direction and nature of these flows eludes explanations based on such simple notions as the marginal productivity of capital.

- While questions are being raised about the future of its role as world money, the US dollar continues to enjoy an unrivalled status. The dollar is dominant in its share of international trade (Goldberg & Tille, 2008); liquid liabilities and risky assets\(^{24}\), including derivatives\(^{25}\); and official reserves\(^{26}\).

- Finally, as illustrated by the rise of sovereign wealth funds and state-owned enterprise control of commodities, the state is by no means withering away. Indeed, through the crisis which began in 2007-8, there has been a revival in financialisation.

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\(^{24}\) The US share of liquid liabilities (debt, trade credit and bank loans) has gone down only slightly from 70 per cent in 1973 to around 60 per cent in 2004, while its share of risky assets has risen dramatically from near zero post-war to almost 60 per cent in 2004 (Gourinchas & Rey, 2005).

\(^{25}\) In the foreign exchange market in April 2007, the US dollar stood as the leading currency with 89 per cent of all contracts having, at least, one “leg” denominated in that currency (BIS, 2007, p. 15).

\(^{26}\) Share of claims in USD in the allocated reserves portion of the total official foreign exchange reserves peaked at 71.5 per cent in 2001 and decreased to 62 per cent in 2008 (IMF, 2010).
more explicit forms of state-led interventions in the interests of capitalist development.

My hypothesis is that peripheral economies will experience the tendencies of financialisation, but in a distinctive form which has been shaped by imperial relations in the current world market conjuncture. The impact of such needs to be apprehended in relation both to posited changes at the macroeconomic level, as well as to the sectoral transformations characteristic of financialisation. Taken together, I have called the distinctive form of financialisation in the periphery *subordinate* financialisation.

At the macroeconomic level, subordinate financialisation will not be reducible to the quantity or direction of capital flows at any one time. Foreign portfolio flows, driven by yield dynamics in the core, variously inflate and then exit from government debt, private securities and real estate markets in the periphery. Under flexible exchange rate regimes, costly central bank efforts to sterilise these flows and/or foreign exchange earnings increase government indebtedness and threaten to crowd out domestic lending by commercial banks and fixed investment by private firms. Monetary and exchange rate policy become driven by the profit-making strategies of both foreign capital and large domestic capital. All of this appears explicitly as a result of the subordinate status of peripheral states in international capital markets and the subordinate status of the domestic currency.

The turn of large non-financial corporations towards market-based finance will lead them disproportionately either to foreign markets, or to foreign investors in domestic markets. Additionally, those firms which are part of global production chains may finance themselves with trade credit from corporate headquarters, themselves becoming pivots in the development of internal capital markets. In the short-term, this sees the extraction by foreign capital of a share of domestically-generated profit in the form of interest, fees and commissions, pitted against the benefits of greater liquidity and a reduced cost of financing. The long-term risk is that this mode of financing perpetuates shallow and/or volatile domestic financial markets. In a world market marked by the internationalisation of production, hedging exchange rate and interest rate risk in small, open economies which are subordinate to world money, requires globally-integrated firms to participate in
derivatives markets. The further temptation may arise for firms under increasing pressure to generate higher yields to assume speculative positions in a range of financial assets, which may have the corollary of reduced investment in fixed assets.

The role of domestic banks in the periphery is expected ex-ante to be ambiguous. However, the tendency will be towards greater reliance on international money markets, and a turn towards lending to households. As is the case with non-financial corporations, financial corporations of the periphery entering into international capital markets are subject to increased risks owing to the exchange rate, interest rate and macroeconomic risks they assume. While lending to households may prove a profitable strategy for the banks, its macroeconomic impact via the wealth effect will be limited by the distinctive class structure in the periphery. In any one institutional setting the transformation of bank behaviour will pivot on its relationship with industrial capital and the state, overdetermined by that with foreign capital. Depending on these relationships, and owing to the tendencies of non-financial corporations and banks alike to turn to international capital pools, it is conceivable that economies in the periphery may be at the same time both under-financed and financialised.

Finally, as in advanced capitalist economies, it is expected that financialisation in ECEs will be marked by households’ increasing indebtedness accompanied by rising holdings of financial assets. This will be distinguished by the markedly different class structure in ECEs. The size of the middle class will affect the potential of finance-led accumulation, especially in the relative importance of mortgage as against consumer lending. Securitisation is likely to be limited by institutional quality. A further distinguishing characteristic will be the desire of households, in the face of greater domestic volatility, to hold a greater share of foreign assets denominated in world money. The transformation of the household will be influenced by class struggle as it is reflected in the policy directives of the state around critical issues such as housing, pensions and consumer finance.
5.5 CONCLUSION

This chapter began with a review of the literature on imperialism and dependency, highlighting whether and how finance figured in the analysis. I illustrated how each successive generation of imperialist theory was rooted in the particular material conditions of the colonial, post-colonial and neoliberal periods, each of which exhibited distinguishing world market characteristics:

- During the classical period of colonial production and restrictions on trade, the predominant analysis was that imperialism relieved pressures of over-accumulation driven by the formation of monopolies in the core. Banking capital was seen to take a lead role in collaboration with industrial capital in order to overcome trade barriers. The peripheral state served the needs of its masters in the capitalist classes of the core. The role of a seemingly immutable gold-sterling standard was not yet a prominent feature of analysis, though it was critical to maintaining British imperial dominance.

- In the post-colonial period, while trade and financial barriers remained, the question of ownership over the means of production and thereby the orientation of the domestic bourgeoisie, rose to the fore. Emphasis was placed on the unequal terms of exchange, with a split opening up between those who expected dependent states to act as instruments of the ruling classes of the core, and those who anticipated the possibility for autonomous development. How finance was understood, and what role it should play, pivoted on this interpretation. Little attention was given to the role of world money during the period of stability that was facilitated, for a time, by the gold-dollar standard.

- After the collapse of the Bretton Woods system, the institutional specificity of world money began to be recognised as a key element in the imperial relationship. In reaction to the crisis of the post-war model of accumulation, neoliberal reforms deepened trade and financial liberalisation, facilitating the internationalisation of production. In this context, rather than being seen to relieve pressures of overaccumulation, or being centred around unequal exchange, imperialism has been related to the way that foreign investment affects class structures and state formations in the periphery. In this, finance plays an ambiguous role, in tension with industry, variously productive and parasitic, capable of either empowering or enfeebling.

From this review, a number of critical insights were gained which have informed my theorisation of financialisation in the periphery. First, imperialism cannot be explained by recourse to any single nationally-based dynamic relating to the
absorption/extraction of surplus, marginal gains from exchange or movements in relative profit rates. In a world market marked by deep and complex trade, financial and production linkages, a contemporary understanding of imperialism must be sought in the multi-faceted way that the forces and relations of production in the periphery respond to the imperatives of the capitalist classes of powerful nations in the core. Financialisation should be seen in this light. Second, the role of finance has been an ambiguous but influential one in imperial relations. The malleability of the circuit of financial capital creates a constant tension with industrial capital, and opens up possibilities to variously, and sometimes simultaneously, coordinate, erode or subvert power structures. In the current setting of unprecedented financial liberalisation, these tensions and possibilities are magnified, giving institutional forms an important role to play. Third, overlooked in much of the literature is the importance of world money to the exercise of imperial power. Today, the nature and impact of financialisation pivots on the status of the US dollar as world money. Finally, grasping imperialism has required advancements in analysis of the state. Instrumental descriptions of the peripheral state must be abandoned in favour of a view of the state as a condensation of intra- and inter-class struggles, constrained and overdetermined by its place in an uneven global hierarchy. Ultimately, these struggles are what give the sectoral transformations which characterise financialisation their particular form.

In view of these insights, a number of hypotheses were advanced about the sectoral transformations which are expected to characterise financialisation in the periphery. At the macro level, subordinate financialisation can not be reduced to the quantity or direction of capital flows at any one time. In ECEs, the difference will be a qualitative one, in that capital flows in a financialised economy may be expected to be more volatile, and their movement driven by external imperatives. The turn of the non-financial corporation to market-based finance and investment in financial assets will be distinguished by both the nature of the risks undertaken and by the recipients of the financial profits thus generated. The tendency of banks will be towards greater reliance on international pools of capital and a turn towards household lending. The turn of corporations, both financial and non-financial, to international capital markets may hold back the development of the domestic financial sector, dependent on state-capital relations. Finally, it is expected that financialisation in
ECEs will see increasing household indebtedness, with different impacts owing to distinct class structures, accompanied by rising holdings of financial assets, impacted by the desire to hold them in world money. Taken together, I have called the distinctive form of financialisation in the periphery subordinate financialisation.

In the next chapter, drawing upon this theorisation of subordinate financialisation, I will examine macroeconomic and sectoral transformations across a range of ECEs with a focus on my case study country Mexico. Following this, chapter seven provides a contemporary political economy of Mexico; its changing place in the world market reflecting the re-configuration of domestic capitalist classes and their relationship with foreign, particular US, capital. The focus will be on bank-firm relations which are deemed critical to the form that financialisation has taken in the country. Finally, in chapters eight and nine, I will look in detail at the transformation of the financing and investment behaviour of large Mexican firms.
6.1 INTRODUCTION

In 1969, Raymond Goldsmith was commissioned by the OECD to study Mexico’s financial development. Goldsmith was impressed by Mexico’s post-war economic progress. It was achieved, he noted, despite only ‘limited’ reliance on capital imports and virtually without foreign aid. He highlighted a number of characteristics to which he credited the success. Of the characteristics particular to Mexico, he cited the important role of government development banks, the rapid development of financieras (NBFIs), the role of economic groups, and an increase in the financial intermediation ratio (FIR) \(^2\) “… well above the level prevalent in many underdeveloped countries”. (1969a, p. 55)

Some forty-five years later, if it can be questioned whether Mexico’s economic development has lived up to its promise, it can be stated with certainty that its financial development has not. Of the characteristics highlighted by Goldsmith, public development banks have faded to insignificance (Girón, Correa, & Rodríguez, 2010), and, as will be subsequently discussed, domestic market-based finance remains stunted. At the same time, Mexico is experiencing firms’ turn to market-
based funds and investment in financial assets, and banks’ turn to household lending; tendencies which were theoretically linked to financialisation in advanced capitalist economies in chapter three, and empirically established in chapter four. What explains this apparent paradox – a country which is under-financed and financialising?

This chapter will first establish that, according to conventional measures of financial depth and relative to its peer group, Mexico is under-financed. Measures of financial depth will be reviewed for a survey of emerging capitalist countries: Brazil, Korea, South Africa, Thailand and Turkey. In the subsequent section, the question of whether and, if so, how Mexico is financialising will be addressed. This will be done using the sectoral indicators developed in relation to advanced capitalist economies in chapter three, and by examining additional measures building upon the understanding of subordinate financialisation suggested by the theoretical analysis in chapter five.

At the macroeconomic level, relative to advanced capitalist economies as well as some of the emerging capitalist economies surveyed, Mexico does not appear financialised. However, it will be shown that the nature and volatility of foreign capital flows are indicative of Mexico’s subordinate position in the hierarchy of global finance. At the sectoral level, data limitations restrict cross-country comparisons of firm behaviour; however, Mexican firms are increasingly reliant on market-based and foreign funding, and are investing in financial assets. It will be argued that the drivers of these transformations and the failure of firms to translate this strategy into increased financial incomes may be symptomatic of subordinate financialisation. In the financial sector, central bank data allows a comparison of the financialising behaviour of ECE banks. Mexican banks are increasingly dependent on short-term and foreign funding, with lending and profit-making shifting towards households. For both firms and banks, reliance on foreign funds has brought with it an increasing engagement with derivatives required for hedging the volatility that is intrinsic to Mexico’s subordinate status and position relative to world money.

3 The choice of countries is meant to be indicative of trends in emerging capitalist countries, and not a statistically representative survey. It encompasses two countries from Latin America, two from East Asia, one from Africa and one from Central Asia. By income, four of the countries are classified as upper middle income, while Thailand is considered lower middle income and Korea high income. Note that data is not available for some countries for certain figures, as indicated.
Finally, a measure of household financialisation will be assessed, suggesting that Mexican household financialisation is distinct from that in advanced economies; Mexican households are increasing their borrowing, particularly of a short-term nature, and their investment in market-based assets, however the level of financialisation from a macroeconomic perspective is still relatively low.

Based on this evidence, it will be argued that Mexico represents a case of subordinate financialisation, that is, an uneven combination of the transformations which characterise inter-sectoral relations in a new epoch of capitalism, but whose distinctive characteristics emerge from Mexico’s subordinate status in the hierarchy of global finance. Mexico is simultaneously under-financed and financialising. However this is not a paradox, but characteristic of a process of subordinate financialisation. Understanding why financialisation has taken the particular form it has in Mexico requires finer analysis of inter- and intra-class relations; this will be the subject of the next chapter.

### 6.2 UNDER-FINANCED ...

This section will first establish that, by standard measures, and relative to its overall level of economic development, Mexico is under-financed. Countries at lower levels of income per capita can be expected to have, *ceteris paribus*, lower levels of financial system development. Goldsmith (1969b) believed that the ratio of financial sector assets to GDP would steadily increase as a country became richer, flattening out at about three to four times GDP. However Mexico exhibits financial under-development even when compared to countries at similar or lower levels of income per capita, both in terms of overall monetary aggregates as well as the size of the banking industry and the capitalisation of securities markets.

Typically in the mainstream literature, overall ‘financial depth’ is measured by using various measures of the money supply as a share of GDP (Goldsmith, 1969b; King & Levine, 1993; Levine, 2004). One such measure accessible for

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4 Though the exact level of financial development of any particular country reflects its historical and institutional specificities.
emerging capitalist countries is the IMF’s ‘broad money’ to GDP\(^5\). Figure 6.01 shows that by this measure Mexico’s ‘financial depth’ is considerably less than a number of other countries, including those at lower levels of per capita GDP. The difference is made more emphatic by the fact that Mexico includes deposits of residents in banks abroad in its monetary aggregates, while most other countries do not (Lim & Sriram, 2003).

![Figure 6.01: Broad money to GDP](source-image)

**Source:** IMF International Financial Statistics

In terms of bank-based finance, Mexican deposit money banks’ claims on the domestic non-financial sector peaked at 47 per cent of GDP in 1969 (figure 6.02)\(^6\). It is important to note that this ratio excludes claims on the financial sector and international claims, by definition limiting itself to what is generally considered ‘productive’ lending. Since 1969, with the exception of the immediate period after

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\(^5\) The use of the IMF’s ‘broad money’ category is not unproblematic. The IMF’s Monetary and Financial Statistics Manual does not prescribe a specific definition of broad money. But as presented here, the data will be understood as indicative. Data is only available from 2001 forward. Data for the US and UK is included for comparative purposes; note that the measure used for the UK is M4 (M2 is unavailable). Germany and France do not make M2 data available; the ratio for Japan is above two times GDP so its inclusion would have obscured the differences between other countries.

\(^6\) This ratio measures deposit money banks’ total assets to GDP. Time series begin from when data is available. The same dataset makes available private credit by deposit money banks to GDP, however no additional insight into either relative levels or the trends in the size of the banking sector is provided.
bank re-privatisation, these claims have hovered around 30 per cent of GDP. This is considerably lower than the levels of Korea, Thailand, South Africa and Brazil. In the last decade, the relative size of the Mexican banking sector, as indicated by this particular metric, has also been surpassed by the other laggard of the group, Turkey.

![Figure 6.02: Deposit money banks’ claims on domestic non-financial sector to GDP](image)

**Source:** World Bank financial structure dataset

In terms of market-based finance, with the exception of the pre-NAFTA surge in the years 1990-3, stock market capitalisation as a share of GDP in Mexico has been below that of all countries except for Turkey (figure 6.03). Private bond market capitalisation is gradually increasing from a low level, tracing a similar path to that of Brazil, South Africa and Thailand, but decidedly less important as a source of financing than in Korea (figure 6.04). From a situation in the early 1990s where Mexico had one of the most significant public bond markets (smaller only than South Africa), a decade of fiscal austerity resulted in the smallest public bond market by the end of the 1990s (figure 6.05). Despite steady growth since that time, it remains the smallest public bond market in relative terms throughout the 2000s.

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7 Time series begin from when data is initially available.
8 The time series data for Turkey are incomplete, and the level is below one per cent of GDP. Data for other countries is only available from 1990.
9 Data is only available from 1990.
Chapter 6 *Financialisation in emerging capitalist economies*

**Figure 6.03:** Stock market capitalisation to GDP  
*Source:* World Bank financial structure dataset

**Figure 6.04:** Private bond market capitalisation to GDP  
*Source:* World Bank financial structure dataset
Having established that Mexico is relatively under-financed by traditional measures, can it also be argued that it is, at the same time, financialising? To address this apparent paradox, the macroeconomic picture will be first examined, followed by a consideration of each of the non-financial corporate, banking and household sectors. Within each category, the indicators of financialisation developed in relation to advanced capitalist economies in chapter three will be assessed, as well as additional measures capturing the subordinate nature of financialisation theorised in chapter five.

6.3 ... YET FINANCIALISING?

6.3.1 The macroeconomic picture

Starting at the macroeconomic level, one of the empirical transformations which is typically associated with financialisation in advanced capitalist economies is a surge in the size of the financial sector relative to that of the economy as a whole. The increase in the assets of both bank and non-bank financial institutions as a share of
GDP gives an indication of the financial sector ‘footprint’ (figure 6.06)\(^\text{10}\). Note that this is similar to one of the measures of financial depth discussed above (figure 6.02), though this measure includes claims of both the bank and non-bank financial institutions on the financial as well as the non-financial sector, and also includes international claims. This more exhaustive picture is important for capturing financialisation.

For those countries considered as archetypes of financialisation, the increase in this ratio has been dramatic (see figure 4.01, chapter four). The US has seen financial sector assets rise from less than two times GDP in 1980 to over four times GDP by 2010; in the UK in recent years the figure has risen to nine times GDP. Such growth is by no means confined to the archetypical financialisers, as the ratio shows a similar trend, if distinct levels, in the other advanced capitalist economies examined. However, by this measure, Mexico is \emph{neither} already financialised \emph{nor} does it appear to be financialising; the ratio of financial sector total assets to GDP is lower than all the other countries of the sample. Korea and South Africa, conversely, have reached similar levels to those attained by the advanced capitalist economies. Thailand was on a similar trajectory until the Asian financial crisis of 1997-8.

\[\text{Figure 6.06: Financial sector assets to GDP}\]

\(^{10}\) Unless otherwise indicated (as with the previous figures), source notes can be found in appendix B. Note that comparable data for Brazil are unavailable.
In her seminal piece charting financialisation in the United States, Greta Krippner (2005) documents the increasing weight of the finance, insurance and real estate industries (FIRE) in the US share of output. In the post-war era, FIRE has grown from 10 per cent of output to nearly 25 per cent in the early 2000s\textsuperscript{11}. The change in the FIRE share of US employment during the same period, in contrast, has been minimal - from 5 to 7 per cent. Comparable data for Mexico and the emerging capitalist economies tell a different story (figure 6.07). The Mexican share of FIRE in GDP fell following bank nationalisation, rose rapidly in the period of bank re-privatisation and the signing of the North American Free Trade Agreement, or NAFTA\textsuperscript{12}, and has since fallen back to hover at 20 per cent. This is the level reached by the more consistent rise in the FIRE share in the Korean and South African economies. Turkey ends at approximately the same level, following the end of a bubble in the late 1990s and early 2000s. The share of FIRE collapses in Thailand after the Asian financial crisis of 1997-8, though the data appear to underestimate the actual level. Like the United States and the advanced capitalist economies, the corresponding gain in employment in the Mexican FIRE sector has been small – from 3 to 6 per cent, with most of the growth coming in the real estate sector in recent years\textsuperscript{13}.

\textsuperscript{11} FIRE share of GDP has risen from approximately 15 per cent in 1970 to approximately 30 per cent in 2008 in France, Germany, Great Britain and the USA. In Japan, during the same period, it has risen from 10 per cent to 17 per cent (Source: OECD.stat).

\textsuperscript{12} These events and their implications will be discussed in detail in chapter seven.

\textsuperscript{13} Source for these summary comments on employment in the FIRE sectors is ILOstat.
Exploiting the detailed data available in the United States, Krippner (2005) documents the rise in the share of the FIRE sector in profits, rising from just ten per cent post-war to 40 per cent in 2003. Data restrictions make it difficult to estimate profitability by sector in ECEs. However, national accounts data do allow a crude comparison of profitability in the financial as against the non-financial sectors to be made. Figure 6.08 shows that Mexican financial corporations accounted for over 12 per cent of gross operating surplus (GOS) in the immediate period after bank reprivatisation in the early 1990s, falling to nearly two per cent in the late 1990s in the wake of the peso crisis and the collapse of the banking system, then rising from the period of foreign bank entry in 2001 to reach nearly seven per cent recently. Financial corporations in Brazil, Korea and South Africa capture approximately ten per cent of GOS in the early 1990s, rising to roughly 14 per cent recently.

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14 Lapavitsas (2013) documents the rise of pre-tax profits of financial corporations as a share of total pre-tax profits for the UK (from below ten per cent in 2000 to 35 per cent in 2008) and Japan (from ten per cent in 1981 to peak at 20 per cent in 1995, hovering between 15 and 20 per cent since).

15 Gross operating surplus is equal to gross value added less employee compensation and taxes/subsidies on production. Comparable data are unavailable for Thailand and Turkey.
Financialisation in emerging capitalist economies

Comparison of these levels with those of financial corporations’ share of national gross disposable income\(^{16}\) (GDI) is informative (figure 6.09). Mexican financial corporations secured over 40 per cent of GDI in the immediate period after bank re-privatisation, falling to zero in the period 1996-2001, but then rising rapidly to surpass 20 per cent in recent years. Korean financial corporations have seen their share of GDI rise from approximately 10 per cent in the 1980s to 20 per cent in the 1990s and 2000s; Brazilian financial corporations’ share has risen sharply from below 10 per cent in the mid 1990s to between 20 and 30 per cent in the last decade; and South African financial corporations have taken approximately 40 per cent of GDI from the mid 1990s until the recent crisis.

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\(^{16}\)Gross disposable income is equal to gross operating surplus adjusted for property income, FISIM (Financial Intermediation Services Indirectly Measured), social transfers and taxes on income, wealth, etc.. Comparable data are unavailable for Thailand and Turkey.
Figure 6.09: Financial corporations’ share of GDI of both financial and non-financial corporations

Source: UNdata national accounts data, table 4.3 and 4.4

Thus far, by measures typically used to illustrate financialisation in high-income countries, Mexico is not clearly financialised, though the trend in the profitability of the financial sector echoes developments in advanced capitalist economies. Hypotheses will now be examined concerning the mechanisms of subordinate financialisation, first at the macroeconomic level. In the previous chapter a key role for the nature, term and volatility of capital flows was postulated.

A large theoretical literature exists on the various transmission mechanisms through which capital flows affect real variables such as consumption, investment and output. It is clear that the composition of capital flows matters, with a general presumption in favour of FDI but more skepticism about the benefits of portfolio flows and foreign bank lending (Kose, Prasad, Rogoff, & Wei, 2006). Where portfolio inflows or bank lending lead to currency appreciation under a floating exchange rate regime, this can lead to a bias against tradable goods; at the same time this appreciation reduces the costs of imports and the repayment of foreign debt. The impact of inflows on stock market prices can distort investment allocation, but equally may provide cheaper financing for domestic firms and spur, at least temporarily, wealth effects on consumption. The change in interest rates will depend
on inflationary effects, and ultimately the actions of the central bank in choosing whether to sterilise inflows. In sum, the overall impact of these flows will hinge upon which of these many complex and interacting factors dominate in a particular context.

A number of empirical studies have examined the impact of increasing financial integration on the volatility of real variables, with little overall agreement. Early econometric work across 138 countries by Razin and Rose (1994) found no empirical link between openness and macroeconomic volatility; conversely Gavin and Hausmann (1996) found significant association between volatility of capital flows and output volatility in developing countries. While Aghion, Bannerjee and Piketty (1999) link low financial sector development and high output volatility in the face of ‘sudden stops’, Arellano and Mendoza (2002) conclude that ‘sudden stops’ do not induce ‘sizeable’ changes in the volatility of output and consumption in small, open economies. Kose, Prasad and Terrones (2003) find that output volatility declined through the 1990s, however financial openness has been associated with an increase in the ratio of consumption volatility, running counter to the neoclassical assertion that financial openness will reduce consumption volatility by allowing greater consumption smoothing through access to finance. Faia (2011) has more recently confirmed this linkage between capital account liberalisation and consumption volatility. Attempting to reconcile these different findings, Mody and Murshid (2011) provide evidence to support their argument that the ability to productively use capital inflows is related to structural features of the economy.

What is clear is that where capital inflows do lead to price and asset market volatility, they can increase uncertainty, undermining productive investment and encouraging speculative behaviour. In view of this, it is surprising that there is relatively little work on the impact of capital flow volatility on real variables in the Mexican context. Demir attempts to fill this gap, finding that the average coefficient of variation of real short-term capital flows in Mexico doubled between the periods 1982–1989 and 1990–2005 (2009b, p. 677). This has important ramifications when his econometric testing suggests that a ten per cent increase in capital flow volatility

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17 Real short-term capital flows are defined by Demir as annual portfolio investment liabilities (equity plus debt securities) plus other investment banks’ liabilities plus other sector liabilities from the International Financial Statistics of the IMF.
reduces fixed investment spending in the range of 2.3 to 15.1 per cent (2009b, p. 683). Earlier work by Ibarra (2004) concluded that, while the volatility of non-FDI capital flows is a significant factor behind consumption behaviour, its impact on investment has tended to disappear since Mexico’s transition to a floating exchange rate regime.

![Real net capital flows (mns USD)](image)

**Figure 6.10:** Real net capital flows (mns USD)

**Source:** IMF Balance of Payments Statistics (BOPS) table 2, author’s calculation

While caution is merited in interpreting balance of payments data\(^\text{18}\), figure 6.10 tracing real net capital flows (the sum of net investment income and net investment\(^\text{19}\)), argues against any simplistic assertions that Mexico has suffered net capital outflows. The 1980s, after the debt crisis in 1982, are a decade of net outflows. The early 1990s, after financial liberalisation, are a period of rapid growth

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\(^{18}\) The most significant deficiency of balance of payments data in capturing the true nature of cross-border financial flows, particularly in an economy with a large export sector which is integrated into multinational firm production chains, is the issue of transfer pricing (Shaxson, 2011). Beyond this, Mexican balance of payments data lack any information on derivatives, and fail to provide detail in a number of categories.

\(^{19}\) Net capital flows is the sum of net investment income from the current account and net investment from the capital account. From the current account, net investment income is the sum of net direct investment income (dividends and interest payments, with reinvested earnings stripped out since they do not represent an outflow), net portfolio investment income (income on equity, bonds and money market instruments) and net other investment income. From the capital account, net investment is the sum of net direct investment, net portfolio investment and net other investment. These figures in USD have been deflated by the US GDP deflator to approximate real net capital flows.
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in inflows, dominated by portfolio flows. After the peso crisis end-1994, while FDI remains resilient, portfolio flows become erratic and bank lending dries up. The most recent decade sees strong net inflows with the exception of the pre-crisis year of 2006 as US FDI, portfolio investment and lending all turned downwards in unison. Over the 30-year period from 1980 to 2010, $305 billion leave the economy in the form of dividends and interest payments, and $100 billion exits via deposits made abroad. This $405 billion outflow is countered by $480 billion inflow of direct investment, portfolio investment and bank lending.

Examining some of the components of the balance of payments reveals a number of trends of interest. First, the theory of subordinate financialisation suggests that domestic firms will spend greater amounts on commissions and fees paid to foreign banks. In need of foreign currency-denominated loans and in search of lower funding costs, firms might be forced to pay foreign banks increasing commissions and fees related to brokerage, placements of issues, underwritings, redemptions, arrangements of derivatives, etc. However, as illustrated in figure 6.11, this does not appear to be the case. The entry of foreign-owned banks from 2000 may be mitigating such a trend by orchestrating Mexican firms’ access to foreign funds via syndicated loans. Second, an increasing trend in the outflow of dividends and distributed profits, illustrated in figure 6.12, on its own is neither an indication of subordinate status or of financialisation. The growth of reinvested earnings is, in fact, outstripping that of repatriated profits. This issue will arise again in the sectoral analysis. Third, a possible indicator of a subordinate relationship shows up in the sharply increasing trend in deposits held abroad in the past decade (figure 6.13).

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20 According to the IMF BOPS manual, the category ‘financial services’ “… covers financial intermediary and auxiliary services (except those of insurance enterprises and pension funds) conducted between residents and nonresidents. Included are intermediary service fees, such as those associated with letters of credit, bankers’ acceptances, lines of credit, financial leasing, and foreign exchange transactions. … Also included are commissions and other fees related to transactions in securities—brokerage, placements of issues, underwritings, redemptions, and arrangements of swaps, options, and other hedging instruments; commissions of commodity futures traders; and services related to asset management, financial market operational and regulatory services, security custody services, etc.” Insurance is included for comparative purposes, illustrating the increasing internationalisation of Mexican firms and their need to insure internationally.

21 This ambiguity is compounded by the inability to capture the impact of transfer pricing practices on the true nature of profit remittances, as previously observed.
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Figure 6.11: Current account, services, debit (mns USD)
Source: IMF BOPS, table 2

Figure 6.12: Current account, income, debit (mns USD)
Source: IMF BOPS, table 2
In sum, the evidence of financialisation, either advanced or subordinate, at the macroeconomic level is mixed. Consistent with the previous conclusion that Mexico is relatively under-financed, analysis here indicates a relatively small financial sector, the profit share of which is increasing in the last decade. Capital flows, particularly portfolio flows have been marked by volatility, denoting a subordinate relationship with international finance. In aggregate terms over the past thirty years capital inflows have outweighed outflows and profit remittances. For corporations, there is no evidence of increased spending on commissions and fees to foreign financial intermediaries, and while profit remittances have grown significantly, so have reinvested earnings. Finally, there is some evidence that households are moving deposits abroad in the last decade. I now turn to examine the sectoral behavior of Mexican firms, banks and households in more detail.

6.3.2 The non-financial corporate sector

To further probe the question of Mexico’s financialisation, it is necessary to devote attention to the sectoral level. This reflects the theoretical understanding established in chapter three, and the empirical evidence in advanced capitalist economies
captured in chapter four, which understands financialisation as a transformation in the relations between the fundamental agents of capitalism, in the context of a particular stage in the development of the world market. This will be combined with sectoral measures which build upon the understanding of subordinate financialisation developed in chapter five.

Looking first at firms, their financialisation is indicated by a rising share of financial relative to non-financial assets. Due to data limitations\(^{22}\) it is impossible to examine stock figures for non-financial corporations (NFC) as a sector. However, figure 6.14 makes use of the flows data which is available, plotting the net acquisition of financial assets to gross fixed capital formation\(^{23}\). Interpretation of this trend should be done with caution; increasing (decreasing) flows might, for example, be a corrective to historically low (high) stocks of financial assets, or constitute a purely cyclical phenomenon. The ratio for Mexican non-financial corporations’ rises markedly between 2000 and 2009, outpacing that of the other countries in the sample. Firms in Thailand and Korea appear to be increasing their relative acquisition of financial assets once again, following a decline in the period after the Asian financial crisis of 1997-8. South African firms appear to be acquiring less financial assets relative to fixed assets over the period for which data are available.

\(^{22}\) With the exception of Korea, none of the sample of emerging capitalist economies makes sectoral national accounts data available in stocks. In discussions with the author, officials of INEGI, the Mexican statistical office, revealed that plans were under way to do so, perhaps allowing such analysis at a future date. Within the Mexican literature, Loria and de Jesús (2007) have estimated aggregate capital stocks. In discussions with the author, they revealed that they had updated this series to 2009, but had not disaggregated, either between the public and private sector, or between sectors of the economy.

\(^{23}\) Flows data is only available for Brazil from 2005 to 2009, and is unavailable for Turkey. For detailed source notes see appendix B.
Chapter 6  *Financialisation in emerging capitalist economies*

![Figure 6.14: NFC net acquisition of financial assets to gross fixed capital formation](image)

Figure 6.14: NFC net acquisition of financial assets to gross fixed capital formation

Figure 6.15 disaggregates the picture of Mexican NFC financial asset flows. In the 1990s, flows of firms’ financial assets were dominated by ‘other’ assets (loans, commercial advances and other accounts receivable), in other words trade credit, and deposits. This lending to other firms (and micro-enterprises, captured in the household data) reflects the second stage of the development of the intra-firm capital market in the wake of the banking collapse of 1994\(^{24}\). In contrast, from 2001 to 2006 there was growth in purchases of securities; from 2004 until present, marked increases have been seen in purchases of equities and derivatives\(^{25}\). Deposits have been declining in importance throughout.

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\(^{24}\) This issue will be examined in more detail in chapter seven.

\(^{25}\) Data on derivatives is only available from 2005.
While data on stocks of financial assets is unavailable at the sectoral level, it is available for publicly listed firms. A note of prudence is warranted in the interpretation of listed firm data. There are only approximately 130 firms which are listed on the Mexican stock exchange. Despite this, in a highly concentrated economy, these firms make up a significant portion of economic activity. With this caveat, figure 6.16 shows that listed NFC financial assets as a share of net property, plant and equipment have risen from below 20 per cent to over 40 per
cent in the 2000s. Beneath the aggregate picture is a differentiated sectoral story. The ratio has been stagnant in the manufacturing sector, volatile in the construction sector, but rising in the services sector\textsuperscript{31}.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure616.png}
\caption{Listed Mexican NFC financial assets to net PPE (stocks)}
\textbf{Source:} Orbis, author’s calculation
\end{figure}

On the liability side of the balance sheet, NFC financialisation in high-income countries has been associated with an increasing reliance on market-based financing. Again, for reasons outlined above, at the sectoral level the picture is restricted to flows data. Figure 6.17 shows that, compared to other emerging capitalist countries, Mexican firms appear to have little reliance on loans\textsuperscript{32}, particularly in the last decade.

\textsuperscript{31} Author’s calculation using the Orbis database.
\textsuperscript{32} For detailed source notes see Appendix B.
Figure 6.17: NFC net incurrence of loans (short- and long-term) to total liabilities

Figure 6.18 disaggregates flows of Mexican NFC financial liabilities, providing further evidence that loans have not constituted a key source of financing during the period. In the 1990s, equities and loans constitute the dominant, though declining, sources of external funds; at the same time, funds are being used to repay trade credit. From 2001, equities start to grow once again as a source of funds, while trade credit turns from a use to a source. Derivatives data only become available from 2005. It is important to remember that this data only captures external financing. Levy (2012), using System of National Accounts data, estimates that between 1997 and 2009 internally-generated funds account for nearly 80 per cent of gross fixed capital formation of the private non-financial sector.
Restricting the analysis once again to only Mexican publicly listed firms, figure 6.19 shows that the stock of loans as a share of liabilities has been falling in the last decade, from approximately 30 per cent in the early part of the 2000s to dip below 20 per cent in 2009. Once again, the sub-sector differences appear significant. While the importance of loans actually rose in the manufacturing sector between 2000 and 2007, it fell in the services sector throughout.

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33 Disaggregated information on derivatives is only available from 2005 SNA forwards. ‘Other’ contains two line items: loans and commercial advances, and other accounts receivable/payable other than loans and commercial advances.

34 The source is Orbis balance sheet data for industrials. Loans is calculated as the sum of loans (current liabilities) plus bank loans (long-term interest-bearing debt).

35 Author’s calculation using the Orbis database.
Is financialisation, characterised by reliance on market-based finance and an increase in treasury activities, a profitable strategy for Mexican firms? On this count, one indicator which is available\(^{36}\) suggests that increasing financialisation has not led to increased financial income. Figure 6.20 shows that, on a sectoral level, NFC financial income (made up of interest and dividends received plus payments from investment income) as a share of gross value added, has fallen from over ten per cent in 1994, at the time of the financial bubble related to bank re-privatisation and the negotiation of the NAFTA (see figure 6.03 for the related rise in stock market capitalisation), to less than two per cent in 2009.

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\(^{36}\) It would be heroic to assume that all financial income related to the treasury activities of Mexico’s major corporations is appearing on the main balance sheet, as opposed to through holding companies and special purpose vehicles (Shaxson, 2011).
The increasing financialisation of the balance sheet of Mexican firms, alongside declining financial income may be symptomatic of the subordinate nature of the financialisation process. Important to this question is to determine the significance of foreign funds to firm financing strategies. Figure 6.21 relates the growing claims of international banks on the Mexican non-bank private sector. In the decade before the signing of the NAFTA in 1994, the non-bank private sector accounts for approximately a quarter of the claims of international banks; since that time, it accounts for an average of 60 per cent, rising to over 70 per cent after the global financial crisis in 2007.
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Figure 6.21: Total consolidated claims of international banks on Mexico (mns USD)

Source: Bank for International Settlements (BIS) table 9A: consolidated claims of reporting banks – immediate borrower basis

National accounts data does not permit the examination of the sourcing of finance from abroad at the sectoral level. Central bank data does however provide data on ‘external financing’ of the private non-financial sector (including households) in its picture of total financing of the private sector\(^ {37}\). Figure 6.22 makes it clear that, while the role of development banks and debt securities has remained relatively less important, the role of external financing has been increasing in importance, nearly overtaking commercial bank lending in the period 2001 to 2003\(^ {38}\). It will become clear in the next section that much of the growth in commercial bank financing of the private non-financial sector since 2004 has been due to an increase in the financing of households and commercial real estate.

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37 State funds for housing (Infonavit and Fovisste) are excluded from the analysis here since it can be assumed that these funds went to households.

38 Financing from non-bank financial institutions in figure 6.22 also grows at a much slower pace than that of external financing. A considerable, though unspecifiable, portion of NBFI financing is for the household sector. These data do not consider equity financing.
In sum, the absence of stocks data in sectoral national accounts renders cross-country comparisons of the financialisation of the non-financial corporation difficult. From the information available, it appears that over the last decade Mexican firms’ turn away from bank loans as a source of external finance and towards investment in financial assets has been a relatively strong one. The combination of balance sheet financialisation and falling financial income may be a symptom of subordinate financialisation. Foreign financing has become increasingly important to Mexican firms, and the demands this has placed on the balance sheet in the form of derivatives’ use are of consequence to the particular nature of financialisation in a subordinate economy.

6.3.3 The banking sector

Within the financial sector the focus will be on commercial bank behaviour for two reasons. First, as made clear in figure 6.22, commercial bank lending remains the most important external source of financing for the private sector. Second, while the

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**Figure 6.22**: Financing of the private non-financial sector (bns of pesos)

**Source**: Bank of Mexico
rise of non-bank financial institutions is a critical part of the financialisation story, the focus in this research is on the transformation of the bank-firm relationship.

Beginning then on the liability side of the balance sheet, the last decade has witnessed a modest decline in the share of deposits in total liabilities\(^{39}\). Differences in cross-country categorisation present great difficulties in any attempt to precisely disaggregate the nature of these deposits. It appears that Mexican and Korean banks are less reliant on deposits than banks in the other countries.

![Banks’ deposits to total liabilities](image)

**Figure 6.23: Banks’ deposits to total liabilities**

The Mexican bank regulatory agency (CNBV) provides a more detailed picture of the changing balance sheet of ‘multiple banks’\(^ {40}\). Figure 6.24 illustrates the increasing importance of operations with securities and derivatives, and a reversal in the relative importance of term deposits as against demand deposits.

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\(^{39}\) For source notes, see Appendix B.

\(^{40}\) The term ‘multiple banks’ is used in Mexico to denote commercial banks which are allowed to carry out the multiple functions of retail, commercial, and investment banking. This resulted from the merger of what had been separate deposit banks, financial companies and mortgage companies before the banking law was amended in 1976 (Turrent, n.d.).
An indicator of the nature of the relationship to international capital in the banking sector is the balance between domestically and internationally-sourced funding. However, interpreting this balance is by no means straightforward. A country whose banks assume more local currency liabilities than they invest in local currency assets might be judged to be subordinate. In other words, domestic resources are being invested abroad rather than at home. On the other hand, equal consideration has to be given to the possibility that a country whose banks take on less local currency liabilities than they make local currency claims, and are therefore reliant on foreign funds, could be judged subordinate due to its increased vulnerability. In the Mexican case, figure 6.25 reveals that, while local currency liabilities of BIS-reporting banks equaled claims throughout the 1980s and 1990s (not pictured in the graph), in the 2000s there has been a growing gap between local currency claims and liabilities, with the former outstripping the latter. This suggests that as international banks have increased their presence in Mexico since the late 1990s\textsuperscript{41}, the country has become increasingly reliant on foreign funds.

\textsuperscript{41} The entry and impact of foreign banks will be discussed at length in chapter seven.
Turning to the asset side of banks’ balance sheets, the share of lending to non-financial corporations in total assets has been stagnating or falling, with the exception of Turkey\textsuperscript{42}. Limited time series availability makes an analysis of historical trends difficult. The level of non-financial corporate lending, at approximately 25 per cent for all but Thailand, is higher than that seen for advanced capitalist economies in chapter four, where such lending has fallen to approximately ten per cent of total assets, with the exception of Japan.

\textsuperscript{42} For source notes, see Appendix B.
The asset side of the Mexican multiple banks’ balance sheet has been fairly stable over the past decade. Total loans has hovered at around 40 per cent of total assets, while investment securities rose from 30 to 35 per cent by mid-decade before returning to their previous share. Cash, derivatives and other assets all hover at about ten per cent each of total liabilities. This contrasts with the picture developed in chapter four of banks in advanced capitalist countries, where loans are becoming a less significant part of banks’ asset portfolios.

More dramatic however are the transformations which have occurred in the make-up of banks’ loan portfolios (figure 6.27). Lending to the government has fallen from 25 to less than five per cent of total assets. The corresponding increases have come from lending to consumers and non-financial corporations. Consumer loans rose from two per cent to top ten per cent in 2008 before falling back slightly in the face of the global financial crisis. Lending to non-financial corporations had been hovering at around 12 per cent of total assets until the crisis saw it rise to approximately 17 per cent43.

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43 The difference in the level of lending to non-financial corporations between figures 6.26 and 6.27 is due to different institutional categories in use by the Bank of Mexico (commercial banks, which includes specialised banks) and CNBV (multiple banks). Figure 6.27 also limits the analysis to the performing loan portfolio.
While the shifting shares within the banks’ balance sheet are an important part of the banking story, it is equally important to have a picture of the changes in the magnitude of lending relative to the size of the economy. Figure 6.28 reinforces earlier arguments about the under-financed character of the Mexican economy; it shows that, in real terms, the decline in lending to the private non-financial corporate (PNFC) sector has been dramatic, from over 20 per cent of GDP in the mid-1990s to below five per cent in 2006. Lending for housing has started to recover from its lowest level in 2004, while consumer lending has risen sharply over the past decade, reaching nearly five per cent of GDP in 2007. Loans to other financial corporations have remained a small part of the Mexican commercial bank portfolio.
In figure 6.28, there appears to be a slight recovery in commercial bank lending to the private non-financial corporate (PNFC) sector from 2006. Detailed examination of this increased activity in the last half-decade reveals that the growth has been in services and industry, but not agriculture\textsuperscript{44}. The growth in lending to industry has been partly due to increased lending for manufacturing, particularly ‘food and beverages’ and ‘machinery and equipment’, but has been largely due to an increase in lending to the construction industry. The latter has been particularly for the construction of non-residential buildings. In the services sector, the biggest increases in the past five years have been witnessed in the commerce, social and real estate sub-sectors. The significant presence of construction and real estate lending suggests caution before interpreting this recent increase in PNFC lending as a return to lending for production.

During the last decade, interest income has fairly consistently made up 80 per cent of total income, with a rise in the share of fees and commissions from below ten to nearly 20 per cent, before falling back to 17 per cent\textsuperscript{45}. Within the figure for total interest income, the share from consumer lending has risen from less than ten per cent.

\textsuperscript{44} This analysis comes from Bank of Mexico table CF29, commercial bank credit by activity of borrower.

\textsuperscript{45} This analysis comes from CNBV historical series on multiple banks.
cent at the start of the decade to over 50 per cent by 2007 (figure 6.29). This is reminiscent of trends visited in high-income countries in chapter four. During this time interest income from lending to government has fallen drastically, while that from lending to non-financial corporations has hovered around 30 per cent.

![Figure 6.29: Share of total interest income](image)

**Source:** CNBV multiple bank historical series

Banks’ net interest margin, calculated as net interest revenue as a share of interest-bearing (total earning) assets in Mexico rose from five to ten per cent between 1997 and 2007 before falling in the face of the recent crisis (figure 6.30). The levels enjoyed by the Mexican banks are higher than those found in South Africa, Thailand and Korea, but less than those in Brazil and Turkey.
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Figure 6.30: Net interest margin
Source: World Bank financial structure database, from Fitch’s Bankscope database

It is not surprising then that bank profitability, measured in terms of return on equity, rose steadily from below 10 per cent in the late 1990s to peak at over 20 per cent in the years before the global financial crisis.\(^{46}\) Foreign-owned banks’ profit remittances – where these profits have been made increasingly through consumer lending – represent a transfer of workers’ wages abroad. This has become an increasingly high-profile issue in Mexico, particularly in the run-up to the elections of 2012. Between 2007 and 2011, bank regulator CNBV revealed that the five major foreign-owned banks in Mexico\(^{47}\) paid out dividends to their largely foreign-based shareholders equivalent to half the profits of the entire banking sector for the period (Amador, 2012b).

As will be discussed in greater detail in the next chapter, the risks of profit repatriation posed by the presence of foreign-owned banks have not escaped Mexican authorities. Increasingly stringent restrictions on ‘related lending’ have been imposed, ostensibly to avoid the repatriation of capital in the form of loans made to the parent corporate group. This has had the side effect, intended or not, of making it more difficult for smaller Mexican banks with higher ‘related’ loan

\(^{46}\) CNBV multiple bank historical series.

\(^{47}\) BBVA Bancomer, Banamex (Citigroup), Santander, HSBC and Scotiabank
portfolios to compete with the larger foreign-owned banks (Comision Federal de Competencia, 2007).

Finally, the importance of the increase in the use of derivatives deserves further attention. While the previously cited CNBV data on liabilities (figure 6.24) reflect net derivative positions, Banco de México offers data on gross positions. By this measure, commercial bank holdings of derivatives have risen from insignificance in the late 1990s to exceed 15 trillion pesos in January 2008, or nearly eight times the level of outstanding loans. The big growth has been in peso-denominated futures, and foreign currency-denominated forwards and swaps (figures 6.31 and 6.32). It is safe to assume that the former is predominantly interest rate futures\(^{48}\), however it is more difficult by design to ascertain the nature and purpose of the over-the-counter instruments.

\[\text{Figure 6.31: Commercial banks’ domestically-denominated derivatives, assets (bns pesos)}\]

\[\text{Source: Bank of Mexico CF124}\]

\(^{48}\) According to the August 2011 monthly statistical report of MexDer, some 78 per cent of futures by (accrued annual) value, and some 85 per cent by volume, were interest rate futures.
To summarise the position of Mexican banks, it is clear that they have become increasingly reliant on short-term and foreign funding. Relative to banks in other emerging capitalist economies, Mexican banks appear more reliant on market-based funding, and have a low-level of commitment to lending to non-financial corporate activities. On the asset side, while loans have retained a constant share, they have shifted towards lending to households. This has proven a profitable strategy for the banks. González (2009) notes similar trends, highlighting the growing disconnect between financial activity and productive intermediation. The subordinate nature of the financialisation of Mexican banks relates to sizeable profit remittances to foreign shareholders, increasing reliance on foreign funds, and the concomitant engagement with derivatives related to both hedging and to the speculative exploitation of currency and interest rate movements.

6.4.4 The household sector

In chapter four, it was shown that in advanced capitalist economies (with some important differences noted in Germany and Japan), financialisation has been characterised by rising levels of household indebtedness, and an increasing
engagement of households with market-based finance. In chapter five, it was suggested that in states of the periphery, where average incomes are lower, household indebtedness would have a reduced reach and therefore accordingly smaller impact on a macroeconomic scale. It was argued that a distinctive element marking a subordinate relationship to international capital would be an outflow, or volatile flows, of household savings across borders, both as bank deposits and market-based investments.

First, in terms of household indebtedness relative to income, Mexico appears less financialised than its peer group. Household liabilities as a share of household gross disposable income (figure 6.33\textsuperscript{49}) fall from a level of over 20 per cent in the wake of the re-privatisation of the banking sector and its ensuing credit expansion, to reach their nadir of 12 per cent in 2000 as banks cut back lending in an effort to repair their balance sheets. Since that time, with the sale of the commercial banking sector to foreign banks and the expansion of non-bank financial institutions, the figure has risen again to approach 20 per cent. Nonetheless, even this level is lower than the rest of the sample of emerging market economies, especially Korea and South Africa, countries whose level of household indebtedness, at 140 and 80 per cent of GDP respectively, is approaching that of the more financialised advanced economies, Great Britain and the United States.

Figure 6.33: Household indebtedness to gross disposable income

\textsuperscript{49} For source notes, see Appendix B.
Since the incurrence of liabilities is by definition matched by the acquisition of assets, more insight on the risks of increased vulnerability posed by increased indebtedness should be sought from the household debt-servicing picture. However, in the Mexican case, this is not straightforward. From national accounts data, household interest expense as a share of household GDI peaks at 12 per cent in 1996 then falls to hover between one and just over two per cent. While the higher level in 1996 aligns with the expansion of lending which took place in the early 1990s following bank re-privatisation, the lower level in recent years contradicts other accounts of the rising burden of consumer debt. For example, a report by Mexico’s largest commercial bank BBVA Bancomer finds that servicing of consumption and mortgage debt has risen from 6.7 per cent of salaries and wages in 2000 to a peak of 18.8 per cent in 2008 (Amador, 2012a).

In the Bank of Mexico’s 2011 annual report on the financial system (2010, p. 99), household debt service is defined as payment of interest and commissions paid by households to commercial banks for consumer credit, and by households to commercial banks and state mortgage provider Infonavit for housing credit; this excludes the rapidly-expanding non-bank financial institutions, either single or multi-purpose (so-called Sófolos and Sofomes will be discussed in chapter seven). The result is that the debt service ratio is very low, below 2.5 per cent, in line with the national accounts data. Yet previous years of this same report show the debt-service ratio rising from just over two per cent in 2002 to over five per cent in 2006, to over seven per cent in 2007. Then the 2008 report states that “… inferences from the household survey point to an important increase in household debt service as a share of their income” (2008, p. 130). In the most recent reports, the figure for 2007 has dropped back down from over seven per cent in the 2007 report to just over two per cent\(^\text{50}\).

The evidence presented of increasing indebtedness in the 2000s and rising debt-servicing ratios should be placed in the context of what has happened to the wage share. Figure 6.34 shows that in the years since the signing of the NAFTA in 1994, the share of the remuneration of salaried workers in net value added has fallen

\(^{50}\) Requests for further explanation of this inconsistency with both personal contacts at Bank of Mexico as well as via its official information service have gone unanswered.
nearly 30 per cent; from 43 per cent in 1993 to 31 per cent in recent years\textsuperscript{51}. As documented by Lapavitsas (2013), this declining trend in the wage share is a feature common to the period of financialisation across many of the advanced capitalist economies.

While national accounts data on the stocks of household liabilities\textsuperscript{52} and assets are unavailable, insight can be gleaned from the net flows of sources and uses. On the sources side, it appears that households are becoming increasingly reliant on short-term relative to long-term loans\textsuperscript{53} (figure 6.35). This resonates with the previously noted rise in banks’ consumer lending (figure 6.27). However, loans are a less significant source of funding than other accounts payable\textsuperscript{54} (figure 6.36). This

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure6.34.png}
\caption{Remuneration of Mexican salaried workers in net value added}
\textbf{Source:} INEGI SNA
\end{figure}

\textsuperscript{51} Palma (2011), piecing together data over different SNA, contends that Mexican wages and salaries (without employers’ social contributions, which are included above) fell from a peak of just below 40 per cent in 1976 to below 20 per cent by 2000. While productivity rose during that period, real wages fell.

\textsuperscript{52} The data on stocks of Mexican household liabilities used in figure 6.33 come from central bank data (CF297) on total financing to the private sector, disaggregated by sector (households’ total financing SF42790).

\textsuperscript{53} The standard definitions of loan maturity apply here, namely short-term loans are for one year or less, while long-term loans are those granted for greater than one year.

\textsuperscript{54} ‘Other accounts payable’ is made up of both commercial loans and advances and other items receivable or payable. The second category is related to dividends, the purchase and sale of securities,
may reflect, first, family and micro-enterprises (which are captured in the household rather than the non-financial corporate sector) taking on trade credit, and, second, salary advances. This figure has started to grow once again during the current crisis.

![Figure 6.35: Household short-term loans to total new loans](image)

**Figure 6.35: Household short-term loans to total new loans**

*Source: INEGI SNA*

On the asset side, flows in to deposits are falling while those into market-based assets are rising, suggesting increasing engagement with open financial markets. While at first glance it might appear that households are becoming less financialised since flows in to equities are falling, this conclusion hinges on the portfolios of pension funds, which have risen from a negligible share of uses before 2001 to between 40 and 50 per cent of uses between 2003 and 2008. With the increasing liberalisation of pension fund contributions, starting with the switch to a private defined-contribution scheme in 1997, the composition of Mexican pension funds has shifted from government bonds to increasing shares of private bonds, equities and more recently commodities markets (V. Cardoso, 2013b).

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income, wages and salaries; it also includes non-capitalised interest and various reserves for labour obligations (INEGI, n.d.).

55 During years when long-term loans are, in net terms, being repaid, the ratio of short-term loans to total new loans is one. Conversely, during years where short-term loans are, in net terms, being repaid, the ratio of short-term loans to total new loans is zero.
Further insight into financial incomes and outlay can be extracted from analysis of household survey data which allows disaggregation by income decile. This shows that for the bottom five deciles, ‘irregular money transfers coming from other households’, or remittances, represents approximately 40 per cent of financial incomes. For the top five deciles, these transfers represent just 25 per cent of financial incomes, with greater shares coming from savings withdrawal, loans and other financial sources. On the outlay side, for the bottom five deciles between ten and 70 per cent are accounted for by ‘losses in household business’. For the upper five deciles, home business losses are less than ten per cent, with the bulk of their financial outlays accounted for by making deposits and other financial contributions, as well as by credit card servicing. What this survey data illustrate is the limited access of the marginalised sections of Mexican society to the formal financial sector; what financialisation of the household is occurring is predominantly happening at the middle and upper ends of the income scale.

Finally, balance of payments figures give some idea of the movement of household savings across borders, an indicator of subordinate financialisation.

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56 Source is author’s analysis of the INEGI national household survey of income and expenditure 2010.
discussed in chapter five. Figure 6.13 captured both the volatility and the recent sharp increase in deposits held abroad over the last decade. While it is impossible to disentangle deposits of the corporate sector from the household sector, it seems reasonable to assume that a significant portion of this flow represents household savings since deposits have become an insignificant asset flow for corporations (see figure 6.15).

In summary, from a macroeconomic perspective, the burden of household indebtedness does not appear to support the thesis of financialisation. Nonetheless, there is evidence of tendencies which are common to financialisation in advanced countries, but transformed through the institutional specificities of the Mexican economy. Indebtedness and debt-servicing appear to be rising significantly in the last decade. This has happened in the context of a falling wage share. Households are increasingly turning towards short-term debt, likely credit card debt, and are investing in open-market assets through their pension funds. These phenomena appear to be concentrated in the middle and upper ranges of the income distribution. These transformations, which might be characterised as constituting subordinate financialisation, are accompanied by an increase in the cross-border flow of household savings.

6.4 CONCLUSION

Wrapping up this chapter, it was first established that Mexico is under-financed by standard measures. Mexico’s ‘financial depth’, as well as levels of both bank-based ‘productive’ lending and market-based finance, both equities and bonds, are under-developed relative to its peer group. On the surface, this undermines any assertions that the country is already financialised, or even that it is financialising.

The next task was to examine the evidence of financialisation at both the macro and sectoral levels, testing both the indicators of financialisation developed in relation to advanced capitalist economies in chapters three and four, which attempt to capture changes in the behaviour of and relationship between the central agents of a capitalist economy, and to operationalise measures which would reflect the understanding of subordinate financialisation elaborated in chapter five.
At the macro level, while Mexico exhibits a small financial sector ‘footprint’, its financial corporations account for a large and rapidly increasing share of after-tax profits. Domestic firms do not appear to be spending greater amounts on commissions and fees paid to foreign banks, though this may be mediated by the actions of foreign-owned domestic banks. Dividends paid abroad are growing, but are still outstripped by reinvested earnings, leaving open the question of overall impact. The volatility and nature of foreign capital inflows, and outflows of domestic savings clearly reflect Mexico’s subordinate position in the hierarchy of global finance.

At the sectoral level, flows data suggest that Mexican non-financial corporations are acquiring financial assets at a pace which outstrips other countries in the survey over the past decade. From the evidence of publicly-listed firms, financial assets are growing in relative importance as are market-based liabilities. It was suggested that the lack of evidence that these changes in firm strategy have led to increasing financial incomes may be symptomatic of subordinate financialisation. Foreign financing has become increasingly important to Mexican firms, and this has been the catalyst for a rapid rise in the use of derivatives. Relative to banks in other countries surveyed, Mexican banks appear more reliant on market-based funding, and have a low-level of commitment to lending to non-financial corporate activities. Lending has shifted to households, proving highly lucrative. Sizeable profit remittances to foreign shareholders, increasing reliance on foreign funds, and engagement with derivatives are indicative of the subordinate nature of the banks’ financialisation. Finally, in the household sector, the picture reflected, however less strongly, those changes witnessed in advanced capitalist countries; namely increased borrowing (particularly of a short-term nature) and investment in market-based assets. This change in behaviour is concentrated in the middle and upper income groups, and has occurred in the face of a declining wage share.

Based on this evidence, I argue that Mexico represents a case of subordinate financialisation; that is, an uneven combination of the transformations which characterise inter-sectoral relations in a new epoch of capitalism, whose distinctive characteristics emerge from Mexico’s subordinate status in the hierarchy of the world market. In the following chapter, in order to better understand the historical and institutional roots of these distinctive characteristics, I examine the political
Chapter 6 *Financialisation in emerging capitalist economies*

economy of Mexican bank-firm relations in the context of a subordinate relationship to international capital.
7.1 INTRODUCTION

In the previous chapter, the sectoral transformations reflecting a subordinate form of financialisation in Mexico were documented. It was argued that the fact that Mexico is under-financed by conventional measures should be viewed as consistent with this process, rather than in contradiction to it. However, understanding why the process of subordinate financialisation has taken the particular form that it has in the Mexican context demands detailed historical class analysis. Towards this objective, this chapter will focus on the post-war evolution of the relationship between Mexican banks and firms; a relationship of decisive importance to accumulation.

Rather than characterising financial capitalists as a rentier class parasitic on the productive activities of industrial capital, I will establish that, depending on the social formation and opportunities for profit-making, fractions of the capitalist class have variously opposed, allied or merged into one another. The boundaries of a fraction may change spatially, both within and across borders, or become porous as different institutional forms engage with different forms of capital. All of these inter-relationships are reflected in the form and actions of the state, the primary location for the reproduction of social relations imprinted with its historical relationship to the world market. During critical conjunctures, Mexican bank-firm relationships and behaviours became oriented in ways which, in the contemporary period, are facilitating the subordinate financialisation of the development trajectory.
In what follows, the evolution of bank-firm relations is divided into four periods¹. The first period to be examined, running from the late 1970s until the late 1980s, marks the break-up of historic bank-firm relations that were established during the post-war era of state-led industrial policy. Bank nationalisation, carried out by a state under increasing financial pressures, served to facilitate a shift into an accumulation regime based on the exploitation of public fictitious capital, rather than on the reinvigoration of private fixed investment. Non-bank financial institutions seized the opportunity to capture pivotal positions in both private credit intermediation and public debt issuance. These events were given impetus by Mexico’s increasing integration into the world market. Export-oriented domestic capital, allied with foreign financial capital began to exert a dominant influence on state structures, policy and personnel.

The second period, covering the lead-up to and fallout from bank re-privatisation, marks a failed attempt to re-build bank-firm relations around arms-length lending from the newly privatised banks. This period saw Mexico’s formal integration into the world market, exhibited by aggressive financial liberalisation and the signing of the North American Free Trade Agreement (NAFTA). The regime of accumulation based on public fictitious capital in the previous period switched to one based on private fictitious capital, fed by high levels of foreign capital inflows and loose credit conditions. The interdependence of the state and the new class of domestic financial capital was revealed by the extremely favourable terms of the bank bailout in 1994-5.

After the peso crisis, banks returned to their previous role as backers of the public purse, only this time under private ownership. Lending to the private corporate sector fell precipitously, though new institutions were introduced to maintain credit to households. The turn of large firms to international sources of finance matched an increasing internationalisation of their revenue streams. The resultant exchange rate and interest rate risk, a fact of Mexico’s subordinate place in the hierarchy of world money, required increasingly sophisticated hedging strategies. An internal capital market developed to facilitate access to credit for firms without

¹ This periodisation should not be understood in the sense of stages in the development of Mexican capitalism, but instead as denoting important conjunctural changes in bank-firm relationships, the lens through which the analysis is conducted in this chapter.
access to international capital markets. The political elite of the Mexican state consolidated the process of world market integration through continued privatisation, and liberalisation of trade and finance. Accumulation was now dependent on foreign capital-fuelled exports.

The final period, covering the last decade, is distinguished by the ‘extranjerización’ of the Mexican banking system, that is the purchase of Mexican banks by foreign capital, and an increasing orientation of firms towards market-based and foreign financing. The business model of the banking sector has shifted towards household credit provision. Trapped by the need to both maintain capital inflows and allow preferred conglomerates to meet their dollar liabilities, the Mexican state has defended an over-valued exchange rate through sterilisation operations and high real interest rates. As a result, even as the central government’s primary deficit has been eliminated, debt issuance has continued to grow. Large firms have become balance sheet managers, with an increasing focus on the contribution of treasury activities’ to the bottom line. Banking on the state’s commitment to a stable exchange rate, a number of big firms engaged in increasingly speculative use of derivative instruments. When the peso finally fell in the wake of the global financial crisis and the ensuing capital flight, state managers would once again be called upon to rescue those who were unable to cover their positions.

While the focus of this chapter is on intra-class dynamics, the struggle between capital and labour provides the broader context. After the post-war period of rising wages\(^2\), Mexico’s working and peasant classes have suffered a prolonged period of weakened influence. Wage share has fallen significantly\(^3\), with real wages eroded by over 70 per cent between 1980 and 2000 (Watt & Zepeda, 2012, p. 163). This has contributed to rising informality\(^4\), out-migration\(^5\) and the growth of the

\(^2\) Moreno-Brid and Ros (2009) describe the period from 1940 to 1970 in Mexico as the ‘Golden Era of Industrialisation’.

\(^3\) System of national accounts records beginning in 1993, show the share of wages (including social contributions) falling as a share of net value-added from 43 per cent to 31 per cent in 2010 (see figure 6.34, chapter six).

\(^4\) Analysis of INEGI employment survey data (2010) suggests that over half of the working age population is excluded from the formal labour market, a figure which has been steadily rising since 2000.

\(^5\) Between 1970 and 2005, the number of migrants from Mexico to the US increased by over 700 per cent, surpassing ten per cent of Mexico’s population by 2005 (Hanson & McIntosh, 2010).
narco-economy⁶. Organised discontent has thus far been successfully silenced. The Zapatista uprising in 1994, in response to the abolishment of the ‘ejido’ (common) system of communal land tenure was violently crushed; organised labour has, for the most part, been co-opted into the power structures of the ruling party (Cockcroft, 1998). The weakness of the working class is a critical factor in the alignment of the Mexican state with the imperatives of international financial capital.

### 7.2 THE ROAD TO BANK NATIONALISATION

The post-revolutionary period⁷ witnessed the formation of financial-industrial groups in Mexico (Basave, 1996, 2001; Moreno-Brid & Ros, 2009; Vidal, 2000). Distinct from the relationship that existed in Hilferding’s (1981) 19th century Germany, many banks were established by industrial firms to serve the financial needs of their group. Initially these groups were tightly restrained by the state, thereby ensuring that both the externally (internationally) and internally (domestically) -oriented financial circuits were under public control through the operations of the central bank and various state development banks. The former had interests linked to foreign bank capital, while the latter served ‘hacendados’ (landowners), ‘latifundistas’ (large estate owners), and regional industrial, commercial and mining interests served by state banks (White, 1992, p. 21). This first era of state-led capitalism supported the socialisation of the forces of production essential to overcoming belated development.

Private finance capital of this era was divided into three factions: the export-oriented financial faction based in Monterrey (the ‘Northern’ faction); the powerful ‘Central’ faction which included the largest banks as well as the Association of Mexican Bankers, tightly enmeshed with the state apparatus itself; and the internally-oriented group nurtured by the developmentalism initiated by the left-of-centre regime of Lázaro Cárdenas in the 1930s which became dominate in the subsequent

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⁶ Conservative estimates put the size of the wholesale drug market at $50 billion per year in 2008 (Watt & Zepeda, 2012, p. 168).
⁷ The Mexican revolution is generally dated from 1910 to approximately 1920; however, for the purposes here, the post-revolutionary period refers to the period after the end of outbreaks of warfare in the 1920s and the consolidation of power of the ‘Partido Revolucionario Institucional’, or PRI, in 1929 (then the ‘Partido Nacional Revolucionario’).
decade (the ‘Forty’ faction) (White, 1992). Foreign capital played a growing role, instrumental in establishing manufacturing industries, investment infrastructures, and state-owned heavy industry (Morton, 2011). This represented a continuation of the prominent role of foreign capital in pre-revolutionary Mexico8.

What Russell White (1992) describes as the ‘coincidence of interests’ between the state and these financial factions would necessarily prove short-lived. The growth of the Mexican economy through the ‘stabilising development’ of the 1950s and 1960s brought with it the expansion of financial capital and the gradual privatisation of financial circuits. The banking system became increasingly concentrated and dollarised (Vega Rodríguez, 1999, pp. 120–8). In 1974, non-bank financial institutions (‘las financieras’) were authorised to accept dollar deposits (Vega Rodríguez, 1999, p. 134), and in 1976, banks were also allowed to open dollar accounts. Interbank loans allowed the banks ever more room to evade regulations and boost liquidity and profitability (White, 1992, p. 65). Private sector banks’ loan portfolios focused on the highly profitable commercial services sector, and levels of related lending remained high (White, 1992, p. 105). Much of the riskier work of industrial development was left to the state banks. In 1982, the public industrial development bank, NAFINSA, provided 37.5 per cent of all credit available to the manufacturing sector; by comparison, this had fallen to only 10.3 per cent by 1991 (Cypher & Wise, 2010, p. 40).

The ruling ‘Partido Revolucionario Institucional’ (PRI) sought to resolve the tension between the socialisation of the forces of production and the increasing private appropriation of the generated gains, in order to maintain its legitimacy with the rural peasantry and growing proletariat. However it attempted to do so without confronting the ruling classes. The PRI crushed organised political opposition in the 1960s, culminating in the 1968 massacre of students at the ‘Plaza de las Tres Culturas’ in Tlatelolco. Rural peasant movements were repressed with the mobilisation of large numbers of troops into rural areas in the 1970s by the administration of Luis Echeverría. Recognising the danger such movements posed to the existing socio-economic order, Echeverría tried to shift moderate amounts of income to workers and peasants (Cypher & Wise, 2010, p. 32). However, efforts to

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8 For excellent accounts of Mexico’s pre-revolutionary period, see Juan Carlos Moreno-Brid and Jaime Ros (2009) and Adam David Morton (2011).
match this increased spending with increased taxes on internationally-linked capital failed in the face of increased capital mobility (Morton, 2011, p. 115). With expenditure rising, and unable (or unwilling) to increase the tax intake, the state became increasingly reliant on international loans, oil revenues (aided by rising prices and a major find in 1976), and direct financing instruments. White (1992, p. 83) argues that this was a deliberate strategy to increase state financial autonomy in relation to domestic financial capital.

With hindsight, it can be seen that this marked the last major stand of the waning influence of domestically-oriented industrial capital (and the ideological influence of the structuralist school (Fitzgerald, 2010)) over the policy direction taken by the state as Mexico became increasingly integrated into the world market. State support for Mexican conglomerates in the 1970s and 1980s had led to the domination of about 30 industrial groups (Vidal, 2000, p. 122). These firms had been the main recipients of public support via development banks, but had created indirect links to foreign capital through the creation of holding companies. In 1975, the Business Coordinating Council (‘Consejo Coordinador Empresarial’, or CCE) was formed. Based in Monterrey around export-oriented firms and firmly committed to a neoliberal outlook, the CCE’s influence rose as that of the domestic industry-oriented National Chamber of Industry (‘Cámara Nacional de la Industria de Transformación’, or Canacintra) fell (Cypher & Wise, 2010, p. 15). Increasing pressure on the state to attract capital in a competitive global economy, meant that historical links to a particular group of domestically-oriented capitalists began to appear as a hindrance.

The state’s new funding strategy fell apart when, first, international interest rates spiked in the late 1970s triggered by the ‘Volcker shock’9, and then oil prices peaked and began to fall in the early 1980s. This resulted in a dual balance of payments and fiscal crisis, with the deficit reaching 16 per cent of GDP in 1982.

In the lead-up to the 1982 economic crisis, the left-of-centre administration of José López Portillo expressed increasing frustration with the behaviour of the private banks. It accused them of engaging in speculation over exchange rate and related

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9 Paul Volcker, appointed chairman of the US Federal Reserve in 1979, raised the federal funds rate to a peak of 20 per cent in 1981, bringing US inflation down from its 1981 peak of 13.5 per cent to 3.2 per cent in 1983 (Hutchinson, 2008).
capital movements, and of lending to non-productive sectors. Characteristic of peripheral capitalism, private appropriation during times of crisis took the form of capital outflows. Capital flight increased from $1.1 billion US in 1979 to 10.9 billion in 1981. Of the $60 billion in public debt accumulated up to that point, nearly half went to financing capital flight (Buffie, 1989, p. 155). By 1981, bank profits from foreign currency operations had surpassed those from intermediation (Vega Rodríguez, 1999, p. 137). At the same time, interest rate spreads, the gap between deposit and lending rates, had risen from 4.6 per cent in 1978 to 14.3 per cent in 1981 (Vega Rodríguez, 1999, p. 131). Members of López Portillo’s team talked ominously of banks’ ‘social obligations’ (White, 1992, p. 116).

López Portillo brought in Carlos Tello as head of the central bank on the first of September, 1982, ushering in a period which would become known as the ‘ninety days’. Tello, who had served as Secretary of Budget and Planning in the cabinet of López Portillo, was a Cambridge-educated economist trained in the structuralist tradition. In the next three months, before handing power over to incoming president Miguel de la Madrid, the Mexican banks were nationalised. Bankers were predictably outraged. However, in truth, due to rising overseas interest rates and falling domestic revenues, both commercial and development banks were technically bankrupt. Nationalisation served as a means to socialise the banks’ debts. Vega Rodríguez (1999, p. 151) contends that international financial capital greeted the nationalisation favourably. Happy to work with Mexican private financial capital during the preceding economic expansion, with the arrival of crisis, international capital’s primary interest lay in recouping its investments. Nationalisation, and the socialisation of the bankers’ losses, represented their best chance of doing so.

Manuel Espinosa Yglesias, scion of the family that owned Mexico’s largest commercial bank, Bancomer, would later remark that he had been surprised that big firms had not been more upset by bank nationalisation, since this had cut off their sources of related lending. However for big firms, the combination of rising interest rates, economic crisis and the legacy of unproductive investment meant that short-term debts contracted abroad or domestically in foreign currency had become

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10 Author’s discussion with Dr. Carlos Marichal, Research Professor of Latin American History at El Colegio de México, 2 May 2011.
unsustainable. Their self-interest, like that of foreign financiers, was in getting bailed out.

The bailout for the big firms came in 1983, when the Trusts for the Coverage of Exchange Rate Risk (‘Fideicomisos de Cobertura de Riesgos Cambiario’, or Ficorca) were created. Under the programme, the Mexican state assumed the exchange rate risk both for the principal and interest of loans contracted by Mexican firms abroad, and offered new credit in domestic currency at a favourable exchange rate in its place (Vidal, 2000, p. 135). The bailout resulted in a 3.8 billion peso financial subsidy, 80 per cent of which went to just 20 private groups. This public subsidy of big capital in a period of crisis would lead to a subsequent boom in mergers and acquisitions, as big firms used their windfall to buy up smaller competitors (Basave, 2001, pp. 75–81).

After his inauguration in 1982, president de la Madrid immediately undertook a broad programme of neoliberal restructuring known as the ‘Programa Inmediato de Reordenación Económica’, or Urgent Programme for Economic Restructuring (Teichman, 1992). Amongst the range of measures taken was the replacement of key figures at the central bank and the ministry of finance with those more broadly sympathetic to the interests of the private financial sector. Expropriated bankers were paid in indemnity bonds based on a formula for calculating shareholders’ ‘adjusted capital’ which was never made public (Vega Rodríguez, 1999, p. 156). This gave them a large capital base with which they would acquire brokerages and other firms, as well as minority shares in nationalised banks.

After changes were made to allow formerly individual traders (‘agentes bursatiles’) to create brokerage firms, the number of brokerages rose from 31 to 204 between 1982 and 1987, and the number of clients increased from 66,000 to over 300,000 (Suárez Dávila, 2005). These brokerages played a critical role in inflating and exploiting the market bubbles of 1984 and 1987. Private financial capitalists tightened their grip on capital markets through their control of these brokerages, as

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11 This marked the beginning of the dominance of the Ministry of Finance and Public Credit (SHCP) and central bank. Sylvia Maxfield (1990, p. 61) describes this as the rule of the ‘financial coalition’ (Ministry of Finance, Banco de México and development banks) over the ‘developmentalist coalition’ (natural resource ministries and state-owned enterprises). Jens Wissel (2011, p. 225) identifies central banks and finance ministries more generally as bases of a ‘transnationalised bloc’, from which they are able to gain political importance and escape democratic control.
well as the acquisition of insurance and leasing companies (and eventually privatised pension funds). The latter so-called non-bank financial institutions, or NBFIs, had been quickly re-privatised in 1984. With these acquisitions, private financial capital, with the sanction of the Mexican state "… began to compete for savings and create a parallel financial market beyond state control" (Maxfield, 1990, p. 44).

The PRI exploited bank nationalisation to begin an ambitious project of concentration in the sector. The poorest performers were first liquidated and closed, then the remaining banks merged into 18 core banks (Marois, 2012, p. 77). Banks de-dollarised by converting dollar-denominated accounts into pesos (with the government absorbing the losses), and the worst excesses of bank profit-making were restrained (White, 1992, p. 130). While reserve levels were lowered\textsuperscript{12}, new mandates were put in place to guarantee minimum levels of support for state-owned enterprises and the federal government. Profit from financing government would become the new basis of bank profitability.

As a result of this change in bank orientation, non-financial companies faced restrictive credit conditions. To meet their funding needs, firms turned to the brokerages for what became known as ‘operaciones extra-bursatiles’ (or, off-market operations)\textsuperscript{13}. To get around regulations which prohibited them from accepting deposits, brokerages simply found firms with surplus cash and directed them to those with a cash deficit, collecting fees for their troubles. Private control over capital became more concentrated as these NBFIs "… became the preferred means of financing among large capitalists" (MacLeod, 2005, p. 46).

In another signal of the increasingly important relationship between this fraction of financial capitalists and key economic ministries of the state, brokerages were given the monopoly over primary auctions and secondary trading of treasury certificates known as ‘Cetes’ (‘certificados tesoros’). Soon the fraction was demanding increasingly higher interest rates in order to facilitate the placement of these securities in the private capital market (White, 1992, p. 142). This was a very lucrative business. Government securities made up 90 per cent of the Mexican

\textsuperscript{12} Reserve requirements on domestically-denominated liabilities were removed in 1988; those on foreign-denominated liabilities in 1991.
\textsuperscript{13} From author’s discussions with Luis Foncerrada, Director General of the ‘Centro de Estudios Económicos del Sector Privado’ (CEESP), or Private Sector’s Centre for Economic Studies, 28 April 2011.
Chapter 7 Bank-firm relations and subordinate financialisation

securities market at this time. The rapid rise in issuances, related both to the costs of bank nationalisation and to the sums spent on reconstruction following the devastating earthquake of 1985 (Levy-Orlik, 2001), drove the Bolsa Mexicana de Valores (BMV), or Mexican Stock Exchange, from 676 points in 1982 to 47,101 points in 1986.

With the profits earned from off-market lending and securities’ placement, the brokerages were able to buy up large shares of Mexican firms. In this way financial-industrial linkages were partially re-built. Only this time the linkages were centred around the brokerages rather than the commercial banks. The process indirectly contributed to the centralisation and concentration of capital by restricting the financial access of illiquid private firms. White (1992, p. 142) describes the implications of this shift: “It distorted the productive circuits by creating an artificial credit crunch, therein promoting financial liquidity problems and mass bankruptcies. It also transformed the accumulation strategy of large firms. In essence, the entire productive apparatus stagnated and the logic of accumulation shifted from entrepreneurial productive investments to speculative rentierism.” What became key to corporate profitability was no longer the difference between projected profits and the real interest rate, but the spread between the interest rate paid on liabilities and that earned on assets (Vidal, 2000, p. 137).

To sum up, this period marked the end of a phase of accumulation which had pivoted on the private banks and domestic-oriented production. Newly nationalised banks broke off their relationships with large firms, turning to invest in treasury paper in order to help the government ward off fiscal crisis and earn tidy risk-free profits in the process. Old bank-firm relations were partially replaced by relations with the non-bank financial intermediaries of private financial capital. However, these new relations, operating through the mechanism of so-called ‘operaciones extra-bursatiles’, were based on short-term financial profit rather than long-term productive investment relations. Both financial and non-financial corporations came to hold an increasing share of financial assets (dominated by holdings of public securities), as accumulation became centred on the exploitation of public fictitious capital. These changes were accompanied by a significant decline in both gross fixed capital formation (GFCF) and GDP growth. GFCF fell from an average of nearly 22 per cent of GDP in the decade 1973-1982 to 18 per cent in the decade
1983-1992; GDP growth, which had averaged a robust 6.8 per cent per annum in the period from 1960 until 1981, fell to an average 1.4 per cent in the ‘lost decade’ from 1982 to 1991 (see figure 7.01).

![GDP growth and GFCF](image)

**Figure 7.01:** Growth rates of GDP (per cent, left axis) and Gross Fixed Capital Formation (per cent of GDP, right axis)

**Source:** World Bank WDI, series NY.GDP.MKTP.KD.ZG and NE.GDI.FTOT.ZS

It is important to observe the role of foreign, especially financial, capital in these changes. US financial capital facilitated the realisation of profits through domestic capital flight in the years before the crisis. Crucially, tight monetary policy in the US between 1979 and 1982 was what catalysed the debt crisis. The Mexican state was forced to bail out both banks and non-financial corporations. Real interest rates were driven higher as the state attempted to finance its external debts with a massive expansion in domestic securities issuance. As a result, large liquid corporations began both to invest in government securities and borrowed in the US to exploit the cross-border interest rate spread. By the mid-1980s, 42 per cent of interest payments by the Mexican state were made to Mexican residents holding funds outside the country (Garrido, 1988, p. 29). All of this is indicative of Mexico’s subordinate status in the hierarchy of global finance.
7.3 BANK RE-PRIVATISATION AND ITS AFTERMATH

When it came to power in 1988, the administration of president Carlos Salinas sought the answer to Mexico’s anaemic growth in further liberalisation. In the financial sector, a series of new laws and constitutional reforms were ushered in between 1989 and 1993. Most importantly for this analysis, these changes saw the end of capital controls, the removal of restrictions over banks’ credit allocation, and a reduction and eventual elimination of reserve requirements and the liquidity coefficient.

Re-privatisation of the nationalised banks was a stated priority. The Bank Divestment Committee, one of several similar committees devoted to the privatisation of state-owned enterprises, was established in September 1990, made up of officials of the treasury, central bank and bank supervisory authority, as well as representatives of the banks themselves. The committee also "… relied heavily on large, high-profile international consulting and accounting firms" (MacLeod, 2005, p. 51).

In light of the ultimate sale of Mexican banks to foreign entities a decade later, it is important to note that, at this time, Salinas’ stated preference was for the maintenance of a strong, domestic bourgeoisie (Vidal, 2000). One of the eight principles which were announced by finance minister Pedro Aspe to guide the re-privatisation process was that the banks would continue to be controlled by Mexicans (Suárez Dávila, 2010, p. 61).

However, the identity of the domestic financial bourgeoisie was to change. Salinas assured his party that the banks would not return to their former owners (Suárez Dávila, 2010, p. 59). Ostensibly, this assurance was designed to quell the opposition of members of his own party who had supported nationalisation, preventing the re-formation of what were judged to be cosy bank-firm relations in the pre-nationalisation period, and replacing them with a ‘modern’ system of market-based finance. In practice, it gained the administration the support of the increasingly powerful private brokerages. Changes were made to the ‘Ley de Instituciones de Crédito’ (Credit Institutions Law) in 1990 preventing individuals from owning any more than five per cent of any single bank’s stock (Maxfield, 1993, p. 255), and restricting related lending to 20 per cent of total loan portfolios.
(Chavarín Rodríguez, 2010, p. 103). This was intended to disadvantage the old banking elite.

Non-bank financial capital was well-positioned to consolidate its growing dominance. In the years since nationalisation, the brokerages’ earnings had grown substantially through off-market lending and public securities placement and trading. Brokerage house market capitalisation had increased from six to 30 billion pesos between 1982 and 1989 (OECD, 1992, p. 172). The 1990 Financial Groups Law removed restrictions on universal banking, allowing financial groups to be formed around banks, insurance firms or brokerages (Bank of Mexico, 1991, pp. 52–4).

Despite publicly-voiced intentions to avoid a return to the mutual dependency of banks and the state during the period of nationalisation, the increasing concentration of the banking sector achieved through the privatisation process would consolidate an alliance between the new financial oligarchy and the economic elite. As argued by Osvaldo Santín Quiroz, “the already alarming concentration of economic power in a few groups was strengthened with the banks' privatisation, consolidating, in this way, the alliance of the economic elite with the financial coalition.” (2001, p. 157)

The bank re-privatisations were rapidly carried out over a thirteen-month period between June 1991 and July 1992. Public auctions were held for six ‘packets’, each consisting of several banks. The Bank Divestment Committee assessed all of the bids for compliance with legal requirements, but importantly did not carry out assessments of whether potential buyers were ‘fit and proper’. Thomas Marois (2012, p. 83) alleges that the process allowed PRI officials to “… keep a hand on both the sale process and the bidders accepted, while appearing to allow free market processes.” Supporting this assertion is the fact that a number of bids would later be shown to be fraudulent.

Sylvia Maxfield (1993, p. 256) recounts how there was virtually no opposition to bank re-privatisation – even from trade unions – other than that from a handful of left-wing congressional representatives and the architect of nationalisation himself, Carlos Tello. Santín Quiroz (2001, p. 141) notes similarly that not a single public demonstration against privatisation was mounted. Marois (2008) counters that surprise at the lack of opposition is misguided, based as it is on the incorrect assumption that state asset ownership is a fixed characteristic that determines firm
behaviour. The nationalised banks underwent austerity measures, shedding workers in order to facilitate concentration and increase productivity. Thus, when re-privatisation came, bank workers felt little nostalgia for the period of national ownership. For the banks’ corporate clients, during the years of nationalisation their interests had shifted towards the private brokerages and international capital.

While the government’s objective in the sale had been ostensibly to increase the efficiency of financial intermediation, most observers agree that the overriding aim had been to maximise revenues. The sale of 18 banks provided nearly 60 per cent of state privatisation revenues for 1991-2 (Moreno-Brid & Ros, 2009) pushing the fiscal balance into the black (net government borrowing fell from over 3 per cent of GDP in 1990 to essentially balanced for the next four years) and helping to reduce the net public debt burden from over 55 per cent of GDP in 1989 to 17 per cent of GDP at the close of 1993. Inflation and interest rates were reined in to levels that had not been seen since the early 1970s.

After the sale, brokerage firms directly controlled 62 per cent of the assets of the newly privatised banking system (Vega Rodríguez, 1999, p. 227). They held further influence through both their financing of other buyers of the re-privatised banks and subsequent establishment of newly licensed banks. Sixteen new banks would be created between 1993 and 1995, as well as hundreds of new credit unions and factoring and leasing agents (Suárez Dávila, 2010, p. 73). To be sure however, the dominance of the new financial elite was not total. Seven of the 18 re-privatised banks were sold to commercial industrial groups.

A number of commentators (for example Haber, 2005; Suárez Dávila, 2005) stress the role that over-payment for the re-privatised banks during this period of euphoria played in their subsequent troubles during the crisis of 1994-5. As a variation on this thesis, Gruben and McComb (2003) have described the two-year period following re-privatisation in 1991 to 1993 as one of ‘super-competition’: newly privatised banks – in an attempt to repay debts incurred for their purchase – competed for market share by extending increasingly questionable loans. Marois takes issue with this line of analysis. He argues that the buyers were buying into a

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14 Data for general government net borrowing/lending from IMF WEO series GGXCNL. Data for net public debt stock from INEGI (monthly) figures. Nominal GDP from IMF WEO series NGDP.
new strategy of accumulation backed by state authorities\textsuperscript{15}, and as such the prices paid were “… more of a symptom of neoliberal competitive imperatives than a parsimonious causal explanation of the subsequent crisis” (2012, p. 91).

What is certain is that, with new issues of public debt and their yields falling, banks saw greater profit in lending to the private sector. Within limits set by the Bank of Mexico, the banks directly entered the carry trade, borrowing short-term funds from the US at low interest rates, and lending in local currency at much higher rates for longer terms. This included loans to both corporations and households, the quality of which would soon be called into question. Figure 7.02 shows the rapid growth in international banks’ claims on Mexican banks and corporations during the years 1990 to 1994. In this period, the share of Mexico’s private corporations’ in cross-border borrowing rose from 34 to 61 per cent, establishing a trend that would continue until the present day.

![Figure 7.02: Total consolidated claims of reporting banks on Mexico ($ millions)](image)

\textbf{Figure 7.02:} Total consolidated claims of reporting banks on Mexico ($ millions)

\textbf{Source:} BIS table 9A: Consolidated claims - immediate borrower basis

Two further mechanisms were used to evade central bank restrictions and increase banks’ access to dollar funds. First, the banks took funds from the ‘second-floor’ operations of state development banks, which were not subject to the same

\textsuperscript{15} The PRI let it be known that the new buyers would be protected from foreign bank competition for up to four years. Interest rate spreads increased as official interest rates fell between 1991 and 1993, and lending rates were allowed to rise (Ramírez, 1994, p. 666).
foreign liability restrictions and assumed the credit risk of the lending. Second, was the creation of ‘synthetic dollars’ through the use of currency forwards (Vega Rodríguez, 1999, pp. 308–9).

Commercial bank credit to the private non-financial sector rose from 10 per cent of GDP in 1988 to 44 per cent in 1994 (Suárez Dávila, 2010, p. 75). In the same period, real terms lending for housing and consumption rose 250 per cent (Vega Rodríguez, 1999, p. 237). Included in this expansion was the country’s first wave of consumer credit card issuance. This expansion is argued by Basave (1996, p. 229) to have been part of the PRI electoral strategy in 1994, illustrating again the close linkages between political elites and financial capitalists.

The growing use of international interbank markets supported increasingly complex liability management techniques, much of which occurred off-balance sheet. Mexican banks had started their use of derivatives in the early 1990s, participating in foreign exchange swaps on Mexican government treasury bonds (‘tesobono’ swaps) (Soto Esquivel, 2010, p. 159). In return for taking on exchange rate risks, the banks earned fees and were provided with short-term loans in US dollars, which could then be lent to Mexican firms. Also in the early 1990s, markets for options, forwards and warrants were established. These operations have been largely over-the-counter and dominated by the large Mexican banks.

President Salinas’ combination of nationalism and commitment to liberalism took the form of ‘el gran acuerdo’ (the great accord). Salinas’ government embarked on a renewed policy of ‘Mexicanisation’, providing support to large conglomerates to take over newly privatised state-owned enterprises and buy out foreign stakes in existing private firms. Barbara Hogenboom (2004, p. 215) argues that without popular support, the Salinas government’s “… dependency on the political (and financial) support of 'big business' made them turn their pro-market agenda into a pro-conglomerate program."

Large non-financial corporations increased financing in international markets during this period. Between 1993 and 2002, the Bank of New York and Citigroup developed 87 'American Depository Receipt' programmes (ADR) for Mexican enterprises (Garrido, 2005, p. 185). ADRs had been created in the 1920s to allow foreign firms to capture funds from American investors without having to list in the US. ADR use by Mexican firms in the 1990s was extremely concentrated; nearly 60
per cent was obtained by two companies, media conglomerate Televisa and the recently-privatised telecommunications giant Telmex.

![Figure 7.03: Stock and bond market capitalisation (per cent of GDP)](image)

**Source:** World Bank financial structure database

The influx of foreign funds in the early 1990s was catalysed by legislative changes which allowed greater freedom for both foreign direct investment and portfolio investment, and the privatisation of a string of state-owned enterprises. This fuelled a domestic stock market bubble. Stock market capitalisation rose from below ten per cent of GDP in the late 1980s to over 40 per cent in 1993 (see figure 7.03). Despite the boom in both credit and share prices, levels of gross fixed capital formation grew only marginally, remaining below 20 per cent of GDP (figure 7.01). Most of the additional liquidity went in to the purchase of financial assets. While SNA data only begin in 1993, the historically high level of deposits and other financial assets (loans and commercial advances) in this period can be detected (see figure 7.04)\(^\text{16}\).

\(^{16}\) In the previous chapter, figure 6.14 shows that the ratio of the acquisition of financial assets to gross fixed capital formation for non-financial corporations exceeds parity in 1993-4. The ratio falls with the onset of the peso crisis in 1994, and does not regain the 1993-4 levels until 2005.
By the time the Mexican government was forced to devalue the peso in December 1994, many financial and non-financial firms alike were technically bankrupt. The fall in the value of the peso and concomitant rise in interest rates only served to make the fact inescapable. Debate over the primary causes of the crisis has been vigorous. The macroeconomic argument emphasises the dangers of maintaining a semi-fixed exchange rate while undergoing a rapid process of capital account liberalisation. For supporters of liberalisation, blame is therefore placed on both the Salinas administration for its failure to liberalise the exchange rate regime earlier, and on the management of the eventual devaluation process by the incoming government of president Ernesto Zedillo. The so-called ‘error de deciembre’ (the December mistake) of foreshadowing the eventual devaluation in December 1994 triggered unprecedented levels of capital flight (W. C. Marshall, 2011).

The microeconomic argument places more stress on the vulnerabilities created by the process of bank re-privatisation. The government’s objective of maximising revenue meant minimising regulation and assuaging expropriation fears by lowering the capital that buyers had to put at risk (Haber & Welna, 2010). A tacit

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17 Disaggregated data on derivatives is only available from 2005 forward. ‘Other’ contains two line items: loans & commercial advances, and other accounts receivable/payable other than loans & commercial advances.
agreement was struck that high interest rate spreads would be tolerated to allow the investors to quickly recoup their investments. The result, according to a number of analysts, was a banking system controlled by owners who had poor credit skills and inadequate information systems, in the context of a weak regulatory and legal system (Del Ángel-Mobarak, 2006; Mannsberger & McBride, 2007; Marichal, 1997).

Resolving these debates is neither possible nor necessary for our purposes here. But what is important to note, as argued by Suárez Dávila (2010), is that attempts to blame poor credit skills overlook the fact that there was little difference in the behaviour of banks between those which maintained the services of the old bankers and those which did not. This suggests that in a newly liberalised environment attracting capital inflows, with weak bank-firm relations centred around non-bank financial intermediaries, the credit relationship was transformed from ‘invest and retain’ to short-term financial gain. This change in the lending imperative chimes with Marois’ (2012) earlier cited arguments against emphasising the role of the price paid for the banks in 1991-2.

New president Ernesto Zedillo entered office in December 1994 and moved quickly to bail out the banks. Direct administrative intervention facilitated the liquidation, merger or sale of originally twelve, and ultimately sixteen, banks. The Bank of Mexico provided a dollar liquidity window, and bought convertible subordinate debt from those banks whose capital adequacy ratios fell below acceptable levels under the ‘Programa de Capitalización Temporal de la Banca’ (Procapte), or Temporary Capitalisation Programme.

The most controversial part of the bailout involved the actions of the ‘Fondo Bancario de Protección al Ahorro’ (Fobaproa), or Banking Fund for the Protection of Savings. Operating under the central bank, the fund had originally been designed in 1990 as a preventative contingency for the then newly-created multiple banks. But in 1995, failed banks were allowed to exchange their non-performing assets for Fobaproa bonds. For every peso that private shareholders injected in the banks, Foboproa bought twice the amount in bad debt. A series of government agencies subsequently failed in their attempts to sell these assets.

Until 1998, the bonds were legally backed by the assets within Foboproa. Fearing that uncertainty over the value of these assets could continue to undermine confidence in the banking system, president Zedillo moved in March 1998 to back
the bonds with the full revenue-generating capacity of the state. Eventually $552 billion pesos, or 15 per cent of GDP, would be passed to the direct public debt of the federal government. Marois (2012, p. 133) aptly describes this as the ‘socialisation’ of the banks’ bad debts, mortgaging the costs of the financial rescue onto future generations of Mexican taxpayers. This is illustrative of the willingness of the state to comply with the needs of the new financial oligarchy.

Public anger mounted as it was revealed that in anticipation of the programme many bankers had made fresh loans to themselves (Haber & Welna, 2010). Of the 440,000 loans taken over by Fobaproa, only 550 loans, each above 50 million pesos, represented 40 per cent of total liabilities (Suárez Dávila, 2010, p. 135). This anger would play a key role, as will be subsequently discussed, both in the PRI’s loss of power in the 2000 elections, and in the absence of public opposition to the second wave of foreign bank entry thereafter.

Summing up this period, it can be seen that after a decade of almost exclusively serving the public sector, re-privatised banks emphatically returned to private sector lending. While a handful of the newly privatised banks attempted to directly re-establish the bank-firm relations which pre-dated nationalisation, the majority continued with the arms length credit model which had grown out of the establishment of the non-bank parallel market. Household lending flourished.

The combination of a rapid expansion in credit and high levels of capital inflows resulted in increasing levels of household indebtedness and asset inflation. This was the first period of significant (though short-lived) growth in stock market capitalisation, rising from below ten per cent to above 40 per cent of GDP between 1990 and 1993 (figure 7.03). Large Mexican firms were able increasingly to directly access foreign capital markets. Accumulation became based on the exploitation of private fictitious capital. Fixed investment remained stubbornly low, averaging just 18.8 per cent of GDP between 1990 and 1994, and while GDP growth was better than during the collapse of the 1980s, average annual growth of less than four per cent was still disappointing relative to the nearly seven per cent figure achieved from 1960 to 1981 (figure 7.01).

This period marked the beginning of an era of accelerated integration into the world market. Financial and trade liberalisation processes were driven by US pressure expressed through the NAFTA negotiations, in line with the interests of the
domestic economic elite which had become increasingly aligned with that of financial capital. The US economic downturn and low interest rates fed portfolio inflows, which exploited interest rate spreads, and stoked the credit and stock market bubbles. Opportunities in the carry trade opened up for Mexican corporations. These inflows drove the development of an enormous capital account surplus and its mirror current account deficit. The eventual reversal in US interest rates and subsequent capital outflows were a critical factor in the crisis which erupted at the end of 1994.

7.4 ACCELERATED LIBERALISATION AND THE INTERNATIONALISATION OF FIRM FINANCE

After the immediate crisis abated, Mexico entered a five-year period (1996-2000) averaging an annual GDP growth rate slightly above five per cent, exceeding anything it had experienced since the 1970s (figure 7.01). While exports grew to account for over 30 per cent of GDP, imports grew in lock-step. Imports exceeded exports in 1997, initiating a trend which has continued for over a decade (figure 7.05). This export-driven accumulation was ensured by the subordination of monetary, exchange rate and fiscal policies to the needs of international creditors and investors. Central to this strategy were the declaration of central bank independence in 1994 with its new chief objective of price stabilisation (Levy-Orlik, 2009), and the floating of the Mexican peso.18

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18 The peso fell from its semi-fixed level at just over three pesos to the dollar during the first half of the decade to over ten pesos to the dollar by 1998.
The manner of Mexico’s export growth is important. NAFTA encouraged the growth of ‘maquiladoras’, plants which imported largely US technology for assembly and re-export. Basave (1996, p. 226) cites studies estimating that 25 per cent of these manufactured exports were made up of intra-firm trade. While the share of manufacturing in GDP rose from 16 to 21 per cent and that of manufacturing employment from 15 to 20 per cent (both would fall back to their original level in the 2000s)\(^\text{19}\), manufacturing wages fell by 20 per cent between 1994 and 1997 (Watt & Zepeda, 2012, p. 123). The growth in poor quality jobs in the ‘maquilas’ failed to make up for the loss of manufacturing jobs in the toy, clothing and shoe sectors – which had traditionally made up some 65 per cent of formal employment (Basave, 1996, p. 237) – these had been decimated by the 1994-5 crisis and the increase in foreign competition after NAFTA.

With the bailout from the 1994-5 crisis adding some 20 per cent of GDP to the public debt stock, the new, post-crisis banking model came to pivot on interest income from government securities and commissions (Garrido, 2005, p. 200). Commercial bank investment in securities (both public and private) rose from approximately ten per cent of total assets in 1993-4 to between 34 and 39 per cent for

\(^{19}\) Source: INEGI SNA quarterly data on total manufacturing activity
the rest of this period. This took advantage of the fact that Mexican treasury
certificate rates reached nearly 80 per cent in 1995 (over 40 per cent in real terms),
and then gradually declined through the period. In 1998, with the failure to realise
bad loans taken on through the Fobaproa bailout, the government was forced to
recognise the programme costs as contingent public debt (Suárez Dávila, 2010, p.
158). This meant returning for financing to the same banks that had been bailed
out only a few years earlier. Ironically, the level of public sector holdings on bank
balance sheets marked a return to the business model of the nationalised banks.

Meanwhile, bank loans (both public and private) fell from a 1993 peak of 81
per cent of total assets to below 20 per cent by the end of this period (T. S. L.
González, 2009, p. 245). Within the falling loan figures, lending to the private sector
fell from 40 per cent of GDP in 1994 to 10 per cent by 2000 (Garrido & Garcia,
2010). Households and firms, especially small and medium enterprises, were left
without access to bank credit. The collapse in the credit market can only partially be
blamed on demand-side factors; while real interest rates peaked at over 70 per cent in
1995, they then hovered between zero and ten per cent until 1999 (see figure 7.06).

Figure 7.06: MX real interest rate and MX-US real interest rate spread

Source: IMF IFS monthly

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20 The government went to the banks under a new programme entitled the ‘iniciativa de Ley de
Protección del Ahorro Bancario’, LPAB, or ‘Law for the Protection of Bank Savings’, introduced in
May 1999.

21 Mexican real interest rate is calculated as the lending rate (60P..ZF), the rate that banks charge on
short and medium-term loans to the private sector, less the Consumer Price Index (CPI) per cent
change (64..XZF). For the real interest rate spread, Mexican and US treasury bill rates (60C..ZF) less
the CPI per cent change are used as representative.
On the liability side of the banks’ balance sheet, a fall in traditional deposits from 71 per cent of total liabilities in 1992-3 to 33 per cent in 1995-6 was made up for by rising use of market-based liabilities (T. S. L. González, 2009, p. 244). Through this significant change in the bank business model, return on equity recovered from the crisis period to remain between six and ten per cent of GDP (Garrido, 2005, p. 200). In addition to rising income from investments and commissions, interest rate spreads (see figure 7.07) widened, exceeding ten per cent in 1998-9.

**Figure 7.07:** Interest rate spread (lending – deposit rate, per cent per annum)

**Source:** World Bank World Development Indicators series FR.INR.LNDP

A number of authors (Chavarín Rodríguez, 2010; Guerrero & Villalpando, 2009) have suggested that the maintenance of high profit levels throughout this period of balance sheet restructuring was owed to continued high levels of concentration in the banking sector; this despite its elimination being one of the stated objectives of the re-privatisation process. The ‘Comisión Federal de Competencia’ (CFC), or Federal Competition Commission, was only established in 1993. It began publishing indices of the level of concentration in the banking sector. These indices showed that, while the levels of concentration in liabilities and assets had fallen during the run-up to privatisation, they then stagnated for the remainder of
the decade at levels considered to be above the threshold indicating adverse impacts on competition (Chavarín Rodríguez, 2010, pp. 156–68).

However, while there is no argument over the continued concentrated nature of the Mexican banking sector, what is in dispute is the effectiveness of the orthodox remedy of increased competition. In recognition of calls to address the lack of competition in the financial sector, and to comply with the requirements of NAFTA, the Salinas administration introduced ‘Sociedades Financieras de Objeto Limitado’ (Sofoles), or Limited Purpose Financial Institutions, in 1993. These non-depository institutions channeled investment funds into specific financing operations, such as housing, automobile and consumer loans. Many of the Sofoles were affiliated to the same financial groups as the multiple banks. While the macroeconomic impact of the operations of these non-bank financial institutions had only just begun to register in the 1990s, their erosion of commercial banks’ role in consumer and housing finance can be appreciated: Between 1994 and 1999, NBFIs share of consumer lending rose from five to 39 per cent, while their share of mortgage lending rose from 27 to 55 per cent (T. S. L. González, 2008, p. 133).

The entry into effect of NAFTA locked in a profound structural transformation in the Mexican economy which had been building for a decade or more. Import-dependent ‘maquila’ initially provided significant employment though low value-added. Outside of the maquila sector, Mexican manufacturing firms faced increasingly stiff competition. This fact, and the impact of liberalisation measures, resulted in an increasing number of foreign takeovers, reversing the process of ‘Mexicanisation’ that had been orchestrated a decade earlier (Basave, 1996). Both trends pushed Mexican economic groups towards strategic alliances with foreign capital. The belief was that since Mexican exporters were internationalising their revenues, this would balance any internationalisation on the liability side.

By the end of this period, domestic politics would confirm the dominance of internationally-oriented exporters. Rising public resentment over two decades of instability, poor growth, and rising poverty, threatened the 50-year reign of the ruling

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22 González (2008) includes the state-backed Instituto del Fondo Nacional para la Vivienda de los Trabajadores (Infonavit), or Institute of the National Housing Fund for Workers, established in 1973, in her calculations of the NBFI share of mortgage lending. The dominance of Infonavit is illustrated by the fact that it accounts for nearly half of the 55 per cent total mortgage market share of NBFIs in 1999-2000.
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party, the PRI. The nominally anti-neoliberal *Partido de la Revolución Democrática* (PRD), or Party of the Democratic Revolution, threatened a return to state intervention. To see off this possibility, Rodríguez Araujo (2010) argues that the neoliberal technocracy guaranteed its dominance by supporting both the PRI and the conservative *Partido Acción Nacional (PAN)*, or National Action Party, in the 2000 elections. The PAN, with its power base in Monterrey, home to both industrial exporters and to externally-oriented finance capital, was declared the victor. Remnants of domestically-oriented finance capital could count their days numbered.

During this period, the share of commercial banks in the total financing of the non-financial private sector fell from over 60 per cent to just over 30 per cent (see figure 7.08). External financing rose from 20 per cent to over 30 per cent, nearly surpassing bank finance during the first years of the new millennium. By 2002, nearly 50 per cent of corporate financing was from international sources (Garrido, 2005, pp. 181–2).

![Figure 7.08: Financing of the non-financial private sector (bns pesos)](image)

*Source:* Banco de México

In a sample of 40 listed firms taken between 1995 and 2002, Celso Garrido (2005, p. 241) found that the ratio of total liabilities to equity remained at ‘normal’ levels, while fixed asset investment was low. This, he suggests, raises the likelihood that new liabilities, the largest part of which were contracted in foreign currency,
were being used for financial rather than productive investment. Firat Demir (2009a, p. 319), in econometric work linking gaps in the rate of return between fixed and financial investment with levels of financial assets, confirms this by showing that the level of listed firms’ financial assets (as a share of financial plus fixed assets) rose during the mid 1990s. These claims will be explored in more detail in the next chapter.

This change in the balance sheet behaviour of large non-financial corporations introduced increasing levels of currency and maturity mismatch, embodied in exchange rate and interest rate risk. These new realities led quite naturally to an increase in the use of derivatives to hedge risk, in the first instance. It is difficult to estimate corporations’ use of derivatives since the trade was predominantly over-the-counter and off-balance sheet (Soto Esquivel, 2010, p. 176). MexDer, the organised market for derivatives, started operations in 1998, but its major growth would come in the subsequent decade.

What emerges clearly during this period is a bifurcation in financing and broader corporate strategy. As summarised by Moreno-Brid and Ros (2009, p. 187): “... a few very large firms, whose oligopolistic power in the domestic market and links with transnational corporations and access to foreign capital help[ed] them to successfully become relevant players in export markets, coexist[ed] with a vast number of medium and small firms without access to bank credit and technology.” AAA exporting firms continued to enjoy a range of financing options including international and domestic bank loans, both domestically and internationally-issued debt securities, and equity. For firms without access to finance, Gonzalo Castañeda (2005, 2007) argues that an internal capital market was established which allowed the economy to continue to function in the face of both a prolonged bank credit contraction, and negligible market-based financing options. Corporations with surplus liquidity made loans to their subsidiaries and suppliers. Firms of all sizes increased their reliance on trade credit during these years, with the degree of reliance decreasing in larger firms (Garrido, 2005, pp. 224–5).

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Castañeda (2005, 2007) links the shallow development of market-based finance with limited property rights and legal enforcement. This opens up a larger debate over the reasons for the failure to deepen financial markets during this period, and whether this should be viewed as a ‘failure’ at all.
Summing up this period, the switch to export-driven accumulation and an emphasis on manufacturing begun in the previous period was completed. This was the only period of both increasing fixed capital formation (driven by the private sector – see figure 7.09) and comparatively high GDP growth since the end of industrial policy (figure 7.01). Foreign direct investment increased to nearly three per cent of GDP between 1995 and 1999, while portfolio flows were less significant and volatile (see figure 7.10). Without reaching the levels attained in the run-up to the 1994 crisis, the twin capital account surplus and current account deficit once again grew to considerable proportions (see figure 7.11). The current account deficit reflected the inelasticities generated by the new export model based on imported intermediate inputs (Mantey & Levy, 2006). That is, powerful foreign monopsonistic buyers successfully held down the prices that Mexican suppliers were able to charge, while the Mexican firms were unable to exert similar pressure on to the suppliers of intermediate inputs. This is indicative of Mexico’s subordinate place in global production.
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Figure 7.10: FDI and portfolio flows

Source: IMF BOPS, direct investment in Mexico [Code: 4555..] and portfolio investment [Code: 4600..]

Figure 7.11: Current and capital accounts (share of GDP)

Source: IMF BOPS, net current account [4993..9] and capital and financial account [4996..]

There were critical changes in both bank and firm behaviour and their interrelationship. Post-crisis, banks repaired their balance sheets, replacing non-performing (and, in some cases, fraudulent) loans to the private sector with holdings of government bailout bonds. In response, large corporations turned increasingly to
various sources of international finance, both bank and non-bank. This accelerated the bifurcation of the economy. On the one hand, there was the small number of export-oriented internationally-competitive firms, with access to a range of financing options; and on the other hand, was the large number of firms with little or no access to external finance and low profit levels. Between the two an internal capital market emerged.

7.5 ‘EXTRANJERIZACIÓN’

The model of growth based on Mexico’s explicit insertion into US-led global value chains was hit by the collapse of the dot-com bubble and the ensuing slowdown in the US economy in 2001. Mexican GDP growth collapsed, and had barely edged its way back up to five per cent per annum by 2006-7 (figure 7.01) before the impacts of the global financial crisis sent it tumbling again. Exports played a role in what recovery there was, however the dynamism of the previous period proved impossible to replicate. Devaluation of the peso, which had played a role in the previous period of growth, was precluded by the new strategy of using the exchange rate as an inflation anchor in an era of liberalised exchange rates and capital flows. Both FDI and portfolio inflows were reasonably stable but declining as a share of GDP (at least until the current crisis, figure 7.10). Despite historically low real interest rates of less than ten per cent after 2001 (figure 7.06), gross fixed capital formation of the non-financial corporate sector was stagnant at 12 per cent of GDP (see figure 7.09). What little growth in investment there was came instead from the household and public sectors.

Effort had been made in NAFTA negotiations to provide for the continued protection of the domestic ownership of the banking system. A ‘triple padlock’ included limits on foreign participation in any one bank, prohibition of foreign participation in the largest banks, and a ceiling on participation in the total banking system (Suárez Dávila, 2010, p. 154). This was explicitly designed to ensure that control of the payments system remained in Mexican hands.

In December 1996, only seven per cent of total bank assets were controlled by foreign banks, half of which reflected stakes held in investment banks. With the
sale of failed banks through 1996-7 the level of foreign ownership reached the new ceiling of 25 per cent. Then in April 1998 restrictions on foreign ownership of Mexico’s largest banks were removed. After market leader Banamex’s bid to purchase number two Bancomer was rejected by the Zedillo administration on competition grounds, the signal to foreign banks was clear and a domino effect of competitive logic was set in motion.

Of the big four Mexican banks, Serfin was sold to Spanish Santander in May 2000; Bancomer was purchased by Spanish BBVA in August 2000; Banamex was purchased by American Citigroup in May 2001; and finally Bital was bought by British bank HSBC in November 2002 (Suárez Dávila, 2010, p. 169). By 2004, 82 per cent of assets in the Mexican banking system were in foreign hands (Haber & Musacchio, 2004). This raises an important question that is little discussed in the literature on ‘extranjerización’. Echoing the earlier discussion over the lack of controversy over re-privatisation, why was there so little opposition to the removal of restrictions on foreign ownership? Suárez Dávila describes the legislative debate over the removal of the restrictions as having “passed in the night” (2010, p. 158).

Many domestic finance capitalists, the owners of the smaller Mexican banks, were wiped out in a series of liquidations and mergers between September 1994 and March 1998. This removed many of the banks that had been engaged in related lending with economic groups. The remaining large banks, burdened by portfolios of non-performing loans, were dependent on the bailout, thus diminishing their power to lobby government or outwardly oppose state initiatives towards further liberalisation. Moreover, a factor not to be overlooked was the immediate personal financial gain reaped by large shareholders in the big five Mexican banks through their sale to foreign owners.

But why would the officials’ attitudes have changed so drastically in the years since the ‘triple padlock’ and the emphasis on the strategic importance of maintaining domestic control over the payments system? This stance had been re-emphasised during the initial NAFTA negotiations. The official line is that there was not enough domestic equity to purchase the banks post-crisis. Considering the knock-down prices at which they were sold this explanation seems difficult to accept. Undoubtedly an ideological commitment to open markets played a role. A generation of economists, schooled in neoliberal economics, had come to control the
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central bank and treasury and enjoyed support for their ideas from international financial institutions.\textsuperscript{24}

However, over-emphasising this point risks overlooking the critical transformation that had occurred post-crisis in bank-firm and bank-household relationships. Mexico’s largest firms had turned to international finance, both bank and market-based. Smaller firms financed themselves through retained earnings, intra-corporate transfers and trade credit. Irrespective of whether this model was successful for investment and growth in macroeconomic terms, it meant that at the firm level there was little appetite for fighting the corner of the remaining domestic banks.

The growth area for banks since re-privatisation had been in lending to Mexican households. However, skyrocketing interest rates charged on credit card debts had led to accusations that the bankers were acting as ‘tiburones’ (sharks).\textsuperscript{25} On top of this, bankers were increasingly blamed for first causing the crisis of 1994-5 through reckless lending, and then profiting handsomely from the bailout. Mexican consumers looked enviously at rich-country banks which seemed to offer both greater stability and lower interest rate spreads. Under these circumstances, foreign bank intervention was welcomed by the public, unopposed by industrial capital, and aligned with the ideological framework of powerful technocrats.

The business model of the banking sector post-‘extranjerización’ was initially a perpetuation of the post-crisis domestic model. On the asset side, credit as a share of GDP continued to fall, starting from 18.4 per cent of GDP in 2000 and reaching 10.7 per cent in 2005, before recovering to hover at around 15 per cent in the run-up to the global financial crisis of 2008.\textsuperscript{26} The mirror image of the trend in loans was provided by bank holdings of investment securities. As a result, SMEs continued to be excluded from financial services markets due to the high cost of credit. This fall in lending occurred despite several programmes and legal changes

\textsuperscript{24} From the author’s discussions with Adalberto Palma Gómez, Director General of Unifim, the Union of Mexican Financial Institutions, 1 April 2011.
\textsuperscript{25} From the author’s discussions with Professor Carlos Marichal, Professor of Latin American History, Colegio de México, 2 May 2011.
\textsuperscript{26} The source is Bank of Mexico series SF208 commercial bank credit. As a share of the multiple banks’ portfolio, this marked a fall from over 50 per cent to 35 per cent by June 2005, before recovering to hover at 40 per cent in the crisis run-up (Source: CNBV Banca Múltiple series históricas).
introduced by the PAN administration of Vicente Fox to increase access to credit, including: Pronafin (‘Programa Nacional de Financiamiento al Microempresario’, or National Programme for the Financing of Microenterprise); the ‘Ley de Ahorro y Crédito Popular’ (Savings and Credit Law); the ‘Ley Orgánica de la Sociedad Hipotecaria’ (Mortgage Society Law); and a law to restructure the development bank system.

On the liability side, term deposits fell from 35 to 20 per cent of multiple banks’ liabilities between 2000 and 2007, replaced by the rise in the share of securities and derivative operations from 25 to 40 per cent. During the same period of falling bank deposits, domestic savings increased from 41 to 57 per cent of GDP (Garrido & Garcia, 2010). While still low even by internationally-low regional standards, the contrast between falling deposits in the big banks and rising overall savings levels illustrates the increasing importance of non-bank savings.

Figure 7.12: Multiple banks’ gross income (per cent of total)

Source: CNBV multiple bank historical series

This model proved to be very lucrative for the new foreign owners. Interest income has hovered at about 80 per cent of gross income throughout the 2000s (see figure 7.12), but this masks an important change in the source of that interest income. At the beginning of the period over 50 per cent of interest income was derived from lending to government, and only ten per cent from lending to households (see figure
By 2007, as bailout bonds were repaid and the government budget deficit remained low\(^\text{27}\), these percentages were reversed (with remaining government lending focused at the sub-national level). With implicit, that is un-risk-weighted, interest rates on consumer loans being some 40 per cent higher than other types of lending, this translated into rising profits. Return on equity rose from below ten per cent at the start of the period to reach 25 per cent by 2007 (see figure 7.14). More recently, profits from lending and securities have fallen, while those from derivatives trading have risen dramatically (Soto Esquivel, 2010, p. 191).

\[\text{Figure 7.13: Multiple banks’ interest income disaggregated (per cent of total)}\]

\[\text{Source: CNBV multiple bank historical series}\]

\(^\text{27}\) According to the Mexican treasury, the budget deficit between 2000 and 2007 averaged 1.36 per cent of GDP. While overall government debt continued to grow as a result of sterilisation operations, its share of GDP remained constant at approximately 20 per cent throughout this period. The composition of government debt continued to shift from external to internal, with 25 per cent of it held internally in 2000, rising to over 80 per cent at the time of the global financial crisis (Source: Bank of Mexico, public finance, net public sector debt). This is complicated by the fact that a rising percentage of ‘internally-held’ debt is actually in the hands of foreign investors (Amador, 2013b).
High levels of concentration have characterised the Mexican banking sector for much of its history. Federal Competition Commission measurements indicating high levels of concentration in virtually all elements of the commercial bank balance sheet have been largely unaffected by foreign bank entry over the past decade (Chavarín Rodríguez, 2010). As with President Carlos Salinas’ introduction of non-bank financial intermediaries, so-called ‘Sofoles’, over a decade earlier, President Vicente Fox would seek the answer to the problem of concentration once again in increased market-based competition. Predictably, the results would prove similarly disappointing. As of April 2009, six banks controlled 82 per cent of all banking assets in Mexico.

In July 2006, institutions known as Sofomes (‘Sociedades Financieras de Objeto Multiple’, or Multiple Purpose Financial Institutions) were created which could combine the different single-purpose credit activities of the earlier generation of Sofoles along with factoring and leasing activities. Sofomes’ were divided into those which were linked with regulated financial groups and would therefore be regulated themselves, and those which were not. For the latter, credit-creation activities could be carried out without authorisation or special regulation, and their ownership structures were exempted from foreign ownership limits. The new
lenders took advantage of their room to manoeuvre, leading explosive growth in securitised mortgage lending. Non-bank financial institutions’ mortgage lending rose from 27 per cent of total mortgage lending in 1994 to 68 per cent in 2007 (T. S. L. González, 2008). Nine new multiple banks were authorised in late 2006, including new retail-based lenders, Banco Walmart and Banco Azteca. New vehicles for institutional investment – mutual funds, insurers and private pension funds – were also developed during this period. However, Teresa González (2009, p. 254) argues that "... only a small number of these funds assume an active role in the generation of risk capital by supporting the creation of new companies or plants", investing instead in fixed-income public securities.

A number of other developments point to the increased alignment of the priorities of the Mexican state with the imperatives of international financial capital. The limit on related lending was lowered to a maximum of 75 per cent of net capital in 2001, with the added stipulation that any related loans over one per cent of basic capital had to be approved by the board (Chavarín Rodríguez, 2010, p. 107). In February 2008, the maximum level was further reduced to 50 per cent of net capital. Ostensibly, this was done to prevent foreign-owned banks from lending to their parent, but, in practice, the new laws posed the greatest difficulties for the remaining smaller Mexican-owned banks with ties to industrial groups. Mexico’s bank regulator, La Comisión Nacional Bancaria y de Valores (CNBV), or National Commission on Banking and Securities, pushed for compliance with the Basel II banking principles, whose capital adequacy standards favour large banks with access to international funding. The CNBV also entered into a series of agreements with foreign banking authorities with the goal of turning Mexico into a platform for international bank entry into the greater sub-region (Marois, 2012, p. 142).

Previously established trends in the financing of the private non-financial corporate sector continued in to the new millennium: namely, heavy reliance on internally-generated funds\(^{28}\), accompanied by large firms’ expansion of the use of international and market-based financing. The bifurcation of the corporate sector

\(^{28}\) Levy (2012), using System of National Accounts data, estimates that between 1997 and 2009 internally-generated funds (net savings plus depreciation) account for nearly 80 per cent of gross fixed capital formation of the private non-financial sector. This figure masks the differences in funding behaviour between the 95 per cent of firms (by number of units) which are classified as ‘micro’ and the largest firms.
continued apace. While survey data should only be taken as indicative, they suggest that for small firms use of trade credit has risen from 50 to nearly 70 per cent of total financing, while for AAA\textsuperscript{29} firms it accounts for only 20 to 40 per cent of financing (see figures 7.15 and 7.16). The onset of the global financial crisis marked at least a temporary return of Mexican firms to domestic bank loans, with the shutdown of the corporate asset-backed commercial paper market (Vidal, 2010, p. 86).

Figure 7.15: Small firms’ financing (per cent of total financing)  
Source: Banco de México credit market surveys

\textsuperscript{29} AAA is generally used to indicate the largest firms. For Banco de México credit market surveys, the differentiation is made according to annual revenues: small (1-100 million pesos), medium (101-500 million pesos), large (501-5000 million pesos), and AAA (over 5000 million pesos, or approximately 400 million US dollars).
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**Figure 7.16:** AAA firms’ financing (per cent of total financing)

*Source:* Banco de México credit market surveys

Antonio Mendoza Hernández (2010) captures the changes in AAA firm strategy in a case study of four of Mexico’s largest firms\(^{30}\). He highlights four features which epitomise their business models: the turn to market-based finance; reduction of capital and an increase in leverage denoting a preference for liquidity over productive investment; aggressive expansion outside of Mexico through mergers and acquisition; and the increasing use of derivatives as an independent income source rather than a hedging technique.

During this period, Gregorio Vidal et al. also highlight the "… incursion by the largest national corporations into the derivatives market as a part of the general strategy to increase earnings through financial speculation" (2011, p. 9). By 2007, MexDer, the organised market for derivatives, had accumulated notional value of 22.9 billion pesos, or 300 per cent of GDP, its growth having been given a significant boost since 2001 with the entry of foreign banks (Soto Esquivel, 2010, p. 174). Over-the-counter derivative markets exploited resources made available by the managers of the newly privatised pension funds, called Afores (‘*Administradoras de Fondos para el Retiro*’, or Administrators of Retirement Funds). Trading in

\(^{30}\) This included: building materials supplier and cement producer *Cemex*; glass manufacturer *Vitro*; corn flour and tortilla manufacturer *Gruma*; and bottler, brewer and retailer *Femsa*. 
derivative contracts remained highly concentrated, with ten banks representing 98 per cent of the total volume (Soto Esquivel, 2010, p. 178).

By the time of the global financial crisis, a number of AAA corporations had been caught on the wrong side of their derivative operations, most notably brewer Grupo Modelo, retailer Comercial Mexicana and glass manufacturer Vitro (Vidal, 2010, p. 83). Unsurprisingly, the Mexican state stepped in to rescue them. Public development banks Nafin and Bancomext extended a credit line of US$50 billion to guarantee the external debt payments of eight of Mexico's largest privately-owned companies (Vidal et al., 2011, p. 10). This bailout of the non-financial corporations was matched by support given to the banks since 2009 to ensure the liquidation of derivative positions in foreign currency (Girón & Correa, 2010, p. 29). A US Federal Reserve swap line and IMF line of credit were designed to ensure dollar liquidity for the banks.

Summing up this discussion of the most recent period, continued reliance on export-driven accumulation has failed to live up to its initial promise. Investment has mirrored the ups and downs of the US economy over the past decade, and GDP growth has been lackluster (figure 7.01). FDI and portfolio inflows have fallen as a share of GDP (figure 7.09). It appears that accumulation has rested upon rising levels of private fictitious capital, marked by an increase in corporate holdings of derivatives and a large increase in stock market capitalisation from below 20 per cent of GDP in 2002 to over 60 per cent of GDP in 2006 (figure 7.03).

The analysis of the sale of Mexican banks suggests that technocratic support for the move in the abstract was abetted in the concrete by a re-alignment of domestic interests. Domestic financial capitalists were severely weakened. Large industrial capital, having turned to international and market-based finance, was indifferent. Populist support, or at least the lack of opposition, emanated from public anger over the banks’ perceived role in the peso crisis in 1994.

The business model of the foreign-owned banks remained largely unchanged from when they had been Mexican-owned (at least until the financial crisis). The turn away from term deposits and towards open market liabilities continued. On the

31 In this regard, it is important to remember that the process of ‘extranjerización’ in Mexico was one of conversion of existing domestic banks rather than foreign bank entry as new players. This point is emphasised in a paper by the national banking regulator (J. González & Peña, 2012).
asset side, the loan portfolio continued to shrink relative to derivative holdings. Within the loan portfolio, lending to the public sector fell, loans to private non-financial corporations stagnated (until the crisis), and there was growth in consumer loans. This coincided with a steady rise in bank profitability.

A large literature has grown up which attempts to understand why foreign bank entry has not lived up to promised improvements in credit depth and efficiency of intermediation. The predominant strand points towards failures of market structure, an analysis which crosses political economy boundaries. This is, for example, the view taken by the Mexican treasury itself (Hernández, 2010). Most commonly highlighted herein is a continuing lack of competition (Haber, 2003; Levy-Orlik, 2009; Maudos & Solís, 2009; Palacios, 2009) or contestability (Avalos & Hernandez, 2006). Within the market structure camp, other authors have underscored problems with over-specialisation (Blancas, 2009), and with drawbacks over foreign ownership itself (Beck & Martinez Peria, 2010; Haber & Musacchio, 2004; Schulz, 2006), though it should be noted that some analysis argues that foreign ownership is beginning to address the limitations of the banking sector (Dages, Goldberg, & Kinney, 2000; Hernández-Murillo, 2007).

The ‘good governance’ line of argument, emanating from a new institutionalist analysis, emphasises failings in corporate governance and the Mexican legal framework (Del Ángel-Mobarak, 2006; Haber, 2005; La Porta, López-De-Silanes, & Zamarripa, 2003; Maurer & Haber, 2007; Ochoa, 2009). Finally, structuralist authors question the ability of foreign bank entry to solve (or suggest they may in fact contribute to) underlying problems of finance and development, arguing the need for forms of financial restraint (Levy-Orlik, 2009; Moreno-Brid & Ros, 2009) and a more explicit role for state-run development banks (Cypher & Wise, 2010; Girón & Levy, 2005; Moreno-Brid & Ros, 2009).

It is beyond the scope of this chapter to examine the various arguments in detail. However, the analytical lens of bank-firm relations in an era of financialisation lends itself to a different interpretation. The foundations for the financialisation of both bank and firm behavior were laid in an era of public ownership, continuing through re-privatisation and domestic private ownership. From this viewpoint it seems unlikely that foreign ownership will fundamentally alter this trajectory. Rather than affecting the nature of bank-firm relations and
processes of accumulation, foreign bank entry may serve only to alter the geographical distribution of the gains from financial accumulation. This is symptomatic of subordinate financialisation.

Trends in firm behavior have been reinforced. A small number of the largest firms have replicated corporate financialisation as witnessed in the advanced capitalist countries. This equates to dependence on market-based finance, and high holdings of liquid financial assets, with the important difference that firms are dependent on international finance with the additional risk that entails. Foreign-owned domestic banks have undoubtedly played a role in the increasing sophistication of firms’ treasury activities, but this has been a reinforcement of an existing trend rather than a new development. Small and medium enterprises, lacking dynamism due to the export-oriented nature of accumulation and the failure to catalyse domestic technological innovation, support their financing needs through the use of internal capital markets.

Foreign-owned domestic banks have accelerated the adoption of consumer credit management techniques that have begun to yield early signs of the ‘mass financialisation’ (Becker et al., 2010) that has been so spectacularly evident in advanced economies (dos Santos, 2009b). Bank lending to middle and low-middle-income households has increased sharply (Garrido & Garcia, 2010). In this regard, Vidal (2011, p. 119) highlights the penetration of financial capital into new spheres during the contemporary period: present and future family income, land rents, and small and medium producers working capital. Consumer loans make up 20 per cent of commercial bank loan portfolios, but provide 54 per cent of revenues (Ochoa, 2009).

The impact of foreign bank entry on household financialisation should not be exaggerated for a number of reasons. First, households have historically been underserved by the Mexican banking system. There is some suggestion that much of what comes under the heading of consumer credit today is in actual fact lending for micro and small enterprises. Second, it must be remembered that the first wave of credit card loans for consumption preceded foreign bank entry by nearly a decade. Finally, in parallel with developments in the US, innovation in securitised mortgage

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32 Due to lower average income levels, household debts are less important on a macroeconomic scale than is the case in advanced capitalist countries.
lending is supported by a state-run housing development fund, not exclusively by private bank operations.

Exchange rate and interest rate uncertainty, which catalyses Mexican corporations’ entry into derivatives markets, is a fact of Mexico’s subordinate place in the world market. Vidal (2010, p. 91) argues that ties to the US distinguish the financialisation of the Mexican corporation: "Policies are oriented towards avoiding a devaluation in the currency and relying on sufficient foreign exchange in a stable exchange rate regime, so that large corporations can meet their commitments in foreign currency, and banks and transnationals don't have problems to remit profits or financial resources abroad.”

### 7.6 CONCLUSION

Understanding the turn of the Mexican economy away from the financing of productive investment and towards the acquisition of financial assets and consumer debt-driven demand, requires a detailed historical understanding of the evolution of capital-labour and intra-capitalist relations and their articulation with the state and the world market. Central to this re-orientation has been the role played by the Mexican state. Through its management of crises in the 1980s and 1990s, it enabled a reliance of Mexican banks and NFCs on profits from non-productive accumulation. Trade and financial liberalisation policies were pushed ahead. These moved the economy on to an import dependent path based on low wages. Portfolio inflows covered up the ensuing current account deficits, but brought increased volatility and fragility. Macroeconomic policies designed to attract foreign capital, meant high interest rates and an over-valued exchange rate, undermining the dynamism of the domestic market.

Second, Mexico’s capitalist classes have failed to establish a system of developmental finance. Bank-firm lending relationships have been dysfunctional since the era of industrial policy, through subsequent periods of bank nationalisation, re-privatisation and now ‘extranjerización’. The result of this failure has been two-fold. The largest corporations, repeatedly favoured by the Mexican state and often enjoying cartel-like positions of dominance, have sought out international and
increasingly market-based finance. The remaining firms are reliant on retained earnings and the internal capital market. This structure denies the full growth potential of the endogenous credit cycle, distributes rather than expands existing domestic wealth, and surrenders a portion of the domestic surplus to foreign financial institutions.

Finally, this last point draws attention to the subordinate nature of the re-orientation of the Mexican economy. This should not be crudely understood as an imposition of foreign financial capital, for as has been indicated this re-orientation was an outcome of the very particular decisions taken by Mexico’s capitalist classes. However, it is clear that the structural subordination of the Mexican economy helps to explain the 1980s debt crisis, accentuating the breakdown of bank-firm relations and increasing reliance on accumulation strategies based on fictitious capital. Financial globalisation, as embodied by US portfolio flows in the 1990s, inflated Mexican credit and stock market bubbles. With trade liberalisation came the cementing of Mexico’s subordinate insertion in production chains led by US corporations; the resulting structural deficits funded by portfolio inflows. In recent years, foreign-owned banks and firms have staked a major claim to Mexico’s domestic surplus.

The financialisation of the Mexican economy should be understood then to contain within it distinctive elements which relate to the country’s status as an emerging capitalist economy. While exhibiting many of the outward ‘symptoms’ of financialisation, the internal dynamics have been different. Mexico has suffered a double blow. While productive accumulation has disappointed, much of the financial benefit which has accrued, has done so outside its borders.
8.1 INTRODUCTION

The analysis in chapters four and six drew attention to non-financial corporations’ increasing engagement with financial markets, to raise external funding and to provide outlets for investment. These tendencies were documented in both advanced and emerging capitalist countries, including the case study country Mexico. Evidence was presented to suggest that this behaviour was particularly marked in large multinational corporations. In this chapter, original analysis using data from listed Mexican firms’ financial statements is conducted in order to verify and better specify these transformations.

What this analysis reveals confirms the trends analysed at the macroeconomic level, but also provides several new insights into the specific form which financialisation has taken in Mexico. I find that in the 2000s, listed non-financial corporations have substituted long-term bond issuance for bank borrowing, to satisfy external financing requirements. On the asset side, fixed investment has fallen, while holdings of highly liquid financial assets, derivatives and intangibles have increased substantially. I will argue that these transformations should be related to the process of subordinate financialisation, and can be distinguished from an earlier period of financial expansion in the early 1990s when bank lending played a significant role for non-financial corporates and their fixed investment levels grew.
The case will be made, supported by a variety of indicators, that increased holdings of highly liquid assets in the current conjuncture reflect involvement in the carry trade. Against orthodox accounts which blame speculative excesses on deficient corporate governance, this account suggests that firms have undertaken increased treasury activity in the wake of financial liberalisation. This is now a *sine qua non* of operating in a global trading environment under a flexible exchange rate regime, as well as a result of competitive pressures in an era of financial innovation. In such an environment, the line between hedging and speculative strategies becomes increasingly difficult to discern.

Critical to the specifically *subordinate* nature of financialisation in Mexico is the subordination of macroeconomic policy to the financial needs of these large domestic corporations and their foreign investors. Dependency on foreign capital inflows has committed the Mexican state to a strong peso policy, and low inflation anchored by the domestic interest rate. On the back of these commitments, large corporations have adopted profitable strategies to exploit the availability of cheaper international funding. Foreign investors are participating in the financialisation of the Mexican firm. A dramatic rise in the purchases of Mexican securities by US residents in the period between 2000 and 2011 coincides with an increase in financial rather than fixed investment by Mexican non-financial corporations.

The chapter will proceed as follows. In the next section, the data on listed non-financial corporations is first described. This is followed by an analysis of the changes in firm funding and investment behaviour. The differences between an earlier period of financial expansion and the present period of subordinate financialisation are then briefly discussed. Finally, both orthodox and heterodox explanations for increased holdings of liquid assets will be assessed in light of the Mexican data. The chapter then concludes.

### 8.2 EXPLORATORY DATA ANALYSIS

#### 8.2.1 The data

The data come from the financial statements of publicly-listed non-financial firms, as aggregated in the *Economatica* database. The period available is from the fourth
quarter of 1989 until the present period. Due to a major change in accounting methodology\textsuperscript{1}, the data for 2011-12 have not been used\textsuperscript{2}. Quarterly data have been used in order to maximise the ability to capture the potentially volatile flows of financial assets, and to avoid year-end reporting biases\textsuperscript{3}.

The panel data are unbalanced. As shown in figure 8.01, the total number of publicly-listed non-financial firms for which data is available in the *Economatica* database rises from under 20 firms in 1988 to peak at 140 firms in 2000 before falling back slightly in recent years\textsuperscript{4}. Initially the sample is made up almost entirely of manufacturing firms. More rapid growth in the inclusion of firms from other sectors meant that by 2000 manufacturing firms made up less than 50 per cent of the total number of firms. This proportion was roughly maintained throughout the following decade. In other words, both the overall size (in terms of number of listed firms) and sectoral composition of the dataset stabilises towards the end of the 1990s.

It is impossible to draw a representative sample from all Mexican non-financial firms for which financial statement data are readily available. Therefore, the sample of listed firms on which the subsequent analysis is based must be understood to provide an indicative, not statistically representative, picture of the behaviour of the broader population\textsuperscript{5}. This picture is biased towards a relatively small number of large, mostly Mexican-owned firms. According to calculations by Cypher and Wise, the Mexican economy is dominated by large firms. Some 3000 large firms constitute only 0.3 per cent of companies, but own 74 per cent of business assets, pay 69 per cent of all wages, employ 52 per cent of the workforce and produce 74 per cent of all value-added. Of these firms, 403 account for 75 per

\textsuperscript{1} In 2011, all firms switched from the Generally Accepted Accounting Principles of Mexico (GAAP-MEX) to the International Financial Reporting System (IFRS). Some firms introduced some of the changes required by the switch prior to this date.

\textsuperscript{2} Distinct from the recent change in accounting standards outlined in footnote one, there was also a change in reporting formats during the period. Discrepancies in individual line items between the old reporting template for industrial firms (INDCOMMX) and its replacement (IND2MEXICO) were systematically reconciled, the details of which are subsequently outlined where relevant.

\textsuperscript{3} Note that only annual statements are audited.

\textsuperscript{4} The recent decline in the number of listed firms is due to mergers and acquisitions, de-listings and transfers to foreign exchanges.

\textsuperscript{5} Within the literature there is no analysis that I am aware of which examines the composition of firms listed on the *Bolsa Mexicana de Valores* (BMV) relative to the entire non-financial corporate sector. Listed firms are usually larger firms, though many of the largest multinational corporations present in Mexico do not list on the BMV. Much of the export-oriented ‘maquila’ industry, operating as subsidiaries of foreign parents, for example, is unlisted.
cent of Mexico's exports (2010, p. 3). Census data of the Instituto Nacional de Estadística y Geografía (INEGI) suggests that the largest firms, those with over 1000 employees, contribute over 50 per cent of gross fixed capital formation (GFCF), with over 70 per cent of GFCF coming from these firms together with large firms of over 250 employees\(^6\).

![Graph showing number of firms over time]

**Figure 8.01**: Number of non-financial firms with data available in *Economatica*

In total there are 178 non-financial firms in the dataset, 113 of which are active in the most recent period\(^7\). There are 10,324 individual observations in total\(^8\). Distribution of firm observations over time shows that five per cent of firms are observed for roughly three years or less; 50 per cent survive for over 15 years; and the oldest five per cent are observed for the entire period of 23 years.

There are 16 different sectors (North American Industry Classification System, or NAICS, level one) represented in the dataset. Of this, four sectors are more significant in terms of the number of firms represented (shown in bold in table 8.01): manufacturing (38 per cent of firms, or 44 per cent of observations); retail (13

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\(^6\) Author’s calculations using INEGI census data, conducted every five years, for 1998, 2003 and 2008.

\(^7\) Multiple share classes have been treated as a single corporation.

\(^8\) For the first-cut analysis, all observations for all firms are included. For the finer analysis conducted in chapter nine, a number of data cleaning measures will be outlined.
per cent of firms, or 14 per cent of observations); construction and information (both with approximately 10 per cent of firms, or 9 per cent of observations).

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number of observations</th>
<th>% of total observations</th>
<th>Number of firms</th>
<th>% of total firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation and Food Services</td>
<td>528</td>
<td>5.11</td>
<td>8</td>
<td>4.49</td>
</tr>
<tr>
<td>Administrative, Support and Waste Mgmt</td>
<td>166</td>
<td>1.61</td>
<td>3</td>
<td>1.69</td>
</tr>
<tr>
<td>Agriculture, Forestry, Fishing and Hunting</td>
<td>218</td>
<td>2.11</td>
<td>4</td>
<td>2.25</td>
</tr>
<tr>
<td>Arts, Entertainment, and Recreation</td>
<td>104</td>
<td>1.01</td>
<td>3</td>
<td>1.69</td>
</tr>
<tr>
<td>Construction</td>
<td>884</td>
<td>8.56</td>
<td>19</td>
<td>10.67</td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td>78</td>
<td>0.76</td>
<td>1</td>
<td>0.56</td>
</tr>
<tr>
<td>Information</td>
<td>854</td>
<td>8.27</td>
<td>17</td>
<td>9.55</td>
</tr>
<tr>
<td>Mgmt of Companies and Enterprises</td>
<td>161</td>
<td>1.56</td>
<td>4</td>
<td>2.25</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>4538</td>
<td>43.96</td>
<td>68</td>
<td>38.20</td>
</tr>
<tr>
<td>Mining</td>
<td>262</td>
<td>2.54</td>
<td>4</td>
<td>2.25</td>
</tr>
<tr>
<td>Professional, Scientific, and Technical</td>
<td>58</td>
<td>0.56</td>
<td>2</td>
<td>1.12</td>
</tr>
<tr>
<td>Public Administration</td>
<td>33</td>
<td>0.32</td>
<td>1</td>
<td>0.56</td>
</tr>
<tr>
<td>Real Estate and Rental and Leasing</td>
<td>126</td>
<td>1.22</td>
<td>3</td>
<td>1.69</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>1487</td>
<td>14.40</td>
<td>24</td>
<td>13.48</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>354</td>
<td>3.43</td>
<td>9</td>
<td>5.06</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>473</td>
<td>4.58</td>
<td>8</td>
<td>4.49</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10324</td>
<td>100.00</td>
<td>178</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table 8.01: Number of observations and firms by sector

Examining structural change in the composition of the sample by sector over time reveals that manufacturing firms make up a greater share of the sample in the earlier period (1989Q4 to 1999Q4) than in the later period, while construction and information firms account for a smaller share (trends for the four most significant sectors are included in table 8.02).
Besides sector, firms have also been disaggregated by size. Unlike sector, where firm characteristics do not vary\(^9\), firms may move between size categories. For this reason, and strictly for indicative purposes, the firms have been divided into the largest 25\(^{th}\) percentile, the middle 50\(^{th}\) percentile, and the smallest 25\(^{th}\) percentile, by total assets\(^10\). By definition therefore the largest 25\(^{th}\) percentile contains one-quarter of the individual observations; however it does not necessarily contain one-quarter of firms. As shown in table 8.03, the smallest and largest percentiles contain more than a quarter of the total number of firms\(^11\), both for the whole period, and for the two sub-periods. The second and third columns of table 8.03 reveal that, in terms of size, the structural composition of the sample is consistent over time.

\(\text{Table 8.02: Sectoral composition over time}\)

\[
\begin{array}{|c|c|c|c|}
\hline
\text{Sector} & \text{Number of firms} & \text{Number of firms} \\
& (\% \text{ of total}) & (\% \text{ of total}) \\
\hline
\text{Construction} & 19 (11) & 10 (7) & 19 (11) \\
\text{Information} & 17 (10) & 11 (8) & 17 (10) \\
\text{Manufacturing} & 68 (38) & 63 (44) & 68 (39) \\
\text{Retail trade} & 24 (13) & 22 (15) & 22 (13) \\
\hline
\text{TOTAL} & 128 (72) & 106 (74) & 126 (73) \\
\hline
\end{array}
\]

\(\text{Table 8.03: Number of firms by size of total assets, change over time}\)

\[
\begin{array}{|c|c|c|c|}
\hline
\text{Size} & \text{Number of firms} & \text{Number of firms} \\
\text{(total assets)} & (\% \text{ of total}) & (\% \text{ of total}) \\
\hline
\text{Bottom 25\(^{th}\) percentile} & 88 (29) & 66 (30) & 70 (28) \\
\text{Middle 50\(^{th}\) percentile} & 130 (43) & 95 (43) & 118 (47) \\
\text{Top 25\(^{th}\) percentile} & 82 (27) & 62 (28) & 61 (25) \\
\hline
\text{TOTAL} & 300 (100) & 223 (100) & 249 (100) \\
\hline
\end{array}
\]

\(^9\) In theory it is possible that a firm could switch sector, but in practice it has been verified that they have not. This does not preclude however that a firm in one sector merges with a firm in another sector. In this case the series for the acquired firm ends.

\(^10\) The stock of total assets was preferred to other possible measures. This was to avoid the greater volatility associated with the use of the flow figure for revenues; data on the number of employees, a measure commonly used to differentiate firms by size, was unavailable.

\(^11\) The total number of firms in each of the columns of table 8.03 exceeds the actual total number of firms due to the fact that firms may appear in more than one size category over time.
Finally, it would have been desirable to disaggregate the data by level of foreign revenue and ownership structure. The former would have allowed assessing changes in balance sheet behaviour in relation to the degree of export orientation, while the latter would have permitted analysis of the importance of various forms of ownership to changes in funding and investment behaviour. Unfortunately, the data are not available, leaving such analysis for future research.

8.2.2 Changes in firm financing

The most significant change in external firm financing in the contemporary period is the turn away from bank finance and towards bond issuance. Figure 8.02 shows the trend for the aggregate data for all listed non-financial firms in the dataset. In the 1990s, bank loans (both short- and long-term, though the trend is similar for each taken separately) hover at between 40 and 50 per cent of total liabilities. In the 2000s, loan levels fall to below 20 per cent of the same. This trend is uniform across firms by size (though led by the largest firms) and sector (with some exception in recent years in construction and wholesale trade). The decline in bank loans can not be explained by rising interest rates; real interest rates have first stabilised and then fallen throughout the 2000s. This points to the rising importance of the bond market.
What bank financing is available is increasingly monopolised by the largest firms. Examination of nominal flows of bank financing from the cash flow statement shows nearly all new lending going to firms of the largest 25th percentile of firms by total assets (see figure 8.03).

The near mirror flipside of this trend is the increase in long-term bonds as a share of total liabilities. From 10 per cent through the 1990s, bonds increase to nearly 30 per cent of total liabilities in the most recent observations (figure 8.04). However, unlike the decline in bank lending, the increase in bond issuance is restricted to firms in the largest 25th percentile. That is, the smaller firms are not participating in the bond market on a significant scale. The increase in bond financing is fairly uniform across sectors, with the exceptions of both retail and wholesale trade.

Figure 8.02: Bank loans / total liabilities

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12 The source for all figures is *Economatica* unless otherwise stated. Data analysed and output generated by the author using *Stata.*
Figure 8.03: Nominal cash flow from bank financing by size quartile

Figure 8.04: Long-term bonds / total liabilities
This increase in bond financing reflects the rapid growth in private bond market capitalisation from the late 1990s (see figure 8.05). However, this growth should be kept in perspective; as a share of GDP, Mexico’s private bond market capitalisation remains below that of countries such as Thailand and Brazil\textsuperscript{13}, and significantly less than in advanced capitalist countries\textsuperscript{14}.

![Figure 8.05: Mexican private bond market capitalisation / GDP](image)

**Source:** World Bank financial structure database

Graphing the trends in bank and bond financing reveals an apparent break around 2000 (figure 8.06). Before that date, bank and bond financing tend to move together, that is, firms that obtain one form of financing also obtain the other\textsuperscript{15}. After 2000, it is clear that bond financing becomes the substitute for bank financing.

\textsuperscript{13} See figure 6.04, chapter six, private bond market capitalisation to GDP.

\textsuperscript{14} See figure 4.04, chapter four, private bond market capitalisation to GDP.

\textsuperscript{15} The natural logarithm and inverse of long-term debt to total liabilities is used to make the relationship with long-term bonds to total liabilities more clear on a single chart.
Trade finance is relatively stable across the entire period (see table 8.04\textsuperscript{16}). Accounts payable account for some ten per cent of total liabilities, while accounts receivable hovers around eight per cent, suggesting that these listed firms are extracting better terms from their suppliers then they are granting to their buyers. On both sides of the balance sheet, trade finance is more important to the smaller firms. A number of distinct sector-specific levels and patterns can be discerned.

A significant change occurred in long-term deferred taxes as a share of liabilities. From insignificant levels in the 1990s, deferred taxes regularly constituted six per cent of liabilities in the 2000s. This trend was significant across firm size and sector, while the level showed larger firms less indebted to the state.

\textsuperscript{16} The division in to these two periods is meant to be indicative and does not reflect any particular structural break. Rather, from 2000 forwards represents a period of the ‘new normal’ for Mexican corporations, coming after both the fallout from the peso crisis of 1994 had settled and the implementation of a raft of trade and financial liberalisation measures (outlined in chapter seven). The year 2000 also marks an approximate break in the external financing strategies of firms as noted in figure 8.06.
The other possible source of external finance is, of course, equity finance. However, as a proportion, equity has fallen from a level nearly twice that of total liabilities to consistently hover at around 50 per cent of total liabilities over the last decade. This pattern is consistent across firms, though led by large firms.

Table 8.04: Changes in firms’ liability structure

<table>
<thead>
<tr>
<th>Liability line item</th>
<th>1989q4 – 1999q4</th>
<th>2000q1 – 2010q4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CURRENT LIABILITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt</td>
<td>18.0</td>
<td>7.0</td>
</tr>
<tr>
<td>Debentures</td>
<td>4.5</td>
<td>3.0</td>
</tr>
<tr>
<td>Other credits with ST costs</td>
<td>0.0</td>
<td>1.2</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>10.5</td>
<td>9.6</td>
</tr>
<tr>
<td>Taxes due</td>
<td>2.5</td>
<td>3.3</td>
</tr>
<tr>
<td>Other ST liabilities(^{17})</td>
<td>12.0</td>
<td>18.8</td>
</tr>
<tr>
<td>Derivatives</td>
<td>*</td>
<td>0.5</td>
</tr>
<tr>
<td>Employee benefits</td>
<td>*</td>
<td>14.5</td>
</tr>
<tr>
<td><strong>Total current liabilities</strong></td>
<td><strong>47.5</strong></td>
<td><strong>42.9</strong></td>
</tr>
<tr>
<td><strong>LONG-TERM LIABILITIES</strong></td>
<td>28.1</td>
<td>20.1</td>
</tr>
<tr>
<td>Debt</td>
<td>10.3</td>
<td>18.7</td>
</tr>
<tr>
<td>Bonds</td>
<td>5.8</td>
<td>2.2</td>
</tr>
<tr>
<td>Deferred taxes(^{18})</td>
<td>0.6</td>
<td>6.2</td>
</tr>
<tr>
<td>Other obligations(^{19})</td>
<td>0.1</td>
<td>0.8</td>
</tr>
<tr>
<td><strong>Total long-term liabilities</strong></td>
<td><strong>44.9</strong></td>
<td><strong>48.0</strong></td>
</tr>
<tr>
<td><strong>TOTAL LIABILITIES</strong></td>
<td><strong>92.4</strong></td>
<td><strong>90.9</strong></td>
</tr>
</tbody>
</table>

\(^{17}\) Other short-term liabilities is composed of interest payable, derivatives, advance and custom deposits, other current deferred revenue, employee benefits, discontinued operations and other. Due to changes in reporting requirements the individual line items are not significant for the earlier period.

\(^{18}\) While not studied herein, the dramatic rise in the level of deferred taxes poses an interesting question for future research. Shaxson argues that deferred taxes are a “… crucial element of the offshore system. Corporations hold their profits offshore, indefinitely, and only when they bring it back home to pay out dividends to shareholders does it get taxed.” (2011, p. 129)

\(^{19}\) Other obligations is composed of derivatives, advance and custom deposits, other current deferred revenue, employee benefits, provisions, discontinued operations and other. In practice, the entirety of the category is made up by employee benefits, discontinued operations and other.

\(^{20}\) The construction of this table, and its counterpart for the asset side of the balance sheet, reflects a considerable investment of time in forensic accounting. As earlier alluded to, there was a change in the financial reporting format in the middle of the period of analysis. Due to this switch, and sometimes for other unrelated reasons, line items have switched names and/or changed the structure of disaggregation over time. This has resulted in the reporting of misleading sub-aggregate lines such as ‘other’ which have had to be corrected. These have been reconciled as much as possible, but despite these efforts the sum of individual line items remains short of 100 per cent. *Economatica* staff were unable to account for the discrepancy.
Finally, Mexican financial statement reporting requirements include a division of liabilities into those denominated in foreign currency. This line item does not disaggregate loans and securities, but does give a broad picture of the currency in which firms are financing themselves. Across the entire group, long-term foreign liabilities rise from 60 to over 80 per cent of total liabilities in the 1990s, falling back to 60 per cent in recent quarters. The trend is replicated across firms of varying size, however the levels vary considerably: foreign liabilities of the smallest firms rise from 0 to 50 per cent before falling back to half that level; the largest firms rise from 50 to over 90 per cent before falling back to about 75 per cent of total liabilities. The trend is broadly reflected across sectors.

How does this picture compare with the aggregate picture of non-financial corporations that was examined in chapter six? A caveat is required here over the difficulty in comparing the part with the whole. System of National Accounts (SNA) data for Mexico is only available in flows, and obviously includes a great number of unlisted firms which are for the most part smaller and possibly distinctive in their behaviour. Having said this, the role of bank loans at the aggregate level reflects what has been revealed for listed firms, namely a source of financing of diminishing importance. Bank loans as a share of total financing at the aggregate level is even lower than for listed firms, reflecting the observation that what bank lending does occur goes predominantly to the largest firms. Equity, which had been the most important source of finance at the aggregate level has fallen in importance. This echoes the finding that the level of shareholders’ equity has fallen markedly compared to the level of total liabilities, with the admitted difficulty of disentangling new flows from capital market inflation. Trade finance, which was stable and a relatively small source of financing for listed firms, emerges as the most important source of financing over the past decade at the aggregate level. This suggests that small, domestically-oriented firms have witnessed a significant increase in their use of trade finance. Finally, securities poses somewhat of a mystery. Aggregate SNA data suggest that, except for 2002-3, securities have been an unimportant source of finance. However, listed firm data would suggest that it is a critical and increasingly important source of finance. The latter view is confirmed by a report from the Banco de México that the issuance of securities outside of Mexico was the principal source of financing for private corporations in 2011 (Zúñiga, 2012). Finally, shifts in
external funding should be placed within the context of an overwhelming reliance on internal funds for investment. As discussed in chapter six, Levy-Orlik’s (2012, p. 250) work examining the net flow of funds for the non-financial sector between 1993 and 2009, maintains that internal funds contribute more than 60 per cent of the financing of gross capital formation, or 80 per cent of gross fixed capital formation.

8.2.3 Changes in firm investment

The most important transformation on the asset side of the balance sheet has been the declining share of fixed assets accompanied by a rising share of financial assets. Net property, plant and equipment as a share of total assets fell from 60 to 55 per cent in the 1990s, but then fell even more rapidly in the 2000s from 55 to 45 per cent of total assets (see figure 8.07).

![Figure 8.07: Net property, plant & equipment / total assets](image)

**Figure 8.07:** Net property, plant & equipment / total assets
By firm size, this fall has been most dramatic not in the largest or smallest quartiles, but in the middle two quartiles. The decline is seen across most sectors with manufacturing and mining as two key sectors where there has been little change in the ratio. The decline in firm investment in property, plant and equipment (and inventories) is reflected in dynamics at the aggregate level. After a post-NAFTA boost from 1995 to 2000 where gross fixed capital formation of non-financial corporations rose from ten to 15 per cent of GDP, it has since stagnated at around 12 per cent.

Certainly part of this change might be explained by structural transformations which reduce the fixed-capital intensity of business operations. This is likely the explanation for the decline in inventory levels (as distinct from PPE) from over 8 per cent of total assets in the 1990s to fluctuate between 6.5 and 8.5 per cent in the 2000s (see table 8.05). However, this argument seems unlikely to be able to account for the entirety of the decline in fixed investment and its uniformity across firms of different sizes and from different sectors. In an emerging capitalist economy, particularly one suffering from chronically low growth rates, low productivity and high levels of informality, the need to maintain high private fixed investment levels is broadly acknowledged (Moreno-Brid & Ros, 2009).

Financial assets is calculated as the sum of receivables, cash and cash equivalents (maturities less than 90 days), short-term investments (maturities between 90 days and one year), long-term notes receivable (maturities greater than one year), investments in subsidiaries and other permanent investments, and both short- and long-term derivatives. Breaking this down, the increase in current financial assets emanates predominantly from increased holdings of cash and cash equivalents\(^{21}\), and more recently in derivatives. The increase in long-term financial assets can be found in the increased value of intangibles.

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\(^{21}\) Cash is measured at nominal value and consists of non-interest bearing bank deposits and restricted cash. Cash equivalents consisting principally of short-term bank deposits and fixed-rate investments with original maturities of three months or less are recorded at its acquisition cost plus accrued interest income not yet received, which is similar to listed market prices.
### Table 8.05: Changes in firms’ asset structure

<table>
<thead>
<tr>
<th>Asset line item</th>
<th>1989q4 – 1999q4</th>
<th>2000q1 – 2010q4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIXED ASSETS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property, plant &amp; equipment (LT)</td>
<td>56.4</td>
<td>50.8</td>
</tr>
<tr>
<td>Inventories (ST)</td>
<td>8.0</td>
<td>7.3</td>
</tr>
<tr>
<td><strong>Total fixed assets</strong></td>
<td><strong>64.4</strong></td>
<td><strong>58.1</strong></td>
</tr>
<tr>
<td><strong>FINANCIAL ASSETS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Current financial assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>8.2</td>
<td>8.1</td>
</tr>
<tr>
<td>Other receivables</td>
<td>3.0</td>
<td>3.5</td>
</tr>
<tr>
<td>Cash &amp; cash equivalents</td>
<td>1.2</td>
<td>2.8</td>
</tr>
<tr>
<td>Investments</td>
<td>6.9</td>
<td>6.4</td>
</tr>
<tr>
<td>Other assets</td>
<td>1.2</td>
<td>1.9</td>
</tr>
<tr>
<td>Derivatives</td>
<td>0.0</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Total current financial assets</strong></td>
<td><strong>20.5</strong></td>
<td><strong>22.7</strong></td>
</tr>
<tr>
<td><strong>Long-term financial assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes receivable</td>
<td>1.1</td>
<td>0.6</td>
</tr>
<tr>
<td>Investments</td>
<td>5.9</td>
<td>3.3</td>
</tr>
<tr>
<td>Other investments</td>
<td>2.5</td>
<td>1.2</td>
</tr>
<tr>
<td>Investments in subsidiaries</td>
<td>3.4</td>
<td>2.1</td>
</tr>
<tr>
<td>Net intangibles</td>
<td>4.0</td>
<td>8.5</td>
</tr>
<tr>
<td>Commercial credits</td>
<td>3.6</td>
<td>4.7</td>
</tr>
<tr>
<td>Other</td>
<td>0.4</td>
<td>3.8</td>
</tr>
<tr>
<td>Deferred taxes</td>
<td>0.0</td>
<td>0.6</td>
</tr>
<tr>
<td>Other non-current assets</td>
<td>2.0</td>
<td>2.7</td>
</tr>
<tr>
<td>Derivatives</td>
<td>0.0</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Total long-term financial assets</strong></td>
<td><strong>13.0</strong></td>
<td><strong>15.7</strong></td>
</tr>
<tr>
<td><strong>Total financial assets</strong></td>
<td><strong>33.5</strong></td>
<td><strong>38.4</strong></td>
</tr>
<tr>
<td><strong>TOTAL ASSETS</strong></td>
<td><strong>97.9</strong></td>
<td><strong>96.5</strong></td>
</tr>
</tbody>
</table>

22 Other short-term assets includes prepaid expenses, derivative instruments, available-for-sale assets, discontinued operations, rights and permissions, and other.

23 *Economática* staff report that this category includes what is typically known as ‘goodwill’.

24 Other intangibles includes brands, rights and permissions, consignments and other. ‘Other’ accounts for almost the entirety of the change between periods.

25 Other non-current assets includes financial derivatives, employee benefits, discontinued operations, deferred charges, and other.
Cash has increased steadily from less than one per cent of total assets at the beginning of the period to over five per cent in recent quarters\(^{26}\) (figure 8.08). The trend is most dramatic in the largest firms, while in the smallest firms there has been little change in the levels of cash holdings. The trend is uniform across all of the significant sectors. Theories which attempt to account for the increased share of cash and cash equivalents will be discussed in detail in section four.

\[\text{Figure 8.08: Cash and cash equivalents / total assets}\]

The increase in derivatives has occurred since 2005, almost exclusively amongst the largest firms, rising from nothing to reach nearly two per cent of total assets\(^{27}\). It is important to note that derivatives are off-balance sheet except where

\(\text{A common metric of cash holdings in the business literature is cash and cash equivalents as a share of current liabilities, the so-called ‘coverage ratio’. For the dataset analysed here, the coverage ratio is a stable five per cent throughout the 1990s; it then rises sharply throughout the 2000s surpassing 25 per cent. As with cash as a share of total assets, the trend is strongest in the largest firms and is present across all significant sectors.}\)

\(\text{Mexican authorities only began to require more detailed accounting for derivatives in non-financial corporate financial statements in 2005. Inspection of bank holdings of derivatives (see figures 6.31 and 6.32, chapter six), assuming that large non-financial corporations are counterparty to a non-trivial}\)
their fair value is measured as a net positive fair value (asset) or net negative fair value (liability). Therefore, what appears on the balance sheet is a small reflection of the risk being assumed through these transactions. The trend is strongest in the information and retail sectors, led by a handful of firms.

Finally, there is a significant increase in long-term intangible assets, accounted for largely by an increase in ‘other intangibles’. This jump is driven by the behaviour of the largest firms, though the trend is present across firms of all sizes. In terms of sector, the trend can be found in all significant sectors with the exception of the mining sector. A number of authors have attempted to theorise the increasing role played by intangibles within the broader context of financialisation (Palan, 2013; Serfati, 2011; Willmott, 2010); while this issue is not pursued herein, it offers interesting material for future research.

8.3 LARGE FIRM FINANCIALISATION TAKE 1 AND 2?

Large Mexican firms appear to exhibit behaviour which might be termed ‘financialisation’ in both the beginning of the period under examination and in more recent years. However, there are decisive differences between the two periods which demand careful analysis. The behaviour in the first period is better understood in the context of the bubble induced by financial liberalisation and re-privatisation of the banking sector, while that of the second period more properly marks subordinate financialisation, that is, representing a profound change in the operational strategies of firms, banks and households, and the relationship between them.

In the early 1990s, large firms were able to access external financing from two primary sources. First, bank loans were easily obtainable, as newly re-privatised banks returned aggressively to private sector lending following the end of nationalisation. Bank loans make up over 50 per cent of liabilities during the period. Second, financial liberalisation led to large inflows of both FDI and portfolio investment. Between 1989 and 1994 this resulted in a four-fold increase in the size portion, suggests that the growth in non-financial corporate holdings of derivatives actually began in the late 1990s.
of the Mexican stock exchange relative to GDP. For listed firms, capital stock was some 150 per cent of total liabilities in the period.

Much of these funds found their way in to corporate holdings of financial instruments. Short-term investments, those with maturities between three months and one year, began the period at over ten per cent of total assets. Gradually there was a shift out of these short-term investments and into longer-term government paper, with the line item ‘long-term notes receivable’ peaking at over two per cent of assets in 1995. Investment in subsidiaries was also at a comparatively high four per cent of assets during the early 1990s. Derivative use was not yet a significant phenomenon.

It is worth noting however, that investment in fixed capital during this period was higher than it had previously been or would be thereafter. For listed non-financial firms, net property, plant and equipment levels stood at over 55 per cent of assets throughout the 1990s. From the aggregate vantage point, gross fixed capital formation rose from below ten to 15 per cent of GDP in this period. Expansion in the run-up to the signing of the NAFTA may account for part of this increase. Certainly both the object and the quality of these investments can be called in to question, but the point remains that this period is a classic one of financial market ‘exuberance’; that is trade and financial liberalisation driving flows of easy money in to investments both financial and real.

The last decade should be distinguished from this earlier period. Bond issuance takes over from bank loans as the primary source of external funding for listed firms. Rather than medium- and long-term instruments, the funds are held as cash and cash equivalents. Derivatives come to play a central role in firms’ strategies to integrate into the world market. Also distinct from the earlier bubble period, investment in property, plant and equipment falls throughout. As discussed in chapter six, Mexican banks’ profits in the most recent period have come from investment banking and lending to households. I maintain that these characteristics, related to the changing nature of Mexico’s insertion into the world market, distinguish the contemporary period of financialisation from earlier experiences of financial expansion.
8.4 ‘CASH EQUIVALENTS’ AND THE CARRY TRADE

Holdings of cash and cash equivalents (CCE), in absolute terms, are, unsurprisingly, dominated by some of Mexico’s largest firms. These include: mining conglomerates Grupo Mexico and Industrias Peñoles; state oil and gas giant Pemex; the world’s largest cement producer Cemex; América móvil, the fourth largest mobile network operator globally, and formerly the mobile arm of Telmex; and white goods retailer and consumer credit agency Elektra.

In relative terms, those firms with the largest holdings of CCE to total assets are still dominated by the largest firms, but represent a more diverse cross-section outside of purely AAA firms. Of firms with a CCE-to-total assets ratio of five per cent or higher in the period 2000-2011, those in the construction, information and mining sectors play a much greater role than their share of the total sample of firms would suggest. Construction firms, for example, which account for under nine per cent of the total sample, make up 22 per cent of firms with high cash ratios. These include the Geo Corporation, Hogar Consorcio, ICA, Sare and Urbi Desarrollos.

In the information sector, Cablevision, a cable network and programme distributor, and radio and television broadcaster Grupo Televisa, have high CCE holdings for prolonged periods of time.

While there are undoubtedly sector-specific and firm-specific reasons for the rise in this ratio, its presence across a number of key sectors, especially amongst the largest firms, suggests that there are also more generalised dynamics at work. In what follows, I will look first at orthodox accounts of changes in cash holdings, followed by more heterodox theories.

I begin by examining the literature on corporate finance which argues that changes in the cash flow sensitivity of cash are due to market imperfections or underdevelopment. The cash flow sensitivity of cash is a measure of the marginal propensity to save cash out of current cash flows in order to fund more profitable investments. First, Almeida et al. (2004) provide evidence that the cash flow sensitivity of cash is positive for financially constrained firms. In empirical testing,

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28 Housing developers have entered a period of crisis in 2013. Falling demand for housing brought on by the crisis of 2009 has persisted with a shift of consumer tastes away from new housing developments. Leverage ratios for three of the biggest housing developers, Homex, Geo and Urbi, rose from 1.5 times in 2007 to 4.7 times in 2012 (Amador, 2013c).
firm size is used as a proxy of financial constraint. Without reliable access to external sources of finance, this theory posits that small firms are more likely to hoard cash when retained earnings are high in anticipation of future investment opportunities. While this hypothesis might account for differences in the cash flow sensitivity of cash between small and large firms in Mexico, it does not account for the rising level of cash held by large firms during a period in which they have become progressively less financially constrained.

Khurana et al. (2006) use cross-country econometric testing to support their argument that the cash flow sensitivity of cash is negatively related to the degree of financial development. In other words, as a country develops deeper capital and credit markets, firms will feel less need to hoard cash during times of plenty. Again, while this sounds intuitive, it does not account for the increasing CCE holdings of listed Mexican firms during a period of financial development. Private bond and stock markets, and loan and deposit markets all grew in relation to GDP during this period, if admittedly from a low base.

Kusnadi and Wei (2011) provide cross-country evidence to suggest that the level of financial development is a secondary consideration to the first-order driver of the cash flow sensitivity of cash which they argue to be the degree of legal protection of investors. This is consistent with the notion that effective legal systems ease firms’ access to external capital markets. While this may have been a plausible account for Mexico in the period in which they conducted their empirical analysis (1995 to 2004), for the more recent period it fails to stand up. The World Bank’s protecting investors index improved from a score of 3.7 in 2004 to 6.0 in 2012 (the OECD average is 6.1). Clearly, Mexico’s legal protection of investors has improved and is of an international standard; nonetheless, the cash flow sensitivity of cash has increased.

Additional hypotheses, of a more heterodox nature, can be broadly organised under three headings: operations, hedging and speculative motivations. The operations motive might include the need to hold higher levels of foreign-currency denominated cash for inputs as business activities expand internationally. Unfortunately, without a reliable dataset of the share of firm sales which transpire internationally, this hypothesis is difficult to prove empirically. Another reason might be an increase in the general expectation of dividend payouts. Figure 8.09
shows that there has indeed been an increase in dividend payouts since the crisis period of 1994-5. However, having steadied at approximately ten per cent of earnings before interest and tax (EBIT), at best this can account for some of the increased level of CCE holdings, but not the decade-long increasing trend.

The hedging motive refers to management efforts to undertake precautionary measures in the face of uncertainty. Where there is macroeconomic instability, such as most recently experienced in 2007-9, firms may hold cash rather than risk losing out on planned fixed investment. Particularly at times of low interest rates, the opportunity costs associated with such a decision may be relatively low. Facing an uncertain financing picture, management might similarly decide to hold more cash to avoid shortages or delays to desired investment, or to avoid external financing costs.

However, this account loses its explanatory power in view of the fact that the increase in cash holdings occurred during a relatively favourable period of macroeconomic conditions and availability of firm financing, certainly for the largest
firms. Neither was there a debt restructuring bringing an increase in current liabilities relative to long-term liabilities for which greater cash needed to be kept on hand. As shown in figure 8.10, current liabilities have declined as a share of total liabilities. This has resulted in a sharp increase in coverage ratios (cash / current liabilities). This suggests that, all else being equal, the need to hold cash for these reasons has diminished, not increased.

Figure 8.10: Current liabilities / total liabilities

While this undermines the linkage between increased CCE holdings and *macro*economic volatility, there may still be a role for microeconomic volatility. Even in periods of benign macroeconomic conditions, certain sub-sets of firms may experience increased operating volatility. To test this latter hypothesis, figure 8.11 plots a measure of micro-economic volatility (the three-year moving average of the standard deviation of EBIT by quartile\(^{29}\)) against the share of CCE in total assets. Until 2005, there appears to be no relation between the experience of volatility and

\(^{29}\) The first quartile indicates the lowest standard deviation of EBIT, the fourth quartile the highest.
CCE holdings. Between 2005 and 2008, there is the suggestion that the biggest increase in CCE holdings occurred in firms experiencing the greatest volatility in EBIT. However, this relationship breaks down after 2008.

![Figure 8.11: Three-year moving average of the standard deviation of earnings before interest and tax (by quartiles shown as different lines) against the share of CCE to total assets (left axis, per cent)](image)

Finally, there may be a number of reasons for increased CCE holdings which can be categorised as speculative in nature. First, unknown and likely unknowable is the relationship between cash holdings and money laundering of the illegal drug economy. It is estimated that Mexican drug cartels send between 19 and 29 billion dollars annually from the US to Mexico, equal to nearly three per cent of GDP (Realuyo, 2012). In a paper for Chatham House, Ferragut argues that it is becoming increasingly difficult to launder these funds through financial institutions, so “… dirty money is being laundered within the formal economy in businesses that accept cash as tender…” (2012, p. 8). He believes this includes many of the top firms in Mexico.
Second, cash-on-hand may allow firms to take advantage of market movements to buy back shares when prices fall, thereby boosting earnings per share. In the shareholder value literature, this has been found to be the case particularly where executive compensation is linked to profit performance (Froud, Haslam, Johal, & Williams, 2000; Lazonick & O’Sullivan, 2000; Lazonick, 2008, 2012). Haw et al. argue that corporate insiders in a weak investor protection environment are likely to employ repurchases “... as a tool to mislead investors or extract private control benefits rather than to genuinely disgorge excess cash balances to shareholders” (2011, p. 153) as posited by the free cash flow theory. Figure 8.12, showing a marked increase in the nominal values of repurchased shares on the balance sheet, and figure 8.13 showing nominal cash flows spent on share re-purchases from the income statement\(^{30}\), suggest that this may be part of the story in Mexico.

Third, Toporowski (2010c) has argued that in an era of both financial liberalisation and capital market inflation, ‘financially enhanced transnationals’ which enjoy easy access to capital and credit markets grow by international mergers and acquisitions rather than by expansion of production. Certainly for Mexico this account fits well with, for example, the aggressive global expansion of Cemex starting in the mid 1990s (Mendoza Hernández, 2010). This might account for the need to hold liquid assets in order to conduct share purchases, though such acquisitions can also be conducted via share swaps or leveraged buyouts. This might suggest future work to examine the relationship between CCE holdings and mergers and acquisitions activity.

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\(^{30}\) Haw et al. (2011) argue that the dollar amount spent on repurchases in the cash flow statement is likely to yield the least biased estimate of the actual dollar amount spent on repurchases. However, cash flow statement data on share re-purchases is only populated from 2007Q4 in the Economatica database suggesting that there may have been an accounting change prior to which share re-purchases were not separately accounted for in financial statements.
Chapter 8 Financialisation of the Mexican non-financial corporation

Figure 8.12: Nominal value of repurchased shares, balance sheet

Figure 8.13: Nominal value of share repurchases, income statement
The last strand in the speculative account is the hypothesis that the increased holdings of CCE may be concealing carry trade operations. The carry trade can exploit spreads in either or both of the exchange rate and the interest rate. Looking first at the exchange rate, figure 8.14 shows that, except for a brief period in 2002-3, Mexico’s real effective exchange rate appreciated between 1995 and 2008. More relevant for practical purposes is likely to be the bilateral nominal exchange rate between the peso and the US dollar. Figure 8.15 indicates that, after a period of significant depreciation between 1994 and 1998, that the value of the peso was stabilised against the dollar for a period of nearly a decade.

**Figure 8.14:** Mexican real effective exchange rate index (2005 = 100)
**Source:** IMF International Financial Statistics (..RECZF)
Figure 8.15: Nominal Mexican peso – US dollar exchange rate
Source: Banco de México

Estimating spreads exploited in terms of interest rates poses more intractable problems on both the liability and the asset side. The Emerging Market Bond Index (EMBI) provides an estimate of the spread over US government ten-year bonds which investors outside of Mexico demand for sovereign Mexican bonds. With some large Mexican corporates able to obtain similar or even lower rates than the sovereign on US dollar-denominated debt, the EMBI can act as a conservative proxy for corporate funding rates in the long-term bond market. From this it can be estimated, shown in figure 8.16, that while funding rates in the early part of the 2000s were near ten per cent, they fell to below six per cent by 2004, where they hovered until the Lehman Brothers crisis in late 2008.
On the asset side, figure 8.17, indicates that from mid-2005 there was an upward change in the trend of the deposits of private non-financial corporations in both commercial banks and non-bank depository corporations. This suggests that the increased CCE holdings were finding their way into fixed short-term lending to banks, and to vehicles such as money market mutual funds run by investment funds. The latter becomes the more significant vehicle from late 2005.

It is worth noting that in national accounts for the private non-financial sector, deposits are not enjoying the upward trend that could be expected given the analysis so far (see figure 6.15, chapter six). What is increasing during this period is the broad category of ‘securities’ on the asset side, suggesting that what is called ‘cash equivalents’ on firms’ financial statements is accounted for as securities by the authorities. Overall, this recommends that, again as a conservative proxy, rates on short-term fixed deposits can be used to estimate the return that non-financial corporations are earning on ‘cash equivalents’.
Figure 8.17: Nominal stocks of private non-financial corporate deposits with banks and non-banks (bn pesos)

Source: Bank of Mexico SF40413 PNFC term deposits with depository non-bank corporations; SF99039 demand deposits of PNFCs with commercial banks; SF 99045 time deposits of PNFCs with commercial banks

Figure 8.18 gives a rough approximation of the profitability of a straightforward carry trade operation in the 2000s, that is, borrowing in US dollars and investing in Mexican pesos. It depicts the spread between the proxy for corporate funding costs, namely the ten-year US government bond plus EMBI spread, and the proxy for returns, the one-day fixed term deposit rate. The spread is positive for most of the decade, and is uninterrupted from August 2004 until March 2009.

The assertion that this period fits well with the carry trade hypothesis is backed up by Bloomberg analysis of the carry trade (see figure 8.19), which shows that for the period from February 2004 until June 2007, returns on the carry trade in the Mexican peso were the fourth most lucrative after those conducted with the Brazilian real, the Korean won and the New Zealand dollar.
Figure 8.18: Spread between the proxy for corporate funding rates and 1-day fixed term deposit rate (per cent per annum)

Source: Author’s calculation based on EMBI data and Banco de México SF3239 one-day fixed term deposits, weighted average rate before tax

Figure 8.19: Bloomberg carry trade (long: MXP; short: USD), Jan 2004 – June 2007
The straight-forward carry trade, as illustrated above, can be conducted without the use of derivatives. However, their use can either mitigate or amplify both potential gains and downside risk. Once again, it is worth remembering that derivatives are off-balance sheet except where their fair value is measured as a net positive fair value asset or net negative fair value liability. Therefore, what appears on the balance sheet is a small reflection of the risk being assumed through these transactions, let alone through off-balance sheet operations. Figure 8.20 illustrates the dramatic rise in the value of short- and long-term derivatives as a share of the total assets of listed non-financial firms, rising from near zero in late 2004 to nearly two per cent of total assets in late 2007. As earlier discussed, these figures are likely to significantly underestimate the value of derivatives.

Figure 8.20: Short- and long-term derivatives / total assets

As a result of significant losses related to derivatives’ use, the national regulator (CNBV) mandated greater disclosure of derivatives positions starting in 2009 (Whittall, 2009).
The sharp depreciation of the Mexican peso against the US dollar by nearly 20 per cent in October 2008 led to sizeable derivatives losses for a number of Mexican firms, revealing the speculative carry trade strategies which they had been pursuing. According to the financial press, one of the more common structures utilised was called a ‘target redemption forward’, or TRF (R. Davidson, 2008). This product involves a series (or ‘strip’) of forward contracts, each with a coupon that has an individual payout equal to the underlying price (the price of the underlying asset at maturity, in this case US dollars) minus the delivery price (the price agreed upon in the forward contract). Once the total payout from multiple coupons exceeds a target level, the contract ‘knocks out’, that is, it ceases to exist.

The TRF allowed the Mexican corporate buyer to sell US dollars for pesos, at a rate that was typically better than the spot rate, on a set expiry schedule until the pre-determined profit level had been reached. For companies with US dollar receivables, TRFs acted as a hedge against a fall in the value of the dollar, a reality faced by Mexican exporters for over four years before the onset of the financial crisis. If the corporate buyer anticipated a strengthening peso, this appeared to be a low-risk profitable strategy.

However, the TRFs were structured so that the buyer had to sell double the notional value of the contracts if the exchange rate moved against them, that is, if the peso fell. Importantly, whereas upside gains were limited, downside losses were not. Furthermore, evidence has emerged to suggest that some Mexican corporates were leveraging their participation in these structures, or entering into TRFs with multiple banks (Whittall, 2009). In such instances, what may have originally been a hedging strategy had become a speculative one. Jan Kregel (2011) and Randall Dodd (2009) have provided evidence of the use of such strategies using a variety of exotic derivative instruments by non-financial corporates across Latin America in the years leading up to the financial crisis in 2008.

In concluding this section, there are two important points of a methodological nature that must be highlighted. First, it is impossible to equate ex-post outcomes of macroeconomic prices with ex-ante expectations of the same. I have suggested that Mexican government policy, and the stated policy objective of the central bank, sent a signal to the managers of large Mexican firms about their intentions as regarded a strong exchange rate and the use of the domestic interest rate as an inflation anchor.
However, these signals and the subsequent policy interventions were mediated by a host of dynamic factors, both domestic and international. This means that their efforts may or may not have yielded the outcomes they sought. Second, and building upon this first point, it is impossible, at the aggregate level, to equate ex-post evidence of involvement in the carry trade with the ex-ante intentions of corporate managers. Between intention and outcome lies dynamic change and fundamental uncertainty related to the passage of time.

8.5 CONCLUSION

The analysis in chapters four and six highlighted the importance of the transformation in the funding and investment behaviour of large non-financial corporations. In this chapter, I have exploited the greater level of detail afforded by listed firms’ financial statements as an indicative sample, in order to probe these transformations.

This has helped to clarify the important changes in corporate behaviour in Mexico in the 2000s and revealed a number of new findings. For external finance, large non-financial firms have turned away from bank borrowing, substituting long-term bond issuance. On the asset side, fixed investment has fallen, while holdings of highly liquid financial assets, derivatives and intangibles have increased substantially. I have argued that these transformations reflect the tendencies of contemporary financialisation witnessed in advanced capitalist economies, particularly as seen in the large corporation. This was distinguished from an earlier period of financial expansion in the early 1990s when trade and financial liberalisation drove portfolio inflows. Unlike the current period, bank lending to non-financial corporations played a significant role, and fixed investment levels grew.

A range of theories which have attempted to explain non-financial corporations’ increasing holdings of liquid assets were examined. I argued that orthodox theories which link increased cash flow sensitivity of cash to imperfections or underdevelopment of the financial system do not hold up to scrutiny in the contemporary Mexican context. While the recent period until the crisis of 2007-8
has been one of relative macroeconomic stability, analysis was provided contending that microeconomic volatility may explain some of the increase in cash holdings. A number of heterodox theories were considered including the demands of international expansion, expectations of higher dividend payouts, laundering of the illegal drug economy, share buybacks, and merger and acquisition activity. Finally, detailed statistical evidence at the aggregate level and anecdotal evidence at the firm level was presented to suggest that carry trade operations, whether or not they were carried out as part of a conscious strategy, are likely an important part of this transformation. Undoubtedly, a full account requires more than a simple single causal explanation.

It is important to emphasise the systemic nature of this transformation. Against orthodox accounts which celebrate financial market deepening, whilst blaming unsuccessful speculative excesses on deficient risk management practices, this account suggests that firms have undertaken increased treasury activity in the wake of financial liberalisation. This is now a *sine qua non* of both operating in a global trading environment under a flexible exchange rate regime as well as a result of competitive pressures from other firms whose profitability has been augmented through financial innovation.

Critical to the *subordinate* nature of financialisation in Mexico is the subordination of macroeconomic policy to the financial needs of foreign investors and large domestic corporates. Dependency on foreign capital inflows has committed the Mexican state to a policy of stable, if not appreciating exchange rates, and low inflation kept in check by the domestic interest rate. Large corporations, both financial and non-financial (though the analysis here has focused on the latter) have taken advantage of this commitment by seeking funds abroad. Some of these funds, whether by intention or accident, have entered the carry trade.

Foreign, largely US, investors have played an important role in the changed behaviour of Mexican non-financial corporations. Figures for real portfolio flows, such as those made available in the IMF IFS, are limited by what amounts to triple-netting. That is, netting between purchases and sales, netting over the period of calculation (monthly), and netting flows driven by, respectively, American and Mexican investors. In contrast, the US Treasury International Capital Reporting System provides data which can act as an estimate of gross portfolio flows. This
gives gross sales by Mexicans to US residents of Mexican securities (bonds and stocks). Figure 8.21 illustrates that, in real terms, there has been a dramatic rise in gross purchases of Mexican securities by US residents, in the period between 2000 and 2011. This coincides, not with an increase in fixed investment, but a rise in financial investment by listed Mexican non-financial corporates, or, as illustrated in the figure, a significant rise in the ratio of financial assets to net property, plant and equipment. Determining whether these flows are catalytic or opportunistic, that is whether they are leading or following the changes in the investment patterns of Mexican corporations, would require a number of heroic assumptions (for example, UST ICRS figures include purchases of securities of non-listed firms). It is enough for now to note that flows made available by foreign investors are participating in the financialisation of the Mexican firm.

**Figure 8.21:** Financial-to-fixed assets and cross-border securities activity

**Source:** *Economatica*; US Treasury International Capital Reporting System
In the next chapter, I will use innovative econometric techniques to take this analysis a step further. This will involve testing a key hypothesis concerning the financialisation of the non-financial corporation; against orthodox theory which stipulates that changes in firms’ operating characteristics determine alterations in their capital structure, I will argue that, in the era of financialisation, changes in the availability of international capital are driving the financialised investment behaviour of Mexican corporations.
Capital structure and liquid asset management in the Mexican non-financial corporation

9.1 INTRODUCTION

In the previous chapter, detailed original analysis of the balance sheets of Mexican publicly-listed non-financial corporations revealed significant behavioural transformations, particularly over the last decade. These changes were consistent with the sectoral picture of Mexican non-financial corporations developed in chapter six, and reveal similar tendencies to those seen in the financialised corporation of advanced capitalist economies in chapter four. On the liability side, there is increasing reliance on internal funds while external financing needs are being met by long-term bond issuance at a time when bank borrowing has stagnated. On the asset side, fixed investment has fallen as a share of total assets, while investment in highly liquid financial assets, and the value of derivatives and intangibles have increased substantially.

The question of why there has been a secular increase in industrial firms’ cash holdings across a range of countries has preoccupied both the international financial media (Waters, 2013) and academics studying corporate finance (Bates, Kahle, & Stulz, 2009; Iskandar-Datta & Jia, 2012; Opler, Pinkowitz, Stulz, & Williamson, 1999). A number of theories which attempt to explain the increased holdings of cash and cash equivalents by industrial firms were examined in chapter eight in light of the Mexican evidence. Orthodox theories which link increased cash holdings to firm-specific financial constraints (Almeida et al., 2004) or to
underdevelopment of the financial or legal system (Khurana et al., 2006; Kusnadi & Wei, 2011) do not hold up to scrutiny in the Mexican case. The micro-economic relationship between cash holdings and the volatility of operating revenues was analysed, finding that increased volatility may be playing a role but does not explain the phenomenon in its entirety. It was similarly shown that heterodox theories (Haw et al., 2011; Levy-Orlik, 2012; Toporowski, 2010c) linking cash holdings to the demands of international expansion, the requirement to pay higher dividend levels, merger and acquisition activity or share buybacks may explain part but not all of the increase. Finally, statistical evidence at the aggregate level and anecdotal evidence at the firm level suggests that carry trade operations, whether or not they are conducted as part of a conscious strategy, are likely an important explanatory factor.

Having addressed the question of Mexican firms’ possible motivations for increasing their cash holdings, this chapter will empirically investigate a critical connected issue which is central to testing the theory of financialisation advanced in this research: are the increased cash holdings related to the firms’ capital structure? To put a finer point on it, is access to cheaper funding from international investors on bond markets inducing Mexican firms’ investment in liquid assets? Against orthodox theory which posits that operating characteristics cause changes in firms’ capital structure, it will be argued that the reverse may also be true, that is that capital structure may cause changes in operating characteristics. This is a key assertion of the theory of financialisation presented in this thesis, namely that transformations in firms’ funding opportunities have altered their investment behaviour.

It was argued in the previous chapter that while the engagement of non-financial corporations in the carry trade may be broadly symptomatic of financialisation, the dynamics of such activities for enterprises from emerging capitalist economies has a specifically subordinate nature. The rise in cash holdings and carry trade operations of Mexican firms coincides with a sharp increase in US investors’ purchases of Mexican private securities (figure 8.21, chapter eight). In turn, Mexican macroeconomic policy has been designed to protect these profit-making strategies of large Mexican firms and their investors, both domestic and foreign; this has resulted in an overvalued exchange rate and increasing levels of international reserves needed to maintain it, as well as high domestic interest rates which threaten investment and employment.
The results of the econometric analysis described in this chapter, of the aggregate relationship between capital structure and liquid asset holdings, suggests that increases in the ratio of financing received from long-term bonds is more influential on the cash holdings ratio than the availability of internal funds. The evidence on cointegration of the three series is inconclusive. Granger causality tests suggest that bond financing Granger causes liquid asset holdings, while no such link exists with internally-generated funds. However, analysis at the aggregate level suffers from a number of drawbacks. Simple ordinary least squares (OLS) estimation requires that the variables be independent and stationary, whereas evidence is presented that they are not. Cointegration refers to a linear combination of non-stationary variables, but it may be that the relationship is non-linear. More importantly for interpretation of estimation results, aggregation excludes consideration of unobserved variables with heterogeneous effects across firms.

Consequently, new techniques of mean group estimation for panel time series were drawn upon, allowing for both time varying heterogeneity across firms and cross-section dependence. I find that the relationship between levels of bond financing and holdings of highly liquid assets is both positive and significant, whereas that between internal funds and cash holdings is negative and statistically less robust. The relationship between bond financing and cash holdings gets stronger in the period after 2000, especially in the largest firms. At the sectoral level, the relationship is strongest in the construction and information sectors across the period of analysis, only appearing in the manufacturing sector after 2000.

The chapter proceeds as follows. It begins with a brief review of corporate finance theory and a survey of the empirical literature on corporate cash holdings that is built upon these original frameworks. In the subsequent section, the Mexican dataset is described and summary statistics for key variables are provided. The analysis section begins by examining the aggregate relationship between capital structure and cash holdings, moving on to panel time series analysis of the relationship at the individual firm level. The chapter then concludes.
9.2 CORPORATE FINANCE THEORY AND LIQUIDITY MANAGEMENT

One of the key pillars of the theory of modern corporate finance is the Modigliani-Miller (1958) capital irrelevance proposition, according to which individual investors in a perfect market can create their desired level of leverage through portfolio decisions, thereby rendering the capital structure decision of an individual firm irrelevant for its market value. In recognition of the fact that no such perfect market exists in practice, Modigliani and Miller (1963) subsequently amended the proposition to stress the role played by income tax provisions on debt. By shielding earnings from taxes, such provisions render debt relatively more attractive than equity.

To avoid the corollary of this latter proposition that all firms would use 100 per cent debt financing, a large body of literature was spawned which attempted to determine the offsetting costs associated with debt financing. So-called ‘trade-off theory’ initially focused on the static trade-off between the tax benefits and bankruptcy risks of debt financing (Kraus & Litzenberger, 1973; Myers, 1984). Since that time, the theory has come to encompass a wide range of theories which posit that firms dynamically weigh off the marginal costs of their capital structure against its marginal benefits, all the time moving towards an optimal position. Dynamic trade-off theory introduces uncertainty, expectations and transaction costs (Fischer, Heinkel, & Zechner, 1989; Hennessy & Whited, 2005; Kane, Marcus, & McDonald, 1984; Strebulaev, 2007; Titman & Tsyplakov, 2007). In terms of cash holdings, the marginal cost is usually conceived as the difference between interest earned on cash holdings and interest that would have to be paid on additional external financing. The marginal benefit is judged in terms of the ability of cash holdings to minimise a range of information asymmetries and transaction costs.

The most important competing hypothesis to trade-off theory is ‘pecking order theory’ (Myers & Majluf, 1984; Myers, 1984), according to which adverse selection ensures that internal financing is monotonically preferred to external financing, and that where external financing is required, debt is preferred to equity. The theory is analytically based on information asymmetries between owners and outside investors, which make external financing more expensive, meaning that firms will forego positive net-present value projects to avoid overpaying. Unlike trade-off
theory, there is no presumption that firms are targeting an optimal capital structure. Against empirical evidence that the pecking order does not always hold in practice, Jensen (1986) has argued that debt financing may be more prominent than the pecking order theory predicts since it commits managers to pay out future cash flows. This reduces the agency costs to shareholders of ‘free cash’ that is available for spending at the discretion of managers. More recently, Anderson and Carverhill (2012) have created a model in which firms’ optimal cash level is adjusted dynamically according to expected earnings; this is consistent with a ‘pecking order’ of funds, but as a function of business conditions, not as a universally-applicable heuristic.

A large literature drawing upon these theoretical foundations empirically investigates the determinants of corporate cash holdings. A range of variables relating to information asymmetry and transaction costs have been tested, with inconsistent and sometimes contradictory results. A number of studies, for example, link firm size (Al-Najjar, 2013; Almeida et al., 2004; Iskandar-Datta & Jia, 2012) and maturity (Bigelli & Sanchez-Vidal, 2012; Dittmar & Duchin, 2011) with the degree of financial constraint, with constrained firms thought to hold larger cash hoards. Another group of cross-country studies focuses on firms’ operating context, arguing that firms will hold more cash where the financial system is underdeveloped (Khurana et al., 2006), or more specifically where legal protection of investors is weak (Dittmar, Mahrt-Smith, & Servaes, 2003; Kusnadi & Wei, 2011). All of these arguments face an empirical challenge in the Mexican case. They fail to explain a secular increase in cash holdings across firms of varying sizes and sectors in a single country context over a period of improving investment climate and a broadly optimistic economic outlook.

At a deeper analytical level, most of these studies reflect two flawed assumptions. The first is that causality flows from changes in corporate operating characteristics to changes in capital structure. As argued by Guo and Suliman (2010), there are actually four possible relationships between corporate operating characteristics and capital structure: first, corporate operating characteristics cause changes in capital structure; second, capital structure causes changes in corporate operating characteristics; third, corporate operating characteristics and capital structure are mutually causal; and, fourth, the two are causally independent. The
theory of financialisation central to this thesis is premised upon the notion that 
material changes in the world market which have afforded new financing 
opportunities to corporations are affecting their investment behaviour. This suggests 
that capital structure and operating characteristics are likely to be mutually causal.

Second, these studies are based on the presumption that cash is an internal 
source of funds which will ultimately be used to finance productive investment. This 
can be contrasted with heterodox theories which view the firm as a balance sheet 
manager, with no presumption that funds will be invested in directly productive 
activities (Minsky, 1976, 2008; Toporowski, 1993, 2008). Accordingly cash and 
cash equivalents may themselves be seen as an investment. The latter view of the 
firm informs much of the literature on financialisation, as reviewed in chapter three, 
permeating both post-Keynesian (for example Lazonick & O’Sullivan, 2000; 
Orhangazi, 2007; Stockhammer & Grafl, 2010) and Marxian (for example Foster, 

9.3 DATASET AND SAMPLE STATISTICS

The data are the same as those analysed in chapter eight. They come from the 
financial statements of publicly-listed Mexican non-financial firms, as aggregated in 
the Economatica database. The period available is from the fourth quarter of 1989 
until the present period. Due to a major change in accounting methodology (from 
GAAP-MEX to IFRS\(^1\)), the data for 2011-12 have not been used. Quarterly data has 
been used in order to maximise the ability to capture the potentially volatile flows of 
financial assets, and to avoid year-end reporting biases\(^2\). According to International 
Accounting Standard 29 on "Hyperinflationary Economies", the last hyperinflationary period for the Mexican peso was in 1998. The use of ratios 
partially mitigates this problem since both numerator and denominator are likely to 
be affected, and where there are identical effects upon the denominator in both

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\(^1\) In 2011, all firms switched from the Generally Accepted Accounting Principles of Mexico (GAAP-MEX) to the International Financial Reporting System (IFRS). Some firms introduced some of the changes required by the switch prior to this date.

\(^2\) Note that only year-end statements are audited.
independent and dependent variables. Nonetheless, results prior to 1998 should be treated with caution, and the main argument is built on trends post-2000.

The panel data are unbalanced. As shown in figure 8.01 in the previous chapter, the total number of active publicly-listed non-financial firms included in the *Economatica* database rises from under 20 firms in 1988 to peak at 140 firms in 2000 before falling back slightly in recent years\(^3\). In total over the whole period, there are 178 non-financial firms in the dataset, 113 of which are active in the most recent period. There are 10,324 individual observations in total. Distribution of firm observations over time shows that five per cent of firms are observed for roughly three years or less; 50 per cent survive for over 15 years; and the oldest five per cent are observed for the entire period of 23 years.

There are firms from 16 different sectors\(^4\) included in the dataset. Of this, four sectors are more significant in terms of the number of firms represented (see table 8.01, chapter eight): manufacturing (38 per cent of firms, or 44 per cent of observations); retail (13 per cent of firms, or 14 per cent of observations); construction and information (both with approximately 10 per cent of firms, or 9 per cent of observations). Initially the sample is made up almost entirely of manufacturing firms. In the earlier period (1989Q4 to 1999Q4), manufacturing firms account for 44 per cent of firms, but only 39 per cent in the later period (2000Q1 to 2010Q4); construction and information firms account for a rising share over time. The proportion of manufacturing firms to non-manufacturing firms was roughly maintained throughout the later period.

Unlike sector, where firm characteristics do not vary\(^5\), a firm’s size may change over time in both absolute and relative terms. For this reason, and strictly for indicative purposes, the firms have been divided into the largest 25\(^{th}\) percentile, the middle 50\(^{th}\) percentile, and the smallest 25\(^{th}\) percentile, by total assets\(^6\). By definition therefore the largest 25\(^{th}\) percentile contains one-quarter of the individual observations; however it does not necessarily contain one-quarter of firms. Analysis

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3 Multiple share classes have been treated as a single corporation.
4 North American Industry Classification System (NAICS), level one.
5 It is possible that a firm could switch sector, but in practice it was verified that they have not.
6 The stock of total assets was preferred to other possible measures of firm size. This was to avoid the greater volatility associated with the use of the flow figure for revenues; data on the number of employees, a measure commonly used to differentiate firms by size, was unavailable.
in the previous chapter shows that, in terms of size, the structural composition of the sample is consistent over time.\(^7\)

The analysis in chapter eight found that there had been a significant increase in firm holdings of cash and cash equivalents,\(^8\) therefore the dependent variable of interest is the level of cash and cash equivalents as a share of total assets (\(CSH\_TA\)).\(^9\) Ratios are used throughout to normalise the data. Changes in the holdings of these highly liquid assets are assessed against changes in capital structure: long-term bonds as a share of total liabilities\(^10\) (\(BNDSLT\_TL\)); debt as a share of total liabilities\(^11\) (\(DBT\_TL\)); and available internal funds, as approximated by earnings before interest and tax as a share of net operating revenues (\(EBIT\_REV\)). Data from the balance sheet and income statement were preferred to those from the cash flow statement due to the more complete coverage of the former.\(^12\) The use of earnings before interest and tax\(^13\) has the advantage of capturing internal funds available before decisions are made about whether to make financial investments (or repayments), and before taxes, where accounting techniques used to manipulate tax payments and changes in tax regulations over time introduce additional complications. The use of retained earnings would suffer from the same complications (reflecting the accumulation of net income/losses over time) and additional ones related to adjustments for items such as accruals from non-monetary assets, changes in the fair value of financial instruments and other assets, and equity valuations for mergers and acquisitions.

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\(^7\) It would have been desirable to disaggregate the data by level of foreign revenue and ownership structure. The former would have allowed assessing changes in the capital structure – liquid asset relationship in relation to the degree of export orientation, while the latter would have allowed analysis of the importance of various forms of ownership. Unfortunately, the data are not available, leaving such analysis for a future date.

\(^8\) Cash is measured at nominal value and consists of non-interest bearing bank deposits and restricted cash. Cash equivalents consisting principally of short-term bank deposits and fixed-rate investments with original maturities of three months or less are recorded at acquisition cost plus accrued interest income not yet received, which is similar to listed market prices.

\(^9\) For the older accounting template for industrial firms (IND&COMMX), cash and cash equivalents is a separate line item from short-term investments. For the newer template (IND2MEXICO), short-term investments needed to be subtracted from cash and short-term investments to arrive at the same.

\(^10\) Long-term bonds was selected over either short-term bonds or the sum of long- and short-term bonds due to the parallel trajectory of long-term bonds with cash holdings uncovered in chapter eight.

\(^11\) This is the sum of both short- (less than one year) and long-term (greater than one year) debt.

\(^12\) Moreover, while the cash flow statement does offer cash from operating activities, it does not disaggregate the figure for cash from financing activities between debt, securities and equity.

\(^13\) EBIT is equal to net operating revenues less the cost of goods sold and operating expenses. For the older accounting template for industrial firms (IND&COMMX), EBIT is used. For the newer template (IND2MEXICO), both EBIT and its Spanish equivalent ‘utilidades (perdidas) antes otros ingresos/gastos’ are variously used and had to be manually reconciled.
Two other candidate independent variables were considered. Foreign liabilities as a share of total liabilities could reveal any impact that increased reliance on foreign funding has on cash management. Derivatives as a share of total assets could provide a test of the relationship between anticipated volatility and cash holdings. However, in both cases, the limited availability of data precluded this further analysis.  

9.4 ANALYSIS I: WHOLE SAMPLE AGGREGATE RELATIONSHIP

As a first step, the aggregate relationship, that is the relationship across the whole sample of listed firms as opposed to individual firms, was examined between capital structure and cash management. Bank debt as a correlate of increased cash holdings was ruled out as an independent variable at the aggregate level due to the pronounced downward trend in bank debt as a share of liabilities during the period in question. Equity was ruled out for similar reasons. Therefore, it was left to examine whether increases in cash holdings are more closely associated with increased bond financing, or with increased profitability.

From descriptive statistics (table 9.01), it is clear that $CSH\_TA$ is skewed to the right, as might be expected for a ratio variable with most observations near zero. $BNDSLT\_TL$ is also skewed right, though less severely so. $EBIT\_REV$ is the most platykurtic, and appears to be bimodal with peaks around 15 and 27 per cent. For the sake of completeness, the bank debt ratio was also examined. $DBT\_TL$ is skewed left, though inspection of the histogram suggests this may be a multimodal variable perhaps reflecting structural composition effects in the sample. On balance, this suggests that the variables of interest are non-normal.  

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14 Disaggregated data on derivatives holdings is only available from 2005, and then only for a limited sub-set of firms.
15 It is possible that increased cash holdings are correlated with decreased bank loans if the former reflects decreased access to bank loans which firms are compensating for by holding increased cash. However this hypothesis is not tested here.
16 An alternative measure is cash from operating activities as a share of net operating revenues ($CSHOP\_REV$). This has the advantage of excluding non-cash profits generated from depreciation, intangibles, etc.. $EBIT\_REV$ has been preferred in the analysis since there are more observations available (more firms make income statement data available over cash flow data), and because preliminary visual inspection suggests an upward trend in $EBIT\_REV$ from 2000, whereas $CSHOP\_REV$ is flat.
Three methods were subsequently used to examine the relationship between the variables: basic OLS estimation, cointegration testing, and Granger causality testing. First, results of the simple OLS regression of bond financing on cash holdings give the impression that there may be a relationship. The coefficient of bond financing is significant\(^\text{17}\) at 0.16, suggesting that the cash holdings ratio is approximately 16 per cent (or about one-sixth) of the bond financing ratio. R-squared is 0.6517. A scatter plot of the two-way data points of cash holdings and bond financing, along with the fitted values from the regression is shown in figure 9.01, which gives the appearance of a linear relationship. However, the Durbin-Watson statistic, at significantly less than two, indicates positive serial correlation, and therefore hypothesis tests may be invalid.

\(^{17}\)Testing is conducted at the five per cent significance level unless otherwise noted.
Regressing $\text{EBIT}_\text{REV}$ on $\text{CSH}_\text{TA}$ yields a significant coefficient of 0.12 but an R-squared value of only 0.3645. This suggests that bond financing has more power in explaining levels of cash holdings than internally generated funds. However, it is possible at this stage that the relationships are under- or mis-specified, as indicated by the low Durbin-Watson statistic. An additional check of the robustness of these relationships is to examine the relationship between first differences of the variables. The results of the scatter plot of first differences of $\text{CSH}_\text{TA}$ and $\text{BNDSL}_\text{TL}$, in figure 9.02, show no clear relation, reflecting the intuition gained through inspection of the descriptive statistics, and suggesting that the apparent relationship shown previously in aggregate levels may be a spurious one.

Regressing $\text{CSHOP}_\text{REV}$, that is cash from operating activities as a share of net operating revenues, on $\text{CSH}_\text{TA}$ yields a significant coefficient of 0.08 but an R-squared value of only 0.0674. It was argued in chapter eight that $\text{CSH}_\text{TA}$ is a better proxy for the availability of internal funds than $\text{CSHOP}_\text{REV}$.

Other possible explanations for the absence of a clear relationship are discussed in the section on firm-level relations below.
It seems likely that the most powerful predictor of the $CSH\_TA$ ratio in any given period would be its value in the previous period. OLS regression was conducted regressing the lagged value of $CSH\_TA$, as well as $BNDSL\_TL$ and $EBIT\_REV$ on $CSH\_TA$. The coefficient of bond financing is once again significant, though at a more modest level (0.05); the coefficient of profitability is insignificant and near zero. As expected, the coefficient for the lagged value of $CSH\_TA$ is large (0.70) and significant. The overall R-squared value is 0.8114. Durbin-Watson statistics are ineffective in the presence of lagged dependent variables, however Breusch-Godfrey serial correlation testing rejects the null of no serial correlation for the equation with one lag.

With doubts over the robustness of basic OLS estimation, the next step is to examine whether or not the aggregate time series are cointegrated. Using the augmented Dickey-Fuller test, for both $CSH\_TA$ and $BNDSL\_TL$ the null

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Figure 9.02: Scatter plot of first differences of bond financing and cash holdings (aggregated for all firms)

Nearly identical results are obtained if $CSHP\_REV$ is used as the ratio for internally-generated cash rather than $EBIT\_REV$. 

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$^{20}$ Nearly identical results are obtained if $CSHP\_REV$ is used as the ratio for internally-generated cash rather than $EBIT\_REV$. 

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hypothesis of a unit root can be rejected with zero lags and trend included; however, for all other lag lengths, both trended and non-trended, the null hypothesis of a unit root can not be rejected. For EBIT_REV, the null with zero lags, trended and non-trended can not be rejected; nor can the null for all greater lag lengths\textsuperscript{21}. The modified Dickey-Fuller $t$ test (known as the DF-GLS test) is an augmented DF test with the time series transformed via a Generalised Least Squares (GLS) regression before performing the test. The null hypothesis of a unit root can not be rejected for all lag lengths at all significance levels for variables CSH_TA and BNDSLTL_TL. For EBIT_REV the null hypothesis can be rejected for one lag; for all greater lags the null can not be rejected\textsuperscript{22}. Finally, the Phillips-Perron unit root test can be viewed as Dickey–Fuller statistics that have been made robust to serial correlation by using the Newey–West heteroskedasticity- and autocorrelation-consistent covariance matrix estimator. The Phillips-Perron test can not reject the null hypothesis of a unit root for CSH_TA, BNDSLTL_TL and EBIT_REV, with a Newey-West lag length of three\textsuperscript{23}.

On the balance of evidence presented, it appears that CSH_TA, BNDSLTL_TL and EBIT_REV all contain a unit root (while CSHOP_REV does not), allowing the next step of cointegration testing. First, for the Engle-Granger residuals-based approach the cointegrating regression is performed; if the variables are not cointegrated, the residuals will be I(1); if they are cointegrated, the residuals will be I(0). To test this, a Cointegrating Regression Augmented Dickey-Fuller (CRADF) test is conducted. For CSH_TA and BNDSLTL_TL the null hypothesis of no cointegration can not be rejected\textsuperscript{24}. The same was true for the reverse cointegrating regression. Conducting the CRADF test of CSH_TA and EBIT_REV also does not allow the rejection of the null hypothesis of no cointegration in either direction. A second test of cointegration is the Error Correction Model (ECM) t-test. If the variables are cointegrated, then the coefficient on the disequilibrium error should be negative and significant. For CSH_TA and BNDSLTL_TL, the null hypothesis that the

\textsuperscript{21} For CSHOP_REV, for all relevant lag lengths, with and without the inclusion of a trend, the null hypothesis of a unit root can be rejected.

\textsuperscript{22} The null hypothesis of a unit root can be rejected for the variable CSHOP_REV for all lags less than or equal to five.

\textsuperscript{23} The null hypothesis of a unit root can be rejected for the variable CSHOP_REV at the default lag length.

\textsuperscript{24} This is true both with and without a constant, and at all lag lengths.
two variables are not cointegrated can be rejected; however the null can not be rejected for the reverse relationship. The ECM t-test of \( \text{CSH}_\text{TA} \) and \( \text{EBIT}_\text{REV} \) allows rejection of the null hypothesis that the variables are not cointegrated for the reverse cointegration only. Finally, where the previous approaches are of low power, cointegration testing using the Johansen (1991) system-based reduced rank regression approach is preferred. According to this test, there are no cointegrating relations under all five trend assumptions\(^{25}\) for either \( \text{CSH}_\text{TA} \) and \( \text{BNDSLTL}_\text{TL} \), or for \( \text{CSH}_\text{TA} \) and \( \text{EBIT}_\text{REV} \). However, Pesaran, Shin and Smith (2001) have argued that the critical values differ depending on whether or not dependent and independent variables are I(0) or I(1). Using their table of asymptotic critical value bounds of the F-statistic for I(1) variables, there is a cointegrating relation under the assumption of a restricted intercept and no trend for the variables \( \text{CSH}_\text{TA} \) and \( \text{BNDSLTL}_\text{TL} \). In sum, the evidence suggests that while the three variables of interest are I(1), the evidence over cointegration is inconclusive.

Finally, Granger causality testing attempts to establish precedence in time. If event A occurs before event B, then A is said to have Granger caused B. If the prediction of the current value of \( y \) is improved by using past values of \( x \), then \( x \) is said to Granger cause \( y \). By transposing \( x \) and \( y \), it is possible to test whether \( y \) Granger causes \( x \). \( \text{BNDSLTL}_\text{TL} \) Granger causes \( \text{CSH}_\text{TA} \) for lags of one and two quarters, but not for lags of three quarters and greater; \( \text{CSH}_\text{TA} \) Granger causes \( \text{BNDSLTL}_\text{TL} \) for lags of one quarter only. This suggests that there is a degree of mutual Granger causality between the two variables. Carrying out the test for variables \( \text{CSH}_\text{TA} \) and \( \text{EBIT}_\text{REV} \) does not suggest any Granger causality at any lag length.

Concluding the analysis of the aggregate relationship, basic OLS estimation suggests a significant relationship between \( \text{BNDSLTL}_\text{TL} \) and \( \text{CSH}_\text{TA} \), but not between \( \text{EBIT}_\text{REV} \) and \( \text{CSH}_\text{TA} \). However, inspection of descriptive statistics, histograms and examination of the relationship of first differences gives reason to question the robustness of OLS estimation in these circumstances. While the variables of interest appear to all have a unit root, the evidence on cointegration is

\(^{25}\) No intercept, no trend; restricted intercept and no trend; unrestricted intercept and no trend; unrestricted intercept and restricted trend; unrestricted intercept and unrestricted trend.
inconclusive. Finally, there is some evidence that $BNDSLT_{TL}$ Granger causes $CSH_{TA}$, where no such link exists between $EBIT_{REV}$ and $CSH_{TA}$.

9.5 ANALYSIS II: FIRM-LEVEL RELATIONSHIP USING PANEL TIME SERIES ANALYSIS

I begin with descriptive statistics for the variables of interest at the firm level: $CSH_{TA}$ (cash / total assets); $BNDSLT_{TL}$ (long-term bonds / total liabilities); $DBT_{TL}$ (total debt / total liabilities)$^{26}$; and $EBIT_{REV}$ (earnings before interest and tax / net operating revenue). This shows that three of the four variables ($CSH_{TA}$, $BNDSLT_{TL}$, and $DBT_{TL}$) are skewed to the right, as would be expected for ratio variables where most observations are expected to be above zero (see table 9.02). The left skewness of $EBIT_{REV}$ appears to be caused by an outlier(s). All four variables are leptokurtic, suggesting the need both to eliminate observations of zero and signaling the presence of outliers.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std Dev</th>
<th>Min</th>
<th>Max</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Obs$^{27}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>$CSH_{TA}$ overall</td>
<td>.0187</td>
<td>.0309</td>
<td>-2.112</td>
<td>.4624</td>
<td>4.55</td>
<td>36.88</td>
<td>10100</td>
</tr>
<tr>
<td>between</td>
<td>.0196</td>
<td>.0002</td>
<td>.1618</td>
<td>178</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>within</td>
<td>.0249</td>
<td>-1.964</td>
<td>.4322</td>
<td>57</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$BNDSLT_{TL}$ overall</td>
<td>.0805</td>
<td>.1531</td>
<td>0</td>
<td>.9989</td>
<td>2.46</td>
<td>10.18</td>
<td>10095</td>
</tr>
<tr>
<td>between</td>
<td>.1300</td>
<td>0</td>
<td>.8603</td>
<td>178</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>within</td>
<td>.1058</td>
<td>-7.798</td>
<td>.7662</td>
<td>57</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$EBIT_{REV}$ overall</td>
<td>-1.0624</td>
<td>80.8791</td>
<td>-7.815</td>
<td>5.9394</td>
<td>-94.39</td>
<td>9101.74</td>
<td>9576</td>
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<tr>
<td>between</td>
<td>18.2671</td>
<td>-240.323</td>
<td>.5877</td>
<td>177</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>within</td>
<td>79.5618</td>
<td>-7575.74</td>
<td>239.3176</td>
<td>54</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$DBT_{TL}$ overall</td>
<td>.3459</td>
<td>.2774</td>
<td>-1.419</td>
<td>10.6231</td>
<td>5.23</td>
<td>188.55</td>
<td>10092</td>
</tr>
<tr>
<td>between</td>
<td>.1894</td>
<td>0</td>
<td>.7785</td>
<td>178</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>within</td>
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<td>-1.7574</td>
<td>10.3022</td>
<td>57</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 9.02: Descriptive statistics for firm-level variables

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$^{26}$ While bank debt could be ruled out at the aggregate level due to its declining trend over the period of the dataset, it is included here since it may be relevant at the firm level for specific sectors, size of firm, or time periods.

$^{27}$ The default for Stata is to include observations of zero in the observation count. Observations of zero will be removed in subsequent analysis.
Next scatterplots are examined of the independent variables against the dependent variable $CSH_{TA}$ (for observations which are non-empty for both variables). Table 9.03 summarises the relationships for: the whole sample; the largest quartile of firms (by asset size); and by sector.

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Whole sample</th>
<th>Largest firms</th>
<th>Sectoral detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>$BNDSLT_{TL}$</td>
<td>Positive</td>
<td>Accentuated</td>
<td>+ info - retail</td>
</tr>
<tr>
<td>$EBIT_{REV}$</td>
<td>Not significant</td>
<td>Slight positive</td>
<td>+ mining n/a all else</td>
</tr>
<tr>
<td>$DBT_{TL}$</td>
<td>Negative</td>
<td>Accentuated</td>
<td>- cnstrn, info, mining, retail n/a all else</td>
</tr>
</tbody>
</table>

Table 9.03: Summary of visual inspection of scatterplots

For example, the relationship between $CSH_{TA}$ and $BNDSLT_{TL}$ is positive for the whole sample. That is, as cash as a share of total assets rises, so too do long-term bonds as a share of total liabilities. The positive relationship is strengthened where the scatterplot is limited only to the largest quartile of firms by asset size. When plots are disaggregated by sector, the strongest positive relationship appears to be in the information sector, while the retail sector stands out as having a negative relationship between the variables. Figure 9.03 provides an example of the scatterplot of $CSH_{TA}$ and $BNDSLT_{TL}$ limited to observations of the largest firms.
Mean group estimation

In the prior section, the analysis of aggregated time-series for the whole sample suffers from a number of weaknesses. Simple OLS estimation requires that the variables be stationary, whereas evidence has been presented to suggest that they are stochastic nonstationary. Cointegration refers to a linear combination of non-stationary variables. It may be that the relationship is non-linear. Most importantly, aggregation excludes consideration of unobserved variables. These unobserved variables may be time constant (‘unobserved effects’). When the unit of observation is the firm, time constant unobserved effects capture characteristics such as managerial quality or firm structure. First generation panel time series methods designed to capture these unobserved effects assumed that panel members were cross-sectionally independent. These gave way to methods which address correlation across panel members. Such correlation is likely to be common amongst firms in the same economy or even more so in the same sector.
Recent advances in the analysis of panel data where both the cross-section (N) and the time series (T) are large have introduced techniques to allow for time varying heterogeneity and cross-section dependence (the following draws upon the work of Eberhardt, 2012). These estimators are based on the following general model:

\[ y_{it} = \beta_i x_{it} + u_{it} \]  
where \[ u_{it} = \alpha_{1i} + \lambda_i f_t + \varepsilon_{it} \]

\[ x_{it} = \alpha_{2i} + \lambda_i f_t + \gamma_i g_t + \varepsilon_{it} \]  

\( \beta_i \) is the firm-specific slope on the observable regressor (equation 9.1), while \( u_{it} \) contains the unobservable variables and the error terms. The unobservables (equation 9.2) are composed of fixed effects \( \alpha_{1i} \) capturing time invariant heterogeneity across groups, such as managerial quality; and an unobserved common factor \( f_t \) with heterogeneous factor loadings \( \lambda_i \) which can capture time varying heterogeneity and cross-section dependence, capturing such issues as macroeconomic or sectoral factors. Factors \( f_t \) and \( g_t \) can be non-linear and non-stationary (equation 9.3).

All mean group (MG) type estimators estimate \( N \) firm-specific OLS regressions, and then average the estimated coefficients across groups. The original Pesaran and Smith (1995) MG estimator models unobservables with a linear trend. Equation (9.1) is estimated for each firm, with an intercept to capture fixed effects and a linear trend to capture time varying unobservables. Estimated coefficients are averaged across firms.

The Pesaran (2006) common correlated effects mean group estimator (CCEMG) allows for non-linear unobservable variables. Apart from the regressors \( x_{it} \) and an intercept, the firm-specific regression equation includes the cross-section averages of the dependent and independent variables (using data from the entire panel) as additional regressors. The estimated coefficients are then averaged across panel members.\(^{28}\)

\(^{28}\) A third MG estimator, the augmented mean group estimator (AMG), was dropped due to conformability errors in estimation. The developer of the AMG estimator, Professor Markus
Results for the implementation of the MG and CCEMG (both with and without a firm-specific trend) estimators on the relationship between $CSH\_TA$ and $BNDSLT\_TL$, and between $CSH\_TA$ and $EBIT\_REV$, reporting unweighted coefficient averages, are given in the tables below. Also reported are the coefficient for the independent variable and the intercept using a basic fixed effects regression of the form:

$$ (y_{it} - y_{i}) = (x_{it} - x_{i})\beta + (e_{it} - e_{i}) $$  \hspace{1cm} (9.4)

Unlike the mean group estimations, the basic fixed effects regression does not estimate $N$ firm-specific regressions averaging coefficients across these groups, but calculates a single regression which attempts to account for firm specific effects. If $\beta$ is random and independent of $x$, then fixed effects is unbiased. However, with lagged dependent variables (LDV) and/or heterogeneous coefficients on the LDV and the independent variable, fixed effects is inconsistent. The two sources of this inconsistency with LDV come from fixed-T downward Nickell bias (1981), which does not go away as $N$ gets large but does as $T$ gets large, and the heterogeneity upward bias which remains as $T$ gets large.

Typically within the literature on firm behavior (for example Haw et al., 2011; Kusnadi & Wei, 2011) a number of data cleaning steps may be considered depending on the objective of the analysis. This might include, for example, the elimination of:

- firms with fewer than a minimum number of observations;
- sectors which exhibit distinctive behaviour or those with less than a minimum number of firms;
- firms with negative book value;
- firms exhibiting extreme growth or contraction;
- firms with less than a certain level of assets (for example, book value of assets less than US$10 million); and
- extreme values of variables/ratios of interest at the 1st and 99th percentiles through winsorisation.

Eberhardt, was unable to locate and resolve the problem, advising the author to use the CCEMG estimator.
For the analysis here, the sample was restricted to observations where variables of interest were non-negative (and non-empty). This first restriction limited the sample to 3301 observations over 115 firms, compared to 10324 observations over 178 firms for the unrestricted sample. Following standard practice enumerated above for analysis of firm panel time series, a number of measures were taken to improve data robustness with due consideration of the risks of introducing sample bias. First, firms were eliminated which did not have a minimum of 20 observations (five years) for the variables of interest. Second, firms from anomalous sectors (public administration and real estate) were eliminated. Third, observations were eliminated where the firm was in a situation of negative book value. Finally, observations above the 99th percentile for the variables of interest were removed. After these additional measures, the restricted sample had 2788 observations over 72 firms. The restricted sample was consistent with the whole sample in sectoral distribution, though showed a bias towards larger firms. This is expected, since larger firms are more likely to issue securities; it does not however pose a problem for the analysis since it is the behaviour of these securities-issuing firms which is of interest.

Estimations were made of the relationship between the dependent variable, CSH_TA, and the independent variables (first BNDSLTL_TL, then EBIT_REV), using fixed effects, mean group, and common correlated effects mean group estimators. The estimations were carried out for the whole (restricted) sample (table 9.04) and four sub-sample groupings: first, restricted to the largest quartile of firms by asset size (table 9.05); second, restricted to the period after 2000 when the growth of the aggregated ratios CSH_TA and BNDSLTL_TL increases markedly (see figures 8.08 and 8.04 in previous chapter) (table 9.06); third, combinations of the previous two sub-groupings (table 9.07); and, finally, restricted to the four most significant sectors (manufacturing, construction, information and retail; results described below).

29 There was a single firm in the sector of public administration which displayed outlying behaviour for both variables of interest. The real estate sector was dropped since it is considered to operate according to distinctive funding and investment norms from other non-financial firms.
30 Negative book value is a situation where total assets minus total liabilities is less than zero. It is expected that firms in this position are at or near bankruptcy, and therefore their funding and investment behaviour will be erratic.
31 Observations in the first percentile were not removed since the variables are expressed in ratio form, and negative observations had already been eliminated.
### Table 9.04: Whole sample FE and MG estimation of \( BNDSL_TL \) on \( CSH_TA \)

<table>
<thead>
<tr>
<th></th>
<th>FE</th>
<th>MG</th>
<th>MG</th>
<th>CCEMG</th>
<th>CCEMG</th>
</tr>
</thead>
<tbody>
<tr>
<td>( CSH_TA )</td>
<td>2788</td>
<td>2788</td>
<td>2788</td>
<td>2788</td>
<td>2788</td>
</tr>
<tr>
<td>Number of obs</td>
<td>72</td>
<td>72</td>
<td>72</td>
<td>72</td>
<td>72</td>
</tr>
<tr>
<td>( BNDSL_TL )</td>
<td>0.0085</td>
<td>0.0465</td>
<td>0.0556</td>
<td>0.0285</td>
<td>-0.1124</td>
</tr>
<tr>
<td></td>
<td>[2.86]**</td>
<td>[1.37]^</td>
<td>[1.45]^</td>
<td>[1.26]^</td>
<td>[-0.88]</td>
</tr>
<tr>
<td>Firm trend</td>
<td>n/a</td>
<td>n/a</td>
<td>0.0003</td>
<td>n/a</td>
<td>-0.0013</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[2.22]**</td>
<td>[-1.07]</td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>0.0176</td>
<td>0.0133</td>
<td>-0.0011</td>
<td>-0.0017</td>
<td>0.0200</td>
</tr>
<tr>
<td></td>
<td>[23.86]**</td>
<td>[3.36]**</td>
<td>[-0.14]</td>
<td>[-0.32]</td>
<td>[1.03]</td>
</tr>
<tr>
<td>No. significant trends</td>
<td>n/a</td>
<td>n/a</td>
<td>40</td>
<td>n/a</td>
<td>21</td>
</tr>
<tr>
<td>RMSE</td>
<td>n/a</td>
<td>0.0155</td>
<td>0.0135</td>
<td>0.0127</td>
<td>0.0116</td>
</tr>
</tbody>
</table>

Notes: \( t/z \) statistics are reported in square brackets. Statistical significance at the 20%, 10% and 5% level is indicated with ^, *, and **, respectively.

### Table 9.05: Large firm FE and MG estimation of \( BNDSL_TL \) on \( CSH_TA \)

<table>
<thead>
<tr>
<th></th>
<th>FE</th>
<th>MG</th>
<th>MG</th>
<th>CCEMG</th>
<th>CCEMG</th>
</tr>
</thead>
<tbody>
<tr>
<td>( CSH_TA )</td>
<td>1279</td>
<td>1277</td>
<td>1277</td>
<td>1277</td>
<td>1277</td>
</tr>
<tr>
<td>Number of obs</td>
<td>41</td>
<td>39</td>
<td>39</td>
<td>39</td>
<td>39</td>
</tr>
<tr>
<td>( BNDSL_TL )</td>
<td>0.0158</td>
<td>0.0322</td>
<td>-0.0056</td>
<td>0.0240</td>
<td>-0.0837</td>
</tr>
<tr>
<td></td>
<td>[3.37]**</td>
<td>[1.03]</td>
<td>[-0.06]</td>
<td>[0.62]</td>
<td>[-0.49]</td>
</tr>
<tr>
<td>Firm trend</td>
<td>n/a</td>
<td>n/a</td>
<td>0.0021</td>
<td>n/a</td>
<td>0.0034</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>[0.80]</td>
<td></td>
<td>[0.71]</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.0155</td>
<td>0.0175</td>
<td>-0.2400</td>
<td>0.0084</td>
<td>-0.3536</td>
</tr>
<tr>
<td></td>
<td>[15.04]**</td>
<td>[2.52]**</td>
<td>[-0.99]</td>
<td>[0.38]</td>
<td>[-0.80]</td>
</tr>
<tr>
<td>No. significant trends</td>
<td>n/a</td>
<td>n/a</td>
<td>19</td>
<td>n/a</td>
<td>16</td>
</tr>
<tr>
<td>RMSE</td>
<td>n/a</td>
<td>0.0139</td>
<td>0.0117</td>
<td>0.0114</td>
<td>0.0103</td>
</tr>
</tbody>
</table>

Notes: \( t/z \) statistics are reported in square brackets. Statistical significance at the 20%, 10% and 5% level is indicated with ^, *, and **, respectively.

### Table 9.06: Post-2000 FE and MG estimation of \( BNDSL_TL \) on \( CSH_TA \)

<table>
<thead>
<tr>
<th></th>
<th>FE</th>
<th>MG</th>
<th>MG</th>
<th>CCEMG</th>
<th>CCEMG</th>
</tr>
</thead>
<tbody>
<tr>
<td>( CSH_TA )</td>
<td>1673</td>
<td>1671</td>
<td>1662</td>
<td>1671</td>
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<td>Number of obs</td>
<td>62</td>
<td>61</td>
<td>58</td>
<td>61</td>
<td>58</td>
</tr>
<tr>
<td>( BNDSL_TL )</td>
<td>0.0145</td>
<td>0.0806</td>
<td>0.0403</td>
<td>0.0722</td>
<td>0.0270</td>
</tr>
<tr>
<td></td>
<td>[2.94]**</td>
<td>[1.04]</td>
<td>[3.18]**</td>
<td>[0.94]</td>
<td>[1.92]**</td>
</tr>
<tr>
<td>Firm trend</td>
<td>n/a</td>
<td>n/a</td>
<td>0.0002</td>
<td>n/a</td>
<td>-0.0003</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[1.48]</td>
<td></td>
<td>[-1.16]</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.0207</td>
<td>0.0062</td>
<td>-0.0042</td>
<td>0.0102</td>
<td>0.0079</td>
</tr>
<tr>
<td></td>
<td>[16.32]**</td>
<td>[0.62]</td>
<td>[-0.42]</td>
<td>[0.93]</td>
<td>[0.69]</td>
</tr>
<tr>
<td>No. significant trends</td>
<td>n/a</td>
<td>n/a</td>
<td>27</td>
<td>n/a</td>
<td>20</td>
</tr>
<tr>
<td>RMSE</td>
<td>n/a</td>
<td>0.0163</td>
<td>0.0147</td>
<td>0.0135</td>
<td>0.0122</td>
</tr>
</tbody>
</table>

Notes: \( t/z \) statistics are reported in square brackets. Statistical significance at the 20%, 10% and 5% level is indicated with ^, *, and **, respectively.
Table 9.07: Post-2000 large firm FE and MG estimation of $BNDSLTL_{TL}$ on $CSH_{TA}$

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FE</td>
<td>MG</td>
<td>MG</td>
<td>CCEMG</td>
<td>CCEMG</td>
</tr>
<tr>
<td>$CSH_{TA}$</td>
<td>761</td>
<td>755</td>
<td>752</td>
<td>755</td>
<td>752</td>
</tr>
<tr>
<td>Number of obs</td>
<td>34</td>
<td>30</td>
<td>29</td>
<td>30</td>
<td>29</td>
</tr>
<tr>
<td>Number of groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$BNDSLTL_{TL}$</td>
<td>0.0185</td>
<td>-0.0279</td>
<td>0.0929</td>
<td>0.0406</td>
<td>0.1432</td>
</tr>
<tr>
<td></td>
<td>[2.40]**</td>
<td>[-0.46]</td>
<td>[1.57]*</td>
<td>[2.10]**</td>
<td>[1.25]^</td>
</tr>
<tr>
<td>Firm trend</td>
<td>n/a</td>
<td>n/a</td>
<td>0.0040</td>
<td>n/a</td>
<td>0.0063</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[1.20]</td>
<td></td>
<td>[1.01]</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.0198</td>
<td>0.0177</td>
<td>-0.3658</td>
<td>-0.0076</td>
<td>-0.5903</td>
</tr>
<tr>
<td></td>
<td>[11.28]**</td>
<td>[2.11]**</td>
<td>[-1.13]</td>
<td>[-0.62]</td>
<td>[-1.01]</td>
</tr>
<tr>
<td>No. significant trends</td>
<td>n/a</td>
<td>n/a</td>
<td>12</td>
<td>n/a</td>
<td>8</td>
</tr>
<tr>
<td>RMSE</td>
<td>n/a</td>
<td>0.0150</td>
<td>0.0126</td>
<td>0.0123</td>
<td>0.0111</td>
</tr>
</tbody>
</table>

Notes: t/z statistics are reported in square brackets. Statistical significance at the 20%, 10% and 5% level is indicated with ^, *, and **, respectively.

For the whole sample, the relationship between $CSH_{TA}$ and $BNDSLTL_{TL}$ is significant for the fixed effects estimation though the coefficient is near-zero; the coefficient is positive between 0.03 and 0.06 for the other significant estimations. For large firms over the whole period, the results are not significant, with the exception of the fixed effects estimation, and the signs of the estimations are not consistent. For the period after 2000, all coefficients are positive between 0.02 and 0.04, three of which are significant at the five per cent level. For large firms after 2000, all the significant estimations are positive and ranging between 0.02 and 0.14. This suggests that the relationship between $BNDSLTL_{TL}$ and $CSH_{TA}$ is positive and gets stronger in the period after 2000, especially in larger firms.

Drilling down to the sectoral level, for manufacturing firms, there are no significant coefficients and the sign of the relationship is inconsistent over the whole period. However, the coefficients are universally positive after 2000, with the MG estimation with trend yielding a coefficient of 0.02. For firms in the construction sector, all estimations are positive and significant for the whole period, ranging between 0.04 and 0.10. After 2000, the relationship becomes stronger, ranging between 0.07 and 0.11 for the significant estimations. For firms in the information sector, the coefficient for $BNDSLTL_{TL}$ is positive between 0.03 and 0.07 for all estimations (though only the fixed effects estimation is significant at the 20 per cent level).

---

32 Caution should be taken in the interpretation of these results, as outside of the manufacturing sector, the number of firms under analysis is small, reducing the power of the mean group estimations.
level or better), both for the whole period, and for the period after 2000. Finally, retail firms exhibit decidedly different behaviour. The universally significant relationship is negative, ranging from -0.02 to -0.05 for the whole period; after 2000 the sign is inconsistent and the coefficients insignificant.

To compare the relative influence of bond financing on liquid asset holdings with that of internal funds on liquid assets, the sample was additionally restricted to those observations which satisfied the previous criteria with the additional condition that $EBIT_{REV}$ was non-negative and non-empty. This reduced the sample to 2386 observations over 62 firms.

**Table 9.08:** Whole sample FE and MG estimation of $EBIT_{REV}$ on $CSH_{TA}$

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$CSH_{TA}$</td>
<td>2386</td>
<td>2386</td>
<td>2386</td>
<td>2386</td>
<td>2386</td>
</tr>
<tr>
<td>MG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$CSH_{TA}$</td>
<td>62</td>
<td>62</td>
<td>62</td>
<td>62</td>
<td>62</td>
</tr>
<tr>
<td>$EBIT_{REV}$</td>
<td>-0.0095</td>
<td>-0.0310</td>
<td>0.0183</td>
<td>0.0161</td>
<td>0.0088</td>
</tr>
<tr>
<td>Firm trend</td>
<td>n/a</td>
<td>n/a</td>
<td>0.0003</td>
<td>n/a</td>
<td>-0.0004</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>0.0216</td>
<td>0.0224</td>
<td>-0.0011</td>
<td>0.0069</td>
<td>0.0453</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. significant trends</td>
<td>n/a</td>
<td>n/a</td>
<td>30</td>
<td>n/a</td>
<td>20</td>
</tr>
<tr>
<td>RMSE</td>
<td></td>
<td></td>
<td>0.0161</td>
<td>0.0136</td>
<td>0.0118</td>
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</table>

Notes: t/z statistics are reported in square brackets. Statistical significance at the 20%, 10% and 5% level is indicated with ^, *, and **, respectively.

**Table 9.09:** Large firm FE and MG estimation of $EBIT_{REV}$ on $CSH_{TA}$

<table>
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<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$CSH_{TA}$</td>
<td>1129</td>
<td>1125</td>
<td>1125</td>
<td>1125</td>
<td>1125</td>
</tr>
<tr>
<td>MG</td>
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<td></td>
</tr>
<tr>
<td>$CSH_{TA}$</td>
<td>37</td>
<td>34</td>
<td>34</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>$EBIT_{REV}$</td>
<td>-0.0137</td>
<td>-0.0824</td>
<td>-0.0300</td>
<td>0.0154</td>
<td>0.0088</td>
</tr>
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<td>Firm trend</td>
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<td>n/a</td>
<td>0.0004</td>
<td>n/a</td>
<td>0.0001</td>
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<tr>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Intercept</td>
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<td>0.0305</td>
<td>-0.0191</td>
<td>0.0132</td>
<td>-0.0078</td>
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<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>No. significant trends</td>
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<td>0.0119</td>
<td>0.0116</td>
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</tbody>
</table>

Notes: t/z statistics are reported in square brackets. Statistical significance at the 20%, 10% and 5% level is indicated with ^, *, and **, respectively.
Table 9.10: Post-2000 FE and MG estimation of EBIT_REV on CSH_TA

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FE</td>
<td>MG</td>
<td>MG</td>
<td>CCEMG</td>
<td>CCEMG</td>
</tr>
<tr>
<td></td>
<td>CSH_TA</td>
<td>CSH_TA</td>
<td>CSH_TA</td>
<td>CSH_TA</td>
<td>CSH_TA</td>
</tr>
<tr>
<td>Number of obs</td>
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<td>1509</td>
<td>1506</td>
<td>1509</td>
<td>1506</td>
</tr>
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<td>51</td>
<td>51</td>
<td>50</td>
<td>51</td>
<td>50</td>
</tr>
<tr>
<td>EBIT_REV</td>
<td>0.0020</td>
<td>-0.0641</td>
<td>-0.0420</td>
<td>-0.0440</td>
<td>-0.0288</td>
</tr>
<tr>
<td>Firm trend</td>
<td>[0.16]</td>
<td>[-1.20]</td>
<td>[-0.64]</td>
<td>[-0.61]</td>
<td>[-0.49]</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.0241</td>
<td>0.0288</td>
<td>-0.0092</td>
<td>0.0514</td>
<td>0.0791</td>
</tr>
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<td>No. significant trends</td>
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<td>n/a</td>
<td>21</td>
<td>n/a</td>
<td>11</td>
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<tr>
<td>RMSE</td>
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<td>0.0170</td>
<td>0.0141</td>
<td>0.0128</td>
<td>0.0118</td>
</tr>
</tbody>
</table>

Notes: t/z statistics are reported in square brackets. Statistical significance at the 20%, 10% and 5% level is indicated with ^, *, and **, respectively.

Table 9.11: Post-2000 large firm FE and MG estimation of EBIT_REV on CSH_TA

<table>
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<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FE</td>
<td>MG</td>
<td>MG</td>
<td>CCEMG</td>
<td>CCEMG</td>
</tr>
<tr>
<td></td>
<td>CSH_TA</td>
<td>CSH_TA</td>
<td>CSH_TA</td>
<td>CSH_TA</td>
<td>CSH_TA</td>
</tr>
<tr>
<td>Number of obs</td>
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<td>703</td>
<td>703</td>
<td>703</td>
</tr>
<tr>
<td>Number of groups</td>
<td>29</td>
<td>27</td>
<td>27</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>EBIT_REV</td>
<td>-0.0111</td>
<td>-0.1278</td>
<td>-0.0532</td>
<td>0.0030</td>
<td>-0.0003</td>
</tr>
<tr>
<td>Firm trend</td>
<td>[-0.62]</td>
<td>[-2.12]**</td>
<td>[-1.17]</td>
<td>[0.06]</td>
<td>[-0.00]</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.0254</td>
<td>0.0382</td>
<td>-0.0432</td>
<td>0.0311</td>
<td>-0.0213</td>
</tr>
<tr>
<td>No. significant trends</td>
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<td>n/a</td>
<td>11</td>
<td>n/a</td>
<td>5</td>
</tr>
<tr>
<td>RMSE</td>
<td>n/a</td>
<td>0.0167</td>
<td>0.0124</td>
<td>0.0125</td>
<td>0.0114</td>
</tr>
</tbody>
</table>

Notes: t/z statistics are reported in square brackets. Statistical significance at the 20%, 10% and 5% level is indicated with ^, *, and **, respectively.

Results are presented in tables 9.08 through 9.11. For the whole sample, none of the tests yield significant results, and coefficients range from -0.03 to 0.02. In large firms, the basic mean group estimation shows up a coefficient of -0.08, significant at the ten per cent level. Coefficients range between -0.08 and 0.02. For post-2000 observations, there are no significant tests with coefficients varying between -0.06 and zero. Finally, in large firms after 2000, the mean group estimation is significant at the five per cent level generating a coefficient of -0.13, with coefficients of different tests extending from -0.13 to zero. On balance, though statistical significance is limited, the evidence suggests that the relationship between
EBIT\_REV and CSH\_TA is a negative one. That is, firms which generate higher levels of internal funds hold relatively lower levels of liquid assets.

Finally, it should be noted that the possibility exists to conduct unit root and cointegration tests at the firm level. First generation panel unit root tests, pioneered by Im, Pesaran and Shin (2003) assume idiosyncratic errors are cross-sectionally independent. For this reason they are inadequate to the demands of the dataset of Mexican firms. Second generation tests allow for cross-section dependence in the form of a single unobserved factor (Pesaran (2007) CIPS\textsuperscript{33} test), or multiple factors (Pesaran et al. (2013) CIPSM\textsuperscript{34} test). The problem with both generations of tests is that they are based on the null hypothesis that all groups in the panel have a unit root. In the dataset of Mexican firms it would be trivial to reject the null hypothesis; clearly, for specific variables, some firms’ series will have a unit root and some will not\textsuperscript{35}. For this reason, it would be necessary to individually assess the 178 firms and analyse the compositional effects of those series which contained a unit root. This has been left for future work.

9.6 CONCLUSION

In the analysis of firm decision-making over capital structure, orthodox financial theory makes two critical assumptions. First, that operating characteristics, mainly investment needs, drive the decision around whether or not to seek external funds and in what quantity. Second, that both internally-generated and externally-raised funds are channeled towards investment in non-financial assets. In this chapter, in line with heterodox understandings of the firm, I have posited that capital structure may in fact drive operating characteristics, and remained agnostic about whether firms invest in financial or non-financial assets. This is consistent with the theory of the financialised corporation developed in this thesis.

This hypothesis was tested for the listed non-financial corporation in Mexico. At the aggregate level, basic OLS estimation suggests a significant relationship

\textsuperscript{33} Cross-sectionally augmented Im, Pesaran and Shin (IPS) test (2003).
\textsuperscript{34} Cross-sectionally augmented IPS test in the presence of a multifactor error structure.
\textsuperscript{35} Pesaran (2012) highlights the identification of stationary as against non-stationary series as an area of emerging research. One suggestion is to apply a panel unit root test sequentially on progressively smaller fractions of the dataset, dropping those series for which there is evidence of stationarity.
between availability of bond financing and holdings of highly liquid assets, but not between the availability of internally-generated funds and holdings of highly liquid assets. However, this relationship does not appear statistically robust. The evidence on cointegration is inconclusive, and Granger causality tests suggest that while bond financing Granger causes liquid asset holdings, no such link exists with internally-generated funds. At the firm level, employing new techniques of mean group estimation, I find that the relationship between levels of bond financing and holdings of cash is both positive and significant, whereas that between internal funds and cash holdings is negative and less robust. The relationship between bond financing and cash holdings gets stronger in the period after 2000, especially in the largest firms. At the sectoral level, I find that the relationship between bond financing and cash holdings is strongest in the construction and information sectors, and only appears in the manufacturing sector after 2000.

In sum, this analysis provides original evidence of the financialisation of the Mexican non-financial corporation. Listed enterprises, particularly the largest in the period after 2000, are turning to bond markets for external financing; these enterprises are leading the trend of investment in highly liquid financial assets. It appears that the change in the availability of funding opportunities has permitted firms to increasingly act as balance sheet managers, in line with heterodox understandings.

The analysis has highlighted a number of promising areas for further research. Within the framework established here, the analysis could be extended through the introduction of lag structures into the variables of interest\textsuperscript{36}, as well as by assessing the influence of other independent variables. A similar exercise could be performed with other balance sheet items which have undergone significant changes in levels over recent years, such as intangibles and derivatives. Finally, additional examination of compositional effects could be afforded if data were to be made available on firm characteristics such as levels of foreign revenue or firm ownership structure.

\textsuperscript{36} Chudik and Pesaran (2013) argue that the CCEMG estimator continues to be valid in heterogeneous panel data models with lagged dependent variables and/or weakly exogenous regressors.
10.1 KEY FINDINGS AND CONTRIBUTIONS

I began this thesis with a concern for financialisation as a problem for development. This concern had grown out of an appreciation of finance – understood both as a set of institutions and as forms of capital – as something which is at once creative and predatory, supportive of and in tension with production. Investigating financialisation as a development issue required that I first come to grips with how the phenomenon had been understood theoretically and documented empirically in advanced capitalist economies. What this investigation revealed was the presence of a number of similar tendencies characteristic of financialisation across a range of institutionally diverse settings. This regimented against an understanding of financialisation restricted to a single country or type of countries; it also suggested that causal explanations focused on a particular policy matrix driven by a rentier class might be incomplete, if not misleading.

One of the theoretical contributions of this thesis has been to locate financialisation within the contemporary characteristics of the world market. The overcoming of capitalist crisis through the increasing liberalisation of trade and finance has been dialectically related to the maturation of this market. In its mature form, this has been distinguished by the deepening of the internationalisation of the circuits of commodity and money capital, and the unprecedented internationalisation of the circuit of productive capital; this period has also been notable for the role played by the US dollar as quasi-world money. These changes have brought new
funding and investment opportunities and placed new, especially financial, demands on the fundamental agents of capitalism.

A consequent empirical contribution of the work has been to document the resulting behavioural shifts – the tendencies of financialisation – in enterprises, banks and households across both advanced and emerging capitalist economies. This has confirmed the turn of the non-financial corporation to retained earnings and market-based finance, and its engagement in financial investment; banks have become reliant on market-based funding, with profits coming increasingly from investment banking activities and household lending; household reproduction has itself become increasingly enmeshed with financial intermediation, resulting in both greater indebtedness, but also the assumption of greater market risk in the accompanying asset portfolio.

This empirical analysis made clear however that these epochal transformations in the relations between the agents of capitalism are by no means homogenous. The tendencies of financialisation are being experienced through the complex prism of institutional hysteresis. That is, the forms of financialisation are institutionally specific. It matters whether an economy has historically been reliant on bank-based or market-based financial systems, even though both are coming under increasing pressure from financialisation. While German and Japanese policies in regard to industrial finance, housing and pensions set them apart, their largest enterprises and banks are exhibiting similar behaviour to their counterparts in the UK and the US. This supports the thesis of divergence within convergence, as against that of straightforward divergence which characterises the varieties of capitalism literature. This is financialisation varied, not varieties of financialisation.

A second theoretical advance made in this thesis has been to establish how financialisation, as a global process related to the maturation of the world market, will not only be exhibited in some form in the periphery, but that this form must necessarily be shaped by imperial relations. To better theorise these dynamics, I returned to the literature on imperialism. I resolved upon an understanding of imperialism as a collection of practices, reflecting differential power in the hierarchy of states, which are characteristic of the uneven process of capitalist development. The specific manifestations of imperialism in any single period reflect the characteristics of the world market. In the contemporary era of deep trade, finance
and production linkages, the forces and relations of production in the periphery respond to the imperatives of the capitalist classes of the core in complex, multi-faceted ways. Positioning within the hierarchy of states is neither pre-determined nor static; instead it is affected by the inter-relationship between the state, its constituent social relations and external forces. In this, finance has a pivotal role to play, be it ‘autocentric’ or ‘extraverted’, and constantly in dialectical tension between its role in both coordination and predation.

I have argued that in the context of imperial relations, the behavioural transformations characteristic of financialisation will take a subordinate form in the periphery. As is the case in advanced capitalist economies, there is both a shared essence to the process of financialisation in the periphery and a specificity arising out of institutional realities. At the macroeconomic level, subordinate financialisation is not reducible to any simple measure of capital flows, but is reflected in the subjugation of domestic monetary policies to the imperatives of international capital and the relationship of the domestic currency with world money. The turn of the large non-financial corporation towards market-based finance means a turn towards international capital, introducing market risk and making possible the extraction of domestically-generated surplus, as well as ushering in pressures for engagement with hedging and speculative financial instruments. Banks’ increasing reliance on international capital markets, and disengagement from productive lending threatens the growth of developmental finance. Finally, as household reproduction strategies become ensnared by financial intermediation, their increased indebtedness will be matched by rising holdings of financial assets. The distinctive class structure of emerging capitalist economies may circumscribe what temporary growth potential debt-financed household consumption has afforded in advanced capitalist economies. An emerging elite will desire to hold their assets either denominated in world money or physically located in the core.

The primary empirical contribution of the thesis has been to document and analyse the subordinate financialisation of the Mexican economy and, above all, that of the Mexican non-financial corporation. Historical analysis of inter- and intra-class relations brought to light the particularity of the form of financialisation in Mexico, the foundations for which stem from the actions taken by the Mexican state in response to crises of the 1980s and 1990s, and the failure of Mexico’s capitalist
classes to establish a system of developmental finance. Bank-firm relations in Mexico have been dysfunctional in terms of domestically-oriented development through successive periods of nationalisation, privatisation and ‘extranjerización’; therefore an account of financialisation in Mexico which focused primarily on the role of banks or their purchase by foreign capital would be limiting. This conclusion, and the importance in Marxist theory of the capitalist firm to the process of accumulation, compelled a deeper study of the transformation of Mexican non-financial corporations. The financialisation of the Mexican corporation has consisted of a turn to foreign bondholders and increasing engagement with financial assets, particularly highly liquid ones. Evidence was provided that, in part, this reflects involvement in the carry trade. Against orthodox theories of the firm which argue that investment behaviour determines the choice of finance, this finding makes clear that the availability of different forms of financing influences firms’ investment behaviour.

At least two features account for the specifically subordinate nature of the financialisation of the Mexican firm. First, foreign capitalists who hold Mexican private securities extract profits regardless of whether or not the new financialised strategy is a successful one for Mexican firms. US investors’ purchases of private Mexican securities have increased sharply in the last decade. Second, orienting domestic policy towards the defence of such strategies of financial accumulation poses two major disadvantages. Maintenance of a strong peso exchange rate has required that the Banco de México hold increasing levels of international reserves\(^1\). As figure 10.01 illustrates, international reserves have risen from the rule-of-thumb of three months-worth of imports after the peso crisis in 1995, rising to nearly 20 months by the end of 2011. These are funds earning little or no interest, and therefore coming with a heavy opportunity cost (Painceira, 2009; Rodrik, 2006). This opportunity cost is being borne by the Mexican taxpayer in the form of reduced government spending on public services.

\(^1\) Petroleum exports from state-owned oil multinational *Pemex* account for nearly 90 per cent of Mexico’s international reserves (Rodríguez, 2013).
Second, high domestic interest rates associated with the inflation-targeting policy serve the requirements of both international financial capital and domestic capital which holds its liabilities denominated in world money. This has resulted in a bifurcated domestic funding market, with large corporates able to tap cheaper international sources of financing, while domestic SMEs are left reliant on retained earnings to fund their investment, shut out of expensive credit markets and unable to enter capital markets. With smaller domestic suppliers lacking the funds to invest, large firms turn increasingly to international suppliers, finding that local rivals are unable to compete.

The implications of these changes for real economic variables have not been the focus of this research. This has been precluded by the need to first establish the theoretical basis for the phenomenon of subordinate financialisation, and to document its empirical manifestations. Nonetheless, the implications which are suggested by the analysis pose substantial challenges for development. Subordinate financialisation plays a significant part in explaining deficient levels of fixed capital formation and consequently disappointing rates of GDP growth in Mexico. Large transnational firms invest increasingly in financial assets while small and medium firms are unable to secure sufficient funds for investment. This low-investment, low-
growth trajectory has exacerbated the pressures on workers, who have not only seen their share of output fall\(^2\), but who have endured falling real wages and high levels of informality and underemployment\(^3\). The combination of accelerated financial accumulation with a stagnant wage share plays a role in Mexico’s high levels of inequality\(^4\).

### 10.2 FURTHER ISSUES ARISING

At the level of general theory, my framework has pivoted on the transformations in the relations between enterprises, banks and households. This choice was a strategic one, but it is obviously not exhaustive. Within the financial sector, the focus on banks reflected the critical role which they continue to play in emerging capitalist economies. The focus on the non-financial corporation reflected both a theoretical commitment to the important linkages between changes in the sphere of production and those of the financial system, and the empirical realities of financial sector under-development in Mexico. This is not to say that other researchers should not theorise and empirically investigate the tendencies of financialisation in the government sector and in non-bank financial intermediaries. In all sectors, there is a need for both quantitative and qualitative microeconomic research into the motivations and incentives as understood by the actors themselves.

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\(^2\) INEGI system of national accounts records beginning in 1993, show the share of wages (including social contributions) falling as a share of net value-added from 43 per cent to 31 per cent in 2010 (figure 6.34, chapter six).

\(^3\) Correa et al. (2012, p. 271), using Banco de México statistics on employment and consumer price inflation, reveal that the real minimum wage has fallen from nearly 120 pesos per day in 1980 to 40 pesos per day in 2000, at which level it has stagnated for the last decade. Today, some 58 per cent of the labour force earns less than the equivalent of three times the minimum wage.

Analysis of INEGI employment survey data (2010) suggests that over half of the working age population is excluded from the formal labour market, a figure which has been steadily rising since 2000. This huge number of informal workers and workers who are available but considered inactive explains the persistently low levels of official unemployment reported in Mexico.

\(^4\) According to the World Bank’s World Development Indicators, since 1992 the share of income held by the highest ten per cent in Mexico has hovered at around 40 per cent. This compares favourably only with the outlying nations in terms of inequality such as South Africa and Brazil (though the latter has been improving over the past decade). Even these data hide the concentration occurring at the very top in terms of accumulated wealth. Correa et al. (2012, p. 270) point out that fifteen Mexicans on the *Forbes* list of billionaires were worth $25.6 billion in 1996, while by 2008 nine people had amassed $96.2 billion.
In relation to financialisation in emerging capitalist economies, the boundaries of analysis in this thesis were circumscribed by the quality and availability of the data. If increased or improved data were to become available, this would open further avenues for investigation. A number of countries, including Mexico for example, are working on making national accounts data available in stocks. This would allow more meaningful cross-country comparison of sectoral transformations, particularly in the non-financial corporate sector. Short of this, analysis of listed firms’ financial statements data, replicating the analysis conducted for Mexico herein, is already possible.

On the question of subordinate financialisation in Mexico, while I have concentrated on the non-financial corporation for the reasons already discussed, future research should probe similar questions in relation to the financial, household and state sectors. Within the non-financial sector, if national accounts data do become available in levels, it would be possible to better assess how much the picture of listed firms developed herein is representative of the sector as a whole. Akin to this, it may be possible to investigate the comparative financialisation of foreign transnational corporations which operate in Mexico, but do not list in Mexico. This would require analysis of country-disaggregated financial statements as they are made available by firms in their respective countries of origin/listing or, at least, detailed case study analysis. For the analysis of listed Mexican firms, as noted in chapters eight and nine, if data were made available on export revenues and ownership structures, additional insight might be drawn about the dynamics of financialisation. Are exporting firms or firms majority-owned by foreign capital more or less likely to engage in financialised behaviour? Are their strategies distinctive from those of domestic capitalists, and are they more or less successful? Finally, within the strictures of what data were available for this thesis, future research might push the boundaries of the econometric analysis by, for example, introducing lag structures, assessing the influence of other independent variables, or conducting cointegration tests in panels. In a similar vein, the types of analysis

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5 The number of multinational firms which make available detailed financial statements disaggregated by individual country is severely limited since the rules of the International Accounting Standards Board do not require it (Shaxson, 2011, p. 251).
applied in chapter nine could be applied to understanding marked changes which were observed in firms’ levels of intangibles, derivatives and deferred taxes.

10.3 WHAT IS TO BE DONE?

Throughout this thesis, I have emphasised the global, systemic and structural character of financialisation. This is in contrast to those accounts of financialisation which treat it as an Anglo-Saxon error in judgment, a cyclical trend, or a straightforward policy outcome. This is not to deny that the Anglo-Saxon countries and their policies are, in some sense, leading the transformation; or that a certain amount of cyclical de-financialisation is inevitable in the wake of the excesses committed in the run-up to the ‘Great Recession’. However, while the predatory outgrowths of financial expansion can be periodically reined in, epochal changes in the size and form of finance are immanent in the transformed needs of global production and exchange, and respond to opportunities for financial accumulation which have accompanied the internationalisation of the world market.

For this reason, it is not surprising that attempts to re-regulate finance in the wake of the crisis which began in 2007 have been, so far, disappointing (Calomiris, 2013; Helleiner et al., 2011; Kalinowski, 2013). As discussed by Costas Lapavitsas (2013), market-negating regulations which controlled prices, quantities and the functions of financial institutions in the post-war period have been dismantled. Such regulations were based on an analysis which held that liberalised financial markets could inhibit productive accumulation. Those market-negating regulations which remain, such as the lender-of-last-resort function and deposit insurance guarantees, serve perversely to increase financial profits while socialising associated costs. The principal form of regulation during the contemporary period has been not market-negating but market-conforming. These regulations, largely institution-specific in application rather than system-wide, have been designed to overcome market failures. They are based in the belief that optimal investment and accumulation can only occur in the presence of properly-functioning liberalised financial markets.
While the financial crisis has laid bare the weaknesses of market-conforming regulation and even led to efforts towards improved ‘macroprudential’ oversight, there has been little progress in establishing new forms of market-negating regulation. Beyond the obvious fact that such initiatives are opposed by the sizable political influence wielded by international financial institutions, the analysis which underlies this thesis suggests that there is an additional, structural reason for their failure. The transformation of the world market, involving the deepening of the internationalisation of circuits of commodity and money capital, and the internationalisation of production, has rendered industrial capital dependent on and complicit with the liberalised financial market agenda. Moreover, without a form of world money which can stabilise exchange rates, capital accumulation remains dependent on growing financial markets. In a similar fashion, household reproduction strategies are increasingly ‘locked in’ to rising capital and housing markets (Engelen, 2003; Langley, 2004; Toporowski, 2010b), creating a constant demand for new asset classes. Not surprisingly this sets up a powerful political constituency which backs continued financialisation (Watson, 2008).

Does this suggest that the ever-increasing financialisation of the global economy is inexorable? The implications of financialisation were not the focus of this thesis for the reasons previously outlined, however the prospects of continued financialisation for investment and employment, as well as for inequality and environmental sustainability are, in my opinion, ominous. Further exploration of these implications, and the transmission channels through which they operate, is urgently needed. This would be greatly aided by increased transparency in the form of country-disaggregated financial reporting for multinational enterprises and banks.

However, in the absence of such information, the age-old question must be asked – what is to be done? As discussed above, one central element of a progressive agenda for de-financialisation must be the establishment of a form of world money which can act to stabilise international exchange rates. If accompanied by an internationally-agreed framework for the implementation of capital controls,

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6 This has led to a flurry of initiatives including the upgrading of the Financial Stability Forum of the Bank for International Settlements to a Financial Stability Board, and the creation of the Financial Stability Oversight Council in the US, the European Systemic Risk Board, and the Financial Policy Committee of the Bank of England.
Chapter 10 Conclusion

this would serve to harness the international circuit of money capital for the needs of productive accumulation. Combined with public intervention to ensure the provision of developmental finance, this could serve to break industrial capital’s dependency on and alignment with liberalised financial markets. This would have the indirect benefit of rendering needed accompanying regulatory reforms more politically viable.

Of course, the difficulties of procuring international agreement for such an agenda can not be overstated. A large literature has sprung up around questions of financial regulation and the failure of ‘global governance’ to address them. This should bring into focus the limitations of purely policy-based change. In recognition of this, citizens, workers and social movements must build pressure for larger structural change through national struggles for the disengagement of social reproduction from financial intermediation. This involves campaigns not only against the privatisation of pensions, housing and social services, but advocacy in support of new forms of democratic, public provision of the same. Essential to any such agenda will be the need to assert democratically-accountable, public control over the process of credit provision. Public banks can be used to advance a democratically-decided social agenda including long-term large-scale investment in confronting the challenges of natural resource depletion (Lapavitsas, 2009d).

An even greater challenge is faced by citizens of those nations undergoing subordinate financialisation. They face similar problems with fewer resources and from a position of relative geopolitical weakness. However, this is not to suggest that subordinate financialisation is a mechanically-determined fate which awaits all emerging capitalist economies. There are numerous examples of countries which have taken measures to harness finance, rejecting the characterisation of such steps as ‘financial repression’. Once again, it is up to citizens, workers and social movements to create political coalitions which will take full advantage of improved opportunities for the use of capital controls (Grabel, 2011); support the establishment

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7 See, for example, the special issue of the *Review of International Political Economy* on governing global finance and banking with an introduction by Randall Germain (2012).
8 The list of countries which have used capital controls in recent years includes Argentina, Brazil, Chile, China, Czech Republic, Iceland, India, Indonesia, Korea, Malaysia, Pakistan, the Philippines, the Russian Federation, Thailand and the Ukraine (IMF, 2011; Reinhart, 2012). Public development banks are large players in their banking systems in a number of countries including Turkey, Rwanda, Fiji, Brazil and the Philippines (de Luna-Martinez & Leonardo Vicente, 2012).
or expansion of public development banks (Girón et al., 2010); and oppose the privatisation of pensions, housing and social services.

In Mexico, the government of President Enrique Peña Nieto has introduced a sweeping set of financial sector reforms (SHCP 2013). While much of the discussion for public consumption has been on the strengthening of development bank lending in ‘priority areas for national development’, ostensibly a market-negating reform, the underlying ethos reinforces the prevailing view of the importance of financial market liberalisation and deregulation. Market-conforming reforms include: increasing ‘financial inclusion’; facilitating medium-sized enterprises’ access to market-based finance; increasing financial institutions’ lending through improvements to the legal framework\(^9\); and the removal of limits on foreign investment in ratings agencies, insurance agencies and multiple-purpose financial institutions (Sofomes). In the wake of the global financial crisis, the establishment of a permanent Council for Financial System Stability reflects a familiar gesture towards the need for greater macroprudential oversight of the economy. While the actual implementation and therefore the implications of these initiatives will not be clear for some time, it appears that business-as-usual is the most likely outcome.

Reversing subordinate financialisation in Mexico will require a radical policy agenda. A clear framework for the implementation of capital controls is required, in order that monetary policy may be oriented towards domestic developmental objectives rather than the needs of volatile international capital and its domestic partners. This will require a re-alignment of the central bank away from its current obsession with inflation and towards domestic growth and employment objectives. A massive increase in the provision of developmental finance should support the introduction of long-term plans for industrial upgrading and improvements in workers’ skills. This would involve differential pricing of credit for priority sectors, and restrictions on credit for consumption. Expansion of the public realm in the provision of social services is required to prevent the further ensnarement of Mexican workers in costly layers of financial intermediation.

A brief sketch of the contours of such a radical policy agenda belies the revolution in social relations which must occur for it to be implemented. Nothing

\(^9\) A highlight of which is a strengthening of the ability of creditors to seize debtors’ assets.
short of a complete re-drawing of the social contract is required to: achieve the prerequisite tax and land reforms; see an end to corporatist structures in the workplace; and first reverse, then dramatically increase workers’ share in economic gains. Such changes fly in the face of the neoliberal state project, and the interests and ideologies of Mexico’s political classes and their international allies. To date, there is scant evidence that the parties of the left are up to the challenge of uprooting this neoliberal hegemony (Rodríguez Araujo, 2010).

Returning to a global perspective, the path taken by reform efforts to date is indicative of the continued dominance of the ‘financial deepening’ view of development (Gurley & Shaw, 1967; McKinnon, 1973; Shaw, 1973). In a classic piece written over thirty years ago, Cuban-born economist Carlos Díaz-Alejandro (1985) cautioned against extensive financial liberalisation, believing that it would not only fail to generate long-term investment, but that it would provoke financial instability. He has since been proven prophetic. What he could not have foreseen was the way that changes in the world market would mutually reinforce this neoliberal agenda, ushering in a structural transformation in the relationship between enterprises, banks and workers. Putting the financialisation genie back in the bottle will not be easy. But it must begin with a reconsideration of the role of finance in development.
APPENDIX A: Chapter 4 source notes

Figure 4.01: Financial sector total financial assets as a share of GDP

For the USA, Z1 flow of funds data has been used. Financial sector assets equals total finance total financial assets (FL794090005.A) less monetary authority total financial assets (FL714090005.A). Note that in the USA, bonds are evaluated on a face value basis while they are evaluated on a market value basis in other countries. Financial auxiliaries (such as the Stock Exchange and Clearing House) are not included in financial institutions. Offshore accounts are classified as ‘overseas’ whereas in the other countries, they are included in ‘domestic financial institutions’. This suggests that the values for the total assets of the financial sector will be understated. GDP figures come from the Bureau of Economic Analysis (BEA) National Income and Product Accounts (NIPA) Table 1.1.5 GDP annual (NSA).

For the UK, using Office of National Statistics (ONS) UK Economic Accounts (UKEA) X23 (Financial balance sheet: Financial Corporations), financial sector assets is calculated by subtracting monetary authority total financial assets from financial corporations’ total financial assets (NLIZ). Figures for GDP come from ONS BKTL: GDP at market prices, current prices, not seasonally adjusted.

For Japan, data comes from the Bank of Japan, Flow of Funds (1993 SNA), assets and liabilities. Financial sector assets is calculated as the sum of depository corporations’ total financial assets (FFYS120A900), insurance and pension funds (FFYS130A900), other financial intermediaries (FFYS150A900), and financial auxiliaries (FFYS300A900). IMF WEO figures for GDP were used (NGDP, current prices, national currency), as Economic and Social Research Institute (ESRI) and OECD GDP data are only available from 1994 forward. Note that deposits within the sector are shown on an unconsolidated basis in Japan, therefore the asset levels will tend to be comparatively larger than in other countries (Research and Statistics Department, 2000, p. 2).

For Germany, data comes from the Bundesbank financial accounts. Financial sector assets has been calculated as the sum of MFI total financial assets (CEB0Q3), other financial institutions total financial assets (CEB00X), and insurance corporations total financial assets (CEB0QB). While the 1993 SNA guide advises that, as a rule,
entries in the System are not consolidated, there is some evidence to suggest that there may be partial consolidation in the German data resulting in an under-reporting of the size of the financial sector. Source for GDP data is the OECD.

Finally, for France, data comes from the National Institute of Statistics and Economic Studies (INSEE). Financial sector assets is simply financial institutions’ total financial assets (001523402). This data was used, even though it does not allow for the subtraction of the assets of the central monetary authority, due to the availability of a longer time series. Comparison of the Banque de France data for the more narrowly defined S122 (total financial institutions’ assets less central monetary authority assets), available only from 1994 forward, suggests that the use of the aggregate INSEE data leads to an overestimation of the size of the financial sector by between two and five per cent. OECD data were used for GDP.

**Figure 4.02: Banks’ total financial assets as a share of GDP**

Unless otherwise stated, sources are the same as for figure 4.01. For the USA, figures are for commercial banks’ total financial assets (FL764090005.A). For the UK, data is UK banks’ financial assets (NHTZ). For Japan, the data is domestically licenced commercial banks’ total financial assets (FFFOF_FFYS122A900). For Germany, commercial banks’ total assets is calculated as the sum of lending to banks (OU0779), lending to non-banks (OU0784), securities (OUB077) and participating interests (OU0793), from the Bundesbank statistical supplement banking statistics no. 3. For France, data has been used for ‘Etablissements de crédit et assimilés’, series code (MU.A.A.122AE0.980000.980000.A.E.F.A); note that the total assets is only available from 1994 forward, so previous years’ figures are the sum of individual asset line items.

**Figure 4.05: Loans as a share of total liabilities of non-financial enterprises**

For the USA, Z1 data has been taken from the non-farm non-financial corporate business sector. Total loans, the sum of bank loans not elsewhere classified (Z1/FL103168005.A), other loans and advances (Z1/FL103169255.A), and total mortgages (Z1/FL103165005.A), has been divided by total financial liabilities, the sum of financial liabilities (Z1/FL104190005.A) and equities liabilities (Z1/FL103164003.A). For the UK and the other countries, the sector examined is the non-financial corporate sector. Using ONS UKEA data, total loans (NOPI) has been divided by total financial liabilities (NONT). Bank of Japan data for total loans (FFYS410L200) has been divided by total liabilities (FFYS410L900) minus the difference between financial assets and liabilities (FFYS410L700) (the former is adjusted by the latter to equal financial assets). Bundesbank data for total loans (CEB41Q) has been divided by total financial liabilities (including equity) (CEB01Q). INSEE data for total loans (001523262) was divided by total financial liabilities (including equity) (001523400).
Appendices

Figure 4.06: Financial assets relative to total fixed assets of non-financial enterprises

It would have been desirable to include only what might be termed ‘portfolio’ assets in the numerator, but this is impossible due to data limitations. The use of ‘total financial assets’ has the merit of not missing any important dimensions because of different classification systems. The use of ‘fixed assets’ avoids volatility in both land prices (included in tangible assets) and cyclical inventory stocks (included in produced assets). Sources and sectoral classifications are the same as previous, except where specifically mentioned. For the USA, total financial assets (Z1/FL104090005.A) have been divided by the current cost net stock of private fixed assets for the corporate nonfinancial sector from BEA table 6.1. (Z1 figures for tangible assets of non-farm nonfinancial corporate business include land). For the UK, total financial assets (NNZB) has been divided by total tangible assets (CGVA) – inventories (CGUZ), from ONS UKEA. For Japan, total financial assets (FFYS410A900) have been divided by fixed assets for the non-financial corporate sector from the ESRI national accounts. For Germany, total financial assets (CEB0Q1) have been divided by the net stock of fixed assets from the integrated sectoral and overall balance sheets of the German Statistical Office for 1991 to 2005. Figures for 2005 to 2008 were sent to the author by the German Statistical Office taken from a national accounts working document, fixed assets by sector. For France, INSEE data for total financial assets (001523398) has been divided by total fixed assets (001525706).

Figure 4.07: Loans to total liabilities (stocks) of French non-financial corporations

BACH non-consolidated data for French companies is available from 1999 onward. The data source is the Central Balance Sheet data office of the Banque de France. France has an exhaustive survey allowing the provision of figures which can be considered “genuine variable samples” (DG ECFIN, 2006, p. 16).

The data used includes companies in categories A to N, minus K (real estate), according to the Classification of Economic Activities in the European Community (NACE rev 2). Items on the balance sheet in BACH are given as a percentage of the balance sheet total. The sum of amounts owed to credit institutions payable within one year (F.2) and payable after more than one year (I.2), has been divided by total liabilities (FL) which includes capital and reserves.

Figure 4.08: Financial to total income (flows) of French non-financial corporations

In BACH, items on the ‘Profit and Loss Account’ account are given as a percentage of turnover. Sectoral composition is the same as figure 4.07 above. Financial income (9/11) has been divided by total operating income (S).
Figures 4.09 & 4.10: Financial assets to tangible fixed assets (flows); financial assets to tangible fixed assets (stocks) of French non-financial corporations

Information on investment flows is given in BACH as a percentage of the turnover. Figure 4.09 gives data for the same set of companies as previously defined in figure 4.07, with ‘acquisition of financial assets’ (line 271) divided by ‘acquisition of tangible fixed assets’ (line 261). Figure 4.10 uses data from the balance sheet, with ‘fixed financial assets’ (C.3) divided by ‘tangible fixed assets’ (C.2). ‘Fixed financial assets’ includes holdings of stocks and bonds, but does not include ‘current financial assets’ of trade credit and cash in hand. ‘Tangible fixed assets’ includes land and buildings, plant and machinery, other fixtures, and assets in construction, but does not include inventory. The inclusion of land is mandated by data limitations.

Figure 4.11: Deposits to total liabilities of the banking sector

For the USA, the source is the H8 tables of assets and liabilities of commercial banks. Deposits (B1058NCBDM) has been divided by total liabilities (B1152NCBDM). For the UK, data comes from the ONS UK EA A.58 Financial Balance Sheet of Banks. Deposits is equal to the sum of sterling deposits with UK banks (NHVX) and foreign currency deposits with UK banks (NHVY). Total financial liabilities is item NHXD. (Note that using the Bank of England’s ‘Other Banks’ balance sheet, sterling deposits (RPATBFW) as a share of total financial liabilities (RPATBGV) match very closely to the ONS figures above. However, data is broken between two time series.) For Japan, data is for domestically licensed banks from the Bank of Japan. Domestically licensed banks’ currency and deposits (FF'FOF_FFYS122L100) has been divided by total liabilities (FF'FOF_FFYS122L900) less the difference between financial assets and liabilities (FF'FOF_FFYS122L700). For Germany, the source is the Bundesbank’s assets and liabilities of Monetary Financial Institutions (MFIs). Deposits of banks and non-banks (in MFIs) (OU0001 + OU0191) has been divided by the summation of individual liability items (deposits of banks and non-banks (OU0001 + OU0191), repos (OUA179), bearer debt securities (OU0370), capital (OU0322), other liabilities (OUA008)). For France, the longer time series of INSEE for S12A (Financial Institutions) has been cross-referenced with the shorter Banque de France time series of S122 (Other MFIs excluding the central bank). INSEE S12A currency and deposits (001523496), has been divided by total liabilities (001523412).

Figure 4.12: Non-FIRE lending to total financial assets of the banking sector

For the USA, data on the sector ‘commercial banks’ comes from the federal H8 tables. Commercial and industrial loans (B1023NCBDM) have been divided by total assets (B1151NCBDM). For the UK, data on the sector ‘UK resident banks’ comes from the Bank of England. For the period 1977 to 1996, non-FIRE loans equals total net lending (RPAAFTA) minus that to ‘Financial Intermediaries’ (RPAVAHM), ‘Individuals’ (RPAB842) and ‘Property Companies’ (RPAAFUJ). For the period 1997–2008, total net lending (RPQTBSA) minus lending to finance (RPQTBTTI, RPQTBTT, RPQTBTTU, RPQTBTV), individuals (RPQTBTW) and real estate
Appendices

(RPQTBSY) has been used. These sums were divided by the figure for total financial assets for the relevant period (RPAATFU and RPMTBJF respectively). (Note that 1997 was the year that building societies converted to commercial banks, accounting for the break in the data sets.) For Japan, data for ‘domestically licensed banks’ comes from the Bank of Japan loan market data. Non-FIRE loans equals total loans (DL'DLLILKG90_DLLI5DS2T) minus loans to finance and insurance (DL'DLLILKG49_DLLI5DS2TFI), real estate (DL'DLLILKG50_DLLI5DS2TFX), local governments (DL'DLLILKG61_DLLI5DS2TRO), individuals (DL'DLLILKG62_DLLI5DS2TPN) and ‘Overseas Yen Loans’ (DL'DLLILKG63_DLLI5DS2TFL). This sum has been divided by total assets (FF'FOF_FFYS122A900). For Germany, data comes from the Bundesbank’s assets and liabilities of MFIs. Non-FIRE loans equals lending to all non-FIRE sectors (PQ3020, 3021, 3023, 3024, 3025) plus services less real estate (PQ3027 – PQ8076) (note that real estate is only uniquely identified from 1989-07). This has been divided by total financial assets (OUA006 + OU0081 + OU0083 + OUA0087 + OU0089 + OU0310 + OUA007). For France, data for MFIs comes from the Banque de France. ‘Loans to domestic private non-financial institutions’ (MG.Q.R.A20.A.1.U6.2240.Z01.T.E.B.X) has been divided by ‘Total financial assets’ (MI.M.FR.N.A.T00.A.1.Z5.0000.Z01.M.E.B.X).

Figure 4.13: Banks’ loans to households as a share of total loans

For the USA, Federal Deposit Insurance Corporation (FDIC) historical statistics on banking have been used. Loans to individuals (table CB13) plus loans for residential properties (table CB12), has been divided by gross loans (table CB11). For the UK, data on UK residential banks has been drawn from the Bank of England. Loans to individuals (RPAB842 / RPQTBTW) has been divided by total loans (RPAAFTA / RPQTBSA). Note that the break in the data (and in the categories) marks the inclusion of building societies in the category of residential banks from 1997. From the Bank of Japan comes data on loans to households by domestically licenced banks (DL'DLLILKG62_DLLI5DS2TPN) divided by total loans (DL'DLLILKG90_DLLI5DS2T). For Germany, data come from the Bundesbank; lending to domestic employees and other individuals by commercial banks (PQ0805) divided by loans to banks (OU0784) plus loans to non-banks (OU0778). For France, Banque de France provides household lending by credit institutions (MH.M.EC.CREDIT.3.R.1D.TO.T.M.X.B.X) divided by total loans (MI.M.FR.N.A20.A.1.U6.0000.Z01.M.E.B.X).

Figure 4.14: UK banks’ sterling and foreign currency reverse repos

Bank of England data on other banks’ assets and liabilities: reverse sterling repos with UK banks (RPMTBHO); reverse sterling repos with private sector (RPMTBRH); reverse sterling repos with non-residents (RPMTBS); reverse foreign currency repos with UK banks (RPMTBI); reverse foreign currency repos with private sector (RPMTBI); and reverse foreign currency repos with non-residents (RPMTBS).
Figure 4.15: Non-bank loans as a share of total bank assets by bank type

For the category ‘big banks’ this equals ‘lending to non-banks (non-MFIs)’ (OU0833) divided by total assets. The equivalent ratio for the category ‘landesbanken’ is (OU1033) divided by total assets, and (OU1083) divided by total assets for the category ‘savings banks’. Source: Bundesbank.

Figure 4.16: Total financial liabilities to gross disposable income of households

For reasons of data availability the ratio refers to households and non-profit private institutions serving households (NPISH). For the USA, total financial liabilities for households and non-profit organisations (FL154190005.A) comes from the Z1 data, while gross disposable personal income (FA156012005.A) from the NIPA tables. For the UK, total financial liabilities of households and NPISH comes from UKEA table A.64 (NNPP), while gross disposable income is from UKEA table A.38 (QWND). For Japan, Bank of Japan data for total financial liabilities equals ‘Household Total Financial Liabilities’ (FFYS430L900) minus ‘Difference between Financial Assets and Liabilities’ (FFYS430L700) plus the same for non-profit institutions (FFYS440L900 - FFYS440L700). OECD figures have been used for gross disposable income. For Germany, Bundesbank data provides private household (including NPISH) total financial liabilities (CEB410), while OECD figures have been used for gross disposable income. For France, INSEE data has been used. Total financial liabilities equals that of households including individual enterprises (001523424) plus NPISH (001523428). Gross disposable income comes from OECD figures.
APPENDIX B: Chapter 6 source notes

Figure 6.06: Financial sector total financial assets to GDP

For Korea, Bank of Korea flow of funds data gives financial sector total financial total assets. Note that data until 2001 is based on SNA 1968, while data from 2002 forward is based on SNA 1993. For Mexico, OECD national accounts data (volume IIIb) gives total assets of financial corporations (S12). For South Africa, South African Reserve Bank data allow the calculation of financial sector total assets from the sum of: total assets of the monetary sector (KBP1358J), total assets of long-term insurers (KBP2242J), total assets of short-term insurers (KBP2282J), and total assets of Public Investment Corporation (KBP2339J). For Thailand, Bank of Thailand data allow the calculation of financial sector total assets from the sum of: financial assets of commercial banks (EC_MB_012), financial assets of depository specialised financial institutions (EC_MB_013), and finance companies (XLS_MB_028). Note that earlier data are available for commercial banks’ assets only. For the period from 2002 forward the previous data is re-categorised as ‘other depository corporations’ to which has been added new data on the assets of securities companies from the Securities and Exchange Commission Thailand (table 47, assets and liabilities of securities companies), and the assets of insurance companies from the Office of Insurance Commission. For Turkey, financial sector total assets is calculated from data of the Central Bank of the Republic of Turkey: assets of deposit money banks (TP.PB.K40), development and investment banks (TP.PB.T40) and participation banks (TP.PB.BLV34). All GDP figures come from the IMF World Economic Outlook.

Figure 6.07: FIRE share of GDP

For Korea, Mexico, Turkey and South Africa, OECD data are used for the gross value added at basic prices for financial intermediation, real estate, renting and business activities (B1GJ_K). GDP data are those of the OECD (B1_GA). Note that values are estimated for Mexico between 1970 and 2002, and for Turkey between 1970 and 1997. More disaggregated data for financial and insurance activities (B1GVK) are only available for Korea. For Thailand, data are drawn from the Office of the National Economic and Social Development Board (NESDB) national income accounts tables 30 and 32, items ‘GDP originating from financial intermediation’ and ‘GDP originating from real estate, renting and business activities’. Data are available back to 1980, however, there is a structural break in the classification system, with the previous single category of ‘banking, insurance and real estate’ ending in 2001, while the two categories previously mentioned begin in 1993. NESDB data for GDP have been used and cross-checked with that of the IMF WEO.
Figure 6.14: Non-financial corporations’ net acquisition of financial assets to gross fixed capital formation

For Korea, figures for net acquisition of financial assets (NAFA) come from UN data table 4.3 S11 for 1980 to 2002 (note that series 100 is used for 1980 to 1992, series 200 for 1993 to 2002), and OECD dataset 620 (financial accounts non-consolidated). Gross fixed capital formation (GFCF) comes from UN data table 4.3 S11, series 300. (Note that these figures have been corroborated with flow of funds figures of the Bank of Korea.) For Mexico, data for both NAFA and GFCF come from INEGI system of national accounts. For South Africa, both NAFA and GFCF data come from OECD (respectively, dataset 62.0 – financial accounts non-consolidated, and dataset 14A – non-financial accounts by sector). For Thailand, all data come from NESDB flow of funds data.

Figure 6.17: Non-financial corporations’ net incurrence of loans to total liabilities

For Korea, data for loans comes from UNstat.org, table III.2 financial account, loans, series 100 (1980 to 2002), series 200 (2003 to 2004); and from OECD F4LINC from 2005 forward. The same sources were used for total liabilities. The series was reconciled with data from the Bank of Korea (for which recent years were as yet unavailable). For Mexico, data for loans and total liabilities comes from INEGI system of national accounts data for the private non-financial corporate sector. UN and OECD data, similar to those used for Korea, are erratic, moving from significantly negative amounts to greater than parity. For South Africa, OECD data on loans (F4LINC) and total liabilities (FLINC) were used. For Thailand, data come from the NESDB’s flow of funds figures for the private non-financial corporate sector.

Figure 6.23: Banks’ deposits to total liabilities

For Korea, data come from the Bank of Korea’s flow of funds tables for depository corporations. These data match those of the OECD non-consolidated financial balance sheet for other depository corporations (S122) (consolidated data unavailable). A similar trend, but lower level, is attained if Bank of Korea banking data are used for the category ‘commercial and specialised banks’, and the instruments are limited to demand, time and savings deposits. A similar trend with a higher level results, if the latter data are expanded to include certificates of deposit, repos and debentures. Prior to 2002, deposit data is only available for the financial sector as a whole. For Mexico, data used come from CNBV Multiple Bank historical series. Deposits includes term and demand deposits. A similar, though not identical result, both in terms of level and trend, results from the use of OECD consolidated financial balance sheet data for other depository corporations (S122) (similar trend but lower level results from the use of non-consolidated data). For South Africa, South African Reserve Bank data has been employed for banking institutions, with total deposits (KBP1077) divided by total liabilities (KBP1085). (The time series is available back to 1986 but has not been shown here for consistency with other...
countries where consistent longer time series are unavailable.) For Thailand, Bank of Thailand banking data have been used. Commercial banks’ total deposits is series EC_MB_012 for the period 1970 to 2006, switching to series EC_MB_012_S2 after 2002. For Turkey, data have been drawn from the the Banks’ Association of Turkey monthly statistical reports (end-December figures have been used). Total deposits (both Turkish and foreign currency) have been divided by total liabilities. Note that there is a significant discrepancy with the level (though not the trend) attained through the use of the central bank’s (CBRT) data on the total deposits (TP.PB.S01) of ‘deposit money banks’ as a share of total liabilities. Trend and level of both of these series are not consistent with OECD financial balance sheet data for other depository corporations (S122) (either consolidated or non-consolidated).

**Figure 6.26: Banks’ loans to non-financial corporations to total assets**

For Korea, data come from the Bank of Korea’s banking data. Loans and discounts for all industries has been adjusted for those to finance and insurance. For Mexico, Banco de México table CF29 offers credit to farming, forestry and agriculture (SF210), manufacturing (SF211) and services (SF213). Commercial banks’ total assets (SF98924) comes from table CF445. Using CNBV data for multiple banks’ loans to private non-financial business yields a similar trend, though the level is approximately ten per cent lower. For South Africa, SARB banking data on loans to the non-financial corporate sector have been summed (lines 124, 132, 138, 142, 147, 152, 156, 161, 163, 168, 178, 183, and 190). Note that BD900 data convert historical DI900 to BA900 format. Nonetheless, while the time series extends back to 1993, there is a structural break in 2001; before this, ‘overdrafts, loans and advances to PNFCs’ (line 183) and ‘other loans and advances to PNFCs’ (line 190), which account for a significant share of lending post-2001 are not available. Bank of Thailand data for loans are series BoT FI_CB_021 & 021_S2 & 021_S3 (before- and after-2002). Total lending was adjusted for lending to banking and finance, real estate and personal consumption. Total assets comes from series EC_MB_012 for the period 1970 to 2006, switching to series EC_MB_012_S2 after 2002. Turkish data comes from the BRSA statistical query system. Banking sector consumer loans has been subtracted from total non-financial loans. Total assets comes from BRSA financial markets report 2011, table 4.1-2.

**Figure 6.33: Household indebtedness to gross disposable income**

For Brazil, data are only available for the combined sectors of households (HH) and non-profit institutions serving households (NPISH). Data on financial liabilities come from OECD financial balance sheets (non-consolidated, consolidated not available). Data on gross disposable income for HH+NPISH (S14+S15) come from UNstat table 4.9. For Korea, data for household liabilities come from the Bank of Korea’s flow of funds figures. For the period 1975-2001, ‘individual sector’ total liabilities employ SNA68; for the period 2002-2009 SNA 93 is employed. Data on the GDI of the ‘individual sector’ comes from Bank of Korea national accounts tables. Note that the Korean data matches that obtainable from OECD/UN sources, with the latter available after the change from SNA68 to SNA93 in 2002. For
Mexico, Bank of Mexico’s series CF297, household total financing (SF42790) has been used to approximate household liabilities. Household GDI comes from INEGI SNCM national accounts data. Figures for 1993-2002 are net (gross figures are unavailable), while those from 2003 forward are gross. Note that this ratio possibly overstates the level of Mexican household indebtedness. If figures for HH indebtedness are used from the Bank of Mexico’s data on bank lending to households, or from OECD data on S14 liabilities, the level of indebtedness hovers at around ten per cent of GDI. For South Africa, South African Reserve Bank series KBP 6525J, HH debt to disposable income of HH, has been used. The resulting ratio is similar in terms of trend and approximately five to ten per cent lower than that resulting from the use of OECD financial balance sheet data. For Thailand, Bank of Thailand data on HH loans from commercial banks (FI_CB_015, 1990-2000); S2 (2001-3); S3 (2004 forward) has been used to approximate HH indebtedness. GDI of households comes from NESDB national income report 2008. For Turkey, figures for both HH indebtedness and HH GDI come from CBRT FSRs 2007, 2008, 2010 and 2011. Household debt consists of gross consumer credit and credit card balances extended by banks and consumer finance companies. The data for the period after 2008 also include liabilities related to TOKI’s (Housing Development Administration) housing sales.


References


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