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Eurozone Failure, German policies, and a New Path for Greece

Policy Analysis and Proposals

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SUMMARY

1. The current state of the European Economic and Monetary Union (EMU) is fundamentally weak and its future remains precarious. In historical terms the EMU has been a failure. The policies deployed to confront the EMU crisis have undermined the European Union [EU] itself.

2. Europe should rid itself of the monetary straitjacket of the EMU. A wholesale policy change is required to lift the constraint on aggregate demand imposed by the EMU, and to allow for the generation of external surpluses. On this basis Europe should adopt longer-term policies to strengthen productivity growth, employment and income. Such a radical reconstruction of policy also requires confronting, at the very least, the existing EU directives on investment and trade.

3. Germany has emerged as the dominant power of the EMU, also shaping the policies and outlook of the EU. Its ascendancy has not been primarily based on the relative size of its economy, or on its putative efficiency. Rather, it has been due to extraordinary domestic wage restraint, keeping inflation low and gaining a tremendous competitive advantage for German exporters within the EMU. The result in the 2000s has been huge German current account surpluses, while other countries, mostly in the internal periphery of the EMU, have registered huge deficits.

4. In short, Germany has followed a peculiar policy of "neo-mercantilism" that has favoured the interests of big German exporters at the expense of German wage workers and the population in general. In the 2010s the main source of German external surpluses has moved outside the EMU but domestic policy has remained fundamentally the same. German domestic policies and the relationship between capital and labour are the main weakness of the EMU, exacerbating any deficiencies in the "architecture" of the monetary union.

5. External deficits within the EMU were financed through credit flows from surplus to deficit countries taking a variety of forms: from private lenders to the state, from banks to the state, from banks to banks, from private lenders to banks. The individual lending decisions of the agents were associated with a range of motives and obligations that were not necessarily related to the external deficit; the end result was to finance the deficit.

6. During the early 2000s nominal interest rates converged rapidly, bringing a substantial fall in real interest rates for peripheral countries and inducing rapid credit growth. However, real interest rates in the periphery remained lower than in the core as inflation rates were higher in the former than in the latter. Domestic credit growth in the periphery was spurred mostly by domestic banks taking advantage of easy liquidity provided by the European Central Bank, rather than by inflows of foreign financial capital.

7. External credit flows and domestic credit expansion resulted in a vast accumulation of debt in peripheral countries. The mix of external and internal debt varied considerably among member countries, as did the allocation of debt among private and public holders. However, the broad pattern of debt accumulation exhibited considerable similarities. Inability to service debt in 2010 was the immediate trigger of the Eurozone crisis emerging as a sudden reversal of private capital flows to peripheral countries.

8. To confront the EMU crisis the EU has enforced harsh policies of austerity and wage repression as well as deregulation of markets and privatisation presumably to ensure growth. It has avoided institutional changes that might have ameliorated its internal weaknesses. Specifically:
– There was easy provision of liquidity by the EU to banks. The role of exceptional liquidity provider was taken by the European Central Bank.
– Debt forgiveness was rejected, especially the prospect of writing off the principal. No state in the EMU would accept responsibility for the debt of another.
– Assistance was provided to states shut out of the international financial markets through *ad hoc* mechanisms. Gradually the monetary union has acquired a permanent institutional framework for the task, mostly the European Stability Mechanism [ESM].
– Debtor countries were obliged to achieve fiscal stability through the imposition of austerity, i.e., by reducing public expenditure and raising taxes.

9. Thus, the costs of the crisis were largely transferred onto the debtor countries rather than the lenders. Furthermore, the loss of competitiveness was considered as due to lack of domestic "reforms". Consequently, the actual institutional changes that have taken place in the EMU since outbreak of the crisis have hardened its dysfunctional regime:

– Fiscal discipline has been hardened, making austerity the driving principle of the EMU. The Stability and Growth Pact has been made tougher as the Fiscal Compact adopted in 2012.
– Competitiveness is to be raised primarily through wage compression, privatisation of public assets and de-regulation of markets. A neoliberal growth agenda thus complements the dominance of austerity policy.
– The ESM has gradually evolved into a mechanism to deal with future public debt crises. The ESM is a demo-cratically unaccountable fund endowed with a "war chest" to be deployed on the basis of conditionality.

10. Bank fragility would presumably be confronted through a Banking Union including the Single Supervisory Mechanism (SSM) and the Single Resolution Mechanism (SRM).
– The SSM operates under the guidance of the ECB, which has the power to perform stress tests, on the basis of which it can impose capital adequacy requirements and change bank management.
– The SRM has jurisdiction over all banks under the SSM and is supposed to deal with failing banks. Some "bailout" funds would be gradually gathered through bank contributions. In the short term there is provision for the "bail-in" of privately held bank bonds and even bank deposits in case of bank failure.

11. The putative Banking Union is no real union. The real test for banks always comes at the point of failure and relates to provision of funds to protect deposits, shore up capital and remove non-performing loans from bal-ance sheets. The typical provider of such funds has been the nation state. The SRM represents a weak compro-mise since it has not replaced the nation state with a transnational body with sufficient powers. It is likely that the compromise will fail at the first major hurdle.

12. In sum, the Eurozone crisis has not been finally resolved. The EMU periphery has been pacified through re-cession and austerity, but the fundamental problem has re-emerged between Germany and the core countries of France and Italy. Stagnation has spread across France and Italy marked by an inability to compete with Ger-many within the EMU.

13. It is incumbent upon member states, particularly in the periphery, to begin to consider exit strategies to protect the interests of working people and their national economies. It is also incumbent upon core states to consider alternative options for organising international transactions and payments among European states to avoid a return to competing nation states.

14. The failure of the EMU tolls the bell for the EU itself since the monetary union has gradually become the backbone of the EU. In 2017 the EU is at an extremely low ebb symbolised by the decision of Britain to exit in 2016. Europe urgently needs new ideas and initiatives that would break with the failed approaches of the last four decades.

15. Greece, which has suffered the worst from Eurozone failure, offers a useful test case for the structure, con-tent and modalities of the required policy change in peripheral EMU countries. It provides lessons for Spain, Portugal, Italy, and even France. Each country would certainly need its own specifically tailored programme to extricate itself from the morass of the Eurozone, but there would also be shared components, which could be ascertained by examining the case of Greece.

16. The shock delivered to Greece by the Eurozone crisis has been of historic proportions and does not reflect a merely cyclical adjustment of the economy. Above all, the composition of the labour force changed dramatical-ly because of the creation of huge layers of unemployed workers but also of workers in part-time and insecure employment as well as a wave of emigration. The waste of highly skilled labour has been unprecedented, low-ering the growth prospects of the country.

17. The Greek economy suffers from a further profound weakness with regard to saving and investment. Greece has recorded negative aggregate net saving ever since it joined the EMU. The lack of net national saving has been balanced by rising external borrowing for a lengthy period of time until 2010. Thus, the loss of com-petitiveness in the 2000s and the underlying weakness of Greek net saving have been masked by heavy bor-rowing abroad, which facilitated some investment in the 2000s.

18. Once the crisis had burst out in 2010, Greece faced pronounced difficulties in accessing foreign funds. The lack of external borrowing was translated into an unprecedented collapse of investment. This is the most important reason for the extraordinary depth and persistence of the Greek crisis, as well as for the long-term weakness of the Greek economy.

19. Furthermore, the development of Greece since joining the EU in 1981 has relied on internationally "non-tradable" at the expense of "tradable" goods and services. Productivity in the Greek economy is comparable to the European averages only for some non-tradable commodities, especially financial services, construction and domestic trade. Among the tradable goods and services only tourism has been reasonably successful. Consequently, the country has imported ever larger proportions of high-technology products and has recorded low proportions of intra-sectoral trade compared to other EU members.

20. The result has been a developmental dead-end: during the last three decades Greece has specialised in commodities of low and middle technology relying on unskilled labour. These products make a relatively low contribution to the growth of productivity, and therefore create a low growth potential for the economy as a whole. Greece was able to register relatively rapid growth rates only by borrowing from abroad which, in turn, has limited further its productivity improvement and its growth potential. After joining the Eurozone and being confronted with collapsing competitiveness due to German wage restraint, the country went down a disastrous path: debt increased greatly, growth accelerated, and the underlying weaknesses of the economy were worsened. When the Eurozone crisis burst out Greece was ruined.

21. Particularly important in this respect has been the profound weakness of the Greek industrial sector. Since the early 1980s, whenever domestic demand has increased strongly, Greece has faced strong "leakages" abroad, which have contributed to the weakness of its external balance. The major source of these leakages has been the industrial sector: Greek industry has come to depend on imports, thus also reflecting the negative net saving of the country. Specifically, ten industrial commodities are the true "black holes" of the Greek economy regarding leakages abroad.

22. The bailout strategies after 2010 occurred against this background of profound structural weakness for the economy. Furthermore, Greece had no command over monetary policy and obviously no exchange rate policy. Moreover, its fiscal and income policy were determined by the lenders through the imposition of rigid austerity. Finally, the lenders imposed privatisation as well as deregulation of the labour market and other markets. Given the structural weaknesses of the Greek economy, the policies have trapped the country in an iron cage of recession. Far from putting Greece on the path of virtuous development, the so-called "internal devaluation" plus "structural reforms" have delivered a deadly blow to the economy, especially the industrial sector.

23. There is no doubt that Greece faces a bleak future, unless it exits the Eurozone and adopts a radically different policy to restructure its economy. For sustainable growth Greece needs a targeted redistribution of income together with a programme of boosting domestic demand and limiting its leakages abroad. These measures would be impossible within the EMU, or even within the current policies of the EU.

24. Exiting the Eurozone would be a difficult short-term task and that has allowed the power elite of Greece to conduct a campaign of exaggeration and fear to coerce the population into accepting the bailout programmes. Particularly after the vault-face of SYRIZA in the summer of 2015 there has been a loud campaign to claim that there is no obvious alternative.

25. It is shown in this study that the short-term problems of exiting from the Eurozone exit are manageable as long as there is a modicum of planning, preparation and determination. In this connection it is vital to remember that short-term difficulties are never a good reason to avoid a course of action that has medium-term and long-term benefits for economy and society.

26. A "plan" of exit is not –and could not be – a complete list of all possible eventualities and outcomes, with appropriate policy action attached, as is often demanded by those in Greece who support the bailout strategies. It is apparent that such a plan would be impossible to devise for any economic policy and not merely that of exiting the EMU. The appropriate "plan" that Greece should outline the series of steps to be undertaken in logical sequence aiming to minimise the costs of recapturing monetary sovereignty. This study provides an answer in a number of concrete steps. The main components have been known for quite a while in Greece but the policy has not been adopted because of sectional interests, and political vacillation.

27. The modalities of each step, particularly those to do with stabilising banks, supplying key markets and lessening the shock to the productive sector, are crucial but also entirely derivative of the main problem, i.e., resolving the series of steps for exit. In this regard, it is shown in this study that there would be a very small risk of rapid inflation post-exit. It is also shown that the depreciation of the new currency would have a strongly beneficial

effect on the international transactions of Greece. Finally, defaulting on the national debt and issuing a call for its deep write off would also save a significant volume of resources in an annual basis, while releasing the country from the policy shackles of servicing the debt.

28. Exit from the EMU is part of an appropriate medium-term development strategy for the country. Greece should adopt a policy of strengthening domestic demand by initially boosting public consumption and investment. It is shown that there is a range of services (rather than industrial goods) that are particularly suitable for this purpose. It is also shown that there is a further range of agricultural and industrial commodities – but also services – that should be the initial focus of policies to boost exports and limit imports.

29. Boosting demand through fiscal expenditure should be financed in the first instance by issuing money, once monetary sovereignty will have been regained. The risk of inflation is minimal. Demand should also be boosted by readjusting the tax system in the direction of greater progressiveness and to lessen the extraordinary burden created by the bailout strategies.

30. On this basis Greece would adopt an industrial strategy to alter the structure of its economy. It is shown that there are several sectors suitable for industrial policy, which would also improve the net saving of the country, thus helping it enter a virtuous circle of growth and employment. Agriculture would be closely connected to industry.

31. Finally, a country in the terrible state of present-day Greece needs to undertake reforms that would go well beyond the immediate redirection of economic policy. Reforms should also take place in labour markets, public administration and other aspects of social organisation. Nothing less is needed in Greece that wholesale rebalancing of society and polity in the interests of wage labour, small and medium enterprises and small and medium farmers.

PART I. EUROZONE FAILURE

In early 2010 the European Economic and Monetary Union (EMU) entered a period of crisis that has undermined its very existence, and eventually that of the European Union itself. The turmoil has been a continuation of the global crisis of 2007-9 which initially broke out in the financial system of the USA. The global crisis soon subsided in the USA, the UK and other parts of the world, following decisive state intervention that, first and foremost, protected financial interests. In Europe, however, the crisis has acquired a further and virulent aspect due to the dysfunctional EMU, adopted by the bulk of the EU on 1 January 1999.

In late 2016 the crisis in Europe had remained fundamentally unresolved. The underlying condition of the EMU was poor and its future precarious. In historical terms the EMU has been a failure and there seems to be little that could be done institutionally, or politically to rescue it. Even worse, the crisis and the policies deployed to confront it have undermined the EU itself.

It is indisputable that during this period Germany has emerged as the dominant power in the EMU, thus also shaping the policies and outlook of the EU as a whole. The ascendancy of Germany in not primarily based on the relative size of the German economy, or its putative efficiency. It is shown in the first part of this study that Germany has come to dominate the institutions of the EMU and the EU largely through extraordinary domestic wage restraint since the late 1990s, which has given to German exporters a tremendous competitive advantage. The German triumph within the Eurozone has been achieved largely at the expense of German wage workers and others of low income. For the same reason, the ascendancy of Germany is highly precarious: it is based on the suppression of its domestic demand and the growth of exports, rather than on strong productivity growth and technological progress.

Furthermore, it is also shown below that, largely at the behest of Germany, the EU as a whole has enforced harsh policies of austerity and wage repression as well as deregulation of markets and privatisation presumably to ensure growth. By doing so it has avoided institutional changes that might have ameliorated its internal weaknesses. On the contrary, the institutional changes that have taken place in the 2010s have sought to solidify German ascendancy and to pass the cost of dealing with the crisis mostly onto peripheral countries.

Far from strengthening cooperation and making for stability, the policies of the EU have created an impossible situation in Europe. Germany, the largest economy, has an entrenched competitive advantage and vast external surpluses, while peripheral countries and even countries of the core are finding it hard to ensure growth and to earn external surpluses to pay their debts. German economic domination appears to be firmly established within the EMU, contributing to the persistent weakness of the external accounts of peripheral countries as well as undermining core countries. The EMU is set on a course that is dictated by the political and economic leadership of Germany in Europe. It is an illusion to expect the monetary union to alter the current state of affairs from within, given the nature of its institutions.

Peripheral and core countries require a wholesale change in policy that involves lifting the constraint on aggregate demand, and furthermore allows for the generation of external surpluses. On this basis they could also adopt longer-term policies to strengthen productivity growth, employment and income. However, such a radical reconstruction of policy would be impossible within the EMU and it would require confronting the existing EU directives on investment and trade. Even so, to avoid a slow and painful decline the countries of Europe should take action to rid themselves of the monetary straightjacket and attendant German domination. A path could then be opened to growth and solidarity.

Chapter 1. Failure of the EMU and the role of Germany

The EMU was established after decades of efforts to develop a new system of international payments in Europe, which took place as the postwar Bretton Woods system began to unravel, eventually collapsing in 1971-3. The disappearance of Bretton Woods made it clear to governments of European countries, especially smaller ones, that to avoid major upheavals in exchange rates and to protect international competitiveness it was necessary to manage international payments and other obligations among state. To that purpose a new institutional framework across Europe was required. The Werner report of 1970 was the first sign of a turn toward a new system of managing international payments and exchange rates in Europe.

Achieving stability of exchange rates, however, is a very difficult task in a world market that is the locus of interaction by multinational enterprises and nation states. The world market is characterised by the relative absence of regulatory institutions and the prevalence of naked power among states and multilateral organisations, such as the International Monetary Fund. To achieve stability of exchange rates – assuming that there was no automatically functioning anchor provided by the (direct or indirect) convertibility of currencies into a produced commodity, say, gold, as was the case for the US dollar under Bretton Woods – it would be necessary continually to take cooperative decisions by several states.

However, there is a hierarchy of states in the world market, and thus in practice the leading role in any system of decision making would be played by the more powerful countries. Furthermore, the crisis has shown that the Eurozone, despite appearances, lacks genuine cooperation among its members. On the contrary, one state, namely Germany, has come to dominate the monetary union, and its interests have become paramount to the functioning of the common currency. This development has proved lethal for the EMU.

To be more specific, assuming that there was no monetary union and no automatic international anchor, a group of states could potentially practice effective cooperation with the aim of managing (stabilising) exchange rates and dealing with international payments as long as one among these states acted as the anchor of the group.[1] The role of the anchor country would be particularly important under conditions of relatively free movement of money capital across borders, such as those of the last four decades. Free capital movements have a destabilising effect on exchange rates: if they stopped, or were reversed, they could lead to a "sudden stop" crisis. The anchor country would have to shape its domestic monetary policy to fit the needs of exchange rate stability and managing payment flows. At the same time, it would be necessary for the anchor country to have a surplus on current account as well as exhibiting domestic price stability.

In Europe in the 1980s and 1990s monetary cooperation among states took the form of the European Monetary System (EMS). The functioning of the EMS changed continually, until it was eventually superseded by the EMU. Its aim, however, was to stabilise exchange rates in Europe as a step toward fuller economic union, and the obvious anchor country for that was Germany. By implication, France and Italy, the other two major countries of the EMS, would have to accept the periodic depreciation of their currencies to compensate for higher inflation than Germany and for trade deficits. Thus, the structural differences among the three major economies would thus not be overcome by the EMS, but would be reflected in its functioning.

Engaging in periodic depreciation was difficult enough for France and Italy, but the fundamental weakness of the EMS proved to be the stance of Germany, which treated the exchange rate of the Deutschmark as a means of ensuring its own current account surpluses. During those decades Germany effectively refused to direct its domestic monetary policy to supporting the EMS. Tensions gradually accumulated within the EMS, particularly due to depreciations that France and Italy had had to endure, thus paving the way toward full monetary integration in the late 1990s.[2]

The creation of the EMU was partly a political response by France (and to a lesser extent, Italy) to the dominant position of Germany in the EMS. It was also a response to the prospect of greater German domination of Europe following the country's reunification in 1990. The EMU seemed to offer a way of dealing with the malfunctioning of the EMS that had been largely caused by Germany refusing to play its role in the system. Full monetary union appeared to obviate the need for an anchor country because it would presumably create a monetary space that would guarantee equality among states in reaching key decisions. By ostensibly relying on cooperation and equality, it also seemed to be a step toward greater European unity.

Unfortunately for the planners of EMU the hierarchical reality of the world market and the balance of power among states and multinational enterprises could not be overcome by institutional inventiveness in the field of international money.[3] Contrary to its putative aims, the EMU has actually offered tremendous scope to Germany to pursue its own national interests as well as those of its big businesses. Through the EMU, Germany has come to dominate the monetary but also of the economic and political spheres of Europe. To a significant extent this has been achieved at the expense of German wage workers and other social layers of low income.

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1   For further analysis of these issues, see Flassbeck and Lapavitsas (2015).
2   For further discussion of the economics of the establishment of the EMU and the role of Germany see Flassbeck and Lapavitsas (2015). See also Flassbeck and Lapavitsas (2013).
3   A theoretical approach to international ("world") money can be found in Lapavitsas (2013)

It is instructive in this connection to consider the so-called faulty "architecture" of the Eurozone. It is not a great intellectual discovery to ascertain that the "architecture" of the EMU has been deficient, especially if one approached the issue from the standpoint of devising an "ideal" monetary system. Thus, mainstream economists have long been aware that the Eurozone has lacked important components, for instance, a unified mechanism of fiscal transfers and a banking union.[4] But that is a little like blaming the clouds for producing rain. The EMU could hardly have been anything else in "architectural" terms given that it was set up as a treaty-based alliance among several independent states that also belonged to the EU.

The most fundamental institutional mechanism originally created for the EMU was the European Central Bank (and the Eurosystem of national central banks) the capital for which has been contributed proportionately by all member states. As befits a treaty-based alliance of sovereign states, the ECB has not operated under the wing of a particular state, and indeed it has had the most "private" outlook among all major central banks. Above all, it has been deeply reluctant to acquire the primary debt of any state, i.e., it has desisted from the activity that would functionally connect a central bank to its own state.

The other important institutional mechanism created for the EMU was the Stability and Growth Pact, which aimed to regulate the fiscal performance of member states, keeping deficits and public debt within limits, thus avoiding disruption of the functioning of the common currency. However, responsibility for enforcing the Pact was initially left to member states, and in this regard it has been a failure. In the course of the crisis the Stability and Growth Pact has evolved into the Fiscal Compact, essentially a harsher version of the same agreement, which makes provision for monitoring but also presumably for sanctioning individual states, if they do not conform to the fiscal regime of the EMU.

There is no doubt that compared to, say, the mechanisms of the US monetary system the institutional framework of the EMU is manifestly deficient. The Federal Reserve Bank could naturally act as the bank of the US state, acquiring vast quantities of primary state debt if policy necessitated it, as has happened since the crisis of 2007-9. Similarly, the US state would be able to impose a coherent fiscal policy across the territory of the USA, while simultaneously ensuring the transfer of fiscal resources among the country's constituent parts as occasion demanded. The ability of the USA to confront major crises, therefore, would be immeasurably greater than that of the Eurozone, a point that has been amply demonstrated since 2007-9.

However, these perfectly obvious points constitute no explanation of the current predicament of the EMU and the EU. To assume that they do is merely to wish that the EMU would be something other than it is, or that it could become something other than its nature dictates. To wit, the EMU is a treaty-based alliance of sovereign states that belong to the EU, none of which has either the legitimacy, or the desire, to carry the burden of the actions of another. The principle of preventing the transfer of fiscal burdens and the requirement of preventing one state from bearing the tax costs of the actions of another are naturally embedded in the EMU. Why would it be otherwise in an alliance of sovereign states? The public debt of each country in the EMU and the EU is ultimately the responsibility of its government and its people. All those who, in the early days of the crisis, proposed the issuing of "Eurobonds", the "mutualisation" of public debt in the EMU, or the shouldering of individual state debts by the ECB as methods of dealing with the crisis simply mistook their own desires for the underlying character of the EMU and the EU.

The fundamental reason why a federal country such as the USA has been able to develop the institutional monetary and other mechanisms that it possesses is that its polity and its "demos" are one. The EMU comprises several independent states, even if they have ceded some of their sovereignty to join the monetary union. A common polity and a single "demos" cannot be created by diktat, and much less by stealth. It usually takes historic events, often involving wars and revolutions.

The notion that there could ever be an overarching "European" state with sufficient power to replicate the monetary practices of the US state is a figment of the bureaucratic or the academic imagination. Indeed, there is no evidence that the various peoples of Europe have ever shown any spontaneous mass support for the existing project of the EMU, and even for the EU. It is hardly conceivable that the peoples of Europe would ever accept, say, a permanent mechanism of fiscal transfers within the EMU. Quite apart from the difficulty of persuading richer states to transfer funds systematically to poorer states, there would also probably be a strong popular

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4   See, for instance, Pisany-Ferry (2011). More recently, Stiglitz (2016) has devoted an entire book to various flaws of the euro, though he still hoped to rescue it.

reaction among the receiving countries. Which among the nations of Europe would easily accept the position of long-term beneficiary? Only the wilfully blind would not immediately acknowledge the negative implications for its internal political structures, its democratic polity, its culture, and its relations with other states.

The faulty "architecture" of the EMU is no more than a reflection of the underlying character of the EU. Furthermore, the "architecture" provides neither an explanation, nor a mechanism for the crisis that actually broke out in 2010. The undoubted institutional flaws of the EMU have not by themselves caused the malfunctioning and the historic failure of the monetary union. Rather, the flaws of the EMU have simply set the background for economic processes to occur which have in practice undermined both the euro and the EU. Moreover, they have also ensured the deficient response of the EMU to the crisis which has effectively sealed its fate. For the actual mechanism of crisis, however, one has to look elsewhere.

It is increasingly accepted that the proximate cause of the Eurozone crisis was the violent fluctuation of capital flows due to large deficits on current account by the crisis countries. In essence, the Eurozone crisis comprises a series of "sudden stop" crises in several member states, similar to those that have occurred repeatedly in developing countries in the 1980s, 1990s, and 2000s.[5] Fully to account for the Eurozone "sudden stop" crisis of the 2010s, however, it is imperative to take into account German domestic policies. The secret of the Eurozone crisis is neither the faulty "architecture" of the EMU nor the austerity policy choices of the EU. It is, rather, the changed relationship between capital and labour in Germany, which has turned dramatically in favour of capital as the EMU was set up and subsequently became the dominant institutional mechanism of the European economy. It is not a surprise that the official machinery of the EU has avoided meticulously the issue of German domestic policies while formulating its response to the crisis.

In short, domestic wage repression and austerity have allowed Germany to dominate the EMU and the EU in the 2010s. The other side of the coin, however, has been a weakened domestic economy in Germany and heightened fragility of the monetary union. It is shown in the rest of this study that, as a result, the EMU has effectively failed as a historical project.

Since 2010 the EU has imposed substantial institutional change on the EMU by creating several organisations. But it has neither fixed the "architectural" flaws of the EMU nor taken action to encourage a domestic change of course by Germany. The costs of adjusting to the crisis have been shifted primarily to the countries in the periphery, while preparations have been made to manage another potential "sudden stop" crisis in the future. This is the behaviour of a political body that is beholden to particular interests and is incapable of changing to survive. The failure of the EMU has raised the prospect of the EU fracturing, which has become accentuated by the exit of Britain from the EU in the summer of 2016. Peripheral and core countries would do well to begin to plan for appropriate exit strategies from the EMU as well as rethinking the framework of solidarity in Europe.

The fundamental elements of an alternative strategy are discussed in the rest of this study by examining the state of the Greek economy and considering policy options available to Greece. It is apparent that country needs a radical re-orientation that will restructure and rebalance its economy in the direction of growth, falling unemployment and rising incomes. This reorientation is impossible within the confines of the failing monetary union. Greece needs to exit the EMU immediately and it also needs to exempt itself from EU policies on investment, trade, and other activities. The country should adopt policies that boost domestic demand, support exports, limit imports, and promote productivity growth, above all, in the secondary sector. These policies are not feasible within the current framework of the EU. In restoring its economy to health, Greece could act as reference point for other peripheral countries, always bearing in mind that each country will have to adjust policies to its own particular requirements.

To establish in sufficient detail the required policies for Greece it is necessary to start with the failure of the Eurozone and the constraints it has imposed on both peripheral and core countries. Part I of this study, therefore, examines the relative performance of Germany, France, Italy, Spain and Greece, a group that provides an appropriate mix of core and periphery affording insight into the failure of the Eurozone as a whole.

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5   See Merler and Pisany-Ferry (2012) and Baldwin and Giavazzi (2015).

Chapter 2. The mechanism of crisis and the reasons for EMU failure – a summary

For the purposes of the subsequent discussion it is useful to sum up the fundamental elements of the Eurozone crisis as follows:[6]

1. The adoption of the euro in 1999 led to a systematic divergence of national competitiveness among EMU member states. The main culprit was Germany, which has kept its domestic inflation extremely low by suppressing nominal wages, thus gaining competitiveness over its EMU neighbours.

2. The divergence in competitiveness led to pronounced imbalances in external transactions within the EMU during the 2000s. Germany increased enormously its current account surpluses, while other countries, mostly in the rapidly emerging internal periphery of the EMU, registered huge deficits. Thus, Germany has followed a policy of peculiar "neo-mercantilism" by suppressing domestic demand to record huge external surpluses. This is a policy that favours the interests of large German exporters at the expense of German wage workers and the population in general. The main source of German surpluses has moved outside the EMU in the 2010s but the domestic policy has remained fundamentally the same.

3. External deficits within the EMU were financed through credit flows from abroad, which naturally occurred from surplus to deficit countries. The flows took a variety of forms: from private lenders to the state, from banks to the state, from banks to banks, from private lenders to banks. The individual lending decisions of the agents were associated with a range of motives and obligations that were not necessarily related to the external deficit. However, the end result was to finance the deficit.

4. During the early 2000s nominal interest rates converged rapidly as the ECB applied its monetary policy uniformly across the EMU. For peripheral countries convergence represented a substantial fall in real interest rates. The result was rapid credit growth in the periphery. Note that real interest rates in the periphery remained lower than in the core as inflation rates were higher in the former than in the latter. Consequently, domestic credit growth was spurred mostly by domestic banks taking advantage of easy liquidity provided by the ECB, rather than by inflows of foreign financial capital.

5. The combination of external credit flows and domestic credit expansion resulted in a vast accumulation of debt in peripheral countries. The mix of external and internal debt varied considerably among member countries, as did the allocation of debt among private and public holders; but the broad pattern of debt accumulation exhibited considerable similarities. Inability to service debt in 2010 was the immediate trigger of the Eurozone crisis, which emerged as a sudden reversal of private capital flows to peripheral countries.

6. After the crisis had broken out four factors were paramount to tackling it by the EU.
– First, there was easy provision of liquidity by the EU to banks that came under pressure because of the inability of states to borrow and the consequent disturbance of money markets. The role of exceptional liquidity provider to banks was taken by the European Central Bank.
– Second, debt forgiveness was rejected within the EMU, especially the prospect of writing off the principal. The underlying reason was that the monetary union would not accept a policy of one state assuming responsibility for the debt of another. The EMU is a treaty-based alliance of independent states, each bearing individual responsibility for its actions; it was never formally designed as the first step toward an overarching European state.
– Third, assistance had to be provided to states that were shut out of the international financial markets. The EMU initially created *ad hoc* mechanisms for lending to such states, above all, the European Financial Stability Facility. Gradually the monetary union has acquired a permanent framework for the task, mostly represented by the European Stability Mechanism.
– Fourth, debtor countries were obliged to achieve fiscal stability through the imposition of austerity, i.e., by reducing public expenditure and raising taxes. Conditionality attached to EU lending was the most important lever in ensuring this principle.

7. In short, the costs of the crisis were to be transferred, as far as possible, onto the debtor countries rather than the lenders. Furthermore, there would be no wholesale institutional change of the EMU that would alter its fun-

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6   This approach to the EMU crisis was originally proposed by Lapavitsas *et.al.* (2010a) and subsequently developed in Lapavitsas *et.al.* (2010b and 2011), all three of which have been published as Lapavitsas *et.al.* (2012). The first of these publications was one of the earliest analyses of the EMU turmoil as essentially a "sudden stop" crisis, which has gradually become the standard approach to the crisis. The fundamental analysis of the Eurozone crisis was much further developed in Flassbeck and Lapavitsas (2013 and 2015).

damental functioning. Above all, there would be no adjustment of domestic German policy with regard to nominal wages and inflation rates. The crisis was interpreted as, primarily, the result of fiscal profligacy on the part of borrowers combined with weak competitiveness. The loss of competitiveness by the borrowers was considered to be due to lack of domestic "reforms", and was presumably unrelated to German policies.

8. In the 2010s Germany has emerged as the undisputed leader of the EMU dispelling any lingering illusions that the monetary union is an alliance of equal states reaching decisions jointly. The position of Germany as the largest economy with a huge current account surplus and vast lending abroad had ensured its preeminence in the hierarchy of states within the EU. Consequently, the institutional changes that have taken place in the EMU since the outbreak of the crisis have actually hardened the already existing, dysfunctional, regime. Three elements have been pivotal:
– First, fiscal discipline has been proclaimed a paramount aim, thus making austerity the driving principle of the EMU as a whole. To this effect the Stability and Growth Pact – which has been a vital feature of the EMU since the beginning – has been made tougher through the Fiscal Compact adopted in 2012. Penalties and automatic expenditure "cutters" have been instigated for "delinquent" states.
– Second, the methods to raise competitiveness include primarily wage compression, privatisation of public assets and deregulation of markets. The series of measures advocated for both peripheral and core countries fall well within the so-called Washington Consensus that has prevailed in international policy making since the 1980s. In short, the EU has opted for a neoliberal growth agenda to complement the dominance of austerity policy.
– Third, the ESM has gradually evolved into a mechanism that could deal with future public debt crises in the EMU. It cannot be overstressed that the ESM is a democratically unaccountable fund – legally a private enterprise – that is endowed with a "war chest" to be deployed on the basis of conditionality. Its character is not yet firmly fixed, but it might develop into a Eurozone-equivalent of the International Monetary Fund.

9. Equally important has been policy to deal with the fragility of banks as a result of the Eurozone crisis. A Banking Union has been proclaimed that includes the Single Supervisory Mechanism (SSM) and the Single Resolution Mechanism (SRM) for banks across the EU. The Banking Union is supposed to go beyond the creation of a homogeneous money market for banks in EMU member states. Its putative aim is to supersede the historical and institutional link between banks and their respective nation states regarding lending, but also regarding intervention when banks are threatened with failure.
– The SSM operates under the guidance of the ECB; membership is compulsory for all EMU member-state banks but optional for EU member-state banks. The SSM has the power to perform stress tests on the basis of which it can impose capital adequacy requirements and change bank management.
– The SRM, on the other hand, has jurisdiction over all banks under the SSM and is supposed to deal with failing banks. There would be some "bailout" funds that would gradually be gathered through bank contributions for the purpose. More important in the short term is the provision for the "bail-in" of privately held bank bonds and even bank deposits in case of bank failure. However, there would be no deposit insurance guarantees applying uniformly across the EMU and the EU.

10. The putative Banking Union is no real union. Supervision has certainly been homogenised and is now in the hands of the ECB with attendant powers. However, the real test for banks always comes at the point of failure, namely regarding the provision of funds to protect deposits, to shore up capital and to remove non-performing loans from balance sheets. The typical provider of such funds has been the nation state. The SRM represents a weak compromise in this regard since it has not replaced the nation state with a transnational body that could over the role of the state, but has attempted to shift the onus of dealing crises onto private banks and their creditors, including ordinary depositors. The fundamental reason is that the EMU is a treaty-based alliance in which no nation state would assume responsibility for the obligations of another. Certainly Germany would not assume the funding responsibility of rescuing the banks of another nation. The core logic of the EMU has remained unchanged in this respect. It is likely, therefore, that the compromise will fail at the first serious test.

11. Given these policies and institutional interventions, it is not at all surprising that the Eurozone crisis has not been finally resolved but merely pacified. The problem of German domestic policy has not been tackled at all. The imposition of austerity on peripheral countries has caused deep recessions, which in the case of Greece has approximated the magnitude of war destruction. The adoption of neoliberal policies of wage suppression, privatisation and liberalisation, the basic content of which is to be found in the Washington Consensus, has not significantly improved the growth prospects of peripheral countries. The hardening of EMU institutions, on the other hand, has spread austerity and neoliberal policies across the core of the EMU. The result has been the emergence of an increasing distance between Germany and the core countries of France and Italy, manifested

in the first instance as a growing competitiveness gap. Stagnation has spread across France and Italy marked by an inability to compete with Germany within the EMU. Among the first outcomes of this situation appears to be a nascent banking crisis in Europe which is unlikely to be resolved within the framework of the SRM.

12. There is little doubt that the EMU has failed as a monetary mechanism that was supposed to generate stability and convergence among member states. The gradual migration of tensions from the periphery to the core indicates that the end of the monetary union is now a realistic possibility in the foreseeable future. It is incumbent upon member states, particularly in the periphery, to begin to consider exit strategies that would protect the interests of working people and their national economies. It is also incumbent upon core states to consider alternative options for organising international transactions and payments among European states to avoid a return to competing nation states. The market for foreign exchange and the market for loanable capital must not be allowed to dictate relations among the states of Europe because the EMU has failed.

13. More broadly, the failure of the EMU tolls the bell for the EU itself. The monetary union has gradually become the backbone of the EU, as was quite likely from the beginning. In the 2010s the EU is at an extremely low ebb symbolised clearly by the exit of Britain. Europe currently needs new ideas and initiatives that would break with the failed approaches of the last four decades.

Chapter 3. The role played by national competitiveness

The monetary union of a large number of developed European countries created a currency that would function as the second most important international means of payment after the US dollar, thus providing scope to respond to pressures emanating from the world market. The euro would presumably protect individual member states from the need to adapt their monetary policies to external pressures which would typically impose costs on the domestic economy. At the same time, using the euro within the EMU would presumably eliminate the costs and risks of exchange rate fluctuations among member states, whose trade relations tended to be stronger with each other than with the rest of the world.

Unfortunately for these and similar aspirations to creating the monetary union, the common currency could not by itself eliminate the existence of the national economies within the EMU. Even more important, the euro could not alter the plain fact that imbalances of trade could still result in an accumulation of obligations that would be "external" to each national economy, even if "external" meant still within the EMU. Creating a form of money that is capable of operating in the world market, or even in a large part of the latter, negates neither the existence nor the inherent logic of the world market.

A national economy within the EMU would still face pressure to balance its external relations and to pay for its imports through exports. Obviously, the exports of a national economy, insofar as they would be sold to other EMU countries, would be denominated in euros, which would also be the exporter's domestic currency. But that would merely be to obfuscate the issue, since the value represented by exports would still have to be earned outside the national borders. In short, all members of the EMU would still have to generate a sufficient flow of exports to cover their imports and other external obligations. This fundamental principle of operating internationally would not be abolished because the currency of transactions across nations also happened to function as their domestic currency. To put it differently, the euro would appear to be the domestic currency of all member states but as far as deficit states were concerned, it would still be a foreign currency. Each country would still have to generate sufficient euros abroad to pay for its external obligations.[7]

This is the framework within which national competitiveness enters the mechanism of Eurozone crisis. National competitiveness is a notoriously difficult concept to define, not least because national economies are not capitalist enterprises. The most common mistake to make in this regard is to approach national competitiveness in terms of the normal determinants of enterprise competitiveness, such as technology and quality of management, which are hardly applicable to the national context. Nevertheless, national competitiveness is a real aspect of the world market reflecting the presence of national economies. National competitiveness shapes the imbalances of trade, thus setting the terms of restructuring national economies, if they are to continue participating in the world market.

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7   In effect the EMU is a peculiar version of the pre-World-War-I Gold Standard in which gold functioned both domestically and internationally but the latter role dominated the former and was often perceived as "external" to each country. The difference is, of course, that the EMU is highly managed. The euro operates with none of the automaticity of gold. This is what gives to the monetary union a deeply political and hierarchical character.

National competitiveness has a variety of determinants that could be interpreted at different levels, including even cultural and institutional elements. Thus, the characteristic approach of the European Commission to peripheral countries hit by the crisis stresses heavily the domestic causes for competitiveness loss.[8] The frictions, institutional weaknesses, and various inefficiencies of peripheral economies and societies have presumably caused a loss of competitiveness. By this token a remedial policy of "reforms" is necessary and that is presumably what the European Commission is doing in Greece and elsewhere in the periphery with its "rescue programmes".

There is, however, a further approach to the role of competitiveness in the Eurozone crisis that is far better founded in macroeconomic terms. It is an approach that is based on the divergence of nominal unit labour costs among member countries of the EMU, which has proven disastrous for the monetary union. Gradually but steadily the validity of this approach is gaining ground. Below it is considered in some depth because its analytical use of competitiveness has been the cause of not a little confusion.[9]

National competitiveness in the world market, other things equal, depends on two macroeconomic factors: the rate of domestic inflation (negatively) and the rate of aggregate productivity change (positively). For this reason, a good proxy for the evolution of national competitiveness is the rate of change of nominal unit labour cost defined as the nominal remuneration of labour, divided by real output. The nominal remuneration of labour, W, includes not only nominal wages but also all other nominal labour costs for employers. The real output of a national economy, on the other hand, is defined as nominal output, Y, divided by the price level, P. The nominal unit cost of labour (ULC) is therefore given $ULC = W/(Y/P)$.

It is apparent that this ratio captures the nominal outlay on labour per unit of national output. Even more important is that its rate of change over time is closely correlated with domestic inflation in empirical terms. Correlation is, of course, not causation: nominal unit labour costs are not the cause of national inflation but certainly relate to it closely.[10] At the same time the ratio implicitly reflects the relationship of labour productivity to the cost of labour per worker, or per hour worked. Thus, if both the numerator and the denominator were divided by the total hours worked in the economy, L, the definition would become, $ULC = (W/L)/(Y/PL)$.

The numerator would then stand for the nominal cost of labour per hour worked, while the denominator would stand for labour productivity. Therefore, the path of nominal unit labour cost over time would also reflect the variation of nominal labour remuneration relative to labour productivity. Note, finally, that if the real rather than the nominal remuneration of labour was used in the numerator, i.e., W/P, the ratio would become $(W/P)/(Y/P)$. This ratio would not capture national competitiveness but the share of real wages in real national output.

National competitiveness, summed up by the nominal unit labour cost for the whole economy, underpins the performance of a national economy in the world market. It gives insight into the performance of exports but also of imports in the domestic economy, thus into the forces that make for an external deficit or surplus, with attendant implications. Needless to say, it is a rather blunt instrument since it refers to the national economy as a whole. Competitiveness requires far more detailed examination at close quarters, if specific policy decisions are to be taken. Nevertheless, at the macroeconomic level of the EMU as a whole, aggregate nominal unit labour cost remains an indispensable analytical tool, as is shown immediately below.

The single piece of evidence that captures the malfunctioning of the Eurozone is the trajectory of nominal unit labour costs over time. It is convenient to depict it from the actual introduction of the euro in 1999, although the EMU began to take shape a few years earlier. Figure 1 shows the trajectory of on the one hand, Germany, France and Italy, and, on the other, Spain, and Greece. This group of countries reflects the core and periphery composition of the EMU.

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8   Its logic is expressed with clarity, even if it is not officially aligned with the European Commission, by Sinn (2014).
9   The confusion is vividly apparent among well-meaning heterodox economists and presumably radical politicians of the Left who wish to oppose the emphasis of the European Commission on the internal problems of the Greek and other peripheral economies. The official approach is certainly misleading and the emphasis on "reform" to raise competitiveness has been disastrous, as is shown below. But refusing to analyse the importance of competitiveness and disregarding the role of Germany in causing the loss of competitiveness in the periphery of the EMU is to throw the baby out with the bathwater. An instance of such a misunderstanding is Storm and Naastepad (2015); see also the recent debate between Storm, Flassbeck, Lapavitsas, Bibow, Hild, Wren-Lewis, and Bofinger in EReNSEP (2016).
10   See Flassbeck and Lapavitsas (2015).

Figure 1. Unit labour costs
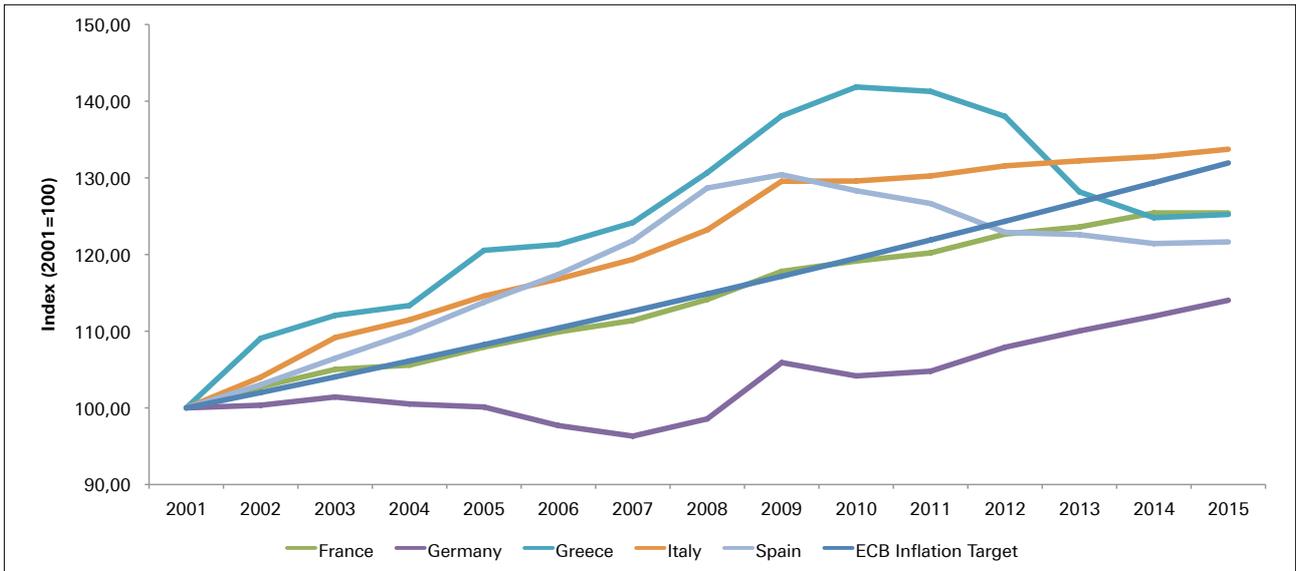
The path of each country is shown in relation to itself, with 1999=100. Given the preceding analysis, it is apparent that the gap between any two curves represents loss of national competitiveness for the country with the faster rising costs, which would be a gain for the other. It cannot be overstressed that the curves show changes rather than levels of competitiveness. What matters ultimately in determining international deficits and surpluses is loss or gain of competitiveness, rather than the absolute levels. Note, finally, that the change in competitiveness (both gain and loss) would be cumulative for every year that passes.

Figure 1 shows immediately that the outlier in the EMU as far as nominal unit labour costs are concerned is Germany. Nominal unit labour costs rose faster in Greece, Spain and Italy during the decade of 1999–2009, but the behaviour that truly stands out is the essential freezing of these costs in Germany during the same period. France, in contrast, had modest increases in ULC.

It is apparent that Germany has made enormous gains in national competitiveness in 1999–2009 relative to other EMU countries as a result of keeping the nominal remuneration of labour essentially frozen. These gains for Germany, and indeed the trajectory of its national competitiveness after 2009 have had nothing to do with labour productivity, as is clear from Figure 2.

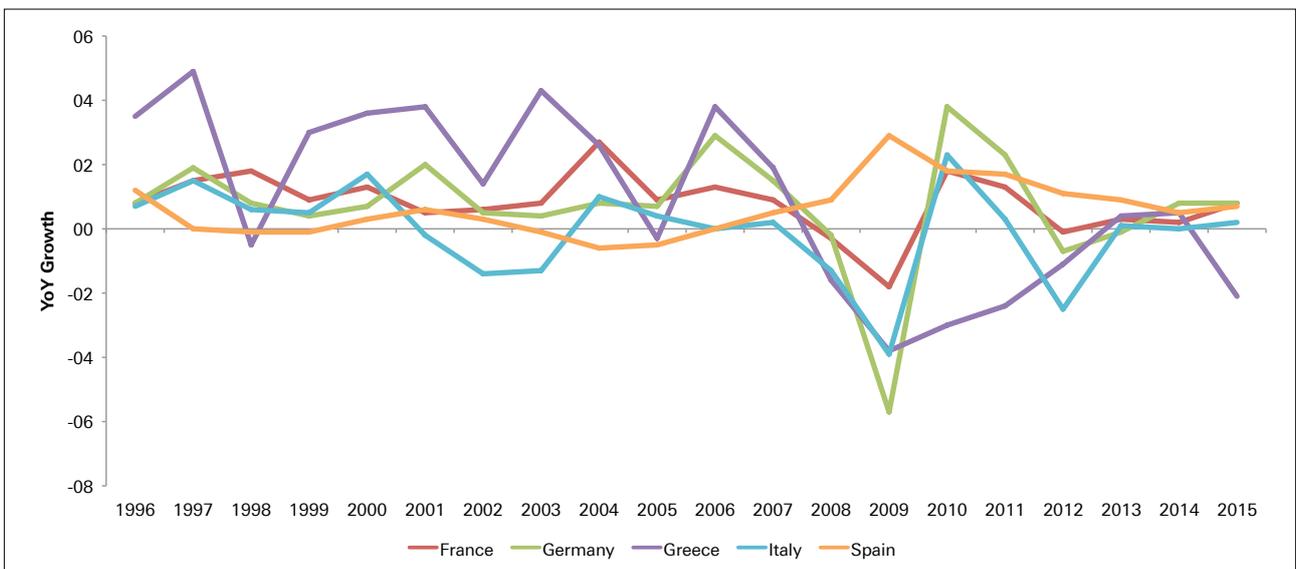**Figure 2. Real labour productivity per person**

Figure 2 shows that the fastest growth of labour productivity per person during the 2000s and until the out-break of the crisis was actually observed in Greece. Productivity growth in Germany was weak, though not as weak as in Italy and Spain. What is perfectly obvious is that the dramatic jump in German competitiveness after the introduction of the euro had nothing to do with a "productivity miracle". German exporters have triumphed on the back of frozen wages for German labour. The same point also emerges clearly when labour productivity is considered in terms of the hours worked.

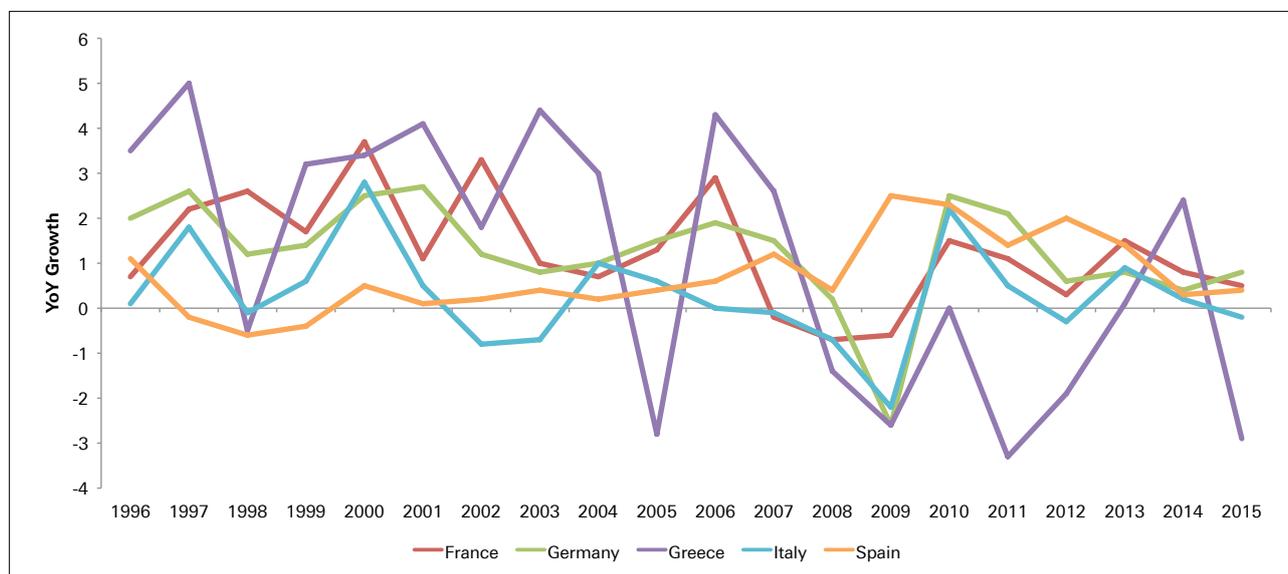**Figure 3. Real labour productivity per hour worked**

Figure 3 shows that Greece was again ahead of the other countries in productivity growth. The performance of Germany was weak, though still better than Italy and Spain. Under no circumstances, however, has Germany done systematically better than France in improving labour productivity. The persistent laggards in productivity growth in the EMU, finally, have been Spain and Italy: productivity in both countries appears to have completely stagnated after joining the monetary union.

In this light it is important to return to Figure 1 and consider the trajectory of competitiveness following the out-break of the Eurozone crisis and provided insight into the path of the EMU. The outlook of Germany, i.e., of the true outlier, has not been fundamentally corrected in the 2010s. German nominal wage growth has slightly ac-celerated compared to the 2000s, but remains very modest and secures significant advantages to its exporters. Instead of focusing on Germany, the EU has engaged in a ruthless policy of lowering the remuneration of labour in the periphery: there has been a veritable collapse of wages in Greece and a dramatic fall in Spain. It is intuitive, and it will be shown below, that the result has been a pronounced decline of domestic demand in these countries and hence very strong recessionary pressures, which have reached unprecedented levels in Greece. The com-petitiveness gap with Germany has closed somewhat, but there is still a long way to go for Spain and Greece be-fore they could even begin to contemplate gaining an advantage relative to Germany within the EMU.

There is no doubt that the tremendous gains in German competitiveness since the introduction of the euro have been due to freezing nominal unit labour costs essentially by freezing the nominal remuneration of labour. The secret of German competitive success has been extraordinary wage restraint – German exports have boomed on the back of German workers. By the same token, the collapse of Greek competitiveness in the 2000s has not been caused by a putative structural failure of the Greek economy to increase productivity. On the contrary, Greece has been the most successful among the sample countries in raising productivity until the outbreak of the global crisis.

German dominance in the Eurozone – ultimately leading to the historical malfunctioning of the monetary union – is rooted in the capitulation of German labour to German capital in the second half of the 1990s. There was no grand plan behind this outcome; history does not proceed in this way. Rather, faced with the pressures of German reunification in the 1990s and confronted with the uncertainties of the emerging monetary union, the institutional forces representing German class struggle – the employers, the unions and the state – came to an arrangement that shifted the entire burden of adjustment onto labour. Annual productivity gains would be appropriated by the

employers, and workers would accept frozen wages. The benefit to workers would presumably be protection of employment in the medium term. The neoclassical ideology of the operation of the labour market, prevalent in debates in the atmosphere of the 1990s, facilitated this extraordinary surrender of German labour.[11]

The outcome has been beneficial to German capital in the short term but completely destabilising for the EMU in both the short and the long term, thus potentially damaging for German capital in the long term. For, within the monetary union there is no way that other countries could adjust their exchange rates to eliminate the gains in German competitiveness, i.e., they could not repeat the practice that characterised the earlier monetary arrangements of the EU.

Furthermore, the notion propagated by the European Commission that competitiveness could be raised across the board within the EMU by imposing wage restraint while improving productivity through deregulation of labour markets, privatisation, and liberalisation of other markets, is not even worth considering theoretically or empirically. The only outcome of such a policy – as will become evident in the remaining parts of this study in relation to Greece – would be to depress demand across the EMU, thus attaining stabilisation but at the cost of generalised economic stagnation.

The winner within the EMU framework has been Germany due to both its extraordinary wage restraint and the relative size of its economy and industrial base. The historic advantage gained by Germany within the EMU could not be replicated by other countries and certainly not by the monetary union as a whole. The EMU has become a trap for the smaller countries, such as Spain and Greece, which have rapidly become an internal periphery. It has also become a trap also for the larger countries, such as France and Italy, which have gradually accumulated major losses in national competitiveness.[12]

In 2016 the real problem for the EMU was no longer the periphery but the core. The gap between, on the one hand, Germany and, on the other, France and Italy had become very large, particularly for Italy. The Italian economy found itself trapped within the EMU and its prospects looked very poor, given the dispensation of EU policies. The EMU had clearly failed with regard to peripheral countries and it was also failing with regard to the core. The inherent weakness of the EMU meant that the long-term interests of German capital were far from served by the monetary union. However, this would not be the first time that short-term gain would undermine the long-term interests of a country in the world market.

Chapter 4. Destabilisation of external transactions

The failure of the monetary union is apparent in the external transactions of EMU countries, since national competitiveness is vital for both exports and imports. The impact of tremendous competitiveness gains on German external transactions has been rapid and substantial. As is shown in Figure 4, soon after the introduction of the euro in 1999, but also in the years immediately preceding it, since the shifts in national competitiveness actually began to emerge in the late 1990s, a tremendous change has taken place in the patterns of external transactions among EMU countries. From a reasonably stable pattern, the EMU has shifted to a fundamentally unstable outlook in which Germany has emerged with a huge surplus, while peripheral countries but also key core countries have taken a sharp turn for the worse.

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11 See Flassbeck and Lapavitsas (2015).
12 The nearest analogue to the current state of the EMU is Europe following the Treaty of Versailles. As Keynes (1919 and 1929) explained in withering terms, the victorious allies had imposed a Carthaginian peace on Germany forcing it to make enormous reparations while simultaneously depriving it of much of its productive capacity and preventing it from increasing its exports. Germany was simply incapable of generating the surpluses abroad to make the required payments. The historical tragedy is that Germany has now imposed a similar state of affairs on the rest of Europe via the EMU.

Figure 4. Current account
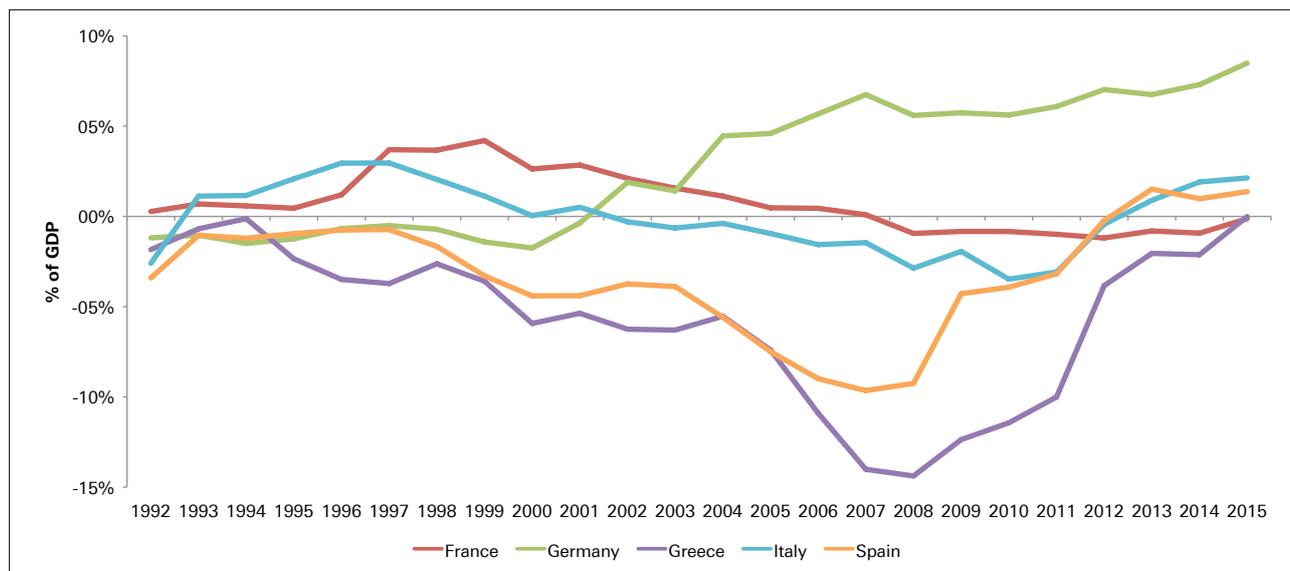
The jump for Germany was of historic dimensions and its exporting transformation since the launch of the euro in 1999 can be usefully split in two. The surplus on current account until 2009 derived mostly from within the Eurozone primarily because of gains in national competitiveness, explained above.[13] After the outbreak of the Eurozone crisis, however, and as the Eurozone economy faced protracted economic weakness, the German current account surplus began to be generated primarily from the rest of the world. The single most important reason for this development has been the trajectory of exchange rate of the euro. Relative to the dollar the euro has declined consistently since 2010, the EUR/USD rate falling from roughly 1.5 in 2008 to 1.1 in 2015. Relative to the Chinese yuan the euro has also declined consistently, the EUR/CNY rate falling from roughly 10.4 in 2007 to about 7 in 2015.

The sustained fall in the exchange rate of the euro has reflected the weakness of the European economy, encouraging European exporters to seek markets outside the EU that is bedevilled by depressed internal demand. This is a generally observed trend across the five countries of the sample, but the main beneficiary has been Germany due to its historically strong industrial base and high levels of productivity. If Germany was still in possession of its Deutschmark, the exchange rate would probably have behaved very differently, and the impact on its exporters would not have been positive. In possession of the euro, Germany has been able to dominate the internal market of the EMU for reasons explained above, while also benefiting from a weak euro globally. The result has been a tremendous growth in German exports, a historic shift in the international standing of Germany as an exporting country.

The transformation is also apparent with regard to the trade balance in Figure 5, which shows the enormous and growing German external surplus in goods and services since 1999. The same conclusion is apparent from Figure 6 which shows the growth of German exports as proportion of GDP since 1999. Growth occurred in two distinct jumps: first, roughly in 2003–2008, mostly to the Eurozone, second, in 2009–2015, mostly to the rest of the world. In effect, the EMU has made it possible for Germany to implement a "neo-mercantilist" policy of keeping domestic demand weak by suppressing wage growth, while seeking growth through the accumulation of external surpluses. Germany has been sucking in demand from across Europe in the 2000s, and from across the world in the 2010s. The EMU has been simultaneously a lever for tremendous German domination of Europe and for profound structural instability in the world economy. The monetary union has been a failure of historic proportions, including for German wage labour and other social layers affected by domestic wage restraint. But it has been a tremendous success for large German exporters.

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13   See also Lapavitsas *et.al.*, (2010a).

Figure 5. Trade balance
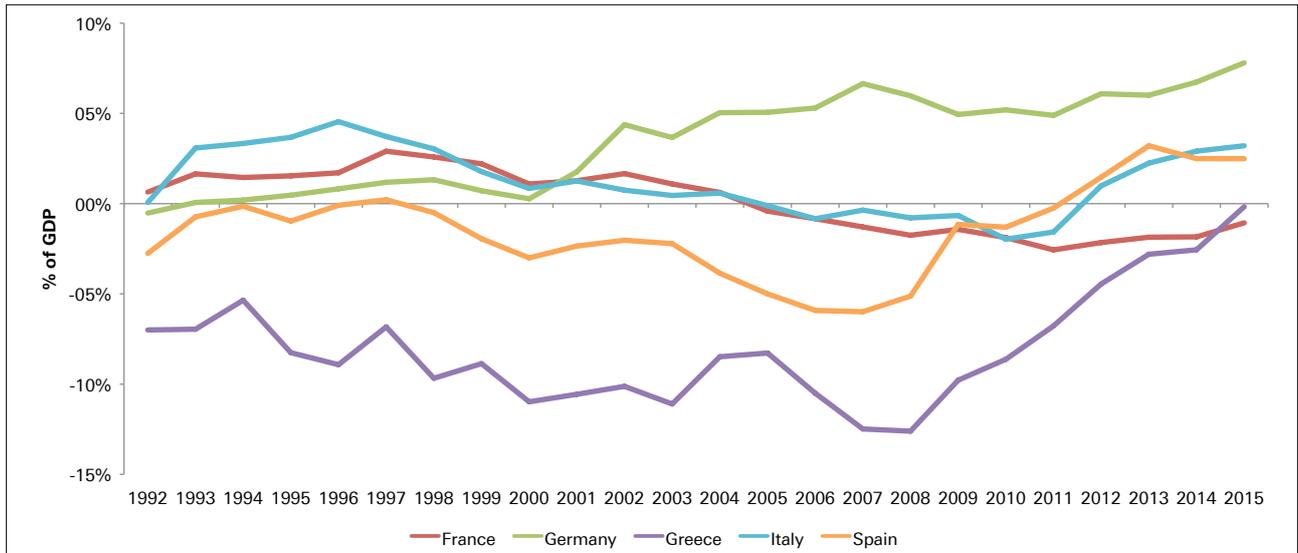
Figure 6. Exports of goods and services as % of GDP
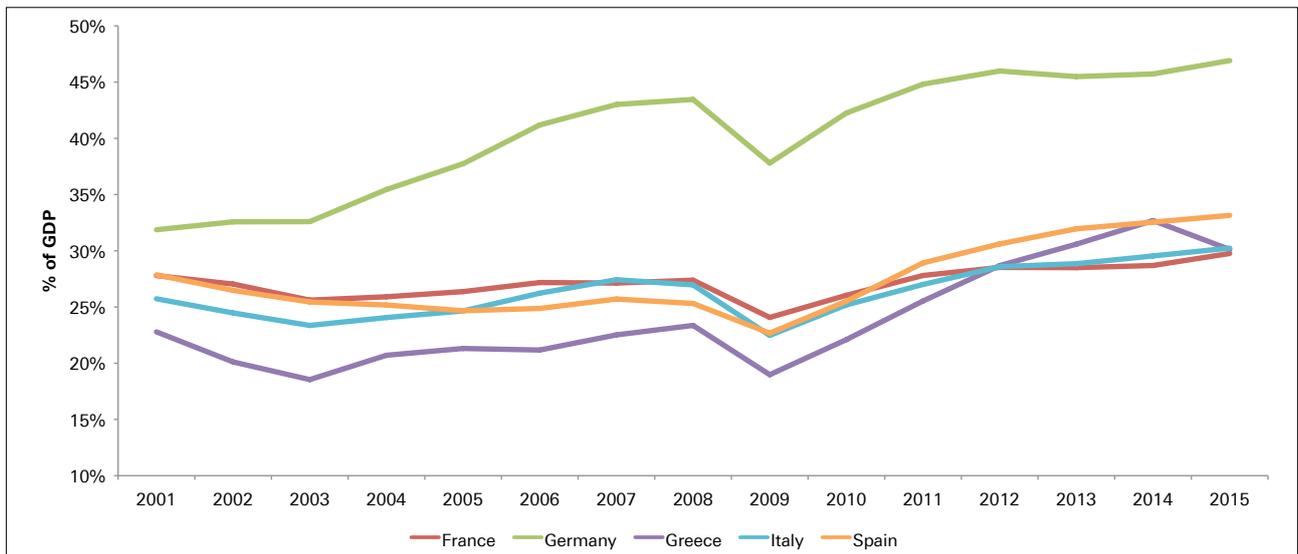
The mirror image of Germany's triumph has been the emergence of an internal Eurozone periphery in the 2000s – here represented by Spain and Greece – that has faced enormous deficits on current account as well as on trade balance. The policies of austerity and wage suppression that the periphery has been forced to adopt since 2010, at the behest of Germany, have brought a measure of stability to the external transactions of the periphery, as is apparent from Figures 4 and 5. The recovery of national competitiveness, shown in Figure 1, has indeed allowed Spain and Greece to close their external gaps.

The mechanism of stability, however, has been primarily the collapse of imports due to falling domestic demand, rather than strong growth of exports. As Figure 6 shows, in the case of Greece, where the adjustment was at its most violent, exports have shown no dynamism at all. Indeed, Greek membership of the EMU appears to have been a failure in most respects. Spain has performed better in the world market, but it is hardly a pattern that would decisively change the direction of the Spanish economy. Peripheral economies, in short, are trapped in the recession cage of the EMU and are failing to compete globally despite the fall in the euro.

Finally, the underlying weakness of the Eurozone is also apparent with regard to the core countries. German "neo-mercantilism" has placed France and Italy in an impossible predicament, facing persistent difficulties on current account and inability to compete globally. Italy, in particular, has been caught in the EU austerity vice since 2010, with weak productivity growth for a long time and weak growth of exports. There is no economic reason to think that France and Italy will be able to survive for long within the EMU.

Chapter 5. Vast accumulation of private and public debt

For the countries of the periphery the most pressing aspect of the growing external imbalances in the 2000s has been the rise in indebtedness. The form taken by debt has varied among peripheral countries depending crucially on the domestic array of economic and political factors. It is beyond dispute, however, that the main increase took place in private debt.[14]

Figure 7 shows the trajectory of debt incurred by non-financial agents in the economy, i.e., corporations and households. It is important to note that the debt incurred by financial agents, i.e., primarily banks, has been even more substantial than for non-financial enterprises, as will be seen in subsequent sections. The debt of non-financial agents, however, reflects the impact of credit relations on the productive agents of the economy, and is thus of critical importance for the rest of the analysis. Incidentally, it is erroneous to expect the accumulation of external debt due to loss of competitiveness to take the form exclusively of company debt (importer's debt). Loss of national competitiveness certainly implies growth of imports but the financing of imports can take a variety of indirect and deflected paths through the domestic financial system. National competitiveness is an aggregate result and its decline would correspond to an increase in obligations that would have occurred in a variety of ways.

In the 2000s there was a veritable explosion of Spanish private debt, which was a direct result of the real estate 'bubble' that occurred in the country in the years following accession to the EMU. Private debt also increased substantially in Greece, where there was no real estate 'bubble', but households and enterprises still became laden with debt. Unsurprisingly, the reverse holds true for Germany: non-financial corporations, enjoying a great competitive advantage, have accumulated profits and have had no reason to expand indebtedness, particularly in view of weak investment, as will be shown below.

Following the outbreak of the crisis of 2007-9 crisis and especially of the Eurozone crisis in 2010, private debt has declined as proportion of GDP, as both peripheral and core economies have faced protracted recession and weak growth. Declining use of private credit has indeed been one of the reasons of weak effective demand that has marked Europe since 2010. The exception has been France, where private indebtedness has continued to grow.

Figure 7. Private debt (non-financial corporations and households)
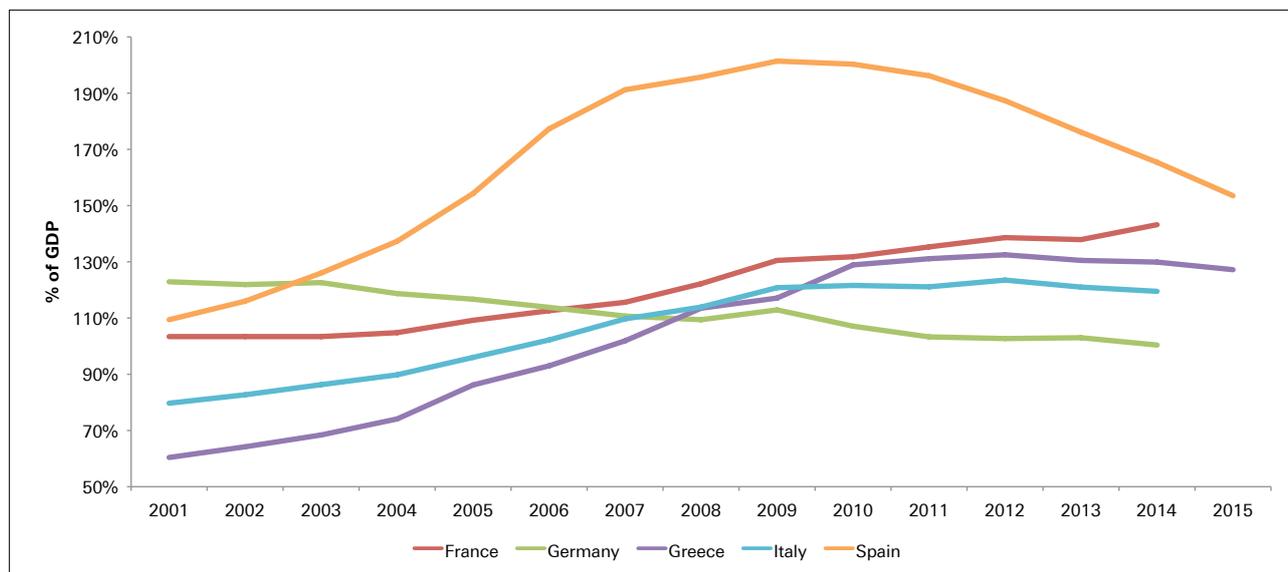
In contrast to private debt, public debt as proportion of GDP has either declined or been stable for most of the 2000s. Growth of public debt did not cause the crisis. As Figure 8 shows, public debt has grown following the outbreak of the crisis of 2007-9 and particularly of the Eurozone crisis in 2010.

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14   This point was established in Lapavitsas *et.al.* (2010b) by examining in detail the debt of several peripheral EMU countries.

Figure 8. Public debt
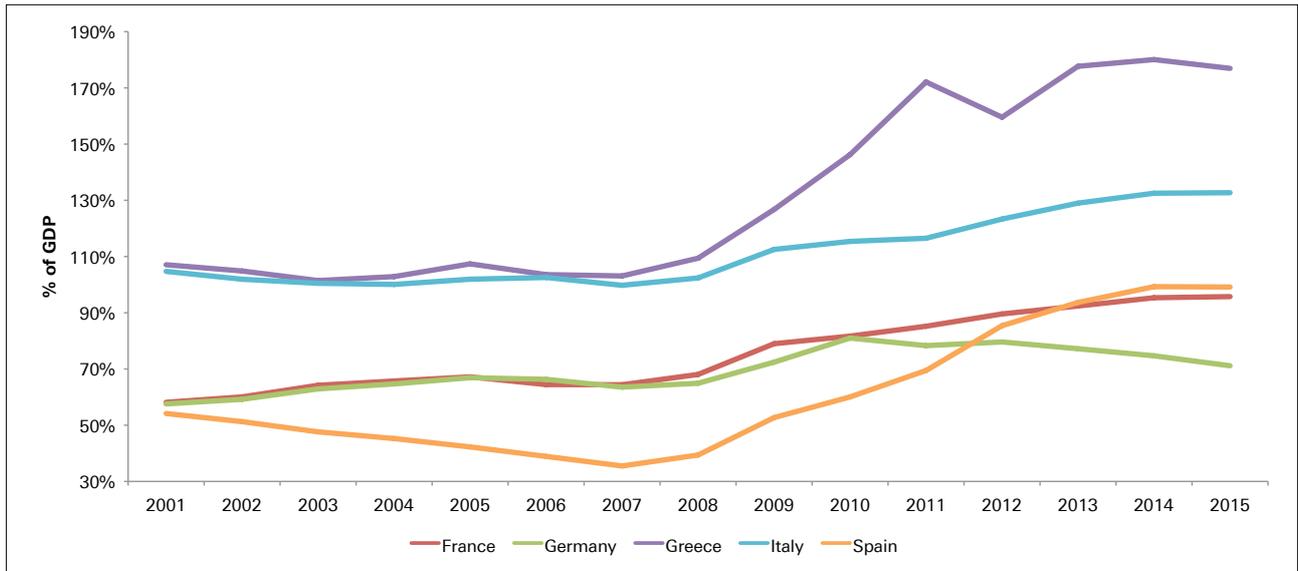
Note that Greece and Italy have had historically high proportions of public debt, partly as a result of problematic tax collection practices.[15] In Greece public debt rose rapidly as proportion of GDP after 2008, and by 2015 it had reached unsustainable levels. Italian public debt has also increased steadily but, unlike Greek debt, much of it is owed domestically, thus making it less pressing on the economy. The deepest transformation, however, has occurred in Spanish public debt, which has traditionally been very low, partly reflecting the conservative fiscal stance of successive Spanish governments. The rapid increase in Spanish public debt is a direct result of the migration of private financial corporation (bank) debt onto public debt. Dealing with the debt accumulated by the private sector in Spain has meant imposing a huge burden of debt on the public sector.

The accumulation of debt in the Eurozone has taken a complex form due to a further development associated with the Eurozone but only indirectly related to the loss of competitiveness. The implementation of a common monetary policy and the concomitant creation of a homogeneous interbank market across the Eurozone meant that nominal interest rates converged toward the same level in the second half of the 1990s, as is shown in Fig. 9. Note further, that the crisis has once again led to significant divergences in nominal interest rates as the banking space of the EMU has become increasingly fragmented.

Figure 9. Nominal interest rates

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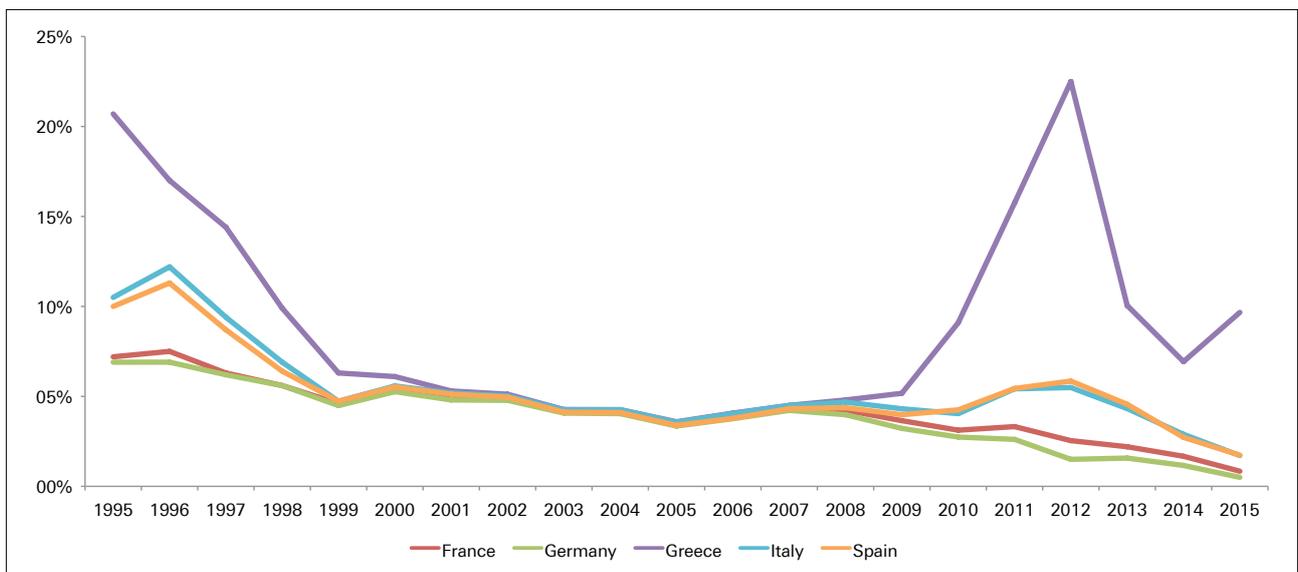
15   For some penetrating observations on Greek public debt and its trajectory, see Nikiforos, Papadimitriou and Zezza (2016).

The convergence of nominal interest rates has brought interest rates down in an unprecedented way in the periphery. It is vital to note, nonetheless, that real interest rates did not converge nearly as much on account of the divergence of inflation rates, which were closely correlated with diverging nominal unit labour costs. Thus, real interest rates in Germany and France have remained generally higher than in Spain and Greece in the 2000s, as is shown in figure 10.

Figure 10. Real interest rates

The emergence of lower real interest rates in the periphery in the 2000s is important with regard to assessing an alternative explanation of the Eurozone crisis that has attracted considerable attention among heterodox writers who wish to oppose the policies of the European Commission. In a nutshell, the argument is that the crisis has been caused by strong growth of domestic demand in the periphery that led to external deficits and was induced by the inflow of foreign loanable capital seek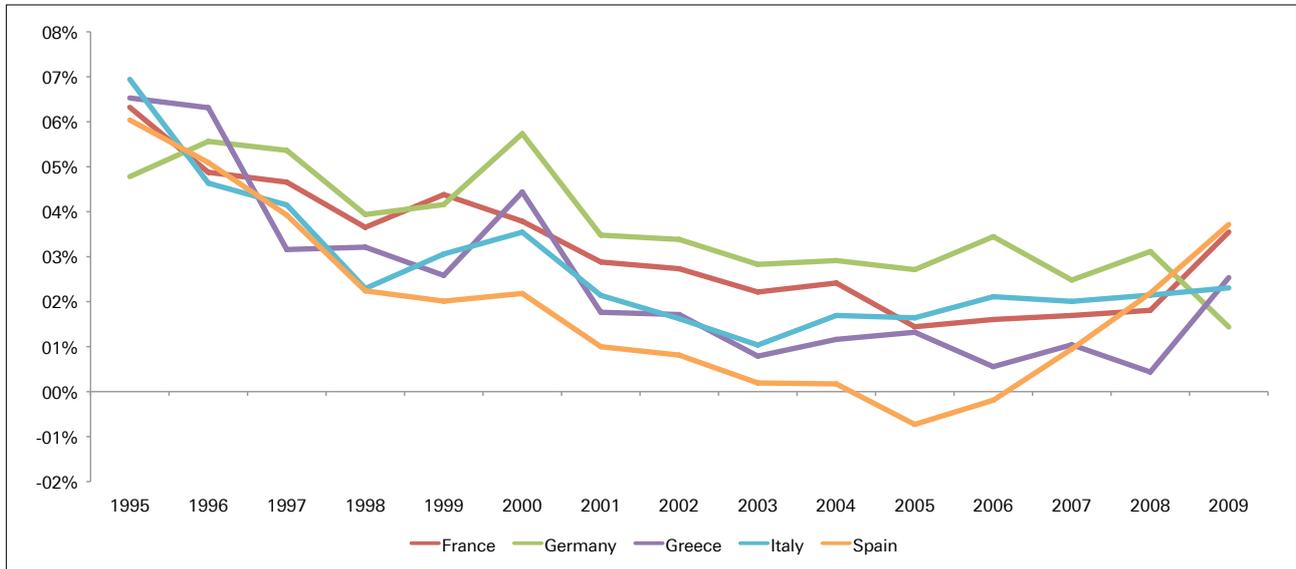ing higher returns in the periphery, thus encouraging growth of credit.[16] This claim appears ostensibly radical since it rejects the arguments of the European Commission regarding competitiveness – indeed it looks askance at the very use of the concept of competitiveness – and lays much of the blame for the crisis at the door of financial institutions and their lending practices.[17] Unfortunately the argument is fallacious on both empirical and theoretical grounds.

Capital certainly flowed into the periphery from the core but that was the result of deeper processes occurring in the economy, above all, of the external deficits due to loss of competitiveness. At the same time, lower nominal and real rates in the periphery coupled with the heightened ability of peripheral banks to obtain liquidity in the homogeneous interbank markets of the EMU – partly through the mediation of the ECB – indeed led to tremendous growth of domestic finance, which took the form of a real estate 'bubble' in Spain. However, there was no financial 'bubble' in Greece, although domestic finance did expand rapidly.

For both Spain and Greece the 2000s were a period of financial expansion as households and workers were brought into the realm of formal finance primarily for real estate and consumption loans. Yet, the rapid growth of finance had domestic sources and was not initiated by the inflow of foreign loanable capital in search of higher returns. It would have been absurd for private loanable capital to abandon the higher real interest rates at the core in search of the lower real rates in the periphery. Foreign banks certainly lent to peripheral countries and the flows were substantial, but the process was much more roundabout and had to do primarily with lending to the state, as in Greece, or to private banks, as in Spain, though Greek banks also borrowed heavily abroad. This borrowing, however, was a reflection of the underlying inability of these economies to compete, which thus had to finance their external deficits through foreign inflows.

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16   Recent exponents are Storm and Naastepad (2015). There have been several others, including in Greece, where the clearest instance of this insupportable claim was provided by Milios and Sotiropoulos (2010).
17   It should be noted, nonetheless, that there are also strong mainstream arguments that lay the blame for the crisis on the growth of domestic demand in the periphery rather than on competitiveness; see Wyplosz (2013).

In Greece, in particular, the expansion of aggregate demand in the 2000s certainly depended on credit growth, but that was supplied by domestic banks, which relied on the international money market and the ECB for liquidity. Moreover, and as will be shown in detail in Part II of this study, credit growth occurred while a dramatic collapse of aggregate domestic saving took place. Net national saving in Greece has been systematically negative since the country's entry into the Eurozone. Foreign borrowing has thus been essential to support the country's growth and investment in the 2000s. Capital inflows from abroad were a reflection of the weakness of the domestic economy, not its cause. When foreign borrowing became impossible as the "sudden stop" crisis burst out, the underlying weakness of Greece became apparent and the economy collapsed in the 2010s.[18]

Confronting public debt has been one of the main concerns of EU policy following the outbreak of the crisis, even though public debt has not been the cause of the crisis. Austerity policies have aimed at keeping public debt under control, and the direction and mix of policies have been determined by the putative need to make public debt sustainable. It bears stressing that real burden of debt in peripheral countries has not simply been the volume of resources paid to lenders on an annual basis, often being transferred to lenders abroad, but the very adoption of austerity policies driven by the logic of servicing the debt. The cost of these disastrous macroeconomic policies is most evident in Greece, but it has also been substantial elsewhere in the EMU. A further measure of Eurozone failure, moreover, has been the emergence of unsustainable levels of public debt in several peripheral, and even core, countries, despite the adoption of macroeconomic policies that have ostensibly aimed at restraining public debt.

Note, finally, that historically low interest rates as a result of EMU membership made it possible for the Greek state to change the composition of public debt in the 2000s.[19] When the Eurozone crisis broke out in 2010, great bulk of Greek public debt was owed to foreign lenders, unlike Italian public debt. In 2010 the foreign lenders to Greece were mostly private banks for Germany, France and elsewhere within the Eurozone. The policies imposed on the country by the EU and enforced through the rigid conditionality attached to bailout funds in the 2010s have allowed foreign private lenders to extricate themselves from Greece with minimal losses. Greek public debt has been transferred to foreign public lenders, that is, primarily the new institutions created by the Eurozone to deal with the crisis, including the ESM. The result has been complete subjection of the country to the lenders in terms of economic policy, but increasingly also in terms of its internal politics and its geopolitical stance. It is no exaggeration to consider Greece as a form of neo-colony within the EMU, a subaltern status that was demonstrated clearly when the presumably radical government of SYRIZA was elected to power in 2015, only to adopt the same policies within seven months of its election.

In sum, whether in private or public form, peripheral countries have accumulated debt as their economies have lost out in the competitive struggle within the Eurozone induced by the extraordinary domestic German wage restraint. The presence of this private and public debt has been an obstacle to both recovery and growth within the Eurozone. Inability to deal with the accumulated debt, furthermore, has reflected an inability decisively to restore competitiveness. This is also a part of the historic failure of the monetary union, as is shown in more detail below.

The counterpart to rising peripheral debt has been the emergence of Germany as a major lender, both in Europe and across the world. Figure 11 shows the historic jump in the trade and current account surpluses of Germany following the introduction of the euro, which have amounted to a vast improvement in the country's Net International Investment Position. The latter is basically defined as the stock of international assets held by agents of the national economy minus the stock of domestic assets held by foreign agents. Germany has been accumulating huge claims on foreigners through its exports and lending. After the introduction of the EMU, Germany has emerged as the dominant lender of Europe and a significant lender across the world. This is the real foundation of German political power within the EU.

Figure 11. German balance of payments statistics
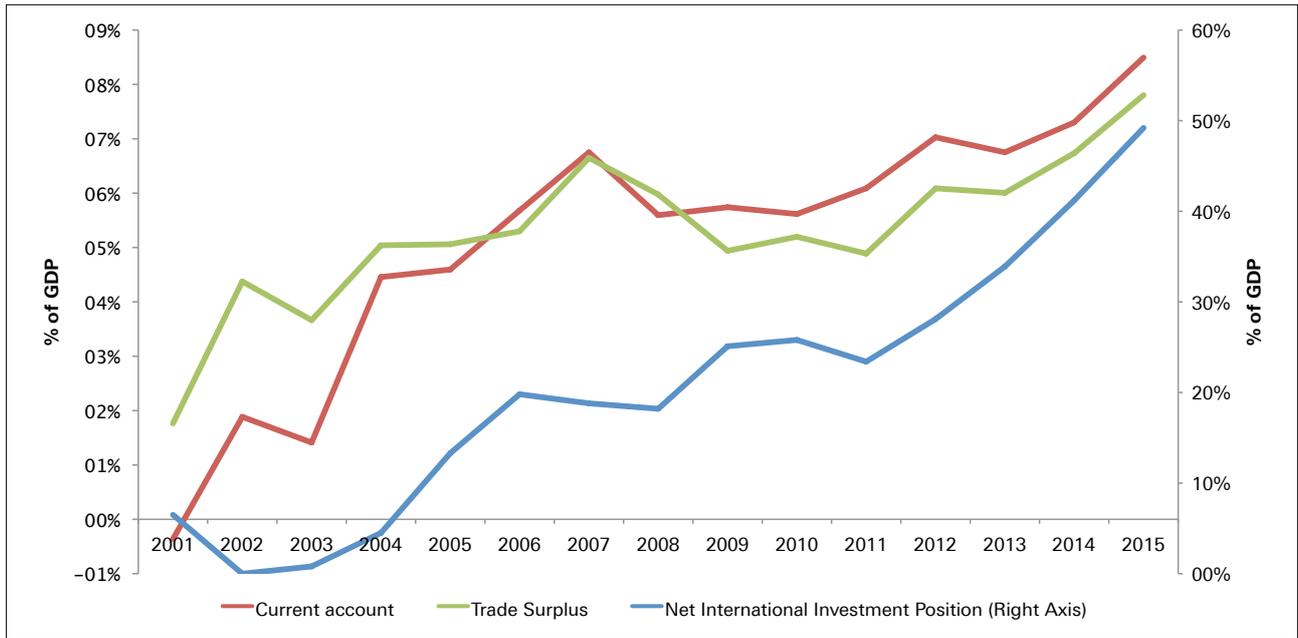
Chapter 6. The Eurozone crisis takes the form of a "sudden stop"

By the end of the 2000s the periphery found itself in an extremely precarious position as external deficits had reached huge proportions and debt had accumulated in unprecedented ways. The global crisis of 2007-9 lit the fire and the Eurozone was engulfed by it in 2010. The crisis burst out in the classic ways observed in developing countries in the 1980s and 1990s. The emergence of huge deficits on trade and current account together with the accumulation of private and public debt had created unstable conditions for international capital flows to the periphery. When the world economy went into synchronised recession in 2008-9 as a result of the financial collapse in the USA, the public sector of peripheral countries began to register substantial primary deficits.

As figure 12 shows, rising public deficits were a result of the crisis and not its cause. Tax income declined and expenditures were maintained in an attempt to support aggregate demand even in Greece, for which the figures were least reliable. There has been no public "profligacy" anywhere in the periphery, and indeed the performance of the Spanish has been even more conservative than the German state. It has not gained any prizes for its fiscal uprightness, however.

Figure 12. Primary balance as % of GDP, selected EMU countries
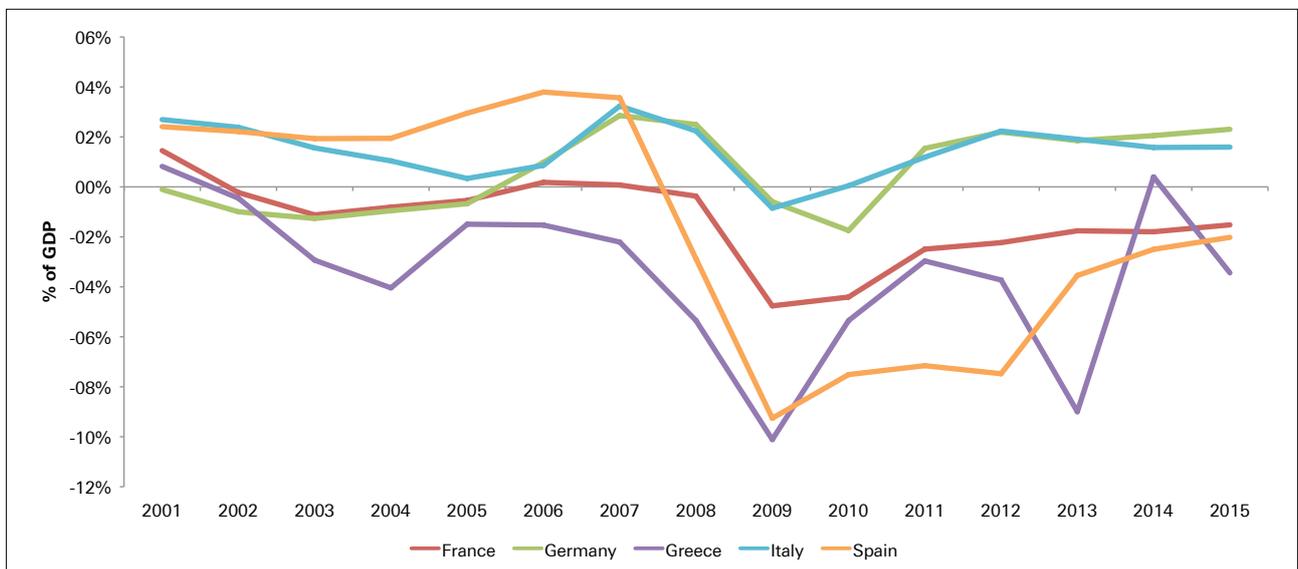
As public deficits increased, it became apparent that the huge volumes of public debt in Greece but also of private debt in Spain and elsewhere in the periphery would be impossible to sustain through regular access to private loanable capital flows. The implication was a sharp reversal of private flows: essentially private bank lending by the core to the periphery dried up suddenly.[20] Greece and then Portugal and Ireland were shut out of financial markets in 2016, unable to borrow and service their public debt. A 'sudden stop' crisis materialised. The proximate form of the Eurozone crisis, therefore, was that of a classic crisis of capital flows and international trade observed in the world market during the last four decades.

Under the normal conditions of capitalist development in the period since the 1970s, once the private flows of private capital to the periphery had dried up there would have been a foreign exchange crisis, which would then have impacted negatively on the real economy. The problem was, of course, that within the Eurozone there were no foreign exchange rates to take the brunt of the shock. Inevitably the economies and societies of the periphery would have to take the shock directly: the rigid framework of the EMU precluded any other option. Matters for the periphery became immeasurably worse as the reaction of the EU – driven partly by lack of appreciation of the nature of the crisis and partly by a profound reluctance to force change on Germany – was to impose wage suppression, austerity, deregulation and privatisation. A crisis of capital flows, international trade, and external debt in the periphery became a gigantic disaster for peripheral countries, especially in Greece. Before discussing the results of EU policies, however, it is necessary to outline the state of the financial sector in the Eurozone, particularly the banks.

Chapter 7. The black hole of the banks

It is trivially true that no monetary union could function properly without making provision for banking operations. The EMU has struggled with banking provision from the time of its inception, even taking steps toward a putative Banking Union after the outbreak of the crisis in 2010. Banks have been protected throughout the crisis, in contrast to the harsh measures imposed on nation states. However, the state of banking in the Eurozone, particularly in the periphery but also in countries that could be considered part of the core remains highly precarious. Contrary to the talk of creating a Banking Union, banking in the Eurozone has been characterised by advancing fragmentation and persistent malaise.

Establishing the EMU has made it necessary to create a framework within which member-state banks would be able to borrow on homogeneous terms from the interbank market. By creating a homogeneous inter-bank market the ECB was be able to control the ultimate provision of liquidity to private banks, and thus to oversee the supply of the common currency across the EMU. The operation of banking in this regard was regulated by the so-called Lamfalussy framework, which lasted until 2011, and presumably aimed at integrating finance across Europe.[21] The framework focused on removing barriers to cross-border provision of financial services, and deployed the Basle rules that have been applied to international banking since the end of the 1980s. Supervision of banks and dealing with banking failure was left to individual states. The Lamfalussy framework self-evidently failed after 2010 as Spanish, Greek, Irish but also French, German and other banks urgently required public support. The Eurozone crisis brought the banking system of peripheral countries but also several large banks of core countries to the point of collapse.

During the first years of the crisis the problem of banks appeared to be the accumulation of public debt that could not be serviced in the open markets, bringing into focus the relationship between banks and sovereign states. The new framework introduced by the EMU after 2011 has tried primarily to tackle these issues. However, as the Eurozone crisis has continued to unfold and has increasingly impacted on countries of the core, the problems of the banks have changed to holding large volumes of problematic private debt. With this in mind, the new framework adopted by the EMU is highly unlikely to prove successful. In the 2010s Eurozone banking as a whole has been characterised by fragmentation and inability to support output and employment.

To be more specific, the new framework, summed up by the putative Banking Union, has aimed at removing barriers to banking across the EU, imposing effective capital adequacy regulations, improving the mechanisms for supervision and dealing with failing banks. [22] The intention has been to loosen the link between private

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20   See Lapavitsas *et.al.* (2010a).
21   For an official review see European Commission (2007).
22   See, for instance, the so-called Five Presidents' Report, European Commission (2015).

banks and nation states on the assumption that this would create more stable banks thus preventing the imposition of costs from banking failure onto the public purse. However, the underlying principle of the new framework has remained that that no member state should assume the costs of bank failure in another state. The EU has created the Single Supervisory Mechanism (SSM) and the Single Resolution Mechanism (SRM) for banks, which were briefly mentioned in section 2. Supervision has been taken away from nation states and passed to the ECB. The costs of dealing with bank failure would presumably be transferred to shareholders, bondholders and even depositors, before any claims were made onto public funds.

Unfortunately for the new framework, the trajectory of EU banking in the years following the outbreak of crisis has been deeply problematic. Banks in the periphery but also in the core have lost customer trust and have become heavily concerned with strengthening their balance sheets, which means primarily dealing with poorly performing private debts. Given the weak condition of peripheral banks, especially in Greece and Spain, but even more in view of the fraught state of core banks after years of recession or weak growth, the new framework is likely to be tested in the near future. Were a crisis to materialise, the aim of imposing bank rescue costs onto depositors, i.e., reducing the value of deposits through a "bail-in", would cause profound political tensions in individual countries. The new framework would be unlikely to function more effectively than the old.

In this light, Figure 13 shows the strong growth and subsequent decline of peripheral banking as proportion to GDP. Note that the figure for Greece is misleading due to the collapse of GDP by 25% after 2008. The growth of banking in the periphery in the 2000s is the counterpart of the growth of indebtedness shown in Figures 7 and 8, and the main lever for the rapid growth of finance. In turn, the decline of banking after 2010 is both a reflection and a cause of the profound crisis of the periphery within the Eurozone. Note, finally, the sharp difference between French and German banking since the introduction of the euro. France has been the core country of rapid financial growth in Europe during the last four decades, whereas in Germany the banking sector has grown less rapidly and has actually contracted relative to GDP in the 2010s. The relative stagnation of domestic demand and the high profits and liquidity of German enterprises have constrained the German banking sector domestically. Note, finally, the substantial growth of Italian banking in the second half of the 2000s, followed by stagnation in the 2010s.

Figure 13. Aggregate bank balance sheets as % of GDP
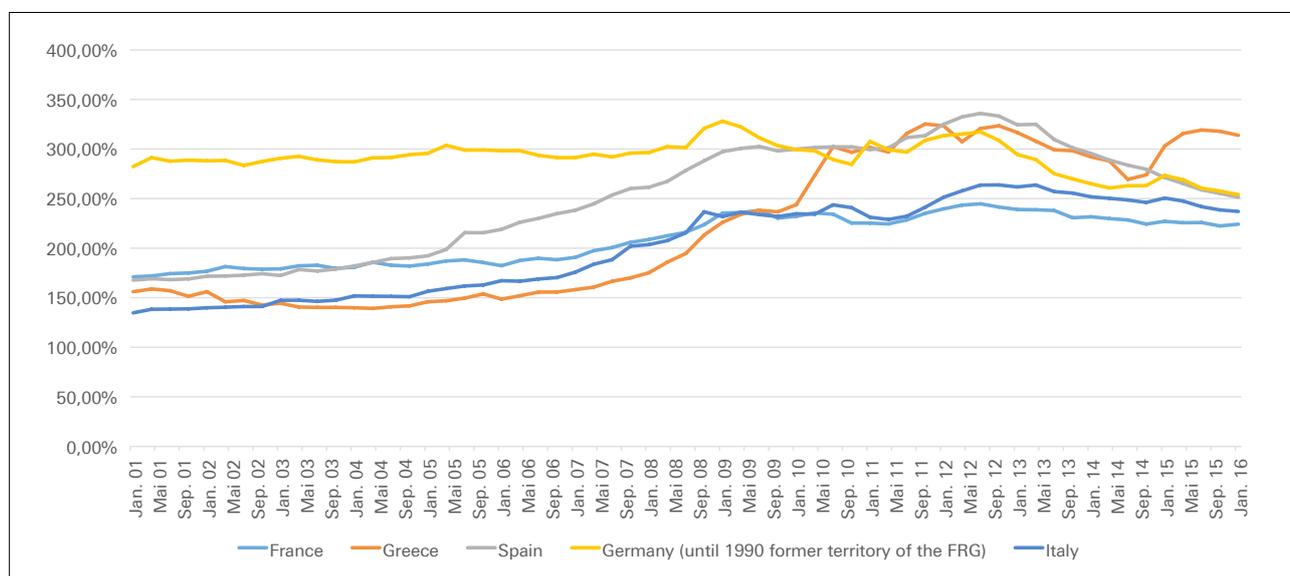
The divergence between core and peripheral banking, but also within core banking, is evident with respect to domestic lending, shown in Figure 14. After the introduction of the euro, Spanish banks increased enormously their loans to enterprises and households – domestic bank credit expansion was the true source of the Spanish 'bubble'. The decline in Spanish bank lending has been equally pronounced after the outbreak of the crisis, and its contraction has been one of the main sources of Spanish stagnation and recession. A similar pattern holds broadly for Greece, except that there was no 'bubble' prior to the crisis and the dramatic collapse of GDP after the outbreak of the crisis has made the decline of bank credit look less severe. Note that French banks have maintained the level of domestic lending reached at the time of crisis, similarly to Italian banks, while German banks have reduced theirs. Once again, it is apparent that German corporations are awash with liquid funds and thus rely less on banks. The domestic scope for profits by German banks appears to have shrunk.

Figure 14. Domestic bank lending as % of GDP
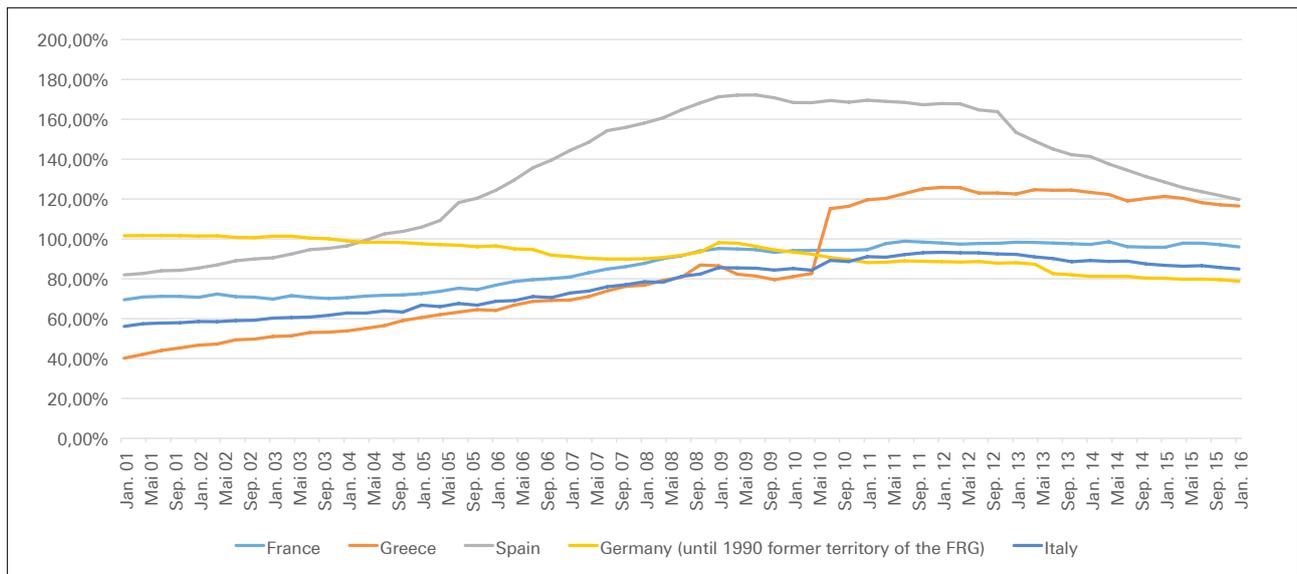
The weakness and the divergence among Eurozone banks, however, becomes more evident in connection with the liability side of their balance sheets. Figure 15 show domestic bank deposits as % of GDP. Both Spanish and Greek banks have faced a pronounced loss of deposits in the aftermath of the crisis, restricting their liquidity and forcing reliance on funding provided from abroad, especially the ECB. For Greek banks in particular the loss of deposits has taken catastrophic dimensions. German banks, in contrast, have faced much gentler loss of deposits, commensurate with the continuing stagnation of the domestic German economy. In contrast, Italian banks appear to have succeeded in maintaining their deposit base, which French banks have even expanded theirs.

Figure 15. Domestic bank deposits as % of GDP
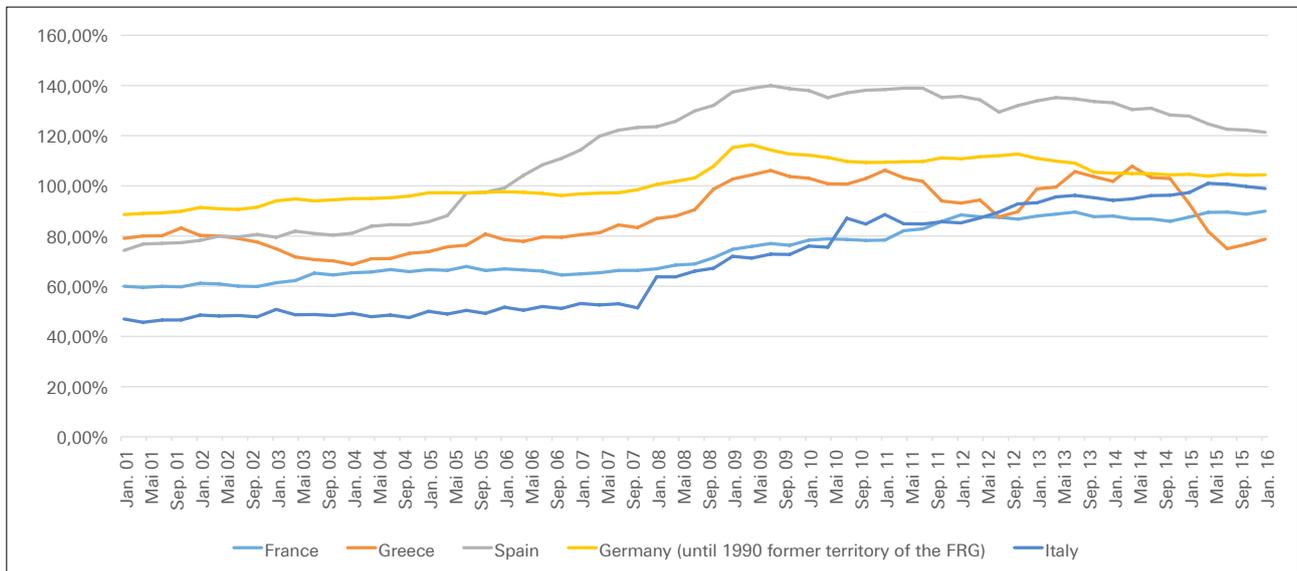
In sum, the banks of member countries of the Eurozone have been exposed to the pressures generated by the crisis, but have also exacerbated the crisis be restricting their lending as their balance sheets have become laden with problematic loans, especially in the periphery. Peripheral and core banks have exhibited considerable divergence in their behaviour and performance. The countries that have been worst affected by loss of competitiveness are also the countries with the most serious banking problems, reflected on bank balance sheets. To be sure, peripheral and core banks have also increased their provision for bad debt and boosted their capital in line with the directives of the EU. However, both peripheral and core banks in Europe are in a fraught state as aggregate demand and output remain restrained. In particular, the banking sectors of Germany and Italy appear to face substantial difficulties in part due to the persistent weakness of the domestic economy.

Chapter 8. Austerity and neoliberal adjustment

Form a macroeconomic perspective, there is little mystery about the persistence of the malaise in the periphery and the essential failure of the EMU following the outbreak of the crisis, including the disaster that has occurred in Greece. Suppression of wages, shown in Figure 1, together with fiscal austerity (reduction in public spending and increases in taxes), shown in Figure 12, combined to cause a collapse of aggregate demand for several years. Bank credit, meanwhile, suffered a sustained contraction as peripheral and core banks faced turmoil caused by bad debt. This combination of factors proved lethal in the case of Greece.

Within a short period of time following the outbreak of the Eurozone crisis, German-inspired austerity policies had emerged victorious across the EMU. The fiscal contraction has been huge for Greece and Spain, but also quite substantial for France. In the case of Greece government budgets appear at least to have been expansionary for most of the 2000s. In the case of Spain, in contrast, budgets have been consistently conservative, and went into deficit purely as a result of the crisis. Once the budget deficit had appeared in Spain, the state immediately assumed an even more conservative outlook, despite not being shut out of the financial markets and not being in receipt of bailout funds from the EU. Note further that Italy has been on a path of sustained fiscal tightness for a long time.

The only domestic boost to aggregate demand in the Eurozone has been provided by ECB Quantitative Easing (QE). This policy was begun in Japan in the 1990s as the country faced persistent depression of aggregate demand in the aftermath of the huge 'bubble' of the 1980s. A version of QE was adopted by the Federal Reserve Bank after the crisis of 2007-9, essentially amounting to the central bank purchasing public debt held by the banks, and a further version was eventually adopted by the ECB under Mario Draghi.

Note that the ECB has provided liquidity to banks consistently after the outbreak of the global crisis, increasing the size of its balance sheet from about 1.5tr euro in 2008 to about 2tr euro by 2011, as is shown in Figure 16. This was a fairly modest increase, reflecting the legal requirement imposed on the ECB not to purchase public bonds, since such action would have potentially allowed one state to finance the debt of another within the EMU, even indirectly. The ECB initially provided liquidity to banks to allow then to confront the pressures of crisis after 2010, but only purchased a very modest amount of government bonds issued by Greece, Spain and Italy in the secondary markets in 2010-11. In 2012, however, Mario Draghi declared that he would do "whatever is takes" to rescue the euro. This was soon translated into more generous provision of liquidity to banks, stretching the balance sheet of the ECB from about 2tr euro in 2011 to 3tr in 2012-13. The bulk of this liquidity again took the form of long-term lending to banks but has also included an extension of the ECB's public-bond-buying programme, as part of the ECB's Outright Monetary Transactions.

Figure 16. ECB balance sheet assets

- ■ 1 Gold and gold receivables
- ■ 2 Claims on non-euro area residents denominated in foreign currency
- ■ 3 Claims on euro area residents denominated in foreign currency
- ■ 4 Claims on non-euro area residents denominated in euro
- ■ 5 Lending to euro area credit institutions related to monetary policy operations denominated in euro
- ■ 6 Other claims on euro area credit institutions denominated in euro
- ■ 7 Securities of euro area residents denominated in euro
- ■ 8 General government debt denominated in euro
- ■ 9 Other assets

The real shift toward QE, however, occurred in March 2015, with the Public Sector Purchase Programme, as recession and stagnation gradually pervaded the economy of the Eurozone. Mario Draghi has embarked on a public-asset-buying programme, which has again stretched the balance sheet of the ECB from nearly 2tr in 2014 (to which it had by then declined) to 3tr in 2016. Banks have been able to sell public bonds to the ECB to obtain very cheap liquidity. The policy of QE has pushed interest rates to very low levels for banks, making liquidity essentially free, as is clear from Figure 9.

It is notable that the ECB has been buying sovereign bonds proportionate to the size of its member countries, so the bulk of the purchases has come from Germany and France. The borrowing rates for the German state have thus become extremely low. Meanwhile, the exchange rate of the euro has been pulled downward, especially relative to the dollar and the Chinese yuan, as was already shown previously. The main beneficiary of QE, in other words, has so far been Germany. The impact on aggregate demand across Europe from providing exceptionally cheap liquidity to banks has been very modest. The funds appear to have flown into financial assets instead of benefiting companies and households.

The main domestic components of aggregate demand leave no doubt about the cause of economic slow-down in the EMU, especially in view of Figures 4, 5, and 6 regarding international transactions. Figure 17 shows the decline in investment as the crisis of 2007-9 struck Europe, and then as austerity policies were applied in the EMU. In the case of Greece and Spain the decline has become a collapse, which for Greece in particular it represents a historic retrogression of the economy. But investment has also declined in Italy, contributing to the persistent weakness of its economy within the EMU. Note that investment has been weak in Germany throughout this period. Once again it is clear that German domination of the EMU and the EU has rested on suppressing nominal wages, rather than on improving productive capacity. Note finally that France has at least managed to maintained investment levels throughout this period. The collapse, or weakness, of investment is the most important single element of poor economic performance in the EMU in recent years.

Figure 17. Investment as % of GDP
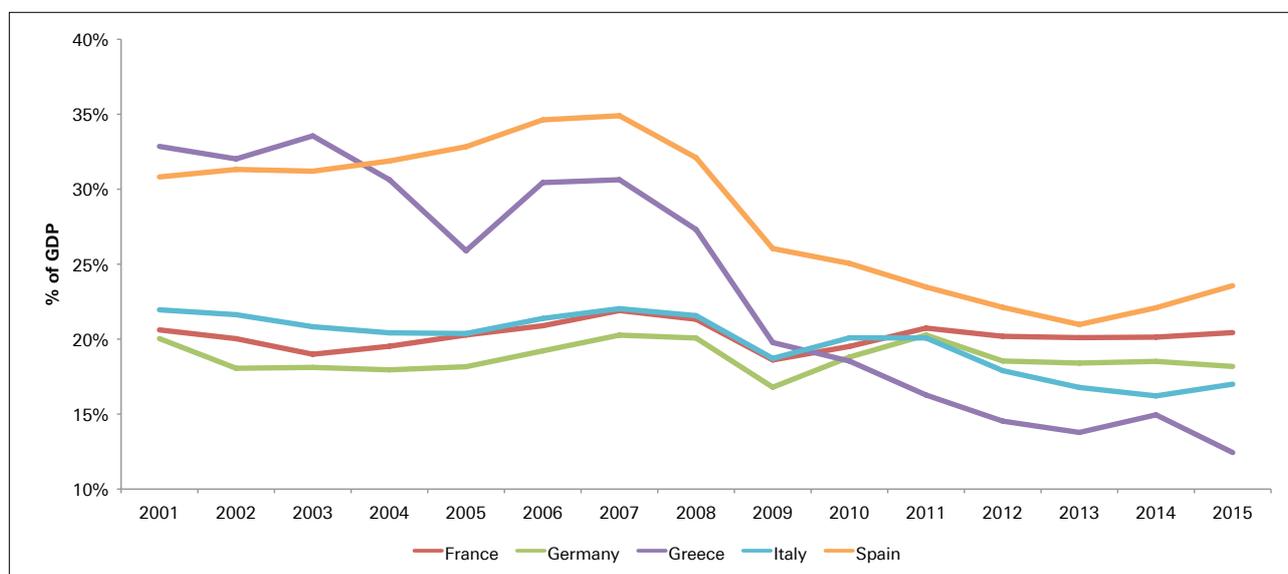
Consumption has been unable to pick up the slack from such a sustained weakness in investment, as is apparent from Figure 18. Two points stand out: first, German consumption has been persistently feeble, confirming the weakness of German domestic demand, and fully reflecting the "neo-mercantilist" stance of Germany, which has sought growth entirely through foreign trade; second, consumption has had an exceptional weight in Greece, reflecting the deeply problematic development path followed by the country for decades. The step up of Greek consumption after 2009 is, of course, entirely due to the collapse of GDP as the country went into a contractionary tailspin.

Figure 18. Consumption as % of GDP
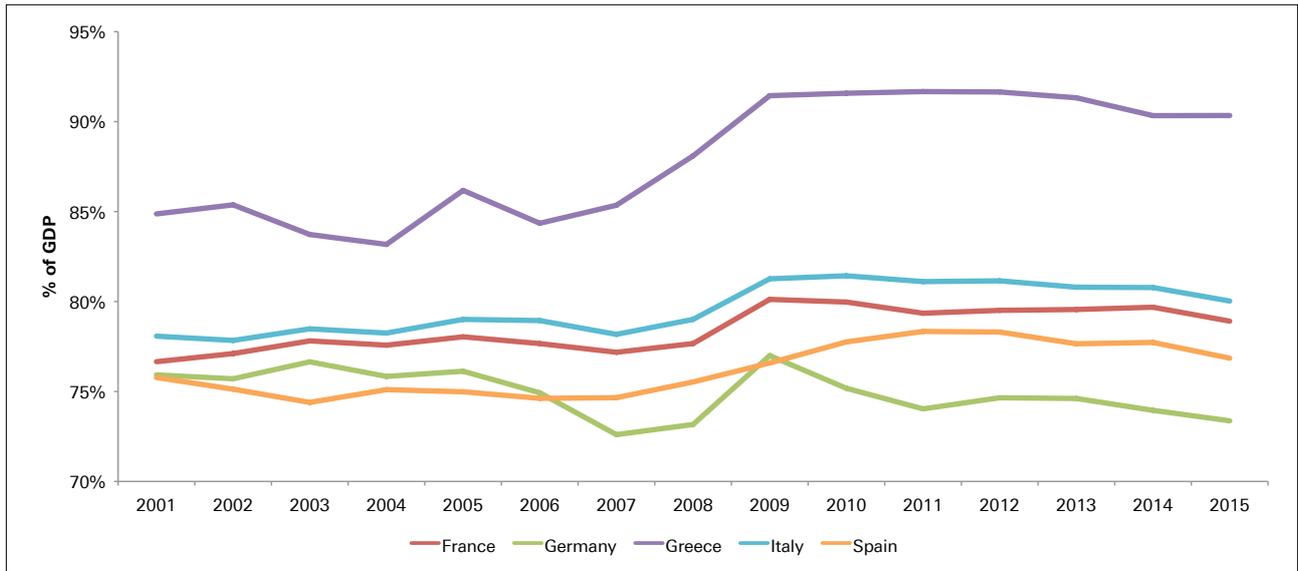
The impact of weak domestic demand on employment has been catastrophic, even leaving aside the suppression of wages. As is shown in Figure 19, unemployment has increased very rapidly in both Spain and Greece, reaching unprecedented levels, especially among the youth. Both countries are well onto the path of destroying much of their capacity to labour particularly if emigration by well-trained young people is also taken into account. The poverty implications of huge unemployment have been enormous, especially in view of the decline in public welfare provision as austerity has spread. Note, however, that unemployment has declined significantly in Germany. The Faustian pact struck by the German unions, the employers and the government in the late 1990s has been kept. Nonetheless, the conditions of labour, the security of employment and, of course, the remuneration of German workers as a whole have certainly not improved during this period. Indeed for broad layers of the German labour force conditions have become substantially worse with zero hours contracts, precarious employment, and related calamities of the policies adopted since the late 1990s.

Figure 19. Unemployment rate
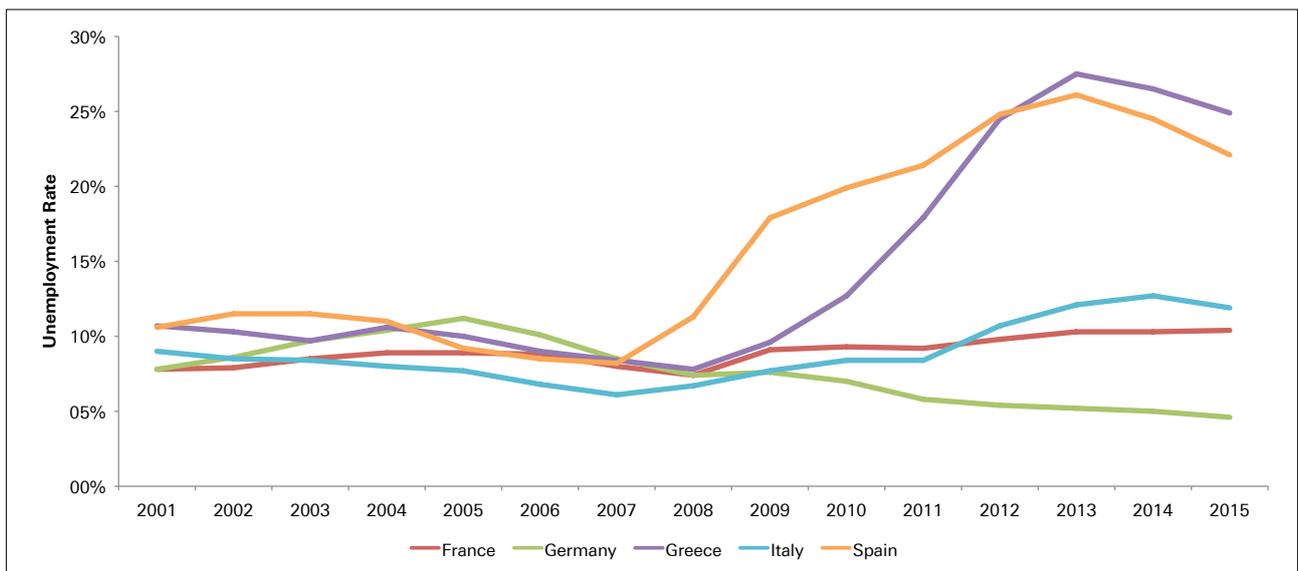
In this light the prospects of growth for peripheral countries are extremely limited. The suppression of aggregate demand and the sustained weakness of the banking system in several European countries make it extremely unlikely that rapid expansion of output would occur in the near future. The Fiscal Compact together with the putative Banking Union operate as an iron cage of recession in the short term. The notion that productivity and growth could, or would, be boosted in a sustained way by neoliberal "reforms", including further deregulation of labour markets, privatisation and liberalisation of other markets, is mere ideology with little em-

pirical or theoretical content. It is shown in Part II for the case of Greece in particular that 'structural reforms' especially in the labour market amount to a worsening of conditions and lowering of wages for employees. Nor is there reliable evidence that privatisation, or the liberalisation of markets would lead to sustained growth of productivity and growth.

In conclusion, the German competitive advantage is firmly entrenched within the EMU contributing to the persistent weakness of the external accounts of peripheral countries as well as undermining core countries. The EMU is set on its current course dictated by the political and economic leadership of Germany in Europe. It is an illusion to expect the monetary union to take a different direction given the hierarchical and rigid nature of its politics and institutions. The future for peripheral countries looks bleak, while that of core countries is steadily worsening.

Peripheral EMU countries urgently require an altogether different set of policies that involve lifting the constraint on aggregate demand and on external transactions. Only then would they be able to adopt longer-term policies capable of rebalancing their economies in the direction of stronger productivity growth, rising employment and rising incomes. It is apparent that this could only happen outside the Eurozone, while also exempting themselves from EU directives on investment and trade.

For core countries, on the other hand, it would also be vital to propose policies that would allow Europe's economies to interact with each other in an environment of solidarity, rather than of national competition. To this purpose it would be necessary to control exchange rate fluctuations, international capital flows and international payments. It has to be stated at this point that such measures and policies are not examined in the rest of this study, which focuses on peripheral countries and especially Greece. Nonetheless, it is clear that there is no need to have a monetary union in Europe to achieve growth with solidarity. It is even clearer that it would be disastrous to persevere with the current, failed, monetary union that has trapped Europe and exacerbated national enmities and oppositions.

PART II. GREEK DISASTER

Parts II and III of this study consider the structure, content and modalities of a policy change in peripheral EMU countries by examining in depth the economy of Greece, which has suffered the worst from Eurozone failure. The current condition of the Greek economy is established in Part II, and the parameters of a radical change in policy are considered in Part III.

In designing economic policy the historical and institutional peculiarities of each country ought to be taken firmly into account, and thus the proposed Greek programme could not be simply replicated elsewhere. But the failure of the Eurozone is a reality that impacts on all its members, even Germany. The analysis of an alternative path for Greece provides lessons for Spain, Portugal, Italy, and even France. Each country would need its own specifically tailored programme in extricating itself from the failing Eurozone, but there would also be shared components, which could be ascertained by examining the case of Greece.

The shock delivered to Greece by the Eurozone crisis is of historic proportions and does not reflect a merely cyclical adjustment of the economy. It is shown in Part II that the profile of the labour force of the country has changed dramatically because of the creation of huge layers of unemployed workers but also of workers in part-time and insecure employment. The waste of highly skilled labour has been unprecedented, lowering the growth prospects of the country.

It is further shown that the Greek economy suffers from profound weakness with regard to saving and investment. Specifically, Greece has recorded negative aggregate net saving ever since it joined the EMU. The lack of net national saving has been balanced by rising external borrowing for a lengthy period of time until 2010. Thus, the loss of competitiveness in the 2000s and the underlying weakness of Greek net saving have been masked by heavy borrowing abroad, which allowed investment to avoid a collapse in the 2000s. However, once the crisis had burst out in 2010, the country faced pronounced difficulties in accessing foreign funds; the lack of external borrowing was translated into an unprecedented collapse of investment, shown in figure 17. This is the most obvious reason for the extraordinary depth and persistence of the Greek crisis, as well as for the long-term weakness of the Greek economy.

Furthermore, Part II shows that the structure of the Greek economy exhibits even more weaknesses. The development of Greece during the last few decades – and especially since it joined the EU in 1981 – has relied on the growth of internationally "non-tradable" at the expense of "tradable" goods and services. Productivity in the Greek economy is comparable to the European averages only for some non-tradable commodities, especially financial services, construction and domestic trade. Among the tradable goods and services only tourism has been reasonably successful. Consequently, the country has imported ever larger proportions of high-technology products and has recorded low proportions of intra-sectoral trade compared to other EU members.

The result has been a developmental dead-end: during the last three decades Greece (as well as other countries of the European South) has specialised in commodities of low and middle technology that rely on unskilled labour. These products make a relatively low contribution to the growth of productivity, and therefore make for low growth potential of the economy as a whole. Consequently, Greece was able to have relatively rapid growth rates only by borrowing from abroad which, in turn, limited further its productivity improvement and its growth potential. After joining the Eurozone and being confronted with collapsing competitiveness due to German wage restraint, the country went down a disastrous path: debt increased greatly, growth accelerated, and the underlying weaknesses of the economy were worsened. When the Eurozone crisis burst out Greece was ruined.

Particularly important in this respect has been the profound weakness of the Greek industrial sector. Since the early 1980s, whenever domestic demand has increased strongly, Greece has faced strong "leakages" abroad, which have contributed to the weakness of its external balance. It is shown in Part II of this study that the major source of these leakages was the industrial sector: Greek industry has come to depend on imports, thus also reflecting the negative net saving of the country. Currently Greek Industry is remarkably weak in several respects: gross value added, sectoral saving, inter- and intra-sectoral trade, dependence on imports, and so on. Specifically, it is shown below that ten industrial commodities are the true "black holes" of the Greek economy regarding leakages abroad.

The disaster caused by the bailout strategies after 2010 – aimed at reducing fiscal expenditure, raising taxes, and cutting wages – occurred against the background of structural weakness for the economy. Furthermore, Greece had no command over monetary policy and obviously no exchange rate policy. Moreover, its fiscal and

income policy were determined by the lenders through the imposition of rigid austerity. Finally, the lenders imposed privatisation as well as deregulation of the labour market and other markets. Given the structural weaknesses of the Greek economy, the result has been to trap the country in an iron cage of recession. Far from putting Greece on the path of virtuous development, the so-called "internal devaluation" plus "structural reforms" have delivered a deadly blow to the economy, especially the industrial sector.

From the analysis in Part II it follows unequivocally that for sustainable growth Greece needs a targeted redistribution of income together with a programme of boosting domestic demand and limiting its leakages abroad. These measures would be simply impossible to undertake within the EMU, or even within the current policies of the EU. There is no doubt that Greece faces a bleak future, unless it exits the Eurozone and adopts a radically different policy to restructure its economy.

Chapter 9. The state of the Greek economy

The outlook of the Greek economy, after eight years of crisis that broke out in 2008 and six years of bailout policies that commenced in 2010, is shaped by the following features:

9.1. Labour Market
The bailout policies have had a tremendous impact on the labour market through deregulation of labour relations, a sharp rise in unemployment and sustained increase in part-time and insecure employment.

9.1.1. Deregulation of Labour Relations
Dramatic changes were introduced to the field of labour relations under CM Act 6/28.2.2012, commonly known as the «Second Bailout Agreement» signed by the Papademos' government in 2012, and following Law Decree 4093/2012 titled «Approval of the Mid-term Fiscal Strategy Framework 2013–2016 – Urgent Measures for the Implementation of the Mid-term Fiscal Strategy Framework 2013–2016» passed by the Samaras government in 2012. The main reform was the modification of the system for setting minimum wages across the country. The new laws altered radically the status of labour relations and labour rights, imposing heavy costs on workers and giving a free hand to the employers.

Some of the most important changes were as follows:
1. Reduction of the minimum monthly gross salary from 751E to 586.05E (500E net salary) and to 510.95E (400E net) for workers under the age of 25. Indeed, after 1/1/2017 the minimum monthly salary is to be determined unilaterally by the Minster for Labour and not through the process of National General Collective Labour Bargaining.

2. Scrapping the so-called "expandability principle" of Collective Agreements. That is, the sectoral Collective Agreements would no longer apply to employers' associations that are not a formal party to the negotiatins, thus fostering unfair competition between enterprises that are bound by a Collective Agreement and those that are not bound. The latter would merely stick to paying the legal minimum wage.

3. Abandoning the so-called "principle of most favourable regulation", that is, accepting that the most favourable Collective Agreement would hold in cases in which several Collective Agreements would apply to the same employee (for instance both enterprise and sectoral Agreements). Thus, at the level of an individual enterprise the least favourable collective terms would most probably put in operation.

4. Participation in the process of National General Collective Labour Bargaining would henceforth depend entirely on whether an employer belonged to an association that had signed up to the terms of Collective Bargaining, and not on whether the employees would be members of a trade union that fell within the ambit of Collective Bargaining. If the employer was not a member of an appropriate association, the employees would be at the employer's discretion.

5. Limiting the maximum number of formal annual disbursements of wages or salaries (from annual income equivalent of 14 months to annual income equivalent of 12 months) payable on the basis of years of service with the same employer for employees that had not completed 16 years of service by 12/11/2012.

6. Employees of commercial stores would be obliged to be on duty even outside working hours of the stores.

7. Abandonment of the so-called "post-effect" of Collective Agreements, i.e. of the provision that the terms of Collective Agreements would remain valid even after expiry of their formal duration, thus allowing for the completion of the process of collective bargaining required to reach a new Agreement. Abandonment of the "post-effect" would mean that after signing an individual employment agreement the salary of each employee, regardless of his/her years of service, would be re-evaluated on the basis of the then current minimum wage defined by the National General Collective Labour Agreement, and not by the most recent sectoral agreement or the most favourable enterprise agreement in each sector.

8. Refusal by an employers' association to sign up to a Collective Agreement would be impossible to address by trade unions resorting to arbitration (Organisation of Mediation and Arbitration, O.ME.D.) since that would require the employer's consent. Consequently, individual would be favoured over collective bargaining.

The impact of the deregulation of labour relations imposed by the bailout agreements was combined with the collapse of aggregate demand due to austerity policies after 2008-9. The results for employment were catastrophic.

9.1.2. Dramatic rise in unemployment and increase in part-time employment

The first and major result of the bailout policies was a sharp rise in unemployment to unprecedented levels, as was analysed in the first part of this study. More gradually it became apparent that the number of workers with "flexible" forms of employment also began to increase steadily. Thus, apart from the huge unemployment rates, the Greek labour market also began to exhibit a high and steadily growing proportion of workers with deeply problematic employment conditions.

´Specifically, in the fourth quarter of 2009 the country's workforce amounted to 4500000 workers of whom 525000 were unemployed.[23] In the third quarter of 2016, after seven years of bailout agreements, "rescue efforts" and "reforms", there were 3715000 employed and 1085000 unemployed workers. Many of the people listed as employed in 2015 were working under short-period employment agreements without full employment rights and without any union representation. Moreover, the unemployment rates should also properly include the several thousand unregistered self-employed.

In a little more detail, the percentage of the employed among persons aged 15–64 years decreased steadily from 2008 onwards.[24] The decrease was at its sharpest during 2011–2012, when the percentage of the employed shrunk by 8.3 per cent, resulting in Greece having the lowest rate of employed population in the total active employed population in the EU in 2012. The decline continued in 2013 and as a result less than half of the people in the age brackets of 15–64 were in employment (48.8 per cent versus 65 per cent in the EU). Since 2014 Greece has managed to record a meagre increase in that percentage thus slightly surpassing 50 per cent. Despite this increase, the country still has the lowest employment-to-population ratio in the EU: Italy comes second with employment-to-population ratio close to 57 per cent.

The relative stabilisation of the Greek economy since 2013 together with the profound transformation of employment conditions to the detriment of workers has allowed for a halt in the rate of unemployment followed by a slight decrease. In June 2016, seasonally adjusted unemployment in Greece stood at 23.4 per cent,[25] having reached 27.8 per cent in the first quarter of 2014.[26] Although the number of the unemployed has declined by approximately 150000 workers in the first quarter of 2016 compared to the first quarter of 2014, the number of the employed has increased by only 100.000, or by approximately 2 per cent.[27] This divergence has probably been caused by substantial emigration, including among highly trained youth.

It should be noted that unemployment in Greece has several structural attributes that set it aside from the rest of the EU. Specifically, there are differences based on gender, as unemployment among women in Greece is much higher compared to the rest of the EU. Moreover, there are also great differences in the educational level of the unemployed compared to the rest of the EU. Greece is the only country in the EU where the unemployment rate among those with secondary education exceeds that among those with primary education, closely followed by that among those with tertiary education. For comparison, in the rest of the EU the unemployment

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23   See Hellenic Statistical Authority, http://www.statistics.gr/el/statistics/-/publication/SJO02/-, {Employment and unemployment status (January 2004 – June 2016)}
24   See EUROSTAT, http://ec.europa.eu/eurostat/statistics-explained/index.php/Employment_statistics, {Table 2: Employment rates for selected population groups, 2004–14}
25   See Hellenic Statistical Authority, http://www.statistics.gr/el/statistics/-/publication/SJO02/2016-M06, {Employment status and unemployment rate (January 2004 – July 2016)}
26   See Hellenic Statistical Authority, See Hellenic Statistical Authority, http://www.statistics.gr/el/statistics/-/publication/SJO01/2014-Q1 {Comparison of previous and revised Labour Force Survey estimates}
27   See Hellenic Statistical Authority, http://www.statistics.gr/el/statistics/-/publication/SJO01/2016-Q2, {07. Persons employed of 15 years and over by type of employment (full-time, part-time) (Q1 2001 – Q2 2016)}

rate among those with tertiary and secondary education is, respectively, about one third and one half of the unemployment rate among those primary education.[28]

It should also be noted during the crisis the composition of the employed labour force has also changed substantially, quite apart from the huge increase in the rate of unemployment. According to the quarterly Labour Force Survey of the Hellenic Statistical Authority, in the fourth quarter of 2009 the percentage of persons working part-time was only 6.2; among these 48.5 per cent had resorted to part-time employment because they had faced difficulties finding full-time employment.[29] Two years later, in the fourth quarter of 2011, part-time employment had reached 7.1 per cent; among these the proportion of persons unable to find full-time employment had risen to 58.3 per cent.[30] Following the enactment of the third bailout and the associated legislation, in the first quarter of 2016 the percentage of part-time employment had surged to 9.8 per cent, and the proportion of those who were unable to obtain full-time employment had rocketed to 69.1 per cent.[31]

Similar evidence was also provided by "ERGANI", the information service system of the Ministry of Labour.[32] The number of new part-time employment agreements and flexible forms of employment is steadily increasing. While the rate of new full-time employment positions was 54.18 per cent in the first quarter of 2014, in the first quarter of 2016 it had declined to 48.44 per cent. By contrast, the proportion of part-time contracts had increased from 33.94 per cent to 37.51 per cent during the same period, and the proportion of contracts of flexible employment had jumped from 11.87 per cent to 14.05 per cent.[33]

It is worth mentioning that in 2015 the proportion of persons who worked part-time but would actually have preferred to work full-time was nearly 7 per cent in Greece, while in the EU as a whole it was approximately 5 per cent. Greece had the third highest such percentage in the EU after Cyprus and Spain, as is shown in Figure 20.[34]

Figure 20. Underemployed part-time workers as % of total employment
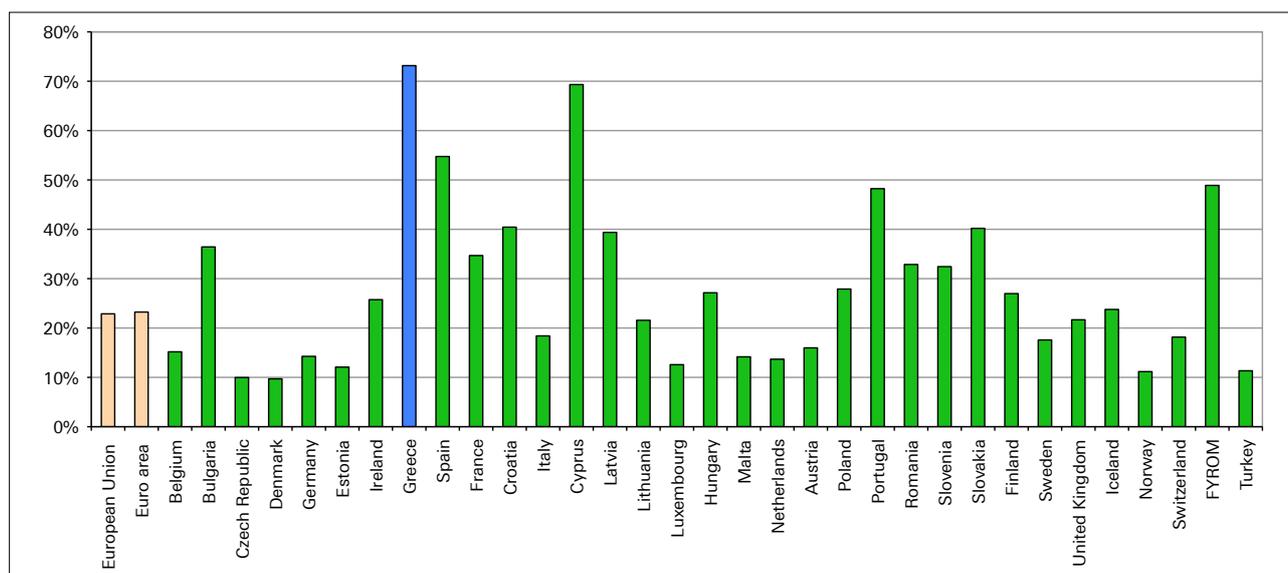
Among part-time workers in 2015 the proportion who would have preferred to work full time (underemployed workers) exceeded 70 per cent, placing Greece first among all EU countries; the corresponding average for the latter did not exceed 25 per cent, as is shown in Figure 21. Of similar magnitude, finally, was the problem of unofficial (undeclared) employment. Although it is difficult to collect reliable data on unofficial (and hence without

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28 See EUROSTAT, http://ec.europa.eu/eurostat/statistics-explained/index.php/Unemployment_statistics, {Figure 9: Unemployment rates (among persons aged 25–64 years) by level of educational attainment, 2015 (%)}

29 See Hellenic Statistical Authority, http://www.statistics.gr/el/statistics/-/publication/SJO01/2009-Q4, {19. Persons employed of 15 years and over with full time / part-time distinction and reasons for taking part-time job, by sex and age groups}

30 See Hellenic Statistical Authority, http://www.statistics.gr/el/statistics/-/publication/SJO01/2011-Q4, {19. Persons employed of 15 years and over with full time / part-time distinction and reasons for taking part-time job, by sex and age groups}

31 See Hellenic Statistical Authority, http://www.statistics.gr/el/statistics/-/publication/SJO01/2016-Q1, {19. Persons employed of 15 years and over with full time / part-time distinction and reasons for taking part-time job, by sex and age groups}

32 See ERGANI (business information service system, Ministry of Labour, Social Insurance & Welfare), http://www.ypakp.gr/uploads/docs/9817.pdf

33 Intermittent employment is considered employment for fewer days per week or fewer weeks per month or fewer months per year or a combination of the above, while working full daily hours.

34 See EUROSTAT, http://ec.europa.eu/eurostat/statistics-explained/index.php/Underemployment_and_potential_additional_labour_force_statistics, {Figure 2a: Underemployed part-time workers, Persons aged 15–74, all countries, EA-19 and EU-28, annual average, 2015}

health insurance) labour, in 2013 40.5 per cent of all employees were uninsured, and almost one out of two employers did not insure their employees.[35]

Figure 21. Underemployed part-time workers as % of part-time workers
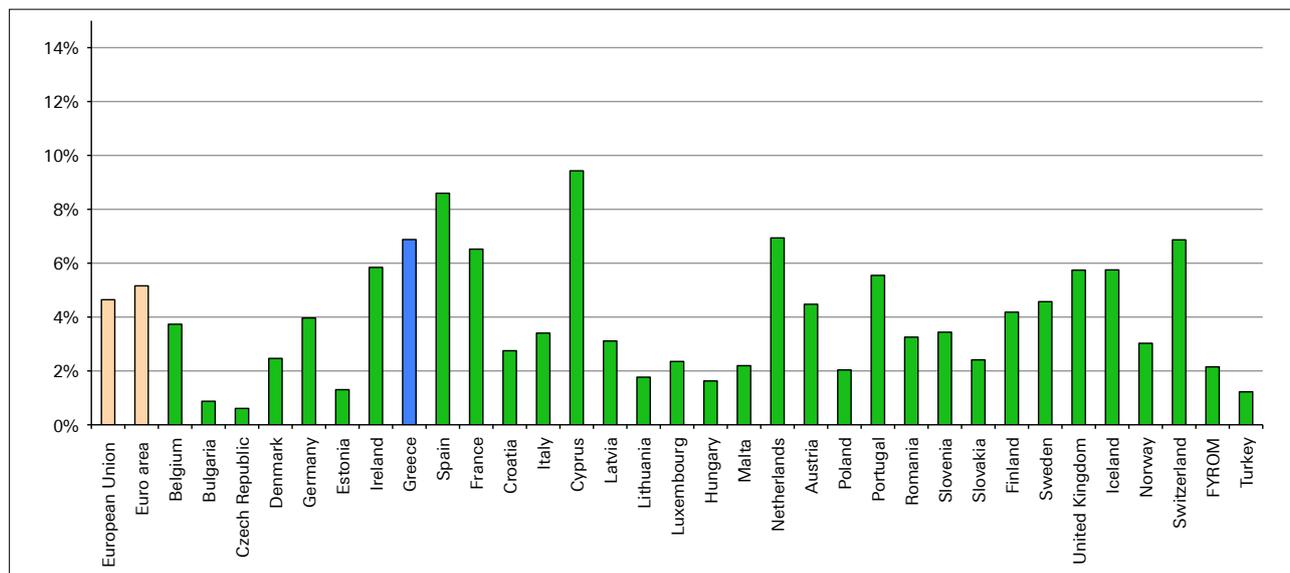
It is evident that the bailout policies of restructuring the labour market and injecting greater flexibility, far from leading to convergence with the rest of the EU, have actually dramatically worsened working conditions. The number of workers in Greece employed on part-time contracts has become considerably higher than the EMU and EU averages. Furthermore, while the majority of part-time contracts in the EU relate mainly to young mothers or to students, in Greece they relate to workers who are unable to find full-time employment and thus support their families with dignity.

The long-term problem the country faces due to prevalent conditions in the labour market and the change in labour relations is immense. For unemployment to start declining systematically and for employment conditions to improve substantially, Greece should achieve GDP growth rates higher than 2 per cent. To indicate the difficulty of the task, for unemployment to decline to 10 per cent within a period of five years it would be necessary to have an annual GDP growth rate of 5.4 per cent and the creation of 181.000 jobs annually.[36]

These estimates are actually quite conservative insofar as they assume that the labour force would decline due to emigration at rates approximately the same as for the period of historic mass emigration in the 1961–1971 in the years of high growth in Western Europe. They also assume that average labour productivity would rise at a rate of 3 per cent, i.e. the same as for the period 1995–2004. There is no need to dwell on how problematic such emigration would prove for the long-term growth prospects of the country. Note ,finally, that the data for the period of the country's membership of the Eurozone indicate a rather high correlation coefficient of about 86 per cent between GDP growth rates and employment rates for the Greek economy.[37]

9.2. Saving and investment

Since Greece joined the EU its gross national saving rate has been steadily decreasing; after entering the EMU the saving rate collapsed, as shown in Figure 22. The gap between saving and gross domestic investment became gigantic following the country's entry into the EMU, and indeed net annual national saving in Greece became systematically negative. Note that since 1960, the first year for which we have reliable statistical data, and until entering the EMU net national saving in Greece has been positive throughout. The country is currently the only economy within the Eurozone with negative net national saving. The implication is that, if Greece was closed to the world economy and thus not able to expand its external borrowing, it would have quickly faced an acute crisis of reproduction.

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35   For further analysis, see Kapsalis (2015).
36   See Mariolis (2016c, Essay 24).
37   See Kanellopoulos (2016, p. 32).

Figure 22. Gross national savings and investment in the Greek economy, 1981–2010
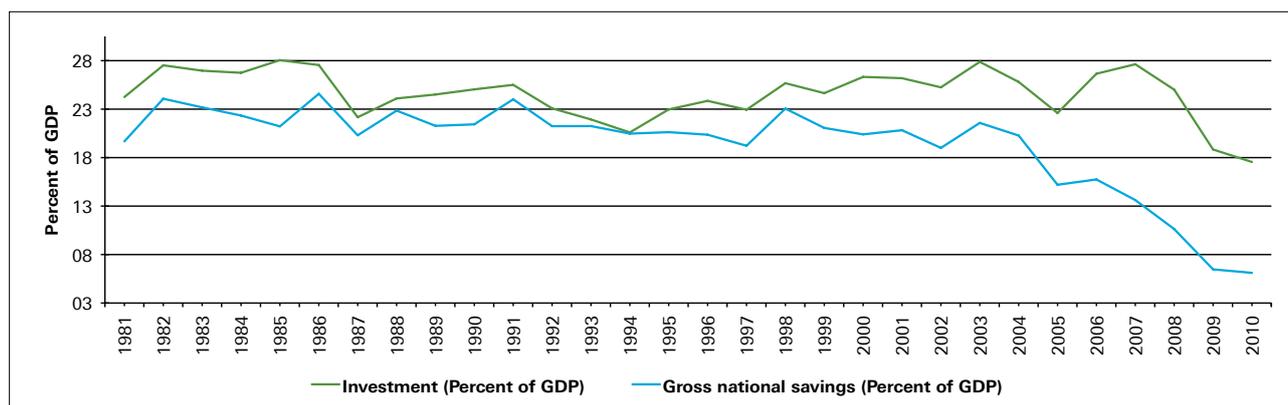
The collapse of national saving in Greece was matched by a decline in saving in other EMU peripheral countries compared to the countries of the core – and the EU as a whole. Figure 23 shows the relevant figures for Greece and Portugal. The collapse of national saving is a reflection of the international deficits accumulated by peripheral countries as they proved unable to compete within the EMU. The gigantic increase in German national saving is similarly a reflection of Germany's competitive triumph and large external surpluses.

Figure 23. Gross national saving as proportion of GDP in Greece and the EMU, 2000–2010
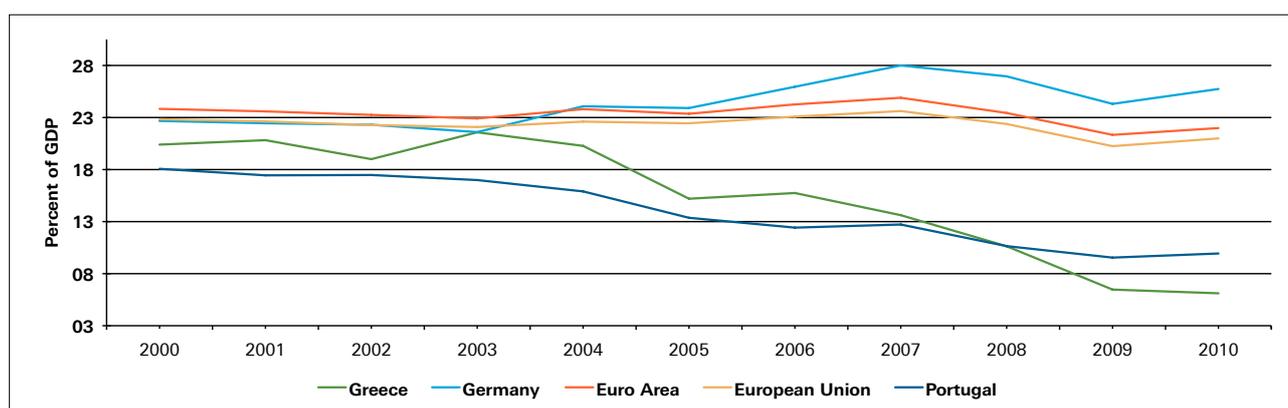
To be specific, based on various data and estimates published by the Hellenic Statistical Authority, the cumulative net saving for the period 2008–2014 amounted to -145.9bn euro (annual average: -20.8bn euro). Net investment exhibited a sharp decline after 2008, and became negative from 2011 onward: -5.7bn in 2011, -12.5bn in 2012, -13.9bn in 2013, -10.9bn in 2014 (annual average: -10.7bn euro). Negative net investment constitutes a qualitatively new development for Greece with profound implication as it indicates that the economic system has entered a process of *declining* reproduction. According to Olenev's estimates – based on a vintage capital model – the average age of the capital stock of the Greek economy started to increase after 2007, while its potential output began to decrease after 2013.[38] To address these problematic phenomena, and in view of the country's participation in the Eurozone – Olenev has proposed an increase in taxes on older capital stock.

It must be emphasised that without high net national saving it is not possible either to reduce fiscal deficits or to achieve economic growth, except when growth is based on constantly rising external borrowing. However, growth sustained by rising external borrowing has been precisely the characteristic feature of the notorious model of a "strong Greece within a strong Europe" which prevailed in the 1990s and 2000s, and which has led to the enormous crisis of the 2010s. During the period 2000–2010 the country's cumulative net external borrowing amounted to 148 per cent of its cumulative net investment.[39] The loss of national competitiveness and the emergence of huge external deficits of the "strong Greece" are reflected in the steady increase of the external debt.

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38   See Olenev (2015).
39   For an interesting analysis of the long lasting downward trend of saving in the Greek economy, see Katsimi and Moutos (2010).

9.3. Public Finance

Severe fiscal contraction as part of the austerity programme has meant rapid and violent reversal of government deficits. According to various publications by the Hellenic Statistical Authority, the general government deficit has decreased from 36bn euro (16 per cent of GDP) in 2009 to 6bn euro (4 per cent of GDP) in 2014. Public expenditure has decreased from 125bn (54 per cent of GDP) to 88bn (49 per cent of GDP); government revenue has decreased from 89bn (38 per cent of GDP) to 82bn (46 per cent of GDP). The primary balance has increased from -24bn (-10.5 per cent of GDP) to 0.6bn (0.4 per cent of GDP).

Note that the general government debt rose from 300bn (130 per cent of GDP) in 2010 to 356bn (171 per cent of GDP) in 2011. Following the policy intervention of 2012 (the infamous PSI, or Private Sector Involvement) public debt dropped to 305bn (157 per cent of GDP), but in 2014 it rose again to 317bn (177 per cent of GDP). In several publications the European Commission has forecast that debt will be 321bn and 324bn euro in 2016 and 1017, respectively. In March 2016 the general government debt amounted to 321bn euro: 69 per cent was on a floating interest rate (compared to 38 per cent in December 2011), 77 per cent was "non-negotiable" (compared to 25 per cent in December 2011), and 97 per cent was denominated in euro. During the period of March 2015-March 2016 the real interest rate on six-month treasury bills was on average 4 per cent (according to data from the Hellenic Statistical Authority and several Bulletins of the Public Debt Management Agency].[40]

Finally, it is worth mentioning in this context that during 2008–2012 the poorest households have lost almost 86 per cent of their income, while the richest have lost only between 17 and 20 per cent. The tax burden on the poor has increased by 337 per cent, while that on the higher income classes has increased by only 9 per cent during the same period.[41] In 2013 2.5mn people were "below the poverty line" and 3.8mn people were "at risk of poverty due to material deprivation and unemployment". Based on these and other similar data, austerity policy could with justification be called a "war against the poor".

9.4. External transactions

Strong internal devaluation in Greece (it is estimated that during the period 2009–2013 average real wages decreased by 24 per cent) did not lead to a stable and significant increase in exports.[42] Indeed, in constant 2010 prices, exports have decreased by 3.3 per cent, while imports have decreased by 15.5 per cent during this period. Greek exports in relation to world exports have dropped by 9.4 per cent (according to several publications of the Hellenic Statistical Authority and the World Bank). The improvement that has been registered in the external balance of goods and services has been mainly due to the rapid decline in imports, which has followed the slump of economic activity. A sustained increase in exports, however, is a necessary condition for a sustained increase in national saving from its current negative levels.

According to estimates in various Reports of the Governor of the Bank of Greece (BoG), the "Net International Investment Position" of Greece as proportion of GDP became dramatically worse: from -44 per cent in 2000, it reached -98 per cent in 2010 and -124 per cent in 2013 (or -223bn euro). By 2014 it had become -222bn or -125.2 per cent of GDP, and in 2015 it was estimated at -219bn euro or -124.8 per cent of GDP, displaying a marginal improvement. In 2015 the "Gross External Debt" was estimated at 251 per cent (238 per cent of GDP in 2013 and 239 per cent of GDP in 2014); the "Gross External Debt of the General Government" stood at 148.9 per cent of GDP (148.5 per cent in 2013 and 149.8 per cent in 2014); finally, the "Net External Debt" was estimated at 138 per cent of GDP or, in absolute terms, 242bn euro (133 per cent or 240bn euro for 2013 and 134 per cent of GDP or 237bn euro in 2014).[43]

9.5. Structure of the economy and international trade

In the decades that followed Greece's entry into the EU the sector of "internationally tradable commodities" (i.e. commodities traded on the international market) actually shrank as it could not withstand international competition. In contrast, the sector of "internationally non-tradable commodities" (i.e. commodities traded only on the domestic market) ballooned.

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40   Even accepting the rather unrealistic assumptions of the IMF assumptions (i.e., annual growth rate of the economy at 2.8 per cent, primary surplus of 4.2 per cent and average annual interest rate of 3.6 per cent), it would take approximately 26 years for the public debt to be reduced to the level of the Maastricht Treaty, i.e. at 60 per cent of GDP (see Lapavitsas, 2014, pp. 52–56).

41   See Theodosiou (2015).

42   See, e.g. International Labour Organization (2015, p. 7).

43   The Net International Investment Position reflects the net liabilities of a country's residents relative to non-residents, Gross external Debt is derived from the Net International Investment Position after subtracting the liabilities in enterprise stock and financial derivatives. Finally, the Net External Debt is derived by the subtracting the net position in enterprise stock due to foreign direct investment and portfolio investment as well as the net position in derivatives, special drawing rights, gold and shares that are included in foreign exchange reserves.

Specifically:[44]

1. The Greek economy is characterised by comparatively low productivity in the sector of internationally trada-ble commodities, while its productivity is equivalent to the European average only in the sector of internation-ally non-tradable commodities (especially in the sectors of financial services, construction and internal trade).

2. Growth of Greek GDP prior to the outbreak of the crisis originated primarily in growth of the sector of inter-nationally non-tradable commodities, while the branches of the tradable sector were either stagnant (some for three decades) or growing at a slow pace (for instance, tourism).

3. The change in relations across the sectors of the Greek economy has had negative feedback effects further reducing international competitiveness. The negative feedback has contributed to the creation of external defi-cits and, *through these,* to the creation of public deficits ("twin deficits").[45] It has also more or less eliminated any chance of success for the bailout policy of "internal devaluation", especially an internal devaluation that would apply across the board and would occur in a state of "imperfect competition".

4. With regard to imports it is notable that there has been a steady increase in high technology goods, while the opposite holds for exports. Also, the Greek economy has been marked by a very low rate of international intra-sectoral/intra-commodity trade relative to the other members of the Eurozone. The implications of these two trends have been deeply problematic because the development of intra-commodity trade:
a. is related to the existence of "internal economies of scale" rather than to "comparative cost advantages", as generally happens for cross-sectoral/cross-commodity trade,
b. generally refers to composite industrial goods and commodities that are intensive in technology and skilled labour, and thus,
c. corresponds to economies with high a technological level.

It is worth noting in this connection the detailed study by Felipe *et al.*, which has examined 5107 products and 124 national economies over the period of 2001–2007 in relation to the oft-mentioned phenomenon of "dein-dustrialisation".[46] The study has concluded that:

1. The most complex products are produced in the sectors of machinery, chemicals, and metals, while the least complex products are produced in the sectors of raw materials, wood, textiles and agricultural products.

2. The four most complex economies in the international system are Japan, Germany, Sweden and Switzer-land, while the least complex are Cambodia, Papua New Guinea, Nigeria and Haiti. Of the twenty most complex economies (the last two being Singapore and Israel), thirteen belong to the EU and sixteen to the "West". Of the top ten, eight belong to the EU and nine to the "West". Greece is ranked 51, lying between India-China and Portugal-Uruguay, while Bulgaria is ranked 47 and Venezuela 43.

3. The main exporters of more complex products are high-income economies. The opposite is true for exporters of less complex products.

4. The share of more complex products in a country's exports is directly proportional to its income, while the share of the less complex products in a country's exports is inversely proportional to its income.

9.6. Development impasse
To analyse the longer term development implications of these trends for the Greek economy it is useful to think of national economies as governed by the following process of "circular positive-feedback". Growth in domes-tic output entails an increase in productivity due to increasing returns to scale; productivity growth, in turn, leads to higher international competitiveness of the economy, followed by an increase in exports, which brings additional growth of domestic output by, at least, stimulating effective demand.[47] Moreover, «Kaldor's growth laws» contend that, for a national economy, the growth rates in the aggregate output of all non-industrial sec-

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44 See, inter alia, Papazoglou (2009, 2014), studies in Economou *et al.* (2010), Economakis *et al.* (2014) and Konstantakopoulou (2015, ch. 2–3). For interesting correlations in the Greek economy between the external balances of the Greek economy and those of other national economies of the EMU, as well as the trade balance (goods and services), the unemployment rate, the growth rate (period 1981–2011), the trade balance, and the real exchange rate (period 1994–2011), see Vavouras (2013, ch. 9 and 13).
45 See Aliber (2010, 2011), and Mariolis (2011, Essay 9).
46 Βλ. Felipe et al. (2012).
47 This is the so-called Verdoorn's Law. For our purposes it can cast a revealing light on the prospects of Greece.

tors as well as in the productivity in all sectors are significantly and positively associated with the growth rate of the output of the industrial sector.[48]

Note also that the economies of the European «South» in general and of Greece in particular are specialised in commodities with low-income elasticity of demand, namely «traditional or raw material intensive, low/medium technology and unskilled labour» commodities. As proportion of foreign and domestic income, the foreign and domestic expenditures on these commodities tend, respectively, to decline as foreign and domestic income rises (Engel Curve). Therefore, these are commodities whose "specific weight" is reduced as national economies develop.

On this basis, it is likely that a vicious circle of cumulative causation has developed for the European South has been developed matched by a respective virtuous circle for European North. Without external borrowing, the South could expand only at relatively low rates, thus having a negative impact on productivity and international competitiveness. Low productivity and competitiveness would in turn push the South even further in the direction of problematic international specialisation.[49]

It has been estimated that, without external borrowing and while remaining within the Eurozone, the Greek economy could grow at rate that would not be greater than 60 per cent of the average growth rate of the aggregate of its trading partners.[50] This implies that for the growth rate of the Greek economy – within the Eurozone – to exceed the aforementioned and crucial threshold of 2 per cent to reduce unemployment, the average growth rate of all its trading partners should exceed 3.3 per cent. By this token, for the growth rate of the Greek economy to reach 5.4 per cent, the average growth rate of its trading partners should be at 9 per cent.

During the period 2001–2008, the average annual growth rate of both the Greek and the world economy was approximately 4 per cent. From the coefficient of 60 per cent, it follows that, without external borrowing, the growth rate of the Greek economy, would have been 2.4 per cent. That is, 40 per cent (= (4%-2.4%) / 4%) of the actual growth resulted from external borrowing. For 2016, the forecasts of the World Bank regarding growth rates were: 2.4 per cent for the world economy, 1.7 per cent for developed economies, 1.6 per cent for the Eurozone and 3.5 per cent for developing economies.[51] Even on this basis alone and ignoring other growth-inhibiting factors the growth prospects of the Greek economy seemed far from encouraging.

9.7. The banking system

Given the overall state of the national economy but also the evolution over time of national net saving, net investment and the current account deficit, the implications for the Greek banking system are perfectly apparent. The banking system is essentially an intermediary mechanism of financing private investment and government deficits through national private saving and external borrowing. Given the structural features of the Greek economy, the banking system would inevitably be in a permanent state of dynamic instability that would become a collapse whenever a fiscal crisis materialised and was accompanied by a halt in the flow of external borrowing.

According to data and estimates of the Bank of Greece and the Association of Hellenic Bank Association (2013), bank deposits (of domestic households and businesses) exhibited a steep downward trend during the period December 2009-June 2012, from 237.8bn euro to 150.6bn euro (30bn direct outflow of deposits abroad, 40bn of leakages through deficits of the external sector, and 17bn domestic "hoarding" and illegal outflow to other countries). Deposits stabilised in the region of 160–164bn during 2013–2014, but fell again during January 2015-May 2016, from 148bn euro to 121.7bn euro.

Inevitably, during the period 2008–2011, the ratio of loans to commercial banks' deposits increased by over 40 per cent, from 92 per cent to 130 per cent. At the same time, the contribution of the domestic private sector deposits in the total liquidity of the banking system decreased from 76 per cent to 49 per cent. The collapse of the liquidity of Greek banks brought about an extensive increase of funding by the ECB and the programme of Emergency Liquidity Assistance (ELA): 4bn euro in January 2008 compared to 130bn euro in December 2011. Since then the volume of financing provided by the Eurosystem has moved generally inversely to the stock of deposits.[52]

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48 For early but also more recent tests of the applicability of these laws for the Greek economy (1960–2007), see Drakopoulos and Theodosiou (1991) and Katrakilidis *et al.* (2013), respectively.
49 See the recent empirical study by Simonazi *et al.* (2013).
50 See Mariolis (2016c, Essay 24).
51 See http://www.worldbank.org/en/publication/global-economic-prospects
52 For an analysis of the state of liquidity, see Lapavitsas *et al.* (2011, ch. 4).

The average interest rate differential of loans and deposits, after declining during September 2011-November 2012, began to increase due mostly to the much faster fall in the average deposit interest rate.[53] In February 2016, the average interest rate differentialstood at 4.42 per cent (= 4.91 - 0.49). Specifically, the average interest rate on consumer loans without a defined maturity was 14.66 per cent. For business loans without a fixed duration the average interest rate was 6.05 per cent. For loans of fixed duration and floating rates the interest rate stood at 4.97 per cent, while for business loans it was 7.44 per cent. These rate of interest correspond neither to the development needs of the Greek economy nor to the need of to boost effective demand.

Finally, during the period 2008–2015, and as was expected, a significant centralisation of the banking system took place: the total number of credit institutions decreased from 66 to 40, commercial banks from 19 to 8, and domestic commercial banks from 11 to 7, the four largest of which (the so-called systemic banks) currently account for 98.6 per cent of the total assets of commercial banks. After the third bank recapitalisation which occurred in November 2015 – a rushed policy measure that took place under pressure to comply with the terms of the latest bailout agreement – the market value of banks dropped from 34bn euro (mid-2014) to 1bn euro, and the public sector lost virtually the entire value of the sums that it had contributed to previous recapitalisations. Participation by the public sector to the equity of banks has shrunk dramatically: 2.7 per cent in Eurobank (down from 35 per cent), 11 per cent in Alpha Bank (down from 66 per cent), 26 per cent in Piraeus Bank (down from 67 per cent) and 35 per cent in National Bank (down from 57 per cent). The equity of the systemic Greek banks has passed primarily into private hands, a good proportion of which were international hedge funds.

Chapter 10. Leakages of the Greek economy in the external sector

The more that the reproduction of a national economy depends on the outside world, the more that an increase in aggregate demand for its output –whether from domestic or foreign sources– would leak to other national economies. As a result of this leakage an increase in demand would not be fully converted into an increase in domestic production and thus an increase in income. If the leakage is large enough, it is even possible that an increase in demand would lead to a reduction in domestic output.

Determining the nature and the magnitude of the leakages of the external sector of the Greek economy is thus very important, first, to have a fuller analysis of the collapse of the economy after 2010 and, second and more important, to analyse the possible impact of an alternative policy that would be based on demand stimulation outside the EMU.

This part of the present study presents the characteristics of leakages of the Greek economy leakages for 2010.[54] To derive the results the study has deployed, first, the Supply and Use Table (SUT) and, second, a range of twelve product indices for each of the sixty-three (63) commodities in the system, as is explained in the Annex.

Out of the 52 internationally tradable commodities of the Greek economy 23 (or 23/52 = 44 per cent) show «revealed comparative advantage» (the meaning and method of estimation are given in the Annex). Of these, two commodities belong to the primary sector, three are industrial sector commodities and 18 are service sector commodities (two of which fall within the public sector). Each one of the 23 has a positive gross value added (GVA) in material terms, which means that gross domestic production is greater than intermediate consumption).

Eleven of the 23 commodities with «revealed comparative advantage» exhibit a deficit in their trade balance. However, the average index of their trade deficit is notably smaller than the corresponding index for the trade balance of the system as a whole. At the same time, these commodities are characterised by relatively low indices of «revealed comparative advantage», with the relevant exception of the commodities included under "Products of agriculture, hunting and related services" (commodity 1) and "Coke and refined petroleum products" (commodity 10). It is important to note, however, that the commodities with «revealed comparative advantage» and simultaneously a deficit in the balance of trade present a high index of intra-commodity trade. This would suggest that even these commodities could have distinct merits that would prove a source of benefits for the Greek economy.

Out of the commodities that show a «revealed comparative disadvantage», one belongs to the primary sector, 19 to the industry sector and nine to the service sector. Their trade deficits are significantly higher than for the

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53   For further information, see Georgikopoulos (2016, pp. 67–69).
54   For a full analysis, see Mariolis (2016a, 2016b).

average of the system (by 132 per cent) and their intra-commodity trade index is significantly lower than the average for the system average (by 30 per cent). Finally, no commodity displayed a «revealed comparative disadvantage» and, at the same time, a trade balance surplus.

Table 1 illustrates the categorisation of internationally tradable commodities for the Greek economy based on comparative advantage/disadvantage and trade balance surplus/deficit ("product mapping scheme").[55] Examining the findings suggests that, apart from the commodities in Category II, the following four commodities in Category I show a remarkably high intra-commodity trade index:
– 15 ("Basic metals")
– 31 ("Land transport services and transport services via pipelines")
– 33 ("Air transport services")
– 48 ("Advertising and market research services")

Finally, it is worth mentioning that in all available empirical studies of this kind covering various national economies and time periods, Categories II and III typically include a relatively small number of commodities and tend to be considered of transitional character. Most commodities are usually included in Categories I and IV.

Table 1. Product mapping scheme; Greek Economy, 2010

Category I *RCA* and *TBS*	Category II *RCA* and *TBD*
Commodities 3, 15, 27, 28, 29, 30, 31, 32, 33, 48, 55, 56 [Sum = 12]	Commodities 1, 10, 35, 39, 40, 45, 46, 47, 49, 53, 61 [Sum = 11]
Category III *RCD* and *TBS*	Category IV *RCD* and *TBD*
Commodities [Sum = 0]	Commodities 2, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 24, 26, 34, 37, 38, 41, 42, 50, 58, 59, 62 [Sum = 29]

Notes: (i). RCA (RCD) means "revealed comparative advantage (disadvantage)". (ii). TBS (TBD) means "trade balance surplus (deficit)". (iii). Commodities are indicated by numbers, which correspond to the Annex.

It is evident that the Greek economy is highly dependent upon the imports of several – mainly – *industrial* commodities in overall terms but also in terms of aggregate intermediate consumption and gross capital formation (i.e. means of production). Its dependence on imports is reflected in negative aggregate net savings. At the same time, the dependence on imports limits the economy's growth potential through policies that stimulate effective demand, no matter how well-designed and successful these policies might be.

Specifically, the industrial sector in the "weak link" of the Greek economy not only because of its low participation in the economy's total Gross Value Added compared to the service sector (17.9 per cent for the industrial sector versus 79.7 per cent for the service sector), or because of the deficit its presents in exports-imports, but truly in just about every respect.

The *particular* characteristics of the industrial sector (in terms of the average indices for the commodities that it produces) are as follows:
– Its GVA (in material terms) is negative. In the primary and service sectors it is positive.
– Gross saving (in material terms) in the industrial sector is significantly negative. In contrast, gross saving in the primary sector is positive. In the service sector it is negative, but it would become positive if commodity 34 ("Warehousing and support services for transportation") was disregarded; commodity 34 is characterised by extremely high negative net saving.
– It exhibits "revealed comparative *disadvantage*", while the other two sectors exhibit "revealed comparative advantage".
– Its intra-commodity trade index is lower than that of the economy as a whole by 19 per cent. The indices for the other two sectors are higher than for the economy as a whole by, respectively, 19 per cent and 14 per cent.

55   See Widodo (2008).

– Its self-sufficiency index is significantly lower than for the economy as a whole (the definition and mode of estimation of the index is given in the Annex). Specifically, the index for the industrial sector lower by 47 per cent, the index for the primary sector is lower by 14 per cent, and the index for the service sector is higher by 33 per cent. Note, however, that the index for the primary sector would become higher than for the economy as a whole (and also higher that the index for the service sector) if commodity 32 ("Water transport services") was disregarded; the index for commodity 32 exhibits an extremely high vale.

– Its aggregate import dependency index is higher than that for the economy as a whole by 107 per cent (the definition and mode of estimation of the index is given in the Annex). In contrast, the index for the primary sector is lower by 65 per cent, and that for the service sector is lower by 68 per cent.

– The index of dependency of its means of production on imports is higher than 100 per cent. This implies that, given total final consumption expenditure and given exports of industrial commodities, an increase in aggregate expenditure on intermediate consumption and an increase in gross capital formation would lead to a *decrease* in the gross domestic output of industrial goods. In contrast, the indices for the other two sectors are significantly below 100 per cent.

In this light, Table 2 illustrates the average values of the indices of intra-commodity trade (ICT), self-sufficiency (SS), total import dependency (TID) and import dependency of capital goods (IDK) for the three basic sectors and the economy as a whole (TE).

Table 2. Indices (per cent) of intra-commodity trade, self-sufficiency and import dependency for the three basic sectors and the economy as a whole

	ICT	SS	TID	IDK
Primary sector	58.4	103.6	13.7	33.6
Industry	39.8	63.8	46.8	114.9
Services	56.2	160.5 (96.9)	7.2	11.8
TE	49.2	121.0 (84.4)	22.6	52.8

Notes: Values in parenthesis are the result after the exclusion of commodity 32 ("Water transport services"), which shows extremely high SS value (i.e. 2385 per cent).

Eleven commodities (ten industrial and one service) exhibit notably bad values in all indices and, therefore, constitute the *main leakages* or "black holes" of the external sector of the Greek economy. They are listed in Table 3 alongside their values for the ICT, SS, TID and IDK indices. Only two of these commodities, i.e. 4 ("Mining and quarrying") and 34 ("Warehousing and support services for transportation") show an IDK index value below 100 per cent. In addition, for these eleven commodities, imports in monetary terms correspond to 667 per cent of exports; indeed, imports of the eleven commodities represent 66 per cent of the economy's total imports, while their exports correspond to only 18 per cent of the economy's total exports. Finally, all these commodities belong to Category IV of Table 1; specifically, they represent 38 per cent (= 11/29) of this Category. It is therefore expected that at least nine out of these eleven commodities – i.e. these with IDK values above 100 per cent – would be the direct target of industrial policy to be adopted by Greece.[56]

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56   For basic dilemmas that such a policy would inevitably face, see Mariolis (2016b).

Table 3. The main commodity leakages in the external sector of the Greek economy and their indices

No	Commodity	ICT	SS	TID	IDK
4	Mining and quarrying	3.9	14.1	87.7	87.7
5	Food products, beverages and tobacco products	47.4	82.7	25.1	125.8
6	Textiles, wearing apparel and leather products	37.5	44.9	71.7	1071.1
11	Chemicals and chemical products	32.5	36.5	78.8	127.1
12	Basic pharmaceutical products and pharmaceutical preparations	30.5	35.0	79.3	247.3
17	Computer, electronic and optical products	0	5.6	94.4	108.2
18	Electrical equipment	68.0	62.2	78.0	113.0
20	Motor vehicles, trailers and semi-trailers	4.0	15.1	86.7	193.2
21	Other transport equipment	27.1	6.9	110.5	124.1
22	Furniture; other manufactured goods	14.7	46.3	58.3	107.5
34	Warehousing and support services for transportation	22.0	34.0	75.3	79.0

Returning to Category I of Table 1, with the marginal exception of commodity 15 ("Basic metals"), every other commodity in the Category, i.e. one primary commodity, one industrial commodity and nine service commodities, exhibits better SS (excluding commodity 32 – see Table 2), TID and IDK index values than the system as a whole. Therefore, these eleven commodities could be considered as "key commodities" for the external sector of the Greek economy. The "key commodities" are listed in Table 4 along with the values of the four indices. In monetary terms, the imports of these commodities correspond to only 5 per cent of their exports and 1.5 per cent of the economy's total imports, while their exports correspond to 54 per cent of the economy's total exports.[57]

Table 4. The key-commodities of the external sector of the Greek economy and their indices

No	Commodity	ICT	SS	TID	IDK
3	Fish and other fishing products; aquaculture products; support services to fishing	43.7	125.4	9.8	26.5
27	Constructions and construction works	66.5	101.1	1.1	1.2
28	Wholesale and retail trade and repair services of motor vehicles and motorcycles	0	107.1	0	0
29	Wholesale trade services, except of motor vehicles and motorcycles	0	110.5	0	0
30	Retail trade services, except of motor vehicles and motorcycles	0	110.4	0	0
31	Land transport services and transport services via pipelines	88.5	100.6	2.2	8.0
32	Water transport services	0.9	2385.0	10.1	19.3
33	Air transport services	83.8	105.2	13.5	34.6
48	Advertising and market research services	94.4	100.5	3.9	3.9
55	Education services	73.0	100.1	0.1	6.0
56	Human health services	73.0	100.1	0.2	7.8

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57   By including commodity 15 these figures would become: 13 per cent, 4 per cent and 59 per cent respectively. The values of Table's 4 indices for commodity 15 are: 96.1 per cent, 103.4 per cent, 41.4 per cent and 41.4 per cent.

Finally, it is worth mentioning that, apart from the commodities of Category I, positive gross saving (in material terms) is also recorded for the following internationally tradable commodities: 9 ("Printing and recording services"), 19 ("Machinery and equipment n.e.c."), 37 ("Publishing services"), 38 ("Motion picture, video and television programme production services, sound recording and music publishing; programming and broadcasting services"), 40 ("Computer programming, consultancy and related services, information services"), 45 ("Legal and accounting services; services of head offices; management consulting services"), as well as the internationally non- tradable commodities: 23 ("Repair and installation services of machinery and equipment") και 44 ("Real estate services (excluding imputed rent)").

Chapter 11. The necessity of a change of course

The Greek economy has recorded one of the deepest recessions in the annals of the global economy since 2008 — it has taken a historic pummelling. As is well known, each national economy can be considered as comprising three sectors: the private sector (businesses and households), the public sector, and the external sector. When an economy slides into a deep recession, at least one of these sectors has to operate as the "locomotive" to boost aggregate demand. This boost is generally achieved through economic policies, including fiscal, monetary, exchange rate, income, trade (tariff and non-tariff) and structural policies, several of which would inevitably be interrelated.

Greece is, of course, a member of the Eurozone and thus faces additional constraints in exercising of economic policy, including:
− National authorities cannot use monetary, exchange rate, and trade policy; these constraints, in turn, significantly restrict the exercise of industrial policy.
− Fiscal policy is limited by the "Maastricht criteria" and, more broadly, by the architecture of the European Monetary Union. These constraints, however have become tighter since the outbreak of the Eurozone crisis in 2010 which more severe Stability and Growth Pact since 2013. Note that within the confines of the Pact national governments retain discretionary powers over taxation.
− Incomes policy is exercised unilaterally, that is, at the expense of wage earners since salaries and wages are among the few variable at the disposal of policymakers.

Greek economic policy adjustments implemented in the wake of the Eurozone crisis amount to an effort to manage a web of huge problems, among which international competitiveness has been a pivotal element. The framework imposed by the EU has been based on:
− rigidly contractionary fiscal policy
− unilateral income policy at the expense of wage earners
− deregulation of the labour market and of the social insurance system under the umbrella of "structural policy" or "reform"

This policy framework has aimed, first, at stabilising the fiscal and the external deficit through deep cuts in aggregate demand and, second, at furthering the neoliberal deregulation of markets and of the welfare state. The first part was imposed through the pressure of the crisis; while the second part took advantage of the crisis to change the country's fundamental economic and social relations in favour of capital and to the detriment of labour. Quite naturally the policies led to:
− a deep recession
− a massive spike in unemployment
− new borrowing to service older borrowing
− sell offs and mortgaging of public and private assets
− ballooning of non-performing bank loans (household and business) as a percentage of total bank lending.

As a result, after six years of "adjustment" and "rescue" policies within the bailout agreements:
− The private sector is in dire condition, drained by taxation and, displaying, as *a whole,* limited prospects of profitability.
− The public sector has been burdened with debt, while being further disorganised through the contractionary policies imposed by the bailout agreements.
− Despite the internal devaluation which might perhaps lead to an indirect and slow increase in international competitiveness (rather than to a direct and rapid increase in competitiveness that would result from an external/currency devaluation) the external sector has not been able to respond positively.

– It should be noted that in the period 1980–2000, the average annual nominal depreciation of the drachma relative to the US dollar was in the region of 10 per cent (from 43:1 to 309:1), to the German mark also 10 per cent, to the Italian lira 6 per cent, and to the ECU 8 per cent. These rates did not diverge significantly from the corresponding differential inflation rates of the Greek economy, and thus Greek international competitiveness (in terms of the real exchange rate) fluctuated within a similarly narrow range.

– By contrast, during the period 2002–2008, the average rate of the nominal *appreciation* of the euro, the currency used by the Greek economy, was 7 per cent relative to the dollar, while the annual inflation rate, as well as the rate of increase of the nominal unit labour cost, was systematically higher than the Eurozone average. During 1980–2000 the current account balance ran deficits ranging from 0.1 per cent of GDP (1994) to 8 per cent (2000). In the period 2002–2008 the deficits ranged between 7 per cent (2002) and 15 per cent (2008), while the average was 9 per cent of GDP.

Given how much has been said publicly in Greece about how ineffectual were in the past changes in the exchange rate of the drachma, it is instructive to be reminded of the views expressed in April 1989 by none other than Professor Xenophon Zolotas, former Governor of the Bank of Greece, Prime Minister for a short period of time and pillar of the economic establishment in the post-war period:

"If a country suffers adverse consequences in the competitiveness of its economy due to inflation higher than the average for the European currencies (nearly four times higher), it will be forced to devalue its currency...The policy of downward drift in our national currency, in my opinion, has been successful and contributed to ensuring the competitiveness of the economy with beneficial effects for the balance of payments. Twice in the past there have been careless attempts at one-off devaluation, parallel to the policy of downward drift, which have had adverse effects and delivered a hard shock to the economy leading to capital flight, speculative price hikes, and so on. These harmful consequences could have been avoided if we had chosen the method of faster downward drift."

It is clear that there will not be any sustained growth in the Greek economy within the tight constraints of "permanent hypotension" created by the bailout "rescue" framework. The issue of growth must urgently be placed on a completely different basis through the implementation of a programme of appropriately *targeted* redistribution of income and simultaneous boost of aggregate demand, while *limiting* the leakages in the external sector. It is even more obvious that such a growth policy means exiting the European Monetary Union and regaining national sovereignty over monetary policy. The desirable growth policy for Greece must therefore be made compatible with a policy to manage the fall-out from leaving the EMU.

PART III. OUTLINING A NEW PATH FOR GREECE

There could be little doubt that the medium- and long-term prospects of Greece would be substantially better outside the recessionary trap of the Eurozone. The foregoing analysis has established this conclusion firmly. However, there could also be little doubt that exiting the Eurozone would be a difficult short-term task. Indeed the short-term difficulties have been the basis on which the power elite of Greece has conducted a campaign of exaggeration and fear to coerce the population into accepting the bailout programmes. Particularly after the vault-face of SYRIZA in the summer of 2015, there has been a strong perception in the country that there is no obvious alternative, even if the bailout strategy is generally rejected.

It is established in this part of the study that the short-term problems of exiting from the Eurozone exit are manageable as long as there is a modicum of planning, preparation and determination. The wild exaggerations of the last few years in Greece have created fear, but there is still room for sustained and calm argument. It is vital to remember, above all, that short-term difficulties are never a good reason to avoid a course of action that has medium-term and long-term benefits for economy and society.

It need hardly be stressed that the precise steps of exit from the Eurozone will depend on the political and social balance of forces in each country. There is, however, one vital analytical point to make at the outset. A "plan" of exit is not –and could not be – a complete list of all possible eventualities and outcomes, with appropriate policy action attached, as is often implicitly demanded by those in Greece who support the bailout strategies. It is apparent that such a thing would be impossible to devise for any economic policy and not merely that of exiting the EMU. The "plan" that Greece, or any other country, needs has a different character.

To be specific, and is shown in this part of the study, there are three major sets of issues to resolve in the case of Greek exit. The first, and by far the most important, is to ascertain the series of steps that should be undertaken in logical sequence to minimise the costs of recapturing monetary sovereignty. This is the true macroeconomic problem of exiting the EMU and an answer for it is given below in discrete steps. The main components of this answer have been known for quite a while in Greece, and from a variety of sources. But the policy was not adopted because of sectional interests and political vacillation or cowardice.

The second problem, and closely related to the first, is to ascertain the modalities of each step, particularly those to do with stabilising banks, supplying key markets and lessening the shock to the productive sector. This is not an easy task but it is entirely derivative of the first problem of resolving the series of steps for exit. One thing that is clear – and is shown below – is that there would be a very small risk of rapid inflation. It is also clear – and is also shown below – that the inevitable depreciation of the new currency would have a strongly beneficial effect on the international transactions of Greece. Finally, defaulting on the national debt and issuing a call for its deep write off would also save a significant volume of resources in an annual basis, while releasing the country from the policy shackles of servicing the debt. These steps would provide a basis for the genuine restructuring that the Greek economy needs.

The third problem, consequently, is to outline an appropriate medium-term development strategy for the country that would be put in place as soon as exit occurred. Greece should adopt a policy of strengthening domestic demand by initially boosting public consumption and investment; it is shown in this Part IV of the study that there is a range of services (rather than industrial goods) that are particularly suitable for this purpose. It is also shown that there is a further range of agricultural and industrial commodities – but also services – that should be the initial focus of policies to boost exports and limit imports.

Boosting demand through fiscal expenditure should be financed in the first instance by the issuing of money, once monetary sovereignty will have been regained. The risk of inflation, as has already been stated, is minimal. Demand should also be boosted by readjusting the tax system in the direction of greater progressiveness and to lessen the extraordinary burden created by the bailout strategies.

On this basis Greece could adopt an industrial strategy to alter the structure of its economy. It is shown below that there are several sectors that would be suitable for industrial policy, which would also improve the net saving of the country helping it enter a virtuous circle of growth and employment. Agriculture would be closely connected to industry in such a strategy.

Finally, and almost superfluous to state, a country in the terrible state of present-day Greece needs to undertake reforms that would go well beyond the immediate redirection of economic policy. Reforms should also take place in labour markets, public administration and other aspects of social organisation. Nothing less is needed in Greece that wholesale rebalancing of society in the interests of wage labour, small and medium enterprises and small and medium farmers. These changes cannot be fully examined in the limited confines of this study, but several pointers are offered below.

Chapter 12. Exit from the Monetary Union

The SYRIZA government that was elected in Greece in January 2015 made its motto the prospect of "hard negotiations" with the lenders and the EU to secure lifting of austerity and neoliberal policies as well as substantial debt relief. It was going to succeed in this demanding endeavour because it would have the democratic mandate of the Greek people and, unlike previous Greek governments that were presumably pusillanimous, it would not compromise. The lenders would retreat because the potential disruption that would be caused in the world financial markets by Greek obstinence would be too great. SYRIZA would thus achieve the remarkable feat of keeping Greece in the EMU, while reversing entirely the stabilisation and adjustment policies of the EU, and continuing to receive liquidity from the ECB for Greek banks and funding for itself from the EU lenders.

Needless to say, this approach was based on manifest ignorance of the politics and the economics of the EMU, not to mention considerable make-belief that passed for political economy. The inevitable result was a complete political defeat that was perfectly predictable and was actually predicted.[58] Nevertheless, one important political point is worth salvaging from the disaster, namely that "hard negotiations" were indeed possible for the Greek government, provided that it had a clear understanding of what lay against it. The only objective of such "hard negotiations" could have been the terms of exit of Greece from a failing monetary union that has become a trap for peripheral, and increasingly core, countries. That remains the only valid objective for a government that wishes to adopt an alternative path for the country.

It has been repeatedly stated that determined use of national state power plus social mobilisation plus some international political support could help the government of even a small state achieve a cooperative exit that would lessen the difficulties of transition.[59] Nonetheless, the doggedness with which the Greek political system, including the leadership of SYRIZA, and indeed the dominant historical bloc in the country have kept Greece on the path of no hope within the EMU, is truly astounding. A responsible government that understood what is important for its country and its people would long ago have opted for "hard" negotiations on how to exit the trap.

To be sure there is no formal method to exit the EMU, but a legal basis for exit is available in the Treaties and, moreover, it does not also mean automatic exit from the EU.[60] The law would not be a problem for Greek exit, or that of any other peripheral country. There are, however, three issues that would prove genuinely difficult and would require "hard negotiations". First, ensuring a non-hostile attitude by the lenders to Greece on suspension of payments on the national debt and deep debt relief, including writing off parts of the principal. Second, securing continued provision of liquidity by the ECB to the banks for a period of, perhaps, up to a year. Third, guaranteeing support for the exchange rate of the new currency, a task that would also be relegated to the ECB.

None of these tasks is impossible, particularly in view of the deepening malfunctioning of the EMU and the unfolding debate on the future of the EU. Institutional mechanisms already exist that could to facilitate the transition to a settlement, including the ECB and the "sleeping" mechanisms of the European Monetary System that preceded the EMU. A cooperative exit from the EMU would be the optimal solution for Greece and other peripheral countries, and it might also be the least problematic outcome for the EU in the medium to long term.

Of particular importance for this path will be an agreement on "exemption" from the EU itself after leaving the EMU. The Greek government will have to negotiate the implementation of a system of "opt-out clauses" to pursue the targeted development policies. Emphasis should be given to agricultural and industrial development, mainly in meeting the good-leakages outlined above. The "opt-out clauses" should include as many forms of tariff and non-tariff interventions as possible (export subsidies, local content requirements, import quotas, public

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58   See Flassbeck and Lapavitsas (2015), a book that was published in English on 24 January, a day before the election of the SYRIZA government.
59   See Lapavitsas and Flassbeck (2015), and Lapavitsas et al., 2016.
60   See Miliariakis (2015 and 2016).

procurement). The "opt-out clauses" could be offset, to some extent, by agreements on transfer of know-how and technology through domestic co-productions with foreign companies. A system of exemption clauses and co-productions also provides a basis for using the method of "reciprocal commitments" during the debt restructuring process, namely repayment of external debt in domestic currency, and pre-agreed imports on the part of Greece.

On 22 January 2014 the European Commission published a noteworthy communication "For a European Industrial Renaissance", which highlighted, inter alia, the following: "Commission calls on Member States to recognise the central importance of industry for boosting competitiveness and sustainable growth in Europe and for a systematic consideration of competitiveness concerns across all policy areas. […] the objective of revitalization of the EU economy calls for the endorsement of the reindustrialisation efforts in line with the Commission's aspiration of raising the contribution of industry to GDP to as much as 20% by 2020."[61] It is clear that this text, as well as other more technical ones that followed, and which in fact include specific references to the Greek industrial sector, ought to become one of the starting points of the negotiations on the industrial policy program for the Greek economy.

There is no doubt that a cooperative exit would probably face considerable difficulties from the EU, particularly if the Greek government insisted on the minimal terms outlined above, which go against the spirit of the policies applied in the EU during the last three decades. However, a cooperative exit is far from the only option available to a peripheral country. A sovereign state retains the right and the ability to act unilaterally to protect its people. If the EU proved uncooperative, Greece or any other peripheral country could act unilaterally to exit the EMU trap and begin to implement the required alternative policy. It is worth stressing, especially as it often misunderstood, that undertaking unilateral action does not mean hostility and refusing to negotiate with the EU. Unilateral action would simply set a different framework within which Greece would negotiate its current and future relations with the lenders and the EU in general. It cannot be overstressed that unilateral action on the basis of national sovereignty would require political legitimacy and active popular support. Such action would not succeed if there was no grassroots participation in the national effort.

Unilateral action to ensure EMU exit is a process that requires a series of steps, several of which have been outlined elsewhere.[62] It is worth recapping the initial steps to provide parameters of policy debate:
1. The Lex Monetae allows a sovereign state to choose the currency it uses. Naturally, there should be no advance warning of the adoption of the New Drachma, and the change of currency should take place over a weekend. The government should immediately announce that:
a. All redemptions of principal and payments of interest on sovereign debt outside of the Greek payment system are suspended.
b. Greek participation in the EMU is suspended.
c. All bank operations and financial markets are closed until further notice.
d. The Greek Central Bank is placed under government control.
e. A Commissioner for Banking is appointed with full plenipotentiary powers over private and public banks.
f. The system of capital and bank controls that has been in operation since 2015 is to be *adjusted* and continued for a further period.[63]
g. All accounts and all debts in the Greek payment system that are governed by national law are to be redenominated in the new currency at a rate of 1:1.
h. The government pledges to fulfil its obligations to all Greek agents.

2. All important decisions - from the choice of principles to be applied in the introduction of the national currency to the resolutions to be passed by Parliament - should be made immediately. Parliament should give to the Government (particularly to the Prime Minister and the Minister of Finance) the widest possible powers to implement the currency reform.

3. The Commissioner for Banking should take provisional control of Greek banks and the Central Bank to ensure:
a. Effective compliance with the system of capital and bank controls
b. Re-denomination of all accounts in the new currency.
c. The introduction of Drachma banknotes into the vaults of banks to begin to use in the following week.

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61   See European Commission (2014).
62   See Lapavitsas et al., 2016.
63   We will return to this issue in chapter 17.

d. Possibly the "voucherisation" of existing banknotes by using a special stamp to allow Euro banknotes held by banks to be provisionally used as "New Drachma".

e. In coordination with the Central Bank, the preparation of a list of Greek enterprises who have borrowed from non-Greek agents. The process should take no longer than two or three days.

4. The decision to suspend external payments thus allowing the national debt to go into arrears in practice means that Greece would be failing to redeem outstanding bonds held by the ECB, and failing to repay IMF loans. Greek debts to the EFSF, the ESM and other bilateral/multilateral debts arising from the bailout programme have a significant grace period. After going into arrears Greece should issue a call for an international conference to settle its debts, including a substantial write off of the principal. Establishing an Audit Commission to consider the legitimacy of Greek public debt would be an important part if this process, not least to ensure democratic participation by the majority. It is probable that a "growth clause" and a limit of debt repayments (interest and principal) relative to GDP, or to exports, would be set in all forms of debt settlement.

5. The conversion of all bank liabilities and assets that are governed by Greek law into the New Drachma would take place at the rate of 1:1 to avoid the technical complexities of conversion at variable rates for different classes of asset and liability. Individual and enterprise bank deposits as well as individual and enterprise bank debts would be converted at 1:1. All employment contracts under Greek law would also be converted at 1:1. The government would immediately announce that it will no longer either accept or make payments in Euro, giving effective monopoly of legal tender to the New Drachma. The government should immediately issue a full guarantee of the new Drachma-denominated deposits. During the initial weekend and for the first few days while the banks were closed, all charge and credit card transactions would be converted into the new currency.

6. Depending on the degree of preparedness, the new banknotes could begin to enter circulation within a month and a half from the switch to a new currency. In the intervening period it would be possible to use stamped Euro banknotes as Drachma "vouchers" in ATMs and at cashier's windows. At present there are perhaps 40bn Euro banknotes in circulation as liabilities of the Greek Central Bank, a large part of which is certainly hoarded. Incentives would be offered to attract these banknotes into the formal banking system following the change of currency.

7. The most complex issue with regard to payments is, of course, not banknotes but the performance of the electronic systems of payment. The performance of banking IT systems should be immediately audited to ensure convertibility of Euro into New Drachma for purposes of interbank and other electronic payments as well as limiting Euro cash withdrawals shortly before and after the changeover. The Compatibility with the IT systems of the banks of the Eurozone should also be examined.

8. Ensuring the continuing functioning of the payment system would be made easier by the full nationalisation of the four systemic Greek banks through conversion of the existing public holdings of equity into common stock with voting rights and, more significantly in view of the sale of Greek banks in November 2015 for a pittance, through confiscation of the equity holdings of private funds without compensation. The government should simultaneously announce the continuation and strengthening of banking and capital controls that have been in operation since the summer of 2015, until such time as the economy would have recovered.

9. After nationalisation the banking system would restructured, first, through establishing a "bad bank" to relieve commercial banks from the bulk of the stock of non-performing debt and non-performing equity that might even approach 140bn in 2016 (to enterprises, housing and consumption, roughly split into 45:25:10). The "bad bank" would be capitalised primarily by newly-issued public bonds in the national currency.

10. A public committee would be appointed to apply social and economic criteria to the allocation of problematic debts to the "bad bank". Two principles would be paramount to its functioning. First, to release households and SMEs from the burden of non-performing debt, especially that which has accumulated in the 2010s. Second, to avoid saddling the public sector with the bad debts of dishonest private borrowers. The recovery of commercial credit, which has collapsed in Greece in the course of the crisis, would depend on rescuing the remaining vestiges of trustworthiness among private enterprises, and for that it is vital not to favour bad debtors.

11. The balance sheet of the National Central Bank would be redenominated and the Bank would be transformed fully into a public institution. The Greek Central Bank would remain a member of the European System of Central Banks, even after exiting the Eurosystem. However, a careful legal assessment would be necessary of the repayment of its liabilities to the Eurosystem as well as with regard to ELA.

12. The government would offer financial and legal assistance to companies and physical persons who hold contracts governed by foreign law, following the change of currency. More generally, there will be need for financial help to SMEs, households and large enterprises for weeks and months ahead. The aim would be to avoid bankruptcies and to deal with legal complications of making payments to and receiving payments from abroad.

13. Greece would rapidly regain monetary sovereignty and the New Drachma would be re-established as the functioning money of the country as long as the state persevered with making and accepting payments in the new currency. However, it is likely that during the initial period there would be parallel circulation of several forms of money: New Drachma banknotes, electronic New Drachma units created by banks, regular Euro banknotes, and perhaps stamped Euro banknotes. Parallel circulation would create transactions costs as goods would be valued differently in different currencies, but they are likely to be limited and under no circumstances justify Greece remaining in EMU.

14. The New Drachma would have an international exchange rate after the initial administrative conversion of assets, debts, wages and salaries at the rate of 1:1 with the Euro. There is no doubt that global markets would immediately price the New Drachma relative to the Euro and to other currencies, and that the New Drachma would depreciate. It is impossible accurately to predict the degree of depreciation – "estimates" of this kind are no more than guesses. It is worth bearing in mind that Greece has reached a precarious balance on current account after six years of recession, and thus the depreciation pressures would be partially attenuated. Even so, it is likely that the exchange rate of the new Drachma would follow a J-curve path, declining sharply in the initial period and rising gradually toward a new equilibrium. The initial period of sharp decline, which might even reach 50%, is unlikely to last longer than several weeks, while the adjustment to the new equilibrium would probably extend to several months. The ability to defend the exchange rate in the short run would depend on capital controls acting as a barrier to speculation. It would also be vital steadily to put together a stabilisation fund managed by the Central Bank. Further detail on the appropriate exchange rate policy is given below.

15. Provisioning of key markets – medicine, food and fuel – in the very short run would require administrative measures to ensure supply of key goods to industry and the most vulnerable social groups. There would be no need for rationing in the sense of coupons, or ration cards for the population. Measures would be taken to prioritise access to medicine, food and fuel of the most vulnerable and economically important groups. Note further that at present Greece has a huge underutilised capacity of both labour power and means of production that could be rapidly used to supply domestic markets. The country already has significant coverage of key food supplies from domestic sources. Moreover, it has good domestic coverage for energy to produce electricity, but it would certainly need an interstate agreement to boost the availability of car fuel for a short period. Greece, finally, has good domestic coverage of medicines, and it would be possible immediately to prioritise key imports of urgently needed drugs, including cheaply available generic drugs from a variety of suppliers across the world.

16. Depreciation would act as a vital lever for Greek enterprises to recapture the domestic market – since it would act as barrier to imports – and to expand exports. It can be expected to have beneficial effects on output and employment in Greece, for reasons that are discussed in more detail in the following section. It is also unlikely to lead to high inflation for reasons that are again discussed in the following section. The recovery of the Greek economy would probably begin between six and twelve months from the change of currency, if historical experience of similar monetary events is a guide. There is, of course, no doubt that the initial period of adjustment would affect output and production negatively. However, the combined effect of restoring liquidity, lifting austerity and currency depreciation would deliver a strong boost to the economy. Given the state of the Greek economy, the unused and wasted resources and the heavily repressed demand, it is reasonable to expect that the growth would be strong and sustained once the economy would have recovered from the currency change. Sustained growth in the medium term would, of course, depend on implement a new development programme along the lines discussed in subsequent sections.

17. Following exit, Greece would follow a policy of managing a floating exchange rate in line with its small size in the world markets and its natural proximity to the markets of the EU. There is plenty of available guidance from other countries on how to manage a floating exchange rate to ensure stability, including from Sweden which operates a floating currency within the EU. In this respect, minimum wages would be raised but, equally, collective bargaining must be put on a different footing to guarantee the new direction of the country. It would also be important to adopt measures to protect workers' incomes by abolishing high taxes on consumer goods (for instance, food, electricity, petrol), by providing increased social protection to the weaker strata of wage labour and the middle class, and by regulating key prices, including the rental cost of housing.

18. Finally, the stock of unpaid obligations by the public to the state (taxes, fines and so on) that is currently in excess of 90bn Euro should be cleared by applying social criteria. The great bulk of the individual cases of unpaid obligations comprises sums below 5000 Euros that have accumulated during the crisis. However, most of the debt in money terms (perhaps four fifths) is owed by a few thousand large debtors, mostly enterprises but also natural persons. In practice very little of the debt is actually collectible, no more than perhaps 10bn Euros. Legislation should be passed to relieve the great bulk of small debtors, while encouraging large debtors also to pay. Once again, a vital issue would be to avoid favouring dishonest debtors.

Chapter 13. Inflation, competitiveness and income distribution following exit

It is impossible precisely to estimate the rate of devaluation of the New Drachma. However, if we take into account the preceding analysis of the state of the Greek economy and its growth needs, it would be appropriate to consider the implications of a nominal devaluation in the range of 30 to 50 per cent.
The short-term elasticity of the average rate of cost-inflation (measured in terms of the gross value of domestic production not the CPI) relative to the nominal devaluation of the domestic currency should not be viewed as greater than 0.20.[64] Consequently, a nominal devaluation ranging between 30 and 50 per cent would trigger the following developments.

A) Imported inflation rate in the range of 6 to 10 per cent during the first year, dropping to between 4 and 6 per cent in the second year. This inflation rate is a "cost" that the Greek economy must pay for the private sector's inability to gain competitiveness internationally.

There are three sectors in which inflationary pressures would be at their highest:
1. Coke and refined petroleum products: 22 to 37 per cent;
2. Water transport services: 14 to 23 per cent;
3. Motor vehicles, trailers and semi-trailers: 13 to 22 per cent.

In contrast, there are three sectors in which inflationary pressure would be at their weakest:
1. Education services: 0.7 to 1.1 per cent;
2. Real estate services: 0.4 to 0.7 per cent;
3. Products of forestry, logging and related services: 0.2 to 0.3 per cent.

Moreover, inflationary pressures in four especially significant industries – food, pharmaceuticals, tourism, and health – would be in the range of
1. Food products and beverages: 4 to 6 per cent;
2. Chemicals and chemical products: 11 to 19 per cent;
3. Accommodation and food services: 5 to 8 per cent;
4. Human health and social work services: 10 to 17 per cent.

B) Increase in the average international competitiveness of the Greek economy ranging from 23 to 37 per cent in terms of "real exchange rate", that is, the ratio of the nominal exchange rate to the domestic price level. In sectoral terms this improvement would be:
1. Primary sector: 25 to 40 per cent;
2. Industry: 20 to 31 per cent;
3. Services: 25 to 40 per cent.

Summing up A and B, a nominal devaluation would be expected to result in an increase in domestic prices equal to the magnitude of the devaluation over time. However, it would also lead to an *immediate* spike in the competitiveness of the Greek economy which would gradually return to lower levels as prices would rise. Both of these results are well-attested in the international bibliography on devaluations. It is thus evident that devaluation would create a huge potential for implementing alternative policies as well as a new growth policy in the immediate wake of the fall in the nominal exchange rate. Devaluation also holds out the prospect of altering the structure of the Greek economy through the emergence of new industries and activities. This is precisely the most dynamic result of deep devaluations, as has been repeatedly shown by international experience.

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64 See Katsinos and Mariolis (2012).

C) Improved external balance of goods and services (expressed in euros). According to Hellenic Statistical Authority data, in 2014 exports reached EUR 59bn and imports EUR 63.3bn.[65] Following devaluation, the EUR 4.3 deficit would become a surplus ranging between EUR 4.5 and EUR 10.6bn. The first signs of improvement in the balance of goods and services would begin to appear after an estimated six to twelve months ("J-Curve"). More specifically, the EUR 59bn exports in 2014 could be broken down by sector into EUR 31bn of goods and EUR 28bn of services, while the EUR 63.3bn in imports comprise EUR 51.9bn of goods and EUR 11.4bn of services. Accordingly, it is possible to project that:

1. The EUR 20.9bn deficit in goods would be reduced to EUR 12.5–6.9bn. For the full elimination of the deficit it would be necessary to have a nominal devaluation of around 78 per cent.

2. The EUR 16.6bn surplus in services would rise to EUR 17–17.5bn. At lower levels of nominal devaluation the surplus would shrink slightly; it would be minimised for a devaluation of around 6 per cent, and it would return to the original level of EUR 16.6bn with a nominal devaluation of around 12 per cent.

These projections are based on the worst-case scenario for imported inflation (and, therefore, for competitiveness). Specifically, the following assumptions have been made: i) full wage indexation to current inflation; ii) fixed tax rates on production; iii) fixed import prices in foreign currency;[66] and, iv) no substitution of imports in domestic production and consumption. Given the partial readjustment that has taken place in the Greek economy from 2010 onwards and especially after the imposition of capital controls in 2015, these projections should be seen as only indicative with respect to their sectoral dimension.

Boosting overall demand after the currency devaluation can spur the country into growth, combined with the development program outlined in subsequent chapters. It is estimated that a devaluation of between 30 and 50 per cent, combined with the cessation of (i) foreign borrowing, (ii) EU transfers, and (ii) interest payments on the external debt, is compatible with a 4 to 7 per cent, rise in GDP.[67]

The results would be positive for wage workers and low-income social layers. The claim that currency devaluations hurt wage earners because they *inevitably* lead to a reduction in the real wage rate is fallacious. The argument, of course, holds when, first, all sectors of the economic system are single-product industries, second, returns to scale are constant and, third, there is full employment of invested capital. Under these conditions a devaluation would lead either to a reduction in the real wage rate (with a constant real profit rate) or a reduction in the real profit rate (with a constant real wage rate). However, this is far from inevitable when there are joint-product industries, or increasing returns to scale, or underutilisation of invested capital and labour.[68]

Given the deep recession in the Greek economy, the underutilisation of invested capital is above 30 per cent, while according to Olenev's above-mentioned estimates, it has been rising continuously since 2007 and approached 50 per cent in 2014.[69] Thus on this basis alone, devaluation could lead to a boost in demand for domestically-produced goods which (combined with the other policy measures outlined below) would increase the degree of utilisation of capital thus allowing both the real wage and profit rates to rise. Needless to say, if this outcome did not materialise it would be necessary to rely on government intervention to protect wages and salaries.

Chapter 14. Demand stimulation and its sectoral dimension

Alongside devaluation, an appropriate economic policy should stimulate autonomous demand (government final consumption expenditure, investment and net exports, i.e. exports minus imports). The boost of demand should be achieved in a carefully planned manner targeting commodities and sectors that offer the greatest potential for increasing total output and employment to the highest degree.

The deep difficulty as far as the Greek economy is concerned is that the boost in demand must take place in parallel with the much-needed reduction and stabilisation of the public deficit and the external deficit of the

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65   See Hellenic Statistical Authority (2015, p. 28).
66   On the possible *reduction* in these prices, see Adam and Moutos (2012).
67   This estimation is based on Thirlwall's (2011) extended model of balance of payments constrained growth; see Mariolis (2013).
68   See Mainwaring (1979), Metcalfe and Steedman (1981), Mariolis (2008).
69   See Olenev (2015).

country. Moreover, it should be done by taking into account the actually existing composition of autonomous demand in Greece, which is a realistic indicator of the degrees of freedom available to the Greek government in shaping economic policy.

Commodities produced in Greece, as has been shown above, could be divided into two main categories: "key-commodities" and "anti-key-commodities".[70] The former display values for all demand multipliers (i.e. for output, imports and employment) which are better than the respective averages for the economy as whole; the latter display values for all multipliers that are worse than the respective averages for the economy as a whole.

It is shown in Table 5 that the first category includes one commodity of the primary sector, four commodities of the industrial sector and fifteen commodities of the service sector (twenty in total). The second category includes seventeen commodities of the industrial sector and three commodities of the service sector (twenty in total). Table 5 also shows the values of output multipliers (OM), import multipliers (IM) and employment multipliers (EM), as well as the values of the SS, TID and IDK indices, while the respective average values for the economy as a whole (TE) are featured in the last row.

Table 5. Key-commodities and anti-key-commodities of the Greek economy in terms of the multipliers of autonomous demand

Key-commodities						
No	OM	IM	EM	SS	TID	IDK
2	1.21	0.35	85.9	87.4	16.7	49.6
9	1.17	0.34	37.6	99.4	0.8	0.8
23*	3.46	-0.53	160.0	100	0	0
25*	1.40	0.28	27.0	100	0	0
27	1.12	0.30	32.2	101.1	1.1	1.2
30	1.43	0.25	60.2	110.4	0	0
31	1.05	0.35	28.2	100.6	2.2	8.0
35	1.51	0.35	38.3	99.2	1.8	1.9
36*	1.13	0.15	25.8	100	0	0
46	1.16	0.22	28.3	99.3	2.9	3.3
52*	1.26	0.23	25.8	100	0	0
53	1.43	0.26	28.5	99.7	1.5	1.6
54*	1.66	0.27	35.4	100	0	———
55	1.73	0.24	43.0	100.1	0.1	6.0
56	1.23	0.26	27.4	100.1	0.2	7.8
57*	1.58	0.36	56.5	100	0	0
59	1.46	0.32	55.6	99.7	0.6	1.0
60*	1.37	0.27	26.5	100	0	0
62	1.57	0.21	35.1	99.99	0.0004	0.03
63*	2.01	0.30	86.9	100	0	0
TE	1.03	0.39	25.8	121.0	22.6	52.8

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70 See Mariolis and Soklis (2015). Additionally, complementary and useful findings for the multipliers of the Greek (period 2000–2010) and Eurozone (year 2011) economies can be found in Ntemiroglou (2015, 2016).

Anti-key-commodities						
No	OM	IM	EM	SS	TID	IDK
4	0.18	0.90	3.6	14.1	87.7	87.7
5	0.89	0.41	25.1	82.7	25.1	125.8
6	0.45	0.74	12.9	44.9	71.7	1071.1
8	0.57	0.70	11.8	54.4	51.4	75.0
10	0.38	0.75	5.7	87.8	33.7	70.5
11	0.32	0.82	6.0	36.5	78.8	127.1
12	0.37	0.76	6.6	35.0	79.3	247.3
13	0.54	0.72	14.1	70.9	46.0	55.2
14	0.94	0.43	17.1	90.5	19.3	21.3
15	0.71	0.58	13.0	103.4	41.4	41.4
16	0.70	0.57	18.0	73.3	31.1	36.0
17	0.07	0.96	1.4	5.6	94.4	108.2
18	0.43	0.72	6.7	62.2	78.0	113.0
19	0.43	0.79	6.5	39.3	77.3	78.2
20	0.18	0.90	3.0	15.1	86.7	193.2
21	-0.01	1.00	-4.3	6.9	110.5	124.1
22	0.54	0.72	20.5	46.3	58.3	107.5
33	0.81	0.48	14.2	105.2	13.5	34.6
34	0.41	0.79	9.9	34.0	75.3	79.0
42	0.91	0.39	14.5	78.9	33.4	70.1
TE	1.03	0.39	25.8	121.0	22.6	52.8

Note: As in the Annex, the symbol "*" indicates commodities that are neither imported nor exported. For these commodities it holds that SS=100 per cent, TID=IDK=0 per cent (with the exception of commodity 54, "Public administration and defense services; Compulsory social security services"). The gross domestic output of commodity 54 is equal to the total final consumption expenditure for this commodity; therefore, its IDK is not defined.

Table 6 shows the average values of the multipliers of autonomous demand for the three main sectors of the economy. The values in parentheses correspond to a hypothetical state in which the economy would not have inflows of imports. The table shows, first, the values of the multipliers and, second, the percentage deviation between the multiplier of the hypothetical state and the actual multiplier. The divergence provides a measure of how far the actual multipliers have worsened due to imports.

Table 6. Average values of multipliers of autonomous demand for the three main sectors and for the economy as a whole

Sector	OM	IM	EM
Primary	1.05 (1.53, 31.4%)	0.29	56.5 (74.6, 24.3%)
Industry	0.74 (1.75, 57.7%)	0.58	20.2 (38.7, 47.8%)
Services	1.22 (1.69, 27.8%)	0.27	26.9 (36.8, 26.9%)
TE	1.03 (1.71, 39.8%)	0.39	25.8 (39.3, 34.4%)

Comparing Tables 1, 3 and 4 with Table 5 it follows immediately that:

1. If internationally *non-tradable* goods are excluded, then 5 out of the 12 key-commodities regarding the multipliers of autonomous demand are also key-commodities regarding the external sector (see Table 4), whereas 8 out of the 12 exhibit a "revealed comparative advantage" (see Table 1). The remaining four commodities are: 2 ("Products of forestry, logging and related services"), 9 ("Printing and recording services"), 59 ("Sporting services and amusement and recreation services") and 62 ("Other personal services"). Note that all key-commodities regarding the multipliers of autonomous demand exhibit TID and IDK values that are lower than the average values for the economy as a whole.

2. All commodities in Table 3 (i.e., the main "leakages" in the external sector of the Greek economy) are also anti-key-commodities regarding the multipliers of autonomous demand (see Table 5). To be specific, there commodities number 11 out of 20 anti-key-commodities.

3. Only commodity 33 ("Air transport services") is a key-commodity for the external sector and, at the same time, an anti-key-commodity regarding the multipliers of autonomous demand.

It can be easily seen that the industrial sector is the «weak link» of the Greek economy also with regard to the multipliers of autonomous demand. As Table 6 shows, not only is the industrial sector the most dependent sector of the economy on imported inputs, but its own extraordinary dependence largely determines the degree of dependence of the economy as a whole on these inputs. It is also clear that there are significant differences as well as similarities in categorising commodities according to their significance, first, for the external sector and, second, for the multipliers of autonomous demand. It follows that an appropriate mix of economic policy is necessary to address imbalances.

On the basis of the estimated values for the multipliers but also of the actual composition of autonomous demand, the most effective sectoral policy should have the following basic characteristics:[71]

1. Increase in *government consumption* for:
– Scientific research and development services (commodity 47).
– Public administration and defense services; compulsory social security services (commodity 54).
– Education services (commodity 55).
– Human health services (commodity 56).
– Social work services (commodity 57).

2. Increase in *investment* for:
– Repair and installation services of machinery and equipment (commodity 23).

3. Selective *reduction* in *government consumption* for:
– Creative, arts and entertainment services; library, archive, museum and other cultural services; gambling and betting services (commodity 58).
– Sporting services and amusement and recreation services (commodity 59).

4. *Reduction in government* demand and increase in *exports* for:
– Wholesale and retail trade and repair services of motor vehicles and motorcycles (commodity 28).
– Wholesale trade services, except for motor vehicles and motorcycles (commodity 29).
– Retail trade services, except for motor vehicles and motorcycles (commodity 30).
– Motion picture, video and television programme production services, sound recording and music publishing, programming and broadcasting services (commodity 38).
– Computer programming, consultancy and related services; information services (commodity 40).

71   In more detail, see Mariolis and Soklis (2015).

5. Increase in *exports* for:
– Products of forestry, logging and related services (commodity 2).
– Fish and other fishing products; aquaculture products; support services to fishing (commodity 3).
– Basic metals (commodity 15).
– Water transport services (commodity 32).
– Scientific research and development services (commodity 47).

If a policy of stimulating autonomous demand on this basis was followed, for every increase in aggregate demand by 1mn euro there would occur on average:
– An increase in output by 1.18mn euro.
– An increase in employment by 45 employees.
– A reduction of public deficit by 0.35mn euro (assuming an average tax rate of approximately 0.30 to correspond broadly to the current state of taxation).
– An improvement in the external balance of goods and services by 0.95mn euro.

Chapter 15. Devaluation and monetary financing of public expenditure

From the preceding analysis it follows that:

– Commodities recommended for an increase in exports belong mainly to the service sector and a lesser extent to the primary sector. It has already been established that, following devaluation, the international competitiveness of both sectors would enjoy a greater increase than the average competitiveness of the economy as a whole.
– Commodities recommended for increased domestic consumption are primarily related to the public sector.
– There are only a few key-commodities of the industrial sector. This is due to the fact that Greek industry is particularly dependent on imported inputs. Its dependence is reflected in the noticeably lower output and employment multipliers, the correspondingly higher import multiplier, and the comparatively smaller improvement in international competitiveness following a devaluation.

On this basis a devaluation would contribute to boosting demand while notably increasing the international competitiveness of the primary and service sectors of the Greek economy. At the same time it would be necessary to engage in an "aggressive" policy of targeted income redistribution and increasing public spending. Public expenditure is financed, as a rule, through borrowing, taxation, or the issuing of new money ("monetary financing of deficits"). Given the state of the Greek economy in 2016, borrowing and taxation could be ruled out at least initially. This leaves printing new money which, it is frequently claimed, would lead to "high inflation". However, this overlooks the underutilisation of productive capacity, which is exceptionally high in Greece. Purely as an indication, and based on the estimated multipliers of autonomous demand, an increase in the "monetary base" of ten billion euro to finance government expenditure in the primary and the service sector would be compatible with a controlled inflation rate of around 10 cent (a similar figure would result from a devaluation of 50 per cent, as was noted earlier). At the same time, the increase in public expenditure would lead to:

– the creation of 420,000 jobs
– an increase in GDP of 11.4bn euro or 6.4 per cent (which is compatible, as was noted earlier, with a 50 per cent devaluation)
– a reduction of 3.4bn euro in the public deficit.

However, the fiscal expansion would also lead to an increase of the external deficit by 2.8bn euro. This outcome suggests that expansionary fiscal policy financed by monetary expansion should be combined with a currency devaluation.[72]

Finally, in designing a tax regime that would be compatible with this policy outlook, the point of departure must be certain fundamental principles which are broadly supported by the relevant literature. The tax regime should aim at reinforcing the effectiveness of the fundamental policies – that is, of rebalancing imports and exports, promoting development, strengthening the employment of labour and of the means of production, and redistributing income.

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72   These estimates assume: first, that the percentage rate of change of the nominal money supply is equivalent to that of the monetary base; second, that the income elasticity of money demand is in the range of 0.6–0.7 (which corresponds to the findings in the literature); and third, the average tax rate would be 0.30, as above. Finally, based on Table 6, the corresponding average sector multipliers were deployed, that is, 1.14 (output), 42 (employment), and 0.28 (imports).

In this light, the tax regime should:

– Be counter-cyclical;
– Rely mostly on progressive taxation at income source rather than on general consumption taxes (for instance, taxes at present comprise roughly 70 per cent of the final price of unleaded petrol and 50 per cent of the final price of heating and fuel oil);
– Restrict the distribution of profits that are not invested productively;
– Subsidise ("negative taxes") sectors of paramount importance for growth, or sectors which could develop comparative advantage, that is, sectors of "dynamic comparative advantage".

Chapter 16. Development policy: Industrial and agricultural policy

Currency devaluation and expansionary fiscal policy financed by money creation are prerequisites for a sustained rebound of the Greek economy, but they are not sufficient for long-term and rapid growth. The reason is that the growth potential of the Greek economy has been severely restricted due to its problematic structure, as was shown above. Thus, it essential to induce a change in the structure of the Greek economy by encouraging growth of the primary and the industrial sector, while simultaneously strengthening the production of internationally tradable commodities.

To this purpose it would be necessary to develop an industrial policy (broadly understood) with two main goals, one general and one particular:

– *General goal:* reduce dependence on imported inputs, especially of the industrial sector.
– *Particular goal:* increase the production of commodities that are intensive in skilled labour and technology (for instance, electronics and optics, transportation equipment, chemicals, pharmaceuticals, etc.). These commodities would be pivotal to boosting exports and the national income because of their high income elasticity of demand, and thus their international competitiveness would not depend primarily on their prices.

It would be particularly advisable to attempt import substitution for commodities such as "Computer, electronic, and optical products": 68 per cent of gross investment in these commodities comes from imports; the latter exceed gross domestic production by a factor of 17 and have an IDK index of 108 per cent (for the category "Other transport equipment", which has a negative employment multiplier, the corresponding indices are 76 per cent, 16, and 124 per cent). There is no doubt that available technical and scientific resources of the country, which are generally of a high level, should be used further to develop "Computer programming, consultancy and related services; information services". The latter category already has satisfactory levels of indices: ICT (88 per cent above average), TID (15 per cent below average) and IDK (63 per cent below average).

The sectoral transformation of the Greek economy would be a condition for the systematic (rather than transitional, as would be the case for a currency devaluation) increase in the level of national saving. More specifically, increased saving could be achieved over time through two methods:

– *Indirectly:* by acquiring the necessary additional means of production through surpluses in international transactions.
– *Directly:* by reinvesting a gradually increasing proportion of the net product of the sector that produces means of production in the same sector.[73]

The exceptionally difficult state in which the Greek economy finds itself suggests that, beginning with the "indirect method", emphasis must then be placed on the "direct method". The shift must be based on a system of nationalising (placing under public ownership and management) of major enterprises in agricultural raw materials, mines and quarries, energy, food, machinery, building for production activities, telecommunications, transport, and wholesale and export trade. This system would also be supported by a network of applied and basic scientific research.

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73   See Mariolis (2016c, Essays 6 and 24).

Thus, and as an indication, the development of a "forward and backward vertically-integrated" sector around a "core" comprising the Hellenic Vehicle Industry (ELVO), Hellenic Defence Systems (EAS), the shipyards, and LARCO General Mining and Metallurgical, in concert with the appropriate use of the country's mineral resources, would contribute decisively to applying both methods in combination. For such a policy to materialise, it would be absolutely vital to possess a public banking system – reserving a significant role of a development bank – that would mobilise national savings and direct them toward production. The systematic provision of bank credit on this basis would also be a condition for extending commercial credit, which would be the foundation for a healthy credit system.

Finally, the transformation in the structure of the sectors of the economy would also have an effect on the productivity of the primary sector, which is particularly low. Generally speaking, a steady increase in productivity is achieved through four interdependent ways: first, by restructuring the processes of producing and distributing goods; second, by providing material and moral incentives to workers and enterprises; third, by achieving technological progress; and fourth, by investing systematically in production, research, and education, which are the most decisive elements of the process of economic development.

It follows that raising productivity in the primary sector would require the creation of agricultural cooperatives whose crucial role would be to distribute the agricultural product. It also requires, however, the restructuring of the industrial sector along lines developed above. A further prerequisite would be the creation of a specialised credit institution through the re-founding of the Agricultural Bank on a healthy public basis. Rising productivity in the agricultural sector would, in turn, contribute to rising living standards and have a positive impact on the industrial sector by raising the quantity and quality of inflows from the primary sector. Finally, rising agricultural productivity would provide the basis for creating agricultural cooperatives also in the sphere of agricultural production thus supporting the emergence of large agro-industrial enterprises.

Chapter 17. Exchange rate policy

Stabilising the rate of exchange of the new currency would obviously help limit the uncertainty generated by the exchange, thus creating a more stable environment for all economic activity. For a country of the size of Greece, however, this would entail two problems:

– First, it would restrict the independence of monetary policy, which is a fundamental element of the required mix of development policy. The reason is that when capital mobility is entirely free and at the same time it is attempted to stabilise exchange rates, it is impossible to operate an independent national monetary policy.
– Second – and related to the first – the Central Bank must have sufficient currency reserves to support the exchange rate, in conjunction with changing the level of the rate of interest. For an economy with a small footprint, such as Greece, the cost can be quite high.

In order to deal with these problems, it would be necessary to create a mechanism to restrict the cross-border mobility of capital. The mechanism should be particularly strict at the beginning and it should be gradually relaxed in line with the development trajectory of the economy. In essence the mechanism should initially allow only those currency transactions that, first, concern the current account of the balance of payments, second, relate to long-term (investment) inflows of money capital, and third, are conducted by the monetary authorities. The mechanism must be retained even after the economy would have entered the recovery phase since there would then be a risk of heavy inflows of short-term ("speculative") capital that would create upward pressure on the exchange rate. More broadly, the inflow of short-term capital could create major problems in applying the recommended economic policy mix for growth during the recovery phase, as is shown by the examples of Mexico in 1991–1993 and Switzerland in 2009–2011.

Generally speaking, free capital mobility is a significant source of instability in the international economic system that raises the intensity and frequency of various crises (for instance, banking, foreign exchange, state debt). Furthermore, under conditions of stable exchange rates and free capital mobility the national authorities would be committing themselves to an endless process of competitive reductions in wages to stabilise or advance the position of the external sector of their economies. The simultaneous presence of these conditions is systematically inimical to the interests of wage earners.

It should be noted that foreign exchange crises, in which the currency reserves of the Central Bank tend to be depleted, typically rest on the expectation that the exchange rate would prove unsustainable. Such expectations often arise when the foreign exchange markets detect contradictions in the mix of economic policies relative to the productive base of the economy. It is expected that the cohesiveness of the new development policy for Greece, combined with the imposition of restrictions on the cross-border movements of capital, would act as a deterrent for such expectations. In any case, given that a large proportion (above 60 per cent) of Greece's trade is with countries outside the European Union, the exchange rate must be monitored with respect to an appropriately weighted "basket" of foreign currencies (taking into account imports from and exports to the main trading partners. Forming a basket of currencies would allow for monitoring the country's competiveness in relation to its trading partners as well as facilitating greater precision in taking necessary adjustment measures.

Finally, the possibility of introducing a "multiple exchange rate system" with low rates (comparatively low devaluation) should not be ruled out for some "basic" consumption goods and for means of production to protect the living standards of wage earners and to reduce inflationary pressure. A system of this kind would also allow for high rates (comparatively high devaluation) for certain heavily exported commodities and for "luxury goods" aiming at boosting exports and compressing imports that would be non-essential for the reproduction of labour power. A multiple exchange rate system would have an advantage over imposing excise taxes insofar as it would not create – at least directly – frictions among social strata and trade partners. On the other hand, the main drawback of such a system would be complexity in implementing it as well as the possibility of exploiting arbitrage opportunities through false trade documentation.

Chapter 18. Resetting Labour Relations

The first step for a radical government in the labour field would be immediately to abolish the anti-labour measures introduced by Cabinet Act 6/28.2.2012 and by Law No. 4093/2012 "Approving medium-term fiscal strategy 2013–2016 and introducing emergency measures implementing Law No. 4046/2012 and medium-term fiscal strategy 2013–2016." This legislation reduced the minimum wage, struck a blow at collective wage agreements, and reduced union freedoms in violation of national and international labour laws.

With the passage of time is has become apparent—in the worst possible way—that these laws did not attract investment or spur growth activity. On the contrary, the impact on Greek enterprises has been either to shrink some sectors or to increase profitability in others but without also raising employment or growth. The increasing trend in part-time employment has compressed consumption as a result of greater insecurity and contributed to a new cycle of recession. The policy of low labour costs has not yielded the "anticipated" results. This strategic—and political—choice must be reversed.

The activities of Greek political parties within trade unions has also created problems for the unions and the labour movement. Groups of workers have become entrenched in partisan positions, creating confusion within the ranks of their fellow workers and despite having common demands. At the same time, the high public visibility of party divisions has discouraged many workers from engaging in trade union activity.

New labour legislation is needed to guarantee the representation of all workers and to ensure the election of union leaders on the basis of being revocable, having rotating terms, being accountable on an annual basis, and restricting the privileges of trade union bureaucrats which have often resulted in underhand relations with management and non-transparent transactions. Some immediate measures that could be taken regarding the labour market and labour relations would include:

1. Strict monitoring of compliance with collective agreements and working hours, especially for workers with flexible forms of work. Effective combatting of the phenomenon of fictitious part-time contracts for unpaid and uninsured full-time work that abuse labour and insurance rights.

2. Immediate restoration, upgrading, and effective activation of the Labour Inspectors Corps and all compliance mechanisms under the Ministry of Labour. This should occur in conjunction with other authorities (especially the tax office) with the intentions of ending the systematic violation of labour laws and the inexcusable non-payment of wages for work already undertaken, which is a widespread phenomenon in Greece today.

3. Passage of a law abolishing Act of Cabinet 6/28.2.2012 that reduced the minimum wage from EUR 751 gross per month to EUR 586 and EUR 511, respectively. The same Act also reduced unemployment benefits, sick pay, and maternity compensation. Adoption of a policy of steadily increasing the minimum wage and benefits.

4. Legislation reinstating the "post effect" of collective wage agreements in force before the changes introduced by Act of Cabinet 6/28.2.2012. Also, restoration of the authority of the Mediation and Arbitration Organisation (OMED), the principle of most beneficial settlement in cases of repeated labour agreements at various levels, and the "principle of expandability", that is, of the binding character of collective wage agreements.

5. Abolish laws adopted in the last four years further liberalising flexible, part-time, and reserve employment.

6. Abolish all requirements for a ratio of "exits" to all new appointments in public sector employment.

7. Establish automatic prosecution procedures and severe criminal and administrative penalties for employers and managers engaging in illegal, off-the-books, uninsured, or undeclared labour, including those who violate collective wage agreements, labour rights, and the legal hours of work.

8. Abolish the lending or leasing of workers—the most anti-labour and inhuman force of labour—practiced through temporary employment offices or private job agencies that substitute for the activities and the jurisdiction of the Manpower Employment Organisation (OAED). It is possible to abolish this practice even though such private agencies are imposed by EU regulations and fostered by the OAED's ineffective operation. At the same time there should be severe curtailment of subcontracting in the service sector.

9. Eliminate flexible and insecure public sector positions as well as temporary or seasonal contracts that are not justified by the nature of the work. Replace these with full-time, stable employment. Public sector employment should be supported by a comprehensive and stable work relationship not only for reasons of social justice, but for productivity and higher effectiveness.

10. Facilitate the establishment of workers' cooperatives thus opening up the possibility of alternative forms of organisation and governance of enterprises in the interests of labour.

Chapter 19. In lieu of conclusion: Escaping the trap

This study has shown that the Eurozone has become an iron cage, a trap, for several of its members both in the periphery and the core. There cannot be much doubt about the failure of the monetary union and the deleterious effect it has had on economies and societies across Europe. Nor could there be much doubt about the accumulation of political dangers in Europe, including the re-emergence of the extreme Right, as long as the continent continues to bear a dysfunctional monetary system. Already much of the goodwill accumulated among the nations of Europe during the last six decades has been destroyed, and the EU looks distinctly unstable. The UK vote in 2016 in favour of Brexit indicates that the EU has entered a period of major tribulations. Introducing the euro and persevering with its use is an important reason for this historic failure.

There is, nonetheless, much less agreement regarding the causes of the failure of the monetary union. In this respect, this study has shown that a fundamental flaw has been the domestic policy framework of Germany. This is without detracting from the institutional weaknesses of the EMU and the imbalances between the economies of its member states. The ascendancy of Germany within both the EMU and the EU has been predicated upon the retreat of German labour in the face of German capital, the concomitant suppression of domestic demand and the extraordinary rise of German exports – a veritable "neo-mercantilism".

The point is that the same factors have also undermined the monetary union and delivered a body blow to the European Union. Furthermore, they have provided very slender foundations for German dominance in Europe, above all, because German success has not been based on sustained productivity gains and rising investment. Applying downward pressure on wages has allowed for competitiveness to be gained by German exporters at the expense of others. Germany has increased exports and thus absorbed demand across Europe and the world on the back of its own workers. This is not a sound basis for sustained ascendancy.

What is beyond dispute, furthermore, is that there is no scope for institutional or other change that could rescue the monetary union, or even lead it to adopt policies that would decisively break with austerity. German domination of the EU and the prevalent ideological and political climate within Germany preclude this possibility. The institutional and other changes that have indeed taken place within the EMU since the outbreak of the crisis in 2010 have been in the direction of hardening the existing mechanisms of the monetary union and institutionalising austerity. The adoption of QE by the ECB and several inevitable budgetary compromises with France, Spain and other countries in recent years do not constitute fundamental structural change, or even open a way toward such change. They are, at best, compromises that smack of "too-little-too-late". The EMU is beyond reform. Peripheral and core countries ought to consider alternative paths as soon as possible.

This study has opened the way to establish an alternative path by examining in detail the economy of Greece, the country that has been most heavily injured by the EMU. The economic and social destruction inflicted on Greece by the bailout strategies after 2010, with the aim of keeping it in the monetary union, is manifest. Greece has attempted to regain competitiveness in the worst possible way, that is, by crushing wages and by adopting an extraordinary constriction of domestic demand. It has indeed attained a degree of stabilisation but at the cost of tremendous destruction of its labour force and other productive resources.

Furthermore, the study has shown that the bailout strategy has not addressed the key weaknesses of the Greek economy, namely negative net saving and extraordinary leakages abroad, especially for certain industries. For more than three decades the centre of gravity of the Greek economy has moved toward services at the expense of industry and agriculture; this has also meant favouring production of "non-tradable" rather than "tradable" goods. Given the lack of national saving and the enormous leakages abroad, Greece was able to grow reasonably rapidly only by borrowing from abroad. When that option disappeared in the 2010s, the country found itself in a developmental impasse: sustained growth became very difficult to achieve.

The bailout strategy of liberalisation, privatisation and wage reduction has not offered a solution for the underlying development problem of Greece, especially bearing in mind that the country's enormous unemployment requires urgent answers. Greece needs a different strategy for development and in this respect it provides a test case for other countries of the periphery, such as Portugal and Spain, and even for the "semi-periphery", such as Italy.

There could be no doubt that for sustained growth and development Greece must break out of the iron cage of the euro. It was shown in this study that the country urgently needs a boost to aggregate demand that would provide support for its productive and other enterprises, while assuaging unemployment. There are several areas of the economy, particularly in the service sector, that would be amenable to such a boost. Subsequently the country would require a targeted industrial policy to limit leakages abroad and boost the growth of productivity. The direction of travel in this respect has been identified in the preceding chapters.

It would be superfluous to state that such a strategy would be impossible to adopt within the EMU. It would also be impossible to adopt while accepting the established framework of the EU for investment and trade. Greece needs to exit the EMU and, at the very least, negotiate a special relationship with the EU. Exit would not be an easy task but it would certainly be manageable.

A list of sequential steps was outlined in this study that would allow Greece to adopt a new currency. It was further shown that the risk of runaway inflation as a result of exit would be negligible. On the contrary, recapturing monetary sovereignty would allow Greece to finance the required immediate expansion of aggregate demand. Moreover, exit would also lead to devaluation of the new currency which would, on the one hand, boost competitiveness and, on the other, exercise pressure on real incomes, thus requiring targeted intervention to support wages labourers and others. Exit is undoubtedly a difficult and complex operation, but the medium- to longer-term benefits are clear, and the short-term difficulties could be managed within the macroeconomic framework proposed here.

Concluding, this study is a first attempt to analyse and formulate the alternative strategy that Greece needs. There are significant further issues to consider in depth, including the restructuring of the financial system on a public basis and, above all, the restructuring of public administration to create a new relationship between the public and private sector. This is work that will be done in the coming period. Even so, the study has outlined the broad macroeconomic policies that ought to be adopted by Greece as well as the required structural rebalancing of its economy. It has sketched a path not only for Greece but also for other countries in the periphery of the Eurozone. More work by others in the same direction is required as a matter of urgency for Europe.

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ANNEX

Product Classification and Index System

The Supply and Use Table (SUT) of the Greek economy for the year 2010 is provided via the EUROSTAT website (http://epp.eurostat.ec.europa.eu). The available SUT describes 65 products and industries. However, the elements associated with the commodities 'Imputed rents of owner-occupied dwellings' and 'Services provided by extraterritorial organisations and bodies' are all equal to zero and, therefore, have been removed from the analysis. Thus, we have derived a SUT that contains 63 products.

The products and their correspondence to CPA (Classification of Products by Activity) are reported in Table A.1. Commodities 1 to 3 belong to 'Primary production'.

Commodities 4 to 27 belong to 'Industry': (i) commodity 4 corresponds to 'Mining and quarrying'; (ii) commodities 5 to 23 correspond to 'Processing products'; (iii) commodity 24 corresponds to 'Energy'; (iv) commodities 25 and 26 correspond to 'Water supply and waste disposal'; and (v) commodity 27 corresponds to 'Construction'.

Commodities 28 to 63 belong to 'Services', while commodities 54 and 57 are primarily related to the 'Public sector'.

The sector that produces mainly commodity 63 ('Services of households as employers; undifferentiated goods and services produced by households for own use') is the only sector that does not use intermediate inputs and, therefore, the elements of the corresponding column of the Use Matrix are all equal to zero. Commodities 4, 24, 25, 32, 47, 51, 54, 56, 60 and 63 are produced by only one industry, while sectors 2, 3, 26, 43, 60, 62 and 63 produce only one commodity.

Finally, the symbol «*» indicates products that are neither imported nor exported. It should be noted, however, that commodity 36 ("Accommodation and food services") and commodity 52 ("Travel agency, tour operator and other reservation services and related services"), which are related to tourism, display zero exports and imports because the SUTs record only the total travel receipts and payments and not the respective payments for each commodity. These exports-receipts (imports-payments) constitute 19.5 per cent (3.0 per cent) of the total exports (imports) of the Greek economy for the year 2010.

Table A.1. Product Classification

No	CPA	Nomenclature
1	A01	Products of agriculture, hunting and related services
2	A02	Products of forestry, logging and related services
3	A03	Fish and other fishing products; aquaculture products; support services to fishing
4	B	Mining and quarrying
5	C10-C12	Food products, beverages and tobacco products
6	C13-C15	Textiles, wearing apparel and leather products
7	C16	Wood and of products of wood and cork, except furniture; articles of straw and plaiting materials
8	C17	Paper and paper products
9	C18	Printing and recording services
10	C19	Coke and refined petroleum products
11	C20	Chemicals and chemical products
12	C21	Basic pharmaceutical products and pharmaceutical preparations
13	C22	Rubber and plastics products
14	C23	Other non-metallic mineral products
15	C24	Basic metals

16	C25	Fabricated metal products, except machinery and equipment
17	C26	Computer, electronic and optical products
18	C27	Electrical equipment
19	C28	Machinery and equipment n.e.c.
20	C29	Motor vehicles, trailers and semi-trailers
21	C30	Other transport equipment
22	C31-C32	Furniture; other manufactured goods
23*	C33	Repair and installation services of machinery and equipment
24	D35	Electricity, gas, steam and air-conditioning
25*	E36	Natural water; water treatment and supply services
26	E37-E39	Sewerage; waste collection, treatment and disposal activities; materials recovery; remediation activities and other waste management services
27	F	Constructions and construction works
28	G45	Wholesale and retail trade and repair services of motor vehicles and motorcycles
29	G46	Wholesale trade services, except of motor vehicles and motorcycles
30	G47	Retail trade services, except of motor vehicles and motorcycles
31	H49	Land transport services and transport services via pipelines
32	H50	Water transport services
33	H51	Air transport services
34	H52	Warehousing and support services for transportation
35	H53	Postal and courier services
36*	I	Accommodation and food services
37	J58	Publishing services
38	J59-J60	Motion picture, video and television programme production services, sound recording and music publishing; programming and broadcasting services
39	J61	Telecommunications services
40	J62-J63	Computer programming, consultancy and related services; information services
41	K64	Financial services, except insurance and pension funding
42	K65	Insurance, reinsurance and pension funding services, except compulsory social security
43*	K66	Services auxiliary to financial services and insurance services
44*	L68B	Real estate services (excluding imputed rent)
45	M69-M70	Legal and accounting services; services of head offices; management consulting services
46	M71	Architectural and engineering services; technical testing and analysis services
47	M72	Scientific research and development services
48	M73	Advertising and market research services
49	M74-M75	Other professional, scientific and technical services; veterinary services
50	N77	Rental and leasing services
51*	N78	Employment services
52*	N79	Travel agency, tour operator and other reservation services and related services
53	N80-N82	Security and investigation services; services to buildings and landscape; office administrative, office support and other business support services

54*	O84	Public administration and defence services; compulsory social security services
55	P85	Education services
56	Q86	Human health services
57*	Q87-Q88	Social work services
58	R90-R92	Creative, arts and entertainment services; library, archive, museum and other cultural services; gambling and betting services
59	R93	Sporting services and amusement and recreation services
60*	S94	Services furnished by membership organisations
61	S95	Repair services of computers and personal and household goods
62	S96	Other personal services
63*	T	Services of households as employers; undifferentiated goods and services produced by households for own use

Regarding the statistical data and the indices deployed, the following points are important:

1. In 2010, when a strong contractionary economic policy was first implemented, the so called «twin deficits», i.e. the state budget deficit and the current account deficit, amounted to 11.1 per cent and 10.1 per cent of GDP respectively, while the trade balance deficit was 6.8 per cent. Public debt reached 146 per cent of GDP, the "net international investment position" was at -97.9 per cent and the net national savings was -24bn euro or 13 per cent of the net national disposable income. Finally, the unemployment rate was at 12.7 per cent. Therefore, that year is *representative* for the detection of leakages in the external sector, unlike 2014 or 2015, when the economy had already shrunk dramatically. That does not mean of course that the research should not be extended in both directions (although so far the most recent SUT is that of 2011).

2. The natural unit of measurement of each product is that unit which is worth one monetary unit (in the SUT of the Greek economy, the unit is set at 1mn euro).

3. A system of twelve product indices for diagnosing structural imbalances in the external sector of a national economy has been deployed: (i) five of the aforesaid indices relate to components of gross domestic production (i.e. intermediate consumption, total, private and public, final consumption expenditure, gross capital formation, exports and imports), (ii) one to gross domestic savings, (iii) three to specific characteristics of foreign trade (trade balance, comparative advantage, intra-commodity trade), and (iv) three to the degree of self-sufficiency and dependence of the domestic economy to and from the rest of the world (dependence on imports in overall terms and in terms of capital goods).

4. For measuring the «revealed comparative advantage (or disadvantage)» we did not use the well-known 'Balassa index', but a certain version of those indices proposed by the *Centre d'études prospectives et d'informations internationales (CEPII)* that take into account the exports-imports for each commodity in relation to the exports-imports of the total economy.[74]

5. For a recent, comprehensive study of the Greek economy (2000–2014) under «Balassa index» (and variants) as well as primary statistical data of a different nature, see Konstantakopoulou (2015, ch. 4). The general conclusions of this study do not appear to differ substantially from our own.

6. To measuring intra-commodity trade we have used the well-known 'Grubel-Llyod index', which takes values between 0 per cent (entirely inter-commodity trade) and 100 per cent (entirely intra-commodity trade).

7. The "self-sufficiency index" (SS_i) of a commodity i is defined as the ratio of gross domestic production of commodity i to the total expenditure for the same commodity. Therefore, SS_i is a multiplier of the total national expenditure.

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74 See, e.g. Laursen (1998), pp. 6–8.

8. The "total import dependency index" (TID_i) of a commodity i is defined as the ratio of imports of commodity i to the total expenditure for the same commodity. For a given value of the exports, one minus the "total import dependency index", $1 - TID_i$, is a multiplier of the total national expenditure.

9. The "import dependency of capital goods index" (IDK_i) of a commodity i is defined as the ratio of imports of commodity i to the intermediate consumption and gross capital formation expenditure for the same commodity. For given values of both the total final consumption and the exports, one minus the "import dependency of capital goods index", $1 - IDK_i$, is a multiplier of intermediate consumption and gross capital formation.

10. When the exports of commodity i are lower than its gross domestic production, then (i) SS_i is positive and less or greater than 1 depending on whether the trade balance of this commodity is in deficit or surplus, respectively, (ii) TID_i is less than 1, and (iii) TID_i is no greater than IDK_i.

11. This index-based study can and should be supplemented by using more disaggregated data from the 'Standard International Trade Classification' (SITD).