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Examining the Link between Macroeconomic Policies and Productive Employment: Assessing Outcomes for 145 Developing Countries

Terry McKinley and Ewa Karwowski,
SOAS, University of London

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Centre for Development Policy and Research,
School of Oriental and African Studies
University of London, Thornhaugh Street, Russell Square
London, UK, WC1H 0XG

Phone: +44 (0) 207 898 4316
Email: cdpr@soas.ac.uk
Website: www.soas.ac.uk/cdpr

This paper was written is in response to the request by the International Labour Office to examine the link between macroeconomic policies, on the one hand, and growth and employment outcomes, on the other hand, of a large sample of developing and emerging economies. It is part of the overall project on 'Growth and Productive Employment in Development Countries – Outcomes and Policies'.

The macroeconomic policies that this paper has examined cover fiscal policies, monetary policies, financial policies and exchange rate policies. Also included have been policies related to investment in development.

Data were gathered for 145 developing and emerging economies. These countries were clustered into three income groups for analytical purposes: 1) Emerging Economies, 2) Lower-Middle Income Countries and 3) Least Developed Countries. Our analysis also included three cross-cutting groups, which included heavily indebted countries, transition economies and major oil and gas exporters.

Data were gathered for the following periods, in accordance with instructions from the ILO: the 1980s, the 1990s and the 2000s (up through 2011). Also included were the sub-periods of 2000-2007 and 2008-2013 (before and after the Global Financial Crisis). Data for 2013 were estimates and, in some cases, this was also true of data for 2012.

The initial effort for this consultancy was to amass, for the above time periods, a data bank of 'macroeconomic outcomes'. The indicators for these outcomes are described in the next section. Of particular concern to the ILO is the issue of 'fiscal space', namely, whether countries have the resources necessary to accelerate economic growth and expand productive employment.

I. The Selection of Indicators

The following indicators have been selected for the four main macroeconomic policy areas (fiscal policy, monetary policy, financial policy and exchange rate policy) as well as the supplementary area of development policy. The selection of indicators has been guided by the research focus on outcomes and policies as well as data availability.

There were problems, for example, with the availability of representative data for these indicators for the 1980s. Hence, this paper's analysis focuses on the 1990s and the 2000s and the transition between these two periods. Our methodological approach was to exclude decadel averages for countries when there were less than four data points. As a supplement, the paper also examines the differences in these indicators between the period 2000-2007 and the period 2008-2013. The data on the 1980s can be made readily available upon request.

Following are the four areas of macroeconomic policy, the indicators selected for each area, and the data source. The criteria for choosing each indicator included not only their usefulness but also the availability of data across a large sample of countries.

1. **Fiscal Policy**

    a. General government net lending/borrowing as % of GDP, i.e. the fiscal balance: available from the IMF (WEO) database.
    b. General government revenue (including grants) as % of GDP: available from the IMF (WEO) database. (Because of its inclusion of grants, this indicator was supplemented with the indicator 'official development assistance as a ratio to gross national income').
    c. General government gross debt as % of GDP: available from the IMF (WEO) database.

2. **Monetary Policy**

    a. Inflation rate (average consumer price inflation) in %: available from the IMF (WEO) database.
    b. Broad money growth (annual % growth in money and quasi-money): available from the World Bank database.
    c. Real interest rates (lending rate adjusted by GDP deflator): available from the World Bank database.

3. **Financial Policy**

    a. Domestic credit by banking sector as % of GDP: available from the World Bank database.
    b. Total external debt as % of GNI: available from the World Bank database.
    c. Short-term debt as % of total external debt: available from the World Bank database.

4. **Exchange Rate Policy**

    a. Trade balance as % of GDP: available from the UNCTAD database.
    b. Current account balance as % of GDP: available from the IMF (WEO) database.
    c. International reserves as % of GDP: available from the IMF (IFS) database.

5. **Development Policy**

Additionally, three outcome indicators related to Development Policy were included as supplementary sources of information. The emphasis was on indicators related to domestic investment and social and economic infrastructure:

a. Gross capital formation as % of GDP: available from the World Bank database.
b. Gross secondary school enrolment as % of the total population of official secondary education age: available from the World Bank database.
c. Electrical power consumption expressed as kWh per capita: available from the World Bank database.

In the following section, we extensively review macroeconomic outcomes (based on the above indicators) clustered primarily by the three income groups, i.e., Emerging Economies, Lower-Middle Income Countries and Least Developed Countries. The main focus is on the 1990s and 2000s. There is a secondary focus on the differing trends for the period 2000-2007 and the period 2008-2013.

Also analyzed were differences in macroeconomic outcomes among three 'cross-cutting' groups. These groups are represented across the three income groups. These 'cross-cutting' groups are 1) heavily indebted countries, 2) transition economies, and 3) major oil and gas exporters. Heavily indebted countries were defined as countries with external debt of at least 60% of GNI. Major oil and gas exporters were defined as countries with export revenue from oil and/or gas that exceeded half of all their export revenue.

All data on macroeconomic outcomes are expressed as unweighted averages. The rationale for this choice is that we are interested primarily in country-by-country performance. When weighted averages are used, those economies with larger economies have a more decisive influence on the overall average.

II. A Review of Macroeconomic Outcomes across Groups

This section starts its analysis with differences in growth rates of GDP across the three major income groups.

A. GDP Growth

1. EEs, LMIs and LDCs

Over the past three decades developing and emerging economies have managed to accelerate their growth rates significantly. This development prompted a debate about whether the economic prospects of the developing world were being 'decoupled' from advanced economies, where growth was slowing significantly as a result of widespread austerity measures.

This debate was particularly intense in the wake of the Global Financial Crisis when it appeared that the developing world – led, for example, by Chinese economic growth and strong international demand for primary commodities – would provide the impetus for a global recovery.[1] More recently, of course, this enthusiasm has waned since some of the major emerging economies have begun to face difficulties as a result of a return flow of capital to the advanced economies.[2]

Nevertheless, over the course of roughly the last two decades, developing and emerging economies as a whole have experienced an upsurge in their growth of GDP. Table 1 shows that the average growth of all such countries rose from 3% in the 1990s to 4.7% in the 2000s. At the same time, the record before the Global Financial Crisis (2000-2007) and the record afterwards (2008 to 2013[3]) have been noticeably different. During the pre-crisis period, the average growth of GDP for all such countries was 5.2% whereas during the post-crisis period, it had slowed down to 4%.

What has been encouraging is that the Least Developed Countries grew the fastest in both the 1990s and 2000s (namely, at 3.7% and 5.2%, respectively). And they were still growing the fastest during the post-crisis period (2008-2013), i.e., at a 4.6% rate.

The country grouping with the highest income per capita, the Emerging Economies, were also growing fairly rapidly during 2000-2007 (i.e., at 5.3%) but they slumped noticeably to only 3.3% during 2008-2013. In other words, the Emerging Economies were losing their new status as an engine of global growth.

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[1] See IMF World Economic Outlook, October 2008.
[2] See IMF World Economic Outlook, October 2013.
[3] Growth rates for 2013 are IMF estimates. When reference is made to the 2000s, this period includes 2000-2011. For the period 2008-2013, some data for 2012 can also be estimates.

The Lower Middle Income grouping grew relatively slowly during the 1990s, at only 2.5%, but accelerated to an average rate of 4.5% during the 2000s. However, during the post-crisis period of 2008-2013, their average growth slowed slightly to 4.2%.

2. Heavily Indebted, Transition and Oil/Gas Exporting Countries

Our analysis of economic growth, employment generation and macroeconomic outcomes also covers three cross-cutting groupings of countries: heavily indebted countries, transition economies and prominent exporters of oil and gas (for which such commodities comprise more than half of export earnings). This research has identified Heavily Indebted countries as those with external debt that represents 60% or more of GDP. In total there are 55 heavily indebted countries in our sample: 12 EEs, 17 LMIs and 26 LDCs. This threshold would apply to countries such as Argentina and Brazil (both of them EEs), Egypt, Ghana, Kyrgyz Republic and Pakistan (LMIs) and countries such as Lao PDR, Mauritania, Mozambique, Myanmar, Rwanda and Uganda (LDCs). Such heavily indebted countries are spread across the three incomes groups, EEs, LMIs and LDCs, but are disproportionately found among LDCs and LMIs.

There was a sharp acceleration of growth across the three cross-cutting groupings between the 1990s and 2000s (see Table 1). But the most pronounced change occurred in the transition economies. This group includes economies such as Armenia, Azerbaijan, Mongolia, Romania, Russia, Turkmenistan and Uzbekistan. The majority of transition economies are concentrated among EEs (14) and a minority among LMIs (10).

Collectively, transition economies experienced an average decline of -1.4% in GDP growth during the 1990s, which was the most difficult period of their transition to a more market-based economy. However, by the 2000s they had bounced back dramatically to average a growth rate of GDP of 6%. This turn-around had a pronounced impact on the growth record of Emerging Economies as a whole and, to a lesser extent, on the growth record of Lower-Middle Income Countries.

The countries specializing in the export of oil and gas include Angola, Algeria, Kazakhstan, Nigeria, Sudan and Venezuela. Half of them are Emerging Economies (10 countries) and about one third are LDCs (7 countries). There are fewer LMIs in this group (5 countries).

Oil and gas exporting countries did only moderately well during the 1990s (when demand for such commodities was subdued): they grew by the slightly above-average rate of 3.5%. But by the 2000s their economies were booming, averaging 7.1% overall, and almost 9% during 2000-2007. However, by 2008-2013, in the wake of the global crisis, their growth rate was back down to 4.3%.

Perhaps surprisingly, heavily indebted countries also experienced an increase in economic growth between the 1990s and 2000s. However, this increase was still relatively moderate, namely, from 3.2% to 4.3%. But in the wake of the global crisis, during 2008-2013, their growth only slowed down back to 4.1%.

Table 1. Average Annual Growth Rates for Income Groups and Cross-Cutting Groups

GDP	1990s	2000s	2000-07	2008-13
Growth Rates	**3.0**	**4.7**	**5.2**	**4.0**
EEs	2.8	4.5	5.3	3.3
LMIs	2.5	4.5	4.9	4.2
LDCs	3.7	5.2	5.4	4.6
High debt countries	3.2	4.3	4.4	4.1
Transition economies	-1.4	6.0	7.4	3.3
Oil & gas exporters	3.5	7.1	8.9	4.3

Source: IMF data.

Nevertheless, despite the relative slowdowns in GDP growth after 2007 in the three major income groups of EEs, LMIs and LDCs, as well as among the groupings of Indebted, Transition and Oil & Gas Exporting Countries, one might still reasonably expect that throughout the 1990s and 2000s, the historical upsurge in economic growth would have led to some significant gains in employment. The following section examines the extent to which this was the case.

B. Employment Outcomes

Our analysis relies on three sets of employment indicators, as explained earlier in Section X. The first employment indicator is the share of wage (and salary) employment in total employment. Wage employment is considered to be a rough proxy for quality employment. The second employment indicator is the share of vulnerable employment in total employment. Since vulnerable employment is not desirable, a positive employment outcome would be a decline in the share of those vulnerably employed.

Progress in expanding quality employment between the 1990s and 2000s was not significant if changes in the two above indicators are used as the main barometers. For example, on average, there was a 2.5 percentage point gain in wage employment during this period across all three income groups (EEs, LMIs and LDCs) (see Table 2). Across the three groups, the results varied only between a 2.2 percentage point average gain (for

the Lower-Middle Income countries) and a 2.7 percentage point average gain (for the Emerging Economies).

The results for vulnerable employment were similar. On average, among all three income groups, there was a -2.7 percentage point change in vulnerable employment between the 1990s and 2000s. The results across the three groupings varied only between -3.0 percentage points (for the Emerging Economies) and -2.4 (for the Lower-Middle Income countries).

Given these modest results, our analysis attempted to delve more deeply into changes in employment by utilizing a new ILO data set (see Kapsos and Bourmpoula 2013) on the absolute levels of labour incomes of the employed, expressed in PPP terms (or international US dollars).

Table 2. Wage and Vulnerable Employment for Income Groups

	Wage employment			Vulnerable employment		
Country group	1990s	2000s	Change	1990s	2000s	Change
Average	41.8	44.2	2.5	55.7	53.1	-2.7
EE	63.3	66.0	2.7	33.2	30.2	-3.0
LMI	43.1	45.3	2.2	54.2	51.8	-2.4
LDC	18.0	20.5	2.5	80.9	78.2	-2.6

Source: ILO data.

As explained earlier, this data set disaggregates the employed into five categories: 1) those earning labour incomes below $1.25 per day (namely, the extremely poor); 2) those earning labour incomes below $2.00 per day (namely, the moderately poor); 3) those earning labour incomes between $2.00 and $4.00 per day (the 'near-poor'); 4) those earning labour incomes between $4.00 and $13.00 per day (the 'developing middle class'); and 5) those earning labour incomes above $13.00 per day (the 'established middle class and above').

Our analysis first gauges the change in the size of the combined share of the top three groups between the 1990s and 2000s. In other words, this combination lumps together all three of the non-poor groups and excludes the two poor groups (the extremely poor and moderately poor). On this basis, there was a 8.5 percentage-point increase in the size of the combined non-poor group for the Lower-Middle Income countries (see Table 3). Among the LDCs, there was a 7.6 percentage point increase. However, among the Emerging Economies, there was only a 5.5 percentage point increase.

Table 3. Labour Incomes of the Employed

	Country group	1990s	2000s	Change
All non-poor (2-13+ US$, PPP)	Average	54.0	61.2	7.2
	EE	84.1	89.7	5.5
	LMI	56.5	65.0	8.5
	LDC	23.1	30.7	7.6
Near poor (2-4 US$, PPP)	Average	22.1	24.2	2.1
	EE	23.6	21.6	-1.9
	LMI	27.4	30.6	3.2
	LDC	15.6	20.5	4.9
Developing middle class (4-13 US$, PPP)	Average	25.3	29.1	3.8
	EE	46.8	51.1	4.2
	LMI	23.8	28.8	5.0
	LDC	6.2	8.5	2.4
Middle class and above (13+ US$, PPP)	Average	6.6	7.8	1.2
	EE	13.8	17.0	3.2
	LMI	4.8	5.1	0.3
	LDC	1.5	1.7	0.3

Source: Kapsos and Bourmpoula 2013

However, such a comparison is not likely to be reflective of meaningful changes in employment in the Lower-Middle Income countries and especially among the Emerging Economies since their two poor groupings are likely to be small and there might even be desirable declines in the size of the 'near-poor'. Such a decline would tend to diminish the gains among the three non-poor groups. Given these caveats, our analysis delved more deeply into the results for both the LMIs and EEs.

Indeed, among the Emerging Economies there was, on average, a 4.2 percentage point increase in the size of the combined grouping of the employed who were *at least* 'developing middle class' (i.e., had labour incomes above $4 per day). This threshold would also include the 'established middle class and above', namely, those who earned above $13 per day). This result implies that the EE's 'near-poor' grouping contracted, in fact, by almost 2 percentage points.

The EE's significant results for the 'developing middle class and above' contrasts with the much more modest corresponding 2.4 percentage point gain among LDCs. This latter result confirms that there was, in fact, a much bigger 4.9 percentage point gain in the size of the 'near-poor' employed in LDCs. This finding qualifies the achievement of the LDCs in generating more widespread quality employment.

Among Lower-Middle Income countries, there was a 5 percentage point increase in the employed that were *at least* 'developing middle class' (earning more than $4 per day).

This outcome implies that there was a 3.2 percentage point increase in the size of the 'near-poor' employed.

Lastly, our analysis focused on expansions in the employed who earned more than $13 per day (i.e., earned incomes above the equivalent of the US poverty line). Only the Emerging Economies registered a significant expansion in this grouping of the employed, i.e., a 3.2 percentage increase between the 1990s and 2000s.

Hence, the Emerging Economies registered a 2 percentage point decline in the share of the 'near-poor' employed (those earning $2 to $4 per day) and a 4 percentage point increase in the share of the employed who were 'developing middle class' (those earning $4 to $13 per day). But the Emerging Economies registered a 3.2 percentage point increase in the share of the employed who were 'established middle class or above' (earned $13 per day or more).

After this review of outcomes for the growth of GDP and expansion of employment, this paper reviews the data for 'macroeconomic outcomes' related to fiscal policies, monetary policies, financial policies and exchange-rate policies. And it supplements this information with data on 'development outcomes', such as investment in social and economic infrastructure.

C. Macroeconomic Outcomes

1. Fiscal Policies

A country's 'fiscal space', namely, its ability to finance development efforts, is greatly influenced by the revenue of its central government. While in some large economies, the revenue of provincial and local governments can be an important source of financing, the comparative data in this analysis are limited to the central government.

Generally, emerging and developing economies achieved, on average, significant increases in government revenue between the 1990s and 2000s. The average across all three groups rose from 22.8% during the 1990s to 26% during the 2000s (Table 4). But during the period 2008-2013, the overall average rose to 27.6%. The average for each of the three groupings, EEs, LMIs and LDCs, rose in similar fashion, by about 3-4 percentage points, between the 1990s and 2000s. There were also are similar trend increases in revenue across the three groups between the period 2000-2007 and 2008-2013.

What is noteworthy is that the Emerging Economies have not achieved markedly higher average revenue levels than either the LMIs or LDCs. The EEs had achieved a revenue level that was about 29% of GDP during the 2000s while the LMIs had achieved about 25% and the LDCs 23.5%.

Of course, as the data in Table 2 suggest, these overall results have been boosted by the revenue levels achieved by both transition economies and oil and gas exporters

(especially the latter). The results for transition economies would have improved the progress of EEs and LMIs while the results for oil and gas exporting countries would have disproportionately improved the prospects of EEs in particular and, to a lesser extent, LDCs.

Table 4. Average General Government Revenue for Income Groups and Cross-Cutting Groups

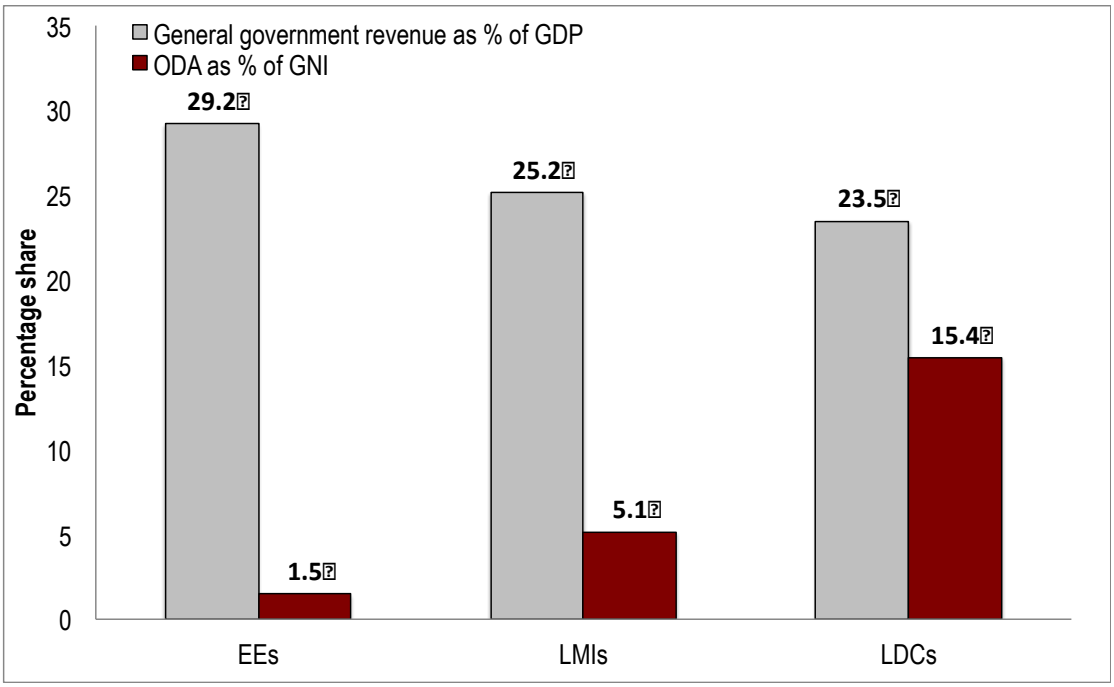
FISCAL POLICY	1990s	2000s	2000-07	2008-13
General government revenue as % of GDP	**22.8**	**26.0**	**25.3**	**27.6**
EEs	25.4	29.2	28.7	30.1
LMIs	22.2	25.2	24.6	26.3
LDCs	21.0	23.5	22.2	26.0
High debt countries	23.0	25.0	24.4	26.0
Transition economies	26.5	32.0	31.0	34.0
Oil & gas exporters	23.6	33.6	32.4	35.7

Source: World Bank data.

Our data set also allows us to compare the contribution of Official Development Assistance (ODA) to the revenue levels across the three major groupings of countries. As Graph 1 suggests, ODA remained very significant in LDCs during the 2000s. It corresponded to almost 16% of Gross National Income. And for the Lower-Middle Income countries, ODA still represented almost 5% of GNI during the same period. Such grants boosted the average level of government revenue for these two income groups.

Many of the LDCs and some LMIs also benefitted from debt relief, principally during the 2000s. This benefit was conferred by the Highly Indebted Poor Countries (HIPC) initiative, supported by the International Monetary Fund (IMF) and the World Bank. Generally, gross government debt declined significantly across developing and emerging economies over the 1990s and 2000s, but particularly during the late 2000s.

Graph 1. Average General Government Revenue relative to ODA for Income Groups during the 2000s



Source: World Bank data.

This trend has persisted despite the recent adversities imposed by the Global Financial Crisis and the subsequent slowdown in international trade and financial activity. Hence, during the period 2008 to 2013 all three income groups – EEs, LMIs and LDCs – had reduced their debt levels well below 60% of GDP on average (Table 5). The most dramatic decline was among LDCs because of the benefits of debt relief. But transition economies and oil and gas exporters had fared even better, achieving debt to GDP ratios below 30% during this same period.

Table 5. Average General Government Debt for Income Groups and Cross-Cutting Groups

FISCAL POLICY	1990s	2000s	2000-07	2008-13
General government debt	**73.7**	**63.8**	**73.4**	**45.4**
EEs	53.1	47.0	49.9	41.2
LMIs	80.1	60.4	68.7	45.3
LDCs	100.3	86.3	104.8	50.5
High debt countries	105.2	101.1	118.9	67.2
Transition economies	63.8	35.3	38.2	28.9
Oil & gas exporters	122.7	43.9	55.9	24.0

Source: IMF data.

All three country groups were also able to reduce their fiscal deficits between the 1990s and 2000s. Fiscal deficits for Emerging Economies declined only from -2.3% to -1.6%.

These levels of deficits compared favourably to those for both LMIs and LDCs (Graph 2). Moreover, such modest resultant deficits need not be problematic, especially if there are viable sources of domestic revenue that grow with income levels.

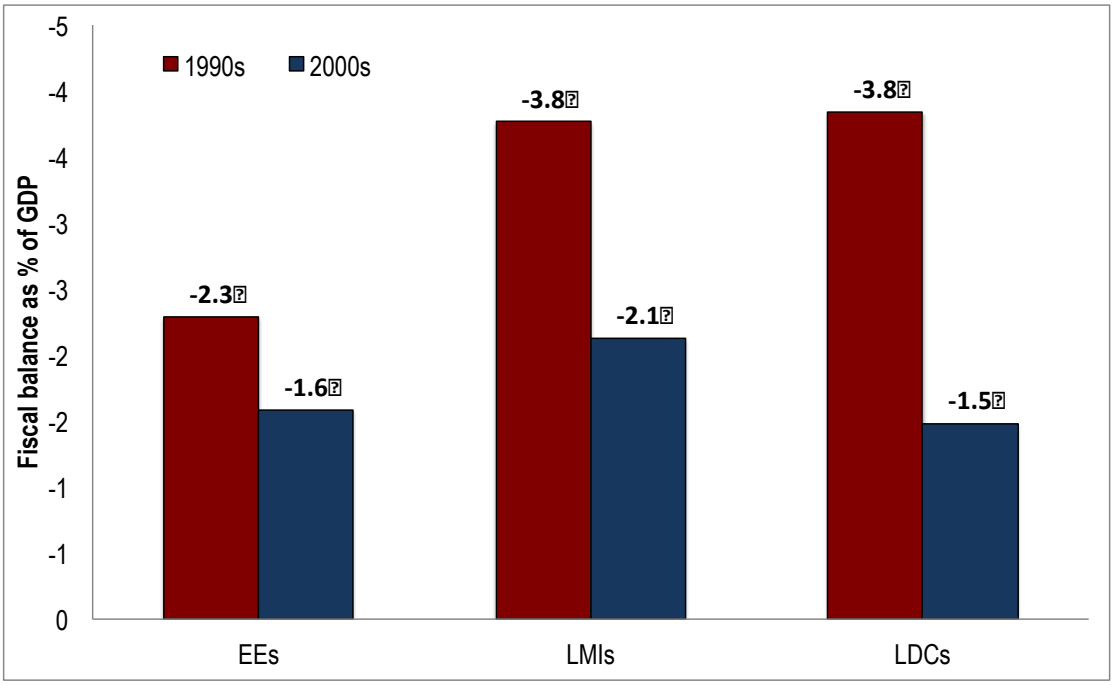
On average, Lower-Middle Income countries were able to reduce their fiscal deficits from -3.8% of GDP during the 1990s to -2.1% during the 2000s. LDCs were able to reduce even further their average fiscal deficits, namely, from -3.8% to -1.5%. However, among all three income groups, fiscal deficits began to widen again during 2008-2013.

Nevertheless, it is important to note that there was substantial fiscal tightening in these countries between the 1990s and 2000s. And this tightening would have counteracted, in effect, the expansion in their revenue base. So, fiscal policies are not likely to have played a leading role in generating increases in economic growth in these countries.

Not included in Graph 2 are trends among heavily indebted countries, transition economies and oil and gas exporting countries. Strikingly, heavily indebted countries were also able to reduce their average fiscal deficit. Between the 1990s and the 2000s, this group's deficit declined from -4.1% of GDP to -3.4%. However, there were much more dramatic declines in fiscal deficits among both transition economies and oil & gas exporting countries.

Transition economies reduced their average fiscal deficit from a relatively high -6.6% of GDP during the 1990s all the way down to -1.1% during the 2000s (though this deficit rose slightly during the period 2008-2013). This trend would have had a pronounced effect on the fiscal tightening of both Emerging Economies and Lower-Middle Income Countries.

Graph 2. Average Fiscal Balance for Income Groups



Source: IMF data.

Between the 1990s and 2000s, the oil and gas exporting countries made impressive gains on their fiscal balances, no doubt based on the rising international prices of their exports. During the 1990s, this grouping was running an average fiscal deficit of -2.9%. But during the 2000s, it was boasting an average fiscal *surplus* of 4.3% of GDP! This turnaround in fiscal outcomes would have mostly benefitted the outcomes for Emerging Economies and Least Developed Countries.

2. Monetary Policies

The rates of consumer price inflation and broad money growth were both reduced dramatically between the 1990s and 2000s across emerging and developing countries (see Table 6). The average rate of inflation was well over 100% during the 1990s across Emerging Economies, Lower-Middle Income Countries and Least Developed Countries.

There were particularly high inflation rates in Latin American countries, such as Argentina and Brazil, and among some African economies, such as Angola and the Central Republic of Congo. Across all transition economies inflation averaged about 370% during the 1990s and across all oil and gas exporting countries it averaged over 200%.

Table 6. Average Consumer Price Inflation and Broad Money Growth for Income Groups and Cross-Cutting Groups

MONETARY POLICY	1990s	2000s	2000-07	2008-13
Inflation	**123.7**	**8.7**	**9.2**	**8.1**
EEs	127.6	7.8	8.2	7.1
LMIs	118.0	7.4	7.1	8.5
LDCs	124.7	11.0	12.1	8.9
High debt countries	119.4	9.3	9.6	9.2
Transition economies	369.6	10.5	11.6	8.3
Oil & gas exporters	204.5	12.3	14.6	9.3
Broad money growth	**86.5**	**19.5**	**21.6**	**15.2**
EEs	77.0	18.6	22.4	12.2
LMIs	63.6	18.3	19.8	13.8
LDCs	117.6	21.5	22.4	19.8
High debt countries	114.3	18.8	18.8	17.0
Transition economies	123.5	28.6	36.6	14.1
Oil & gas exporters	135.1	28.6	33.3	20.9

Source: IMF data.

In stark contrast, however, during the 2000s inflation had plummeted to an average of only 7-11% across the EEs, LMIs and LDCs. In other words, there was a general tendency of monetary tightening during the late 1990s and 2000s. This was necessary, to some degree, in view of the problem of high inflation in the 1990s. However, a continued pursuit of such tightening, especially during the late 2000s, could have contributed to slowing economic growth.

Inflation trends were somewhat different across the income groups and cross-cutting groups. For example, the average inflation rate remained above 10% among the LDCs during the early 2000s but it dropped below 9% on average during 2008-2013. But among heavily indebted countries, average inflation still persisted at levels over 9% throughout the period 2000-2013.

The trend in the growth of broad money or M2 moved broadly in line with that for the inflation rate. On average, across all countries, the rate of growth of broad money was about 87% during the 1990s but dropped to a little under 20% during the 2000s.

The growth of broad money was above 100% during the 1990s among LDCs and heavily indebted countries. Broad money growth was also above this threshold for both transition economies and oil and gas exporting countries. But by the 2000s, such growth was, on average, down roughly to about 20-25% across LDCs and the three cross-cutting groups.

During the 2000s, the rate of growth of broad money was running well ahead of the inflation rate across the Emerging Economies, Lower-Middle Income Countries and Least Developed Countries, as well as across the three cross-cutting groups of heavily indebted countries, transition economies and oil and gas exporting countries.

While inflation became more subdued in the 2000s, on average, across all emerging and developing countries, the real interest rate remained high in some groupings, particularly

among LDCs and heavily indebted countries. For example, the real interest rate still averaged close to 10% for the LDCs across both 2000-2007 and 2008-2013 (Table 7). In heavily indebted countries, the real rate of interest rose to over 14% during 2000-2007 though it declined back to about 9% during 2008-2013. Nevertheless, these relatively high levels of the real interest rate represented a major stumbling block to increasing productive investment and economic growth.

In fact, only the Emerging Economies managed to reduce their average real rate of interest to below 6% during 2008-2013. Oil and gas exporting economies were successful in reducing their real rate of interest to about 2%--primarily because of negative real rates of interest among a number of countries, such as Iraq, Libya and Angola, during 2000-2007. But group average jumped back up to about 8% during 2008-2013.

Hence, while inflation became more subdued during the 2000s, especially in the wake of the slowdown in the late 2000s induced by the Global Financial Crisis, real rates of interest remained relatively high in some of the less developed economies. These rates suggest that domestic financial systems in these countries were not able to provide adequate financing for economic growth and development.

Table 7. Real Interest Rates for Income Groups and Cross-Cutting Groups

MONETARY POLICY	1990s	2000s	2000-07	2008-13
Real Interest Rates	**7.7**	**9.4**	**9.7**	**7.4**
EEs	8.2	5.8	5.9	5.8
LMIs	10.1	13.6	14.0	7.0
LDCs	4.3	9.6	9.9	9.9
High debt countries	7.6	14.4	14.8	8.9
Transition economies	8.2	6.3	6.1	6.7
Oil & gas exporters	7.0	3.4	2.1	8.1

Source: World Bank data.

3. Financial Policies

Although there has been some recent optimism about financial deepening in emerging and developing countries, especially in countries in sub-Saharan Africa where domestic credit was reported to have been expanded (Griffith-Jones 2013), our data suggest that the extension of domestic credit by banks in such countries has remained relatively modest.

The trends in domestic credit as a ratio to GDP confirm that there was little relative increase in domestic credit from the 1990s to the 2000s in either Lower-Middle Income Countries or Least Developed Countries. This represents a major macroeconomic problem because it suggests that financial institutions in these countries are not offering adequate levels of lending to sustain private (or public) investment.

In LMIs domestic credit remained basically flat, at about 40% of GDP, between the 1990s and 2000s, edging up above 40% only during 2008-2013 (see Table 8). In LDCs, the ratio of domestic credit to GDP rose only, on average, by a little over 2 percentage points during the 2000s in comparison to this grouping's relatively low level of under 22% during the 1990s. By 2008-2013 this average had only slightly exceeded 26%.

In Emerging Economies there was a more significant boost to domestic credit between the 1990s and 2000s. For example, compared to the average of about 51% during the 1990s, domestic credit as a ratio to GDP rose to over 62% during 2008-2013. Transition Economies also enjoyed a significant boost in domestic credit. Whereas their domestic credit was only about 29% of GDP during the 1990s (the most difficult period of their 'transition'), it had begun rising sharply during 2008-2013 to reach an average of a little over 50%. Since transition economies are disproportionately included within Emerging Economies, the trends in domestic credit in these two groupings are related.

In contrast, the trend in the expansion of domestic credit in oil and gas exporting countries was negative: measured as a ratio to GDP, domestic credit dropped from 29% during the 1990s to almost 10% during the 2000s. The explanation is that in some countries, such as Libya, Equatorial Guinea and Algeria, banks extended less credit than the government deposits held in their accounts.

Table 8. Domestic Credit by Banks as Share of GDP for Income Groups and Cross-Cutting Groups

FINANCIAL POLICY	1990s	2000s	2000-07	2008-13
Domestic credit	**38.1**	**40.8**	**38.9**	**45.3**
EEs	50.9	56.4	53.6	62.3
LMIs	40.0	40.3	38.2	45.6
LDCs	21.6	24.4	23.6	26.2
High debt countries	42.1	44.7	44.9	45.7
Transition economies	28.6	32.9	26.2	50.2
Oil & gas exporters	29.0	10.8	10.8	9.5

Source: World Bank data.

Concerns about the destabilizing impact of credit expansion on domestic economies, particularly since 2008, have been raised with regard to a number of Emerging Economies. While economic theory has traditionally assumed a positive link between financial depth and long-term growth (Levine 2005), serious doubts began to emerge about excessive 'financialisation' long before the Global Financial Crisis (Minsky 1986; Easterly, Islam and Stiglitz 2000).

When domestic credit reaches the range of 80-100% of GDP, a systematic negative impact on economic growth appears to emerge (Cecchetti and Kharroubi, 2012). Our data show that in a number of emerging economies (such as China, Lebanon, Malaysia, South Africa and Thailand), credit expansion expanded well beyond 100% of GDP during the 2000s.

Table 9. External Debt as Share of GNI and the Share of Short-Term Debt in Total External Debt for Income Groups

FINANCIAL POLICY	1990s	2000s	2000-07	2008-13
External debt stock	**81.6**	**62.7**	**71.8**	**44.4**
EEs	45.5	48.3	49.0	46.4
LMIs	93.3	56.2	61.9	41.5
LDCs	109.8	84.3	105.3	44.8
Short-term debt	**12.1**	**13.6**	**12.9**	**14.5**
EEs	18.0	20.6	19.6	22.3
LMIs	10.7	11.8	10.7	12.9
LDCs	7.4	7.8	7.9	7.7

Source: World Bank.

The size of a country's external debt stock can become a matter of great concern since it can subject domestic policymaking to severe external constraints. The record of developing and emerging economies in reducing their external debt stocks has been mixed. For example, the external debt stock of Emerging Economies did not improve between the 1990s and 2000s. In fact, it rose slightly, from about 45% of GDP to 48% (Table 9). The debt stock of transition economies rose sharply, in fact, between these two periods: from 37% of GDP to almost 57%, an average level that could easily become fiscally unsustainable.

Least Developed Countries did manage to reduce their external debt between the 1990s and the 2000s, from about 110% of GDP to about 84%. However, the most dramatic reduction in their external debt occurred in the late 2000s as a result of a concerted international debt relief program that began to have an effect by the mid 2000s.

Only Lower-Middle Income countries succeeded in substantially reducing their external debt, from about 93% of GDP to 56% between the 1990s and 2000s. Nevertheless, even in LMIs (where debt was still close to 60%), and certainly also among the other two major income groups, levels of external debt have remained relatively high on average and/or have not been substantially reduced.

In addition to the size of a country's external debt, the share of this debt that is short-term in nature has become a major concern internationally. Such debt has the potential to create greater financial instability, especially in the Emerging Economies, which have become temporary havens for portfolio investments seeking out the highest international rates of return.

Since short-term inflows of capital are likely to be channelled into speculative activity (Lin, 2011), a significant number of Emerging Economies – most prominently Brazil and Chile – have recently instituted capital-account regulation to help stabilize the impact of such flows on their capital accounts. This problem was intensified in the aftermath of the Global Financial Crisis, as liquidity began to flood out of advanced economies, where expansionary (and unconventional) monetary policies lowered the rates of return to

speculative investment, and crowd into emerging economies where the currency-adjusted short-term rates of return were the highest.

Unfortunately, such an inflow of capital has a tendency to appreciate the recipient country's real exchange rate, jeopardizing its export success. This effect then leaves such an economy vulnerable to a sudden depreciation in its real exchange rate, which can trigger a rapid outflow of speculative capital.

According to available data, short-term debt was on the rise in Emerging Economies between the 1990s and 2000s. The share of short-term debt in total external debt rose in these economies from 18% in the 1990s to almost 20% during 2000-2007 and then to over 22% during 2008-2013 (though this effect began to abate in late 2013).

The situation was less serious, on average, in Lower-Middle Income Countries. Among LMIs short-term debt, as a ratio to total external debt, did rise from almost 11% during the 1990s to about 13% during 2008-2013. But this resultant level was still relatively low. In the Least Developed Countries, short-term debt never breached, on average, the level of 8% of the total during the 1990s and 2000s.

So, the dangers associated with short-term capital inflows appear to be concentrated mainly in Emerging Economies. This danger manifested itself in the fall of 2013 as short-term capital began to flood back to advanced economies in expectation that the eventual winding down of expansionary monetary policies in these economies would raise short-term interest rates.

4. Exchange Rate Policies

The holding of international reserves has become increasingly important as a form of self-insurance for developing and emerging economies, especially in the light of the growing influence of unstable short-term capital flows. Reserve accumulation increased significantly in Emerging Economies in recent decades. Between the 1990s and 2000s, their international reserves as a ratio to GDP increased, on average, from about 14% to over 21% (Table 10).

The stock of reserves also increased in Lower-Middle Income Countries and Least Developed Countries but their levels during the 2000s were lower than those in the EEs. In LMIs, reserves as a ratio to GDP averaged about 17% during the 2000s, up from an average of about 11% during the 1990s. In LDCs, reserves increased from about 11% of GDP during the 1990s to about 16% during the 2000s.

But in all three groupings, reserves became significantly larger during 2008-2013 in response to the instabilities generated by the Global Financial Crisis. Maintaining such reserves is costly since it entails re-investing capital inflows in foreign short-term assets with a low rate of return instead of utilizing such inflows for productive investment, such as in social and economic infrastructure, which would have a much higher domestic rate of return.

Table 10. International Reserves as a Share of GDP for Income Groups and Cross-Cutting Groups

EXCHANGE RATE POLICY	1990s	2000s	2000-07	2008-13
International reserves	**11.9**	**18.2**	**16.9**	**20.9**
EEs	13.7	21.3	19.4	25.2
LMIs	10.8	16.9	15.9	19.3
LDCs	11.2	16.2	15.2	17.6
High debt countries	11.5	17.3	16.2	19.0
Transition economies	7.7	16.8	15.6	19.5
Oil & gas exporters	7.9	23.0	20.4	29.3

Source: UNCTAD and World Bank data.

Since international reserves are to a large extent held in the currencies of a limited number of advanced economies – in particular in US dollars, Euros and British Pounds – reserve accumulation by emerging and developing economies imposes an effective net resource transfer from poor to rich economies (Ocampo 2013).

A basic rationale for holding a stockpile of international reserves is to use it as a means to manage a country's exchange rate, either explicitly or implicitly. Very few countries have adopted, in practice, an exchange rate regime that allows 'free floating' of their currency's value. Being able to sell reserve assets (such as US Treasury securities) allows countries to counteract, to some degree, depreciation of their domestic currency.

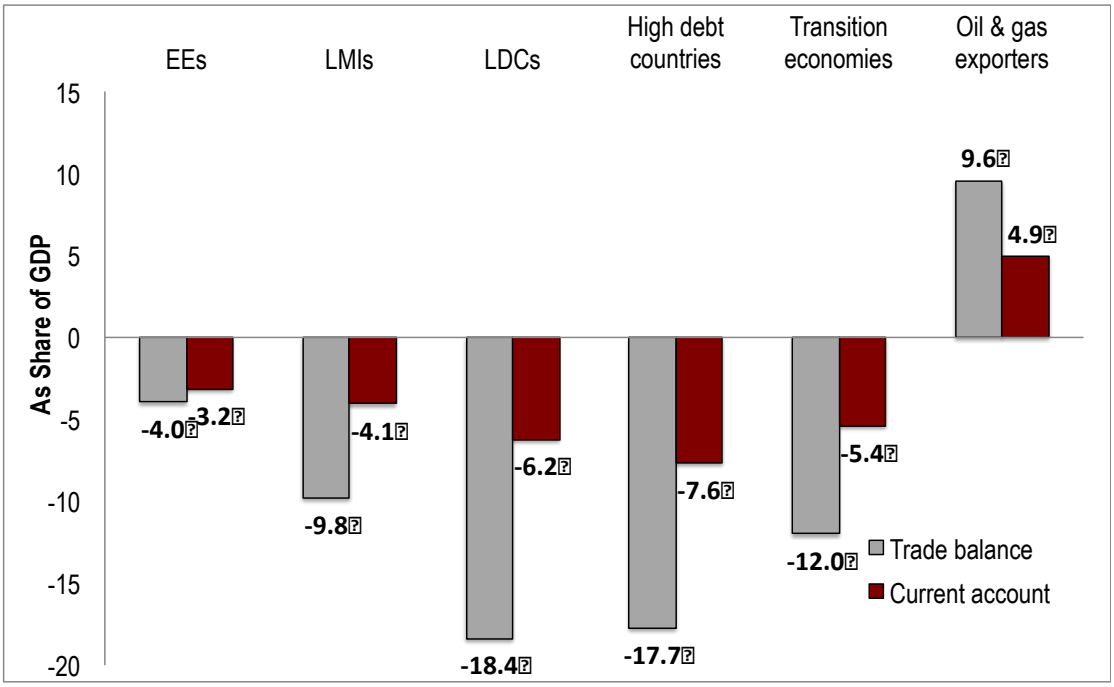
However, many developing and emerging economies still remain in a strategically defensive position since they frequently run sizeable trade deficits. This tendency tends to put downward pressure on the value of their currencies. In some cases, developing and emerging economies also simultaneously run current-account surpluses but this outcome usually relies on receiving substantial international transfers, such as remittances or development assistance.

Graph 3 shows the average trade balance and current-account balance during the 2000s of the three major income groups and the three cross-cutting groups. Only oil and gas exporting countries ran, on average, trade surpluses. In all other groupings, there were both average trade deficits and average current-account deficits, with the latter being smaller than the former.

The Emerging Economies were in the strongest position, in the sense that during the 2000s their average trade deficits and current-account deficits were -4% of GDP and -3.2% of GDP, respectively. The Least Developed Countries were in the weakest strategic position since their average trade deficits and current-account deficits were -18.4% and -6.2%, respectively. There was a large differential between the trade deficits and current-

account deficits of LDCs because of the inflow of transfer payments, primarily in the form of grants and partly also due to remittance.

Graph 3. Average Trade Balance and Current Account Balance by Income Group and Cross-Cutting Group (2000s)



Source: UNCTAD and World Bank data.

Some countries can consistently generate trade surpluses at the same time as they suffer from current-account deficits. This has been the case, for example, for Brazil and South Africa. Both economies possess relatively well-developed equity markets. This condition can imply a continuous outflow of dividends payments combined at times with large periodic outflows of the equity investment itself.

As Graph 3 illustrates, many of the oil and gas exporting countries have experienced a similar condition though the character of their capital outflows has been different. These countries tend to run substantial trade surpluses and through various investment vehicles, such as Sovereign Wealth Funds, they simultaneously send large quantities of capital abroad in search of the highest rates of return. China is in a similarly strong position since it continues to register substantial trade and current-account surpluses and recycles the resultant capital into international reserves.

5. Development Policies

In addition to investigating macroeconomic outcomes, this research has supplemented this effort with an examination of 'development outcomes'. These outcomes might not directly reflect the impact of macroeconomic policies. One of the most obvious indications of economically successful development policies is high investment levels. Hence, this research has examined the indicator of total investment as a ratio to GDP.

Our research has also examined two related indicators that could serve as barometers of the outcomes from both public and private investment. These two indicators are 1) gross secondary school enrolment as a percentage of the total population of official secondary-education age and 2) electrical power consumption expressed in Kilowat hours per capita. The first provides an indication of the extent of investment in social infrastructure and the second the extent of investment in economic infrastructure.

The Commission on Growth and Development has identified high and accelerating investment rates as a decisive condition for accelerating and sustaining economic growth (Commission on Growth and Development 2008). Investment levels of at least 25% of GDP are generally considered as a necessary condition for economic development. But only in Emerging Economies have such levels of total investment prevailed on average. During the 2000s, average total investment as a ratio to GDP was 24.7% in this income group (Table 11). But this represented a slight decline from its average level of 25.2% during the 1990s.

Compared to the level for EEs, average investment levels in Lower-Middle Income countries were slightly lower during the 2000s, i.e., 23% of GDP. And the average level was even lower in the Least Developed Countries, namely, 21.6%. There were only marginal increases in investment in these two income groups between the 1990s and 2000s.

Surprisingly, investment levels declined marginally across all three income groups during 2000-2007. However, their levels of investment appeared to rise back up significantly during the period 2008-2013. For example, Emerging Economies were averaging investment levels that were almost 26% of GDP during 2008-2013. Investment levels in transition economies and oil and gas exporting countries also rose markedly, reaching averages, respectively, of about 27% of GDP and 26.5% of GDP during 2008-2013.

In general, investment levels across the three income groups oscillated across the 1990s and 2000s. While average investment levels had reached credible levels during 2008-2013, it is not certain that such levels will be maintained in the light of a probable global economic slowdown.

Table 11. Total Investment as Share of GDP for Income Groups and Cross-Cutting Groups

DEVELOPMENT POLICY	1990s	2000s	2000-07	2008-13
Total Investment	**22.6**	**23.1**	**22.4**	**24.9**
EEs	25.2	24.7	24.0	25.8
LMIs	22.5	23.0	22.3	24.5
LDCs	19.5	21.6	20.8	24.4
High debt countries	21.6	22.0	20.9	24.6
Transition economies	24.0	25.4	24.3	27.2
Oil & gas exporters	25.8	25.9	26.4	26.5

Source: World Bank data.

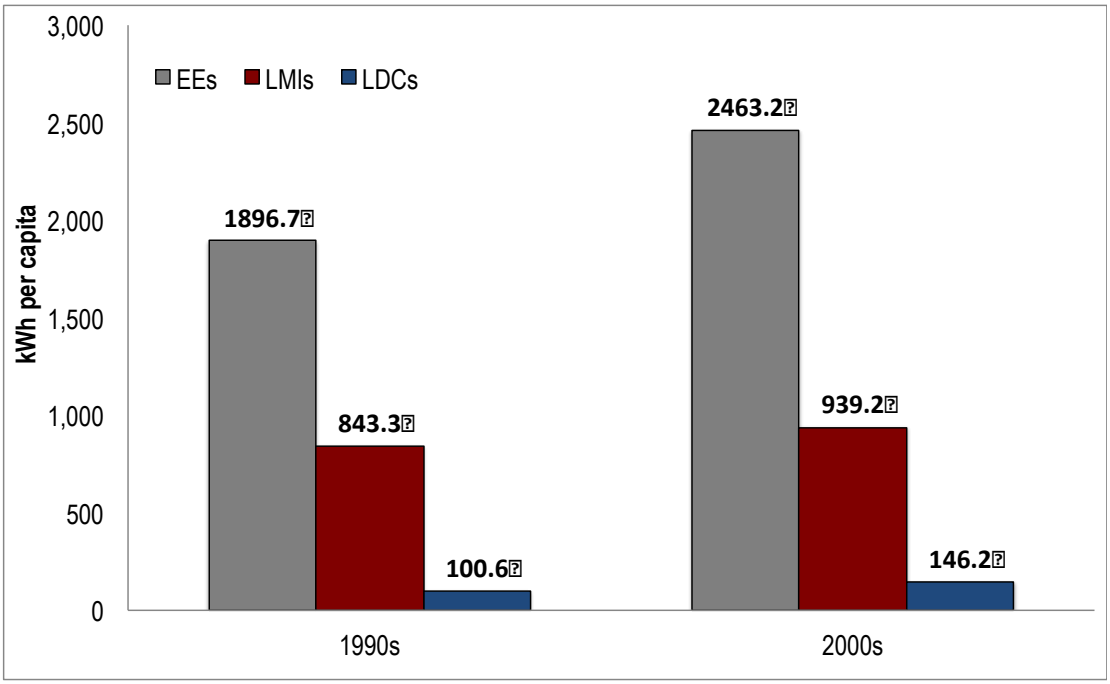
How have levels of investment translated into gains in economic and social infrastructure? Graph 4 depicts the average levels of electricity consumption per capita in the three income groups for the 1990s and 2000s. It shows that there were marked advances in electricity consumption among the Emerging Economies, from about 1900 kWh per capita during the 1990s to almost 2500 kWh per capita during the 2000s.

Electricity consumption has been much lower in both Lower-Middle Income countries and Least Developed Countries. In LMIs average per capita levels of electricity consumption rose from about 840 kWh during the 1990s to about 940 kWh during the 2000s. This represented a significant percentage increase (about 12%) but a much less impressive increase in absolute levels.

In LDCs, average per capita levels of electricity consumption were abysmally low during the 1990s, at about 100 kWh. There was a 50% increase to close to 150 kWh in the 2000s, but this absolute increase was very small indeed.

In other words, from the 1990s to the 2000s, the absolute level of electricity consumption per capita in the EEs remained about eighteen times higher than that in the LDCs. In similar fashion, the absolute level of electricity consumption per capita in the LMIs declined only slightly from eight times higher than that in the LDCs to six times higher. These statistics tend to support the thesis that there has been very little investment in economic infrastructure in the Least Developed Countries in particular in recent decades.

Graph 4. Average Per Capita Electricity Consumption by Income Group (kWh)



Source: World Bank data.

An indicator that can reflect the extent of investment in social infrastructure is gross secondary school enrolment as a share of the relevant age group. Table 12 provides the trends in this indicator for income groups and cross-cutting groups. During the 2000s, such enrolment ratios (which can exceed 100%) were 87% in the Emerging Economies, and had reached 90% during the period 2008-2013. The enrolment ratios for LMIs were significantly lower, reaching the average of 69% during the 2000s and 75% during the period 2008-2013.

Even though secondary school enrolment ratios for the Least Developed Countries started from an abysmally low average level of about 19% during the 1990s and almost doubled to 33% during the 2000s, and, furthermore, even reached over 40% during the period 2008-2013, these absolute levels still lagged very far behind the levels of both the EEs and LMIs.

These results imply that for LDCs to begin reaching the levels of both social and economic infrastructure of both LMIs and EEs, their investment levels would have to be raised substantially and maintained over an extended period of time. Even though the levels of electricity consumption per capita and secondary school enrolment ratios among Emerging Economies would inevitably begin to flatten out over time (as they reach a maximum feasible or statistical level), the task for LDCs in trying to make significant progress towards their levels would remain extremely difficult.

Table 12. Secondary School Enrolment Ratios for Income Groups and Cross-Cutting Groups

DEVELOPMENT POLICY	1990s	2000s	2000-07	2008-13
Enrolment ratios	**53.0**	**64.8**	**61.1**	**68.7**
EEs	70.8	86.9	83.8	90.0
LMIs	62.3	69.0	66.4	75.2
LDCs	18.2	32.7	31.0	39.5
High debt countries	42.2	57.6	53.9	61.0
Transition economies	85.6	90.0	88.1	92.6
Oil & gas exporters	56.7	61.0	56.8	64.6

Source: World Bank data.

III. Summary of Group Results and Policy Implications

The group averages discussed above give an initial glimpse into the overall trends in economic growth and employment generation and the relationship of these two outcomes to a broad set of 'macroeconomic outcomes' (related to fiscal policies, monetary policies, financial policies and exchange-rate policies).

In general, the rates of growth of GDP across developing and emerging economies have appeared to be more impressive than the employment outcomes. There was indeed an upsurge in economic growth between the 1990s and 2000s, particularly among the Least Developed Countries. Yet changes in the quality of employment were more modest if one registers changes in indicators such as wage employment and vulnerable employment.

Our reliance on a new ILO data set that registers changes in 'labour incomes' provides, however, a richer depiction of changes in the quality of employment. There were definitely increases in the share of the employed that progressed to a 'non-poor' status across the three income groups of Emerging Economies, Lower-Middle Income Countries and Least Developed Countries.

While the 5.5 percentage point increase in the share of the 'non-poor' in Emerging Economies was the smallest among the three income groups, a much larger proportion of this total was constituted by the 'developing middle class' (earning $4 to $13 per day) as well as the 'established middle class and above' (earning more than $13 per day).

In Lower-Middle Income Countries, the expansion of the share of the 'non-poor employed' by almost 9 percentage points was concentrated among the 'developing middle class'. In contrast, most of the 7.6 percentage point increase in the 'non-poor' employed in the Least Developed Countries was constituted by those who moved out of poverty but still remained 'near-poor' (earning only between $2 and $4 per day).

The general trends in fiscal outcomes between the 1990s and 2000s suggest that revenue did increase across the three income groups of EEs, LMIs and LDCs. But this expansion was heavily reliant on improving trends in transition economies and, especially, oil and gas exporting countries.

Moreover, the overall expansion of fiscal space (as a result primarily of rising income levels) coincided with fiscal tightening (the significant reduction of fiscal deficits), which tended to dampened the potential for expansionary fiscal policies. Moreover, the fiscal space of LDCs and even LMIs remained heavily reliant during the 2000s on the receipt of Official Development Assistance.

Monetary policies were substantially tightened between the 1990s and 2000s in order to combat the widespread problem of high inflation rates that plagued the 1990s. This policy involved, for example, slowing the growth of broad money and raising real interest rates. However, real rates of interest remained inordinately high in Least Developed Countries and heavily indebted countries during the 2000s. This represented a major obstacle impeding the ability of these countries to raise their general level of investment.

Financial policies also appeared to be ill-suited to the needs, in particular, of Lower-Middle Income Countries and Least Developed Countries. For example, the level of domestic credit provided by the banking system remained relatively low in these two income groups.

In contrast, in a significant number of Emerging Economies there appeared to be an excess of domestic credit, which contributed to financial instability. In addition, the share of total external debt that was short-term in nature in Emerging Economies increased significantly between the 1990s and 2000s, adding another dimension of potential instability linked to erratic international flows of portfolio investment. This rising problem led to greater openness of countries to adopting at least some limited forms of regulation of the capital account.

Despite some progress in reducing the levels of external debt across the three income groups, average levels of such debt during the 2000s as a whole remained relatively high (approaching 60% in some cases) among some Emerging Economies and Lower-Middle Income Countries. However, because of the HIPC initiative, the average debt burden of LDCs dropped to about 45% of GNI during 2008-2013.

Exchange rate policies have undergone some significant changes since the 1990s, especially since the Asia Financial Crisis in 1997-1998. Emerging Economies, in particular, have been striving to amass sizeable stockpiles of international reserves in order to protect their economies from the vagaries of international capital flows. LMIs and LDCs have also been striving to amass international reserves, but with notably less success. Nevertheless, many economies now strive to ‘manage’ their exchange rate, whether officially or unofficially.

There appear to be two major reasons for the adoption of such exchange-rate policies. One prevailing reason is that many developing and emerging economies still suffer from significant trade deficits and current-account deficits. Not only is this condition a drag on economic growth and employment generation, but also it entails a degree of economic

instability since the value of the exchange rate of many countries will be constantly subject to pressures of depreciation. The second, and related, reason is that such pressures of depreciation could precipitate a damaging outflow of speculative investment, which has flooded into many of the major Emerging Economies in recent years.

Lastly, this research has investigated trends in 'development outcomes', particularly as they have related to general trends in investment. Our primary indicator for this purpose has been total investment as a ratio to GDP.

According to this indicator, investment began to approach credible levels (namely, 25% of GDP) across the three income groups only by 2008-2013. But across the 1990s and 2000s as a whole, investment oscillated unpredictably, either growing only marginally or even declining in some cases.

Substantially increasing investment levels in the Least Developed Countries should be a matter of high priority since the indicators in this research that reflect investments in social and economic infrastructure (namely, secondary school enrolment ratios and average electricity consumption) suggest that LDCs lag far behind both Emerging Economies and Lower-Middle Income countries. Despite some significant percentage increases in enrolment ratios and the levels of consumption of electricity in LDCs, their absolute levels remain far lower than those in Emerging Economies and even significantly below those in LMIs.

This paper now examines the concrete experience of 16 developing and emerging economies. For each country a brief case study is presented. The 16 countries have been selected either because they have been relatively successful in generating economic growth and expanding productive employment or because they have been relatively important or well-known countries.

Following the 16 case studies is a summary of the major macroeconomic outcomes, grouped together for comparison purposes by income group (Emerging Economy, Lower-Middle Income Country and Least Developed Country).

IV. Review of 16 Case Studies and General Initial Summaries

A. Emerging Economies

General Summary

This research has conducted seven country case studies of Emerging Economies. These seven countries range across Asia (the People's Republic of China and Thailand), Latin America (Brazil, Mexico and Peru) and the Mediterranean (Tunisia and Turkey). With the exception of China, the growth rates of these Emerging Economies were fairly modest during the 2000s.

Also with the exception of China and, to some degree, Turkey, their improvements in employment were not remarkable. Because these countries had already substantially reduced extreme and moderate poverty, their most notable gains were in the expansion of the employed earning $4 - $13 per day (those described by the ILO as 'developing middle class') and, in some cases, the expansion of the employed earning $13 or more.

What were the major macroeconomic problems that these Emerging Economies confronted? The majority of them did not command substantial public resources, as reflected in their relatively low levels of government revenue as a ratio to GDP. Brazil stands out as a stark exception, with an average ratio of 35% during the 2000s. Even in China, the revenue of the central government appeared to be low, though this was likely due, in part, to the exclusion of the revenue of regional governments.

Leaving China to the side again, the level of total investment as a ratio to GDP tended to be low or only about average among our group of case study countries. No doubt, this tendency contributed to their unimpressive growth rates. For example, investment in Brazil was a very low 18%, on average, and the economy grew by only 3.6% on average during the 2000s. In Turkey investment averaged only about 20% of GDP during the 2000s and its economy grew by less than 5%.

Judging by consumer price inflation and money supply growth, monetary policies appeared to be relatively tight in most of these case study countries. The one exception was probably Turkey, where inflation still averaged 20% during the 2000s. But in a number of cases, such as in China, Peru, Thailand and Tunisia, inflation was averaging only 2-3%. In Brazil and Mexico, it was averaging 5-7%. Some of these Emerging Economies, especially Turkey and those in Latin America, were reacting strongly to damaging bouts of hyperinflation during the 1990s.

Nevertheless, such tight monetary policies might have impeded their ability to achieve higher rates of economic growth. However, in these countries the real interest rate (the

lending rate adjusted for inflation) varied widely. In Brazil and Peru, for example, the average real rates of interest during the 2000s were about 46% and 19%, respectively. In sharp contrast, the average real rates of interest in Mexico, China and Thailand were quite low, averaging about 1%, 2% and less than 4%, respectively.

These widely divergent rates raise serious concerns about the stability and health of the financial sectors in these countries. Either the real interest rate has been too high (discouraging domestic credit expansion) or too low (helping to excessively expand domestic credit).

The divergent tendencies in the real interest rate were mirrored in the supply of domestic credit in these seven economies. In some cases, such as in Brazil, Thailand and Tunisia, domestic credit, as a ratio to GDP, was too high. For example, in Thailand, this indicator averaged over 130% during the 2000s and in Brazil about 84%. In other cases, such as Mexico and Peru, the domestic economy appeared to be short of credit. In Peru, for example, domestic credit averaged less than 20% of GDP and in Mexico less than 40% during the 2000s. It seems apparent that macroeconomic policies, such as interest rate policies, which could have had a direct effect on the financial sectors of these economies were not having a stabilizing effect. In other words, the financial sector, even in these relatively developed economies, appeared to be dysfunctional, to some degree.

Many of these Emerging Economies were in a strong position in the wake of the Global Financial Crisis to receive a growing influx of external sources of credit. But these capital inflows were often short-term in nature. Thailand represents a striking example: its short-term debt as a ratio to its total external debt averaged 35% during the 2000s.

However, Thailand had also amassed a considerable stockpile of international reserves (namely, also 35% of GDP) in order to protect itself against the threat of a precipitous outflow of such portfolio investment. Evidently, it had learned well some of the difficult lessons from the Asia Financial Crisis in 1997-98. A primary lesson was to be in a strong position to protect the value of its exchange rate.

Some of the six other Emerging Economies, such as China and Peru, had also amassed an impressive stockpile of international reserves. China's reserves as a ratio to GDP averaged about 34% of GDP during the 2000s and Peru's reserves about 20%. However, the share of China's total external debt that was short term in nature was also a very high 47% during the 2000s. In Brazil, Mexico, Tunisia and Turkey, the relative size of their short-term debt also exceeded the size of their international reserves. These countries have placed themselves in a potentially vulnerable position should they cease, even on a temporary basis, to become magnets for speculative capital.

China has remained in a fairly strong position with regard to its trade balance and current-account balance. Both averaged a positive 4-5% of GDP during the 2000s. Thailand has also maintained fairly stable trade and current-account surpluses, with its

current-account averaging, for example, almost 5% of GDP during the 2000s. In contrast, however, Tunisia and Turkey, and even Mexico to some degree, have left themselves vulnerable to capital outflows by consistently having run both trade and current-account deficits during the 2000s. And even Brazil ran a current-account deficit during the 2000s despite having generated modest trade surpluses.

Brazil

Brazil is well known as one of the developing world's leading BRIC countries, but it is often regarded as a relatively underperforming Emerging Economy. Its growth of GDP did accelerate from an average of 1.7% during the 1990s to 3.6% during the 2000s. But the average growth for all Emerging Economies during the 2000s was 4.5%.

During the 1990s, 85% of Brazil's employed were already earning labour incomes above $2 per day (i.e., a 'non-poor' level). By the 2000s, this proportion had risen, on average, to 90%. But the country's record in expanding quality employment was better than these statistics indicate. The employed earning labour incomes of $13 or more per day increased by 5.4 percentage points, while the employed earning between $4 and $13 increased by 3.1 percentage points. This implies that the employed who were 'near poor' (only earning between $2 and $4) *declined* by 3 percentage points. The latter improvement should be expected for an Emerging Economy.

BRAZIL	1990s	2000s
GDP	1.7	3.6
Employment indicators		
All non-poor (USD 2-13+, PPP)	85.1	90.6
Near poor (USD 2-4, PPP)	18.1	15.1
Developing middle class (USD 4-13, PPP)	44.1	47.2
Middle class and above (USD 13+, PPP)	22.8	28.2
Wage employment	61.1	65.7
Vulnerable employment	34.8	29.9
Fiscal indicators		
General government revenue	34.4	34.9
ODA	0.0	0.0
Fiscal balance	-5.9	-3.1
Gross government debt	n/a	68.7
Monetary indicators		
Inflation	854.8	6.7
Broad money growth	739.8	17.0
Real interest rate	70.2	40.6
Financial indicators		
Domestic credit	88.2	83.8
External debt stock	29.2	27.8
Short-term debt	18.4	12.8
Exchange rate indicators		
Current account	-1.7	-1.0
Trade balance	0.3	1.4
International reserves	5.4	9.7
Development indicators		
Total investment	18.8	17.9
Secondary school enrolment	n/a	106.0
Electricity consumption	1626.7	2033.7

Brazil's fiscal record has been improving but it remains mixed. During the 2000s, average government revenue as a ratio to GDP was about 35%, significantly above the average for all Emerging Economies. It had a similar level of revenue in the 1990s. Also, Brazil had cut its fiscal deficit roughly in half, from -5.9% to -3.1%, between the 1990s and 2000s. However, its major fiscal problem was that its government debt still stood at almost 69% of GDP.

The country did achieve major improvements on monetary outcomes. Like many Latin American countries, Brazil was afflicted with hyperinflation during the 1990s. Its consumer price inflation averaged an annual increase of over 800%. During the 2000s, this average had been drastically reduced, down to less than 7%. This trend coincided with a rate of growth of broad money of 17% during the 2000s, which was a bit below the EE average.

However, Brazil's real rate of interest remained extraordinarily high during the 2000s, i.e., slightly above 40%, despite having been dramatically reduced from its average level of about 70% during the 1990s. Such rates have posed exceedingly difficult problems for the economy as a whole, and help explain its modest rates of economic growth even during the 2000s.

Apparently in contradiction, the domestic credit supplied by Brazil's banking sector remained, if anything, excessive during the 2000s. As a ratio to GDP, such credit averaged about 84%, little changed from its average level during the 1990s. This level of credit during the 2000s was much higher than the EE average, which was less than 60%.

Brazil did not, however, confront difficult problems associated with its external debt. Its external debt stock, measured relative to GNI, remained comparatively low over the 1990s and 2000s, not exceeding 30% of GDP on average. In addition, its short-term debt as a share of total external debt decreased over time, leaving the country with a proportion that averaged less than 13% during the 2000s, which was well below the EE average.

Also, Brazil maintained a fairly strong trade position during the 2000s: its trade balance averaged 1.4% of GDP. Meanwhile, it current-account deficit was only -1% of GDP, down from an average of -2.7% during the 1990s.

However, Brazil still remained in a relatively weak position in terms of its holdings of international reserves. Though they increased from their average level in the 1990s, they still represented only about 10% of GDP during the 2000s. This was well below the EE average of about 21% and even below the average of 18% for all developing and emerging economies. This low level of reserves implies that Brazil has limited ability to influence the variability of its exchange rate.

Brazil still faces a major constraint on its economic growth and employment generation. This has been its relatively low level of total investment, which averaged only 17.9% of

GDP during the 2000s, and had even declined from its average level of 18.8% during the 1990s. This condition implies that despite the apparent abundance of domestic credit, there is still inadequate financing of investment.

Nevertheless, as a fairly developed Emerging Economy, Brazil has still achieved some credible levels of investment in social and economic infrastructure. For example, its gross secondary school enrolment ratio was over 100% during the 2000s—well above the average for all Emerging Economies. However, its investment in economic infrastructure has lagged somewhat behind. For example, its average electricity consumption during the 2000s was still only about 2000 Kilowat hours per capita. This was well below the EE average of over 2400 Kilowat hours per capita. This is probably due to inadequate public investment in economic infrastructure, which remains a common complaint across Brazil.

China, People's Republic of

The People's Republic of China has performed exceedingly well on GDP growth and qualitative improvements in employment. Its average growth rate of GDP during the 2000s, i.e., 10.2%, was one of the highest among emerging economies (surpassed only by the growth rates of Azerbaijan and Turkmenistan). Its rate of growth during the 1990s was also 10%.

In addition, China's share of wage/salary employment in total employment increased by almost ten percentage points between the 1990s and 2000s while there was a corresponding decline of 10 percentage points in the share of vulnerable employment.

Most remarkably, the share of the 'non-poor' employed increased by almost 37 percentage points between the 1990s and 2000s. This is the largest increase among the entire set of 145 countries in our sample. The bulk of the overall increase in the three combined strata was in the 'developing middle class' (the employed earning $4-13 per day), which rose by 24 percentage points alone. These results indicate that China has been a very successful developing country by carrying out substantial employment-enhancing structural change in its economy.

CHINA	1990s	2000s
GDP	10.0	10.2
Employment indicators		
All non-poor (USD 2-13+, PPP)	27.2	64.0
Near poor (USD 2-4, PPP)	21.6	31.1
Developing middle class (USD 4-13, PPP)	5.5	29.5
Middle class and above (USD 13+, PPP)	0.2	3.3
Wage employment	32.3	42.1
Vulnerable employment	66.1	56.4
Fiscal indicators		
General government revenue	13.4	18.0
ODA	0.5	0.1
Fiscal balance	-2.3	-1.7
Gross government debt	7.7	19.8
Monetary indicators		
Inflation	7.8	2.3
Broad money growth	27.0	17.7
Real interest rate	1.7	1.6
Financial indicators		
Domestic credit	97.7	136.0
External debt stock	16.2	11.3
Short-term debt	17.1	46.7
Exchange rate indicators		
Current account	1.7	4.8
Trade balance	2.1	4.3
International reserves	10.7	34.2
Development indicators		
Total investment	39.1	42.5
Secondary school enrolment	49.5	72.7
Electricity consumption	728.2	1856.6

How are China's macroeconomic outcomes related to these growth and employment successes? Its greatest achievements appear to be its substantial surpluses on its trade balance and current account balance. During the 2000s, both surpluses averaged 4-5% of GDP, significantly above the corresponding levels of about 2% of GDP during the 1990s. Not surprisingly, its holdings of international reserves in the 2000s were also well above average, at an astounding level of about 34% of GDP. These successes resulted essentially from the country's aggressive export-led strategy, which was able to provide widespread manufacturing employment. Such success was also tied to strict management of its exchange rate.

China has also been able to maintain relatively low levels of debt, both government debt and total external debt. Its government debt averaged only about 20% of GDP during the 2000s and its external debt averaged only about 11% of GNI. Both of these levels represented only marginal increases over the levels in the 1990s. Even if central government debt were augmented by provincial and local government debt, it would remain relatively moderate at around 45% of GDP (IMF 2013).

China's fiscal deficit during the 2000s remained relatively contained, at -1.7% of GDP—down from -2.3% during the 1990s. This level was achieved despite the apparent lack of central government revenue, which averaged only 18% of GDP during the 2000s. The

modest size of the central government's revenue base is misleading since this statistic does not take account of provincial levels of revenue.

Also, the recent actions of the central government in the aftermath of the Global Financial Crisis suggest that it wields considerable power over the deployment of lending by the domestic banking sector. This dimension sets China apart from most other developing and emerging economies.

One of the most remarkable features of China's economy is its extraordinarily high level of total investment. During the 2000s China's total investment as a ratio to GDP averaged over 42% (higher than even its 1990s' level of 39%). However, maintaining such a level of investment as a bulwark of growth is not likely to be sustainable over time. And the government has already stated its commitment to boosting domestic demand through significant increases in personal consumption.

One of the advantages of China's traditional emphasis on domestic investment (along with promoting external trade surpluses) is that it has not had to confront the problem of high levels of inflation. During the 2000s China's consumer price inflation averaged only about 2%. This level was much lower than that achieved during the 1990s, namely, about 8%. No doubt, subduing inflation has been due, in part, to the containment of sources of domestic demand, particularly consumer demand. The growth of China's broad money supply has also not been excessive, averaging about 18% during the 2000s. This has been slightly lower than the average for all emerging economies.

Meanwhile, however, China's real rate of interest has remained exceptionally low, at less than 2% during both the 1990s and 2000s. This kind of rate helped spur a potentially unhealthy rise in domestic credit through the country's banking system. Though such an increase could be justified, to some extent, as a means to counteract the fallout from the Global Financial Crisis after 2008, the average level of China's domestic credit as a ratio to GDP was quite high throughout the 2000s, at about 140%, or about 40 percentage points higher than in the 1990s. China's low real interest rate and its expansive domestic credit are worrying signs of potential instability in its financial sector.

Another worrying development has been the rise in the share of short-term debt in total external debt. By the 2000s this share averaged almost half, namely, about 47% of the total. Nevertheless, this development does not appear to pose a serious immediate problem since the country's total external debt, as already mentioned, remained only about 11% of GNI during the 2000s.

China has also been able to build up an impressive buffer against the potential of perverse capital outflows through its amassing of very substantial international reserves. During the 2000s these reserves averaged about 34% of GDP. This percentage represented about twice their relative size during the 1990s. In absolute terms, this stockpile in the 2000s

was one of the largest in the world, and was decisive in maintaining the value of the US Dollar, the world's reserve currency.

Hence, in macroeconomic terms, China has provided many valuable lessons for other developing and emerging economies. The central government has managed the economy in a number of fundamental ways. However, how it now makes the transition to an economy more decisively driven by domestic demand remains a paramount issue. Also, indicators such as those for the real rate of interest and the extent of domestic credit provided by its banking system suggest that its financial system has left itself vulnerable to potential instabilities. Such vulnerabilities are now common among many Emerging Economies.

Mexico

While the average growth rate of GDP for all developing and emerging economies during the past two decades increased between the 1990s and 2000s, Mexico's growth rate declined significantly, from 3.5% to only 2.2%. However, Mexico did register some gains in employment.

Wage and salary employment increased by 7 percentage points between the two decades to reach 65% of all employed. Vulnerable employment correspondingly declined, covering only 30% of all employed during the 2000s.

The share of the non-poor employed (earning more than $2 per day) in total employment also increased between these two decades, i.e., by about 7 percentage points. In the 1990s, this group had already represented about 87% of all employed. What is most remarkable, however, is that the share of the 'near-poor' employed (earning only between $2 and $4 per day) declined by over 4 percentage. Along with this decline, the share of those considered 'developing middle class' (earning $4-13) expanded by over 5 percentage point and the share of the 'established middle class and above' (earning more than $13) expanded by 6 percentage point.

Mexico modestly improved its fiscal position between the 1990s and 2000s. For example, its general government revenue rose from 19% of GDP during the 1990s to 21% in the 2000s on average. Over the same period, its average fiscal deficit improved from -3.1% of GDP to -2.5%. And its gross government debt declined from 46% of GDP to 42%. However, its general government revenue was still relatively low, especially compared to the average for all Emerging Economies of about 29%.

Unlike some other Latin American countries that suffered from hyperinflation during the 1990s, Mexico experienced only an average of about 20% consumer price inflation. And by the 2000s, it had substantially reduced this rate to only 5% on average. But Mexico's growth rate of broad money had also plummeted to less than 10%. These trends suggest that monetary policy was unusually tight during the 2000s.

But what is most striking in this latter decade is the unusually low average real interest rate, i.e., only about 1%. It is difficult to believe that financial institutions would be motivated to lend credit on the basis of such a low rate of return. This suspicion is confirmed by the lack of domestic credit provided by banks. As a ratio to GDP, such credit dropped from 41% during the 1990s and 37% during the 2000s. The average for all Emerging Economies during the latter decade was 56%.

Unlike some other Emerging Economies, Mexico had not run up a large external debt. In fact, its external debt, as a ratio of GNI, had fallen over the two decades from 40% to only 23%. In addition, the country did attract a large inflow of short-term capital. The share of short-term debt in its total external debt had declined over the two decades from a little over 20% to just below 14%.

Mexico was also able to improve its external position between the 1990s and 2000s. While its trade deficit remained between -1.6% of GDP and -1.7%, its current-account deficit dropped from -3.2% of GDP to -1.3%. At the same time, while Mexico managed to build up its stock of international reserves, which reached almost 9% during the 2000s, this percentage was well below the average for all Emerging Economies, namely, over 21%. However, if the country had not significantly exposed itself to the vagaries of short-term speculative capital and was not running sizeable current-account deficits, there was no need for a large stockpile of reserves.

MEXICO	1990s	2000s
GDP	3.5	2.2
Employment indicators		
All non-poor (USD 2-13+, PPP)	86.8	93.9
Near poor (USD 2-4, PPP)	21.1	16.8
Developing middle class (USD 4-13, PPP)	48.3	53.6
Middle class and above (USD 13+, PPP)	17.4	23.4
Wage employment	57.6	64.7
Vulnerable employment	37.7	30.7
Fiscal indicators		
General government revenue	19.2	21.1
ODA	0.1	0.0
Fiscal balance	-3.1	-2.5
Gross government debt	46.4	42.2
Monetary indicators		
Inflation	20.4	5.0
Broad money growth	34.5	9.3
Real interest rate	8.3	1.1
Financial indicators		
Domestic credit	41.0	37.0
External debt stock	40.0	23.0
Short-term debt	20.4	13.8
Exchange rate indicators		
Current account	-3.2	-1.3
Trade balance	-1.6	-1.7
International reserves	5.5	8.9
Development indicators		
Total investment	23.0	24.0
Secondary school enrolment	59.6	82.5
Electricity consumption	1375.7	1815.5

During the 2000s, Mexico's total investment, as a ratio to GDP, reached only 24%. This approximated the average for Emerging Economies. Based on such investment levels, Mexico has made some progress on investments in both social and economic infrastructure. Its secondary school enrolment ratio did increase significantly over the course of the two decades, from under 60% to 82.5%. And its average electricity consumption per capita did increase from almost 1400 kWh to over 1800. However, its electricity consumption during the 2000s remained well below the Emerging Economy average of almost 2500 kWh.

Thus, overall, Mexico only managed sub-par rates of economic growth during the 2000s. At the same time, many of the fiscal, monetary, financial and external-account outcomes did improve moderately between the 1990s and 2000s. However, its government revenue, or 'fiscal space', has remained restricted and its investment levels have not grown beyond average levels. Thus, while Mexico has positioned itself economically to avoid some of the common pitfalls of monetary and financial instability, it has not placed itself in a position that would generate dramatic increases in growth or employment.

Peru

Unlike Mexico, Peru has managed to accelerate its average rate of growth of GDP between the 1990s and 2000s. This average rate soared from only 3.2% to 5.6%. However, the indicators for wage employment and vulnerable employment show very little change in the structure of employment in the country. The share of wage employment declined only slightly over the course of the two decades while the share of vulnerable employment remained virtually the same.

The data for the employed based on absolute levels of labour incomes show a somewhat more positive picture. Overall, the share of the 'non-poor' employed (those earning more than $2 per day) rose by more than 10 percentage points, to about 80%. At the same time, the share of the 'near-poor' employed (earning only $2-4 per day) declined slightly, by 1 percentage point. This reduction implied that there was about a 7 percentage point increase in the 'developing middle class' (earning $4-13) and almost a 5 percentage point increase in the 'established middle class and above' (earning more than $13 per day).

Peru's fiscal position has provided a mixed picture. Its government revenue as a ratio to GDP was quite low during the 2000s, at only about 19%. For example, for all Emerging Economies the average was a little over 29% of GDP. However, Peru did manage during the 2000s to run, on average, almost a balanced budget (-0.1% of GDP). And its stock of government debt was only 35% of GDP.

Peru's monetary position was not a favourable one during the 2000s. Its rate of consumer price inflation was a mere 2.6%, an extraordinarily low rate for an Emerging Economy. Part of the explanation was the slow rate of growth in its broad money base, which grew

by less than 10% during the 2000s. Of course, Peru was forced to battle with hyperinflation during the 1990s, when its inflation rate averaged over 800%. But, in a sense, it appears that it has over-reacted by excessively tightening up monetary conditions during the 2000s.

Has the real rate of interest declined to a moderate level as a result of such monetary tightening? No, Peru's average real rate of interest during the 2000s was a little over 19%. Such a level is bound to restrict the expansion of domestic credit. And the statistics for the 2000s appear to bear out this concern. Domestic credit as a ratio to GDP was only about 19% of GDP during the 2000s. The average for all Emerging Economies for the same period was close to 56%.

PERU	1990s	2000s
GDP	3.2	5.6
Employment indicators		
All non-poor (USD 2-13+, PPP)	69.2	80.1
Near poor (USD 2-4, PPP)	25.4	24.4
Developing middle class (USD 4-13, PPP)	35.0	42.3
Middle class and above (USD 13+, PPP)	8.7	13.4
Wage employment	36.7	35.4
Vulnerable employment	58.3	58.9
Fiscal indicators		
General government revenue	n/a	19.1
ODA	1.1	0.5
Fiscal balance	n/a	-0.1
Gross government debt	n/a	35.0
Monetary indicators		
Inflation	807.9	2.6
Broad money growth	694.2	9.6
Real interest rate	28.1	19.2
Financial indicators		
Domestic credit	16.6	19.2
External debt stock	61.5	39.5
Short-term debt	22.7	12.1
Exchange rate indicators		
Current account	-5.7	-1.0
Trade balance	-3.4	2.4
International reserves	13.3	20.5
Development indicators		
Total investment	20.9	21.1
Secondary school enrolment	71.8	88.2
Electricity consumption	571.0	867.8

As the same time, Peru has succeeded in substantially reducing its external debt stock. While such debt represented over 61% of GDP during the 1990s, it had fallen to a little under 40% by the 2000s. In addition, Peru had reduced its exposure to the instability of portfolio investment. Short-term debt as a share of total external debt fell from an average of almost 23% during the 1990s to an average of only a little over 12% during the 2000s.

Peru has also improved its external accounts. Between the 1990s and 2000s, it was able to reduce an average trade deficit of -3.4% of GDP into an average trade *surplus* of 2.4%.

Meanwhile, its current account deficit shrank from a sizeable -5.7% of GDP to only -1%, which is a manageable level. In addition, Peru was able to build up its stock of international reserves, from a little over 13% of GDP to 20.5%, which was about average for Emerging Economies.

Peru's record on investment was not exemplary during the 1990s and 2000s. Total investment as a ratio to GDP stayed pretty much constant at about 21% of GDP between the two decades. This represented a relatively low level for an Emerging Economy since the average during the 2000s for this group was about 25%.

This general lack of investment has been reflected mostly in the modest improvement in average electricity consumption per capita. This indicator rose from about 570 kWh to only a little less than 870 kWh. This latter level stands in stark contrast to the much higher average level for all Emerging Economies, namely, almost 2500 kWh. However, Peru did make progress on increasing the secondary school enrolment ratio. This ratio rose from about 72% of the relevant population group to over 88%.

In many ways, Peru has been a relatively successful country, at least in terms of raising its economic growth and making some progress on expanding quality employment. Also, many of its macroeconomic indicators suggest that it made significant progress between the 1990s and 2000s.

However, it still confronts some strategic weaknesses, such as a relatively low level of government revenue and a below-average level of total investment. Moreover, its real rate of interest has remained too high and its domestic credit too scarce. Such weaknesses in its financial conditions (which are common among many other developing and emerging countries) are likely to impair its ability to maintain relatively high levels of economic growth and carry out meaningful structural change in its employment conditions.

Thailand

Between the 1990s and 2000s, Thailand experienced a slowdown in its GDP from 5.3% to 4%, on average. However, having already achieved a relatively high level of income per capita as an established Emerging Economy, Thailand is likely to face development challenges that differ significantly from those confronting LMIs or LDCs.

Thailand did manage to increase wage employment by 7.5 percentage points between the 1990s and 2000s and, correspondingly, reduce vulnerable employment by 8 percentage points.

Also, Thailand succeeded in expanding the share of its non-poor employed by over 10 percentage points between the 1990s and 2000s. At the same time, it reduced the size of its 'near-poor' employed by 4.4 percentage points. This signifies that it increased, in fact, the share of the employed earning more than $4 per day (i.e., the 'developing middle class') by more than 11 percentage points. Thus, these indicators suggest that Thailand

did succeed in carrying out some meaningful structural change in its employment conditions.

Since the 1990s, Thailand has improved some of its core fiscal indicators. For example, its general government revenue edged up from 19% of GDP to 21% between the 1990s and 2000s. But this revenue level was still well below the average for all Emerging Economies, which was over 29% during the 2000s.

Between the 1990s and 2000s, Thailand also managed to rein in its fiscal deficit, from -2.2% of GDP on average to -0.6%. But during the same period its gross government debt edged up from 40.5% of GDP to 47.1% (the latter being about average for an Emerging Economy).

The inflation rate, broad money growth and the real interest rate were all roughly halved between the 1990s and 2000s. Already at a relatively low level of 5% during the 1990s, consumer price inflation dropped further to only 2.6% during the 2000s. Simultaneously, broad money growth slowed down from 15.2% to 8% and the real interest rates fell from around 8% to below 4%. These trends suggest that monetary policies were substantially tightened, perhaps too dramatically.

THAILAND	1990s	2000s
GDP	5.3	4.0
Employment indicators		
All non-poor (USD 2-13+, PPP)	81.6	92.3
Near poor (USD 2-4, PPP)	37.2	32.8
Developing middle class (USD 4-13, PPP)	37.8	49.1
Middle class and above (USD 13+, PPP)	6.5	10.4
Wage employment	35.2	42.7
Vulnerable employment	62.4	54.4
Fiscal indicators		
General government revenue	19.2	21.1
ODA	0.6	0.0
Fiscal balance	-2.2	-0.6
Gross government debt	40.5	47.1
Monetary indicators		
Inflation	5.0	2.6
Broad money growth	15.2	8.0
Real interest rate	8.1	3.6
Financial indicators		
Domestic credit	133.8	131.6
External debt stock	57.6	34.0
Short-term debt	35.9	35.0
Exchange rate indicators		
Current account	-2.7	3.2
Trade balance	-1.5	4.8
International reserves	20.6	35.9
Development indicators		
Total investment	36.3	26.0
Secondary school enrolment	43.6	71.7
Electricity consumption	1134.8	1882.8

However, the marked reduction in the real interest rate had little effect on expanding domestic credit. Such credit remained above the very high level of 130% of GDP during the 2000s. This level was well beyond the average even for Emerging Economies (namely, about 56%). Such an abundance of domestic credit should be a matter of serious concern since it indicates that Thailand confronts the danger of financial instability.

However, Thailand did manage to substantially reduce its external debt between the 1990s and 2000s, from the relatively high level of about 58% of GNI to only 34%. At the same time, though, there was little change in the share of short-term debt in Thailand's total external debt. This share remained at roughly 35%, which represents a very high level, even for an Emerging Economy.

Thailand did exceedingly well in improving its trade and current-account balances between the 1990s and 2000s. For example, its trade account improved from an average deficit of -1.5% of GDP to an average trade surplus of +4.8% of GDP. In a similar fashion, Thailand's current account improved from a deficit of -2.7% of GDP to a surplus of +3.2% of GDP.

As a result, although Thailand's stock of international reserves was already large during the 1990s, at over 20% of GDP, it ballooned to about 36% during the 2000s. Such a large stock of reserves provides Thailand with considerable leverage in protecting the value of its exchange rate, whether from trade or financial shocks.

No doubt one key reason that Thailand's rate of growth of GDP slowed down between the 1990s and the 2000s is that its total investment declined significantly, from over 36% of GDP to only 26%. However, Thailand's investment rate during the 2000s was still above-average for Emerging Economies though it now lagged well behind the investment levels of such dynamic economies as China.

As a result of investment in social infrastructure, Thailand's secondary school enrolment ratio rose between the 1990s and the 2000s, from about 44% to 72% of the relevant age population. Average electricity consumption per capita also improved, rising from an average of 1130 kWh during the 1990s to 1880 kWh during the 2000s.

However, the average attainments during the 2000s for both secondary school enrolment and electricity consumption were still well below the average for all Emerging Economies (which were about 87% and almost 2500 kWh, respectively). Hence, it appears that more intensified investment in both social and economic infrastructure is justified.

Thus, Thailand's economy has been performing relatively well across various dimensions between the 1990s and 2000s. And employment gains have followed suit. On the

macroeconomic front, Thailand did manage to reduce its fiscal deficits, reduce its money supply growth and inflation rates, improve its trade and current-account balances and lower its external debt.

However, Thailand's very ample supply of domestic credit is definitely a potential source of financial instability as is the share of its short-term debt (such as unstable portfolio investment) in its total external debt. At the same time, though, Thailand has built up an impressive 'fortress' of international reserves, which it could utilize to stem any attack on the value of its exchange rate.

Unfortunately, the government of Thailand does not command the kind of fiscal resources that are normally available to other governments of Emerging Economies and the country has allowed its relatively high level of total investment to drop dramatically over the course of roughly the last two decades even though its investments in social and economic infrastructure still lag significantly behind the levels in many other Emerging Economies.

Tunisia

Like Turkey, Tunisia is another Mediterranean Emerging Economy that has achieved only a modest degree of economic success during the 2000s. During this period its GDP grew at 3.9%. This represented a decline from its 5% average growth during the 1990s.

There were also only moderate changes in the structure of its employment. Wage and salary employment already averaged over 67% of all employment during the 1990s and it expanded by only about 4 percentage points during the 2000s. Vulnerable employment, which was already relatively low in the 1990s, representing about 30% of the total at that time, also declined by only about 4 percentage points during the 2000s.

The employed did benefit from moderate gains in labour incomes. The share of the employed who were 'non-poor' increased by only about 8 percentage points between the 1990s and the 2000s. But this effect was due to a much larger 12 percentage-point increase in the employed that had become part of its 'developing middle class' (earning $4-13 per day) combined with a decline of over 5 percentage points in the 'near poor' (earning only $2-4 per day). Overall, these gains appear to be consistent with Tunisia's moderate record of economic growth over both the 1990s and the 2000s.

TUNISIA	1990s	2000s
GDP	5.0	3.9
Employment indicators		
All non-poor (USD 2-13+, PPP)	85.1	93.1
Near poor (USD 2-4, PPP)	31.9	26.5
Developing middle class (USD 4-13, PPP)	47.7	60.4
Middle class and above (USD 13+, PPP)	5.5	6.2
Wage employment	67.3	71.2
Vulnerable employment	30.0	25.7
Fiscal indicators		
General government revenue	27.3	28.1
ODA	1.5	1.2
Fiscal balance	-2.7	-2.1
Gross government debt	66.4	53.2
Monetary indicators		
Inflation	4.9	3.3
Broad money growth	9.7	10.8
Real interest rate	n/a	n/a
Financial indicators		
Domestic credit	66.2	67.7
External debt stock	60.4	58.2
Short-term debt	10.9	19.4
Exchange rate indicators		
Current account	-4.2	-3.4
Trade balance	-4.3	-3.2
International reserves	8.0	15.6
Development indicators		
Total investment	26.0	24.4
Secondary school enrolment	56.3	85.3
Electricity consumption	765.5	1124.1

What were the macroeconomic factors behind these trends? Tunisia's total investment as a ratio to GDP did average about 24% during the 2000s. This level was down slightly from its record during the 1990s (i.e., 26%). Still, compared to the record of other Emerging Economies, Tunisia's general level of investment could not be considered below-average.

Tunisia was not generating much growth through its external accounts. During the 2000s its trade account averaged a deficit of about -3% of GDP and its current-account a deficit of a roughly similar magnitude. These levels were down a bit from the average of about -4% during the 1990s. But Tunisia had not managed to substantially boost its holding of international reserves. On average, its reserves were 15.6% of GDP during the 2000s, significantly lower than the overall average for all Emerging Economies (i.e., about 21%).

Tunisia's record on its fiscal accounts was better than its external accounts during the 2000s. For an Emerging Economy, its revenues as a ratio to GDP were quite low, at only about 28% of GDP (roughly in line with the average of about 29% for all EEs). Tunisia ran, on average, a fiscal deficit of about -2% of GDP during the 2000s (down from about -2.7% during the 1990s).

The level during the 2000s could be considered a manageable level of fiscal deficits. But the government still had to deploy a significant portion of its financing for servicing a debt that represented about 53% of GDP. However, it had already succeeded in reducing this debt from its onerous level of 66% of GDP during the 1990s.

The *external* debt burden of Tunisia during the 2000s was also still relatively high, at 58% of GNI, and was down only slightly from its level of 60% during the 1990s. The share of short-term debt in Tunisia's external debt was about 19%. Though this level was about average for EEs, it still represented a significant rise from the country's average level of only about 11% during the 1990s.

Domestic credit appeared to be plentiful in Tunisia during the 2000s. It stood at about 69% of GDP, which represented an above-average level. This level could not be considered excessive. At the same time, consumer price inflation was very low during the 2000s, at about 3%. And this rate was down from a 5% inflation rate during the 1990s. This trend raises a concern about whether monetary policy was being tightened excessively. Certainly, the rate of growth of broad money, which averaged only about 11% during the 2000s, was well below the average of about 19% for all Emerging Economies.

It appeared that, in general, Tunisia was doing moderately well during the 2000s. However, both its external debt and its government debt appeared to be major drags on its economic prospects. Partly as a result, its economic growth achieved only a modest rate, i.e., less than 4%, during the 2000s. This might have also been due to excessively tight monetary policies, which appeared to be geared to subduing inflation along with a generally weak fiscal position that was constrained by the lack of revenue.

Turkey

Turkey is an interesting Emerging Economy to examine since it has maintained fairly moderate rates of economic growth during the 1990s and 2000s. Its GDP growth rate in the 1990s was 4% and in the 2000s 4.6%. Associated with these rates of growth were significant changes in the structure of employment. For example, between the 1990s and the 2000s, vulnerable employment declined by 14.6 percentage points while wage and salary employment rose by 15.3 percentage points.

As an Emerging Economy, the most important barometer of the structural change that has been associated with rising labour incomes would be the combined share of the 'developing middle-class' and the 'established middle class'. During the 1990s, this combined share already represented about two-thirds of all of the employed. And it rose in Turkey by almost 9 percentage points by the 2000s—while the share of the 'near poor' declined by almost 7 percentage points.

TURKEY	1990s	2000s
GDP	4.0	4.6
Employment indicators		
All non-poor (USD 2-13+, PPP)	93.1	95.2
Near poor (USD 2-4, PPP)	26.7	19.9
Developing middle class (USD 4-13, PPP)	53.5	59.1
Middle class and above (USD 13+, PPP)	12.9	16.2
Wage employment	39.7	55.0
Vulnerable employment	54.3	39.7
Fiscal indicators		
General government revenue	n/a	31.9
ODA	0.3	0.1
Fiscal balance	n/a	-4.0
Gross government debt	n/a	53.1
Monetary indicators		
Inflation	77.2	20.6
Broad money growth	93.3	28.2
Real interest rate	n/a	n/a
Financial indicators		
Domestic credit	27.9	51.5
External debt stock	40.7	44.4
Short-term debt	21.3	19.7
Exchange rate indicators		
Current account	-0.9	-4.1
Trade balance	-1.1	-3.2
International reserves	6.4	10.5
Development indicators		
Total investment	23.5	19.5
Secondary school enrolment	57.1	83.1
Electricity consumption	1226.7	2036.8

Turkey was not in an exceptionally strong position in macroeconomic terms in the 2000s. Its government did command some revenues: they represented about 32% of GDP (about the same level as in the 1990s). However, this level in the 2000s was about average for all countries in our sample. In addition, its average fiscal deficit was -4% of GDP, over twice the average size for all Emerging Economies. Not surprisingly, the debt burden of its government was also above-average, i.e., about 53% of GDP.

Its external debt stock was more manageable. It averaged about 44% of GNI during the 2000s. This level was only slightly above its own average level during the 1990s. But it was below the average for all EEs. The extent of Turkey's domestic credit was about average: 53% of GDP. This represented a doubling of its credit levels from the 1990s. Turkey's short-term debt during the 2000s (about 20% of its total external debt) was also about average. Hence, Turkey's financial conditions were not unstable.

However, monetary conditions in Turkey were not enviable. Consumer price inflation still averaged over 20% during the 2000s, driven, in part, by an average 28% growth in its broad money. Nevertheless, these levels were well below the perilous conditions that the country had faced in the 1990s, when inflation was averaging 77% based on broad money growth of close to 100%.

During the 2000s, Turkey's trade account and current account were both in deficit (about -3% and about -4% on average, respectively). These represented manageable levels compared to conditions in many other developing and emerging economies. However, the sizes of these deficits were significantly larger than they were in the 1990s. And Turkey had not built up a substantial stock of international reserves in order to protect it against unstable international capital flows. During the 2000s its international reserves averaged only about 10% of GDP, about half the average size of reserves for all Emerging Economies.

Unlike some other fairly successful Emerging Economies (China in particular), Turkey has not succeeded in implementing an investment-led development strategy. Its total investment as a ratio to GDP averaged only about 20% during the 2000s while the average for all EEs was about 25%. Of particular concern is that Turkey's level of investment during the 2000s actually declined from its level in the 1990s, when it was 23.5%.

Hence, in general terms, while Turkey has made significant progress since the 1990s, especially in quelling high levels of inflation, its monetary conditions remain problematic and its external accounts remain weak. In addition, its level of investment has remained sub-par and its fiscal position remains vulnerable.

B. Lower-Middle Income Countries

General Summary

This research has conducted five case studies of Lower-Middle Income countries. These countries include Indonesia and Vietnam (South Asia), Uzbekistan (Central Asia), Egypt (North Africa) and Ghana (sub-Saharan Africa). All of these economies grew during the 2000s at rates of economic growth that exceeded the average for LMIs. For example, Uzbekistan and Vietnam grew at 7%, Ghana at 6% and Indonesia and Egypt at about 5%.

Vietnam appeared to be the most successful in improving the quality of its employment, at least in terms of the aggregate effects. Between the 1990s and 2000s, the share of its total employed that earned incomes higher than $2 per day (the threshold for moderate poverty) increased by about 30 percentage points (from a relatively small initial base of about 15%). While about one-third of these employed began earning incomes between $4 and $13 per day, the other two-thirds moved from conditions of moderate or extreme poverty into a 'near-poor' economic status (namely, earning $2 to $4 per day). Thus, the latter group remained vulnerable to falling back into poverty.

Both Ghana and Indonesia also registered some successes in moving the employed out of poverty conditions between the 1990s and 2000s. The share of the employed earning non-poor incomes increased in both countries by about 20 percentage points. But in the case of Ghana, about 60% of these newly 'non-poor' employed began earning incomes of $4

per day or more. Namely, they entered the status of 'developing middle class' or above (though recent recalculation of Ghana's income per capita in PPP terms might be part of the explanation). In contrast, in Indonesia, only about one third of the employed who achieved the status of non-poor employed between the 1990s and 2000s began earning such a level of income. This implies that about 69% of them remained 'near-poor'.

It seems appropriate that as countries become Lower-Middle Income and move up within this category, they should be judged primarily by their success in moving the employed out of *both* poverty and 'near-poverty'.

The average revenue, as a ratio to GDP, of all Lower-Middle Income countries was 25% during the 2000s. By this standard, two of our five case study countries had below-average government revenue: Ghana and Indonesia. Another two, Egypt and Vietnam, had roughly average revenue. But, in stark contrast, Uzbekistan, a sizeable transition economy, had average revenue that exceeded 35% of GDP. In other words, it had potentially much greater ability to finance public investment in economic development.

While Uzbekistan consistently ran an average fiscal surplus during the 2000s (i.e., representing 2.8% of GDP), Egypt and Ghana just as consistently ran sizeable average fiscal deficits (of -8.7% and -5.1% of GDP, respectively). More worrisome, Ghana was receiving, on average, Official Development Assistance that represented 9% of its GNI during the 2000s. Vietnam also ran an average fiscal deficit of -2.3% of GDP despite the fact it was receiving ODA equivalent to 3.8% of its GNI.

Uzbekistan, Vietnam and Indonesia maintained manageable levels of government debt (i.e., at least less than 50% of GDP). Uzbekistan was notable for shouldering average debt of only about 28% of GDP. But Ghana averaged government debt of about 60% of GDP and Egypt of about 86%. Hence, with the exception of Uzbekistan, none of our five case study countries were in a particularly strong fiscal position during the 2000s.

Inflation was not a daunting problem during the 2000s for Egypt, Indonesia and Vietnam: their average consumer price inflation was under 8%. But Uzbekistan was averaging inflation of about 15% and Ghana of about 17% during the 2000s. The average growth of broad money was particularly high in Ghana, at about 35%. So, monetary policies appeared to be particularly problematic in Ghana, and potentially challenging in Uzbekistan.

Expanding domestic credit in order to finance productive investment should be a priority for Lower-Middle Income countries. Hence, a dysfunctional financial sector would represent a major barrier to development. This appears to be the case in Ghana, where domestic credit represented, on average, only about 30% of GDP during the 2000s. In stark contrast, expansion of domestic credit appeared to be excessive in Egypt and Vietnam, where it exceeded 80% of GDP during the 2000s.

The external debt stock of these five Lower-Middle Income countries only exceeded 60% of GNI in Ghana. And Ghana also suffered from a relatively high share of short-term debt in its total external stock, namely, almost 17% (compared to the LMI average of about 12%). No doubt there has been some degree of recent speculation on Ghana's exchange rate as the country has emerged as a significant exporter of oil.

Lower-Middle Income countries place themselves in a precarious economic position if they continually register trade and current-account deficits. But both Indonesia and Uzbekistan consistently ran both trade and current-account surpluses during the 2000s. However, both Ghana and Vietnam consistently ran both trade and current-account deficits. Ghana's performance was especially troubling since its average trade deficit was over -13% of GDP and its average current-account deficit over -6%. While Egypt continually ran trade deficits during the 2000s, its current account registered, on average, a small surplus, helped by inflows of personal remittances from abroad averaging 4.5% of GDP.

Unlike some of the seven Emerging Economies analyzed above, none of the five LMIs were able to amass sizeable stockpiles of international reserves. Thus, they were not in a strong position to manage their exchange rates. Based on available data, Vietnam was able to build up the largest stockpile of reserves, which represented, on average, about 17% of GDP during the 2000s. But this was roughly only the overall average for all Lower-Middle Income countries.

During the 2000s there were not large gaps in total investment as a ratio to GDP across Emerging Economies, Lower-Middle Income Countries and Least Developed Countries. The average for LMIs was about 23% (while it was under 25% for EEs and almost 22% for LDCs). While in Uzbekistan total investment approximated this average, investment levels for both Indonesia and Vietnam exceeded it. Vietnam's investment level was especially high, averaging almost 36% of GDP during the 2000s. In this respect, Vietnam's performance was similar to that of the People's Republic of China.

However, the levels of social and economic infrastructure achieved during the 2000s were only noteworthy in Egypt and Uzbekistan. In both cases, the levels of secondary school enrolment and average kilowatt hours of electricity per capita both significantly exceeded the LMI averages. In contrast, these levels remained particularly low in Ghana. While Egypt and Uzbekistan no doubt benefited from past investments in social and economic infrastructure, Ghana, which only recently became an LMI, did not benefit from such a history.

Though all five case study countries were relatively successful examples during the 2000s of economic development, i.e., economic growth and employment generation, Uzbekistan stands out as the most consistently successful (especially in view of its difficult transition to a more market-based economy in the 1990s). Indonesia and Vietnam have also been relatively successful. But Egypt appears to be languishing and

Ghana continues to display many of the economic characteristics of a Least Developed Country.

Egypt

Egypt is a Lower Middle Income country that was able to maintain moderate rates of GDP growth during the 1990s and 2000s. During the 1990s its growth was 4.1% and during the 2000s it picked up to 4.7%. However, there appears to have been little improvement in employment outcomes. Between the 1990s and 2000s, wage employment increased by less than 2 percentage points from a level of about 58% of all employment. There was a parallel decline in vulnerable employment of about -1.7 percentage points from its average level during the 1990s of over 26% of all employment.

The record on labour incomes was only slightly better. From a base that was already fairly high, at 80% of all employment, there was about a 6 percentage point increase in all of the employed who were 'non-poor'. Most of this increase was among the employed who had become 'developing middle-class' (earning $4-$13 per day). In fact, there was a slight decline in the share of the 'established middle-class', namely, those with labour incomes above the US poverty threshold of $13 per capita.

Why have Egypt's growth and employment records been relatively unimpressive? Its government has had a slightly sub-par level of revenue, i.e., an average of about 26% of GDP during the 2000s. Yet the government continued to run hefty fiscal deficits, averaging almost -9% of GDP during the 2000s. And its general government debt had ballooned to about 86% of GDP. These represented major macroeconomic problems.

EGYPT	1990s	2000s
GDP	4.1	4.7
Employment indicators		
All non-poor (USD 2-13+, PPP)	80.0	86.2
Near poor (USD 2-4, PPP)	50.4	53.3
Developing middle class (USD 4-13, PPP)	26.1	31.5
Middle class and above (USD 13+, PPP)	3.4	1.4
Wage employment	57.8	59.6
Vulnerable employment	26.3	24.6
Fiscal indicators		
General government revenue	n/a	26.1
ODA	6.2	1.0
Fiscal balance	n/a	-8.7
Gross government debt	n/a	86.1
Monetary indicators		
Inflation	10.9	7.8
Broad money growth	14.0	13.3
Real interest rate	6.0	4.1
Financial indicators		
Domestic credit	82.0	88.9
External debt stock	58.2	27.0
Short-term debt	9.5	7.7
Exchange rate indicators		
Current account	1.0	0.6
Trade balance	-7.3	-4.5
International reserves	21.6	17.1
Development indicators		
Total investment	20.9	19.0
Secondary school enrolment	70.2	80.6
Electricity consumption	787.0	1337.8

Its external debt position was, however, much better: its debt was only 27% of GNI on average during the 2000s. This level represented a drop from an average of about 58% of GNI during the 1990s. And its share of short-term debt in this total during the 2000s was only about 8%.

However, domestic credit generation appeared to be particularly high. During the 2000s domestic credit represented 88% of GDP, slightly higher than the level during the 1990s. The average level of credit for all LMIs during the 2000s was less than half this percentage. Yet despite such plentiful credit, Egypt had a woeful record on total investment: it represented only 19% of GDP, below even the average level for LDCs. Hence, credit generation did not appear to be translated into increases in investment. This condition represented a potential source of financial instability.

Despite sub-par levels of investment, Egypt still boasted, paradoxically, above-average levels of achievement for a LMI in secondary school enrolment and in average energy consumption per capita. In fact, these levels had increased significantly between the 1990s and 2000s. During the 1990s, Egypt total investment had averaged a slightly higher level of about 21% of GDP.

Despite the ready availability of domestic credit, Egypt did not suffer from inordinately high inflation rates during the 2000s. Its consumer price inflation averaged less than 8% (which was below its average level of about 11% during the 1990s). Its growth of broad money during the 2000s was only about 13%, well below the average of all emerging and developing economies. Correspondingly, its average real rate of interest was only about 4%. This rate was significantly below the worryingly high average of about 14% for all LMIs.

Egypt's international position has also not appeared to be problematic. It is true that its trade deficits averaged -4.5% of GDP during the 2000s (though this level was down from about -7% during the 1990s). But its average current-account balance was slightly positive during both the 1990s and 2000s. And its international reserves, which were about 17% of GDP during the 2000s, were about average.

Like Tunisia, Egypt had achieved moderate levels of progress in terms of economic growth and employment generation. And its general economic conditions did not appear to be unstable or precarious during the 2000s. However, its fiscal condition was particularly weak since its government ran sizeable fiscal deficits and shouldered a relatively high debt burden. And the provision of domestic credit by its banking system did not appear to be channelled into financing productive investment, which languished at below-average levels for a Lower-Middle Income country.

Ghana

Ghana was successful in accelerating its GDP growth between the 1990s and the 2000s. And in 2010 it became a Lower-Middle Income Country (partly due, however, to a recalculation of its GDP). While its GDP grew by an average of 4.4% during the 1990s, this rate jumped to 6.4% during the 2000s.

In recent years, growth has accelerated because of the export of oil discovered off Ghana's coast. Thus, even in the aftermath of the Global Financial Crisis, namely, during 2008-2013, Ghana's average growth rate reached the high level of 8.1%.

As a result of such growth, wage employment in Ghana rose from an average of about 16% of total employment in the 1990s to almost 22% during the 2000s. In similar fashion, vulnerable employment shrank from a 1990s average of 81.4% to a 2000s average of 73.5%.

Also, the share of the non-poor employed in total employment rose substantially between the 1990s and 2000s, from 32.6% to 53.5%, or by more than 20 percentage points. The 'near-poor' employed (earning only $2-4 per day) increased by 8.8 percentage points, accounting for about 33% of the total increase in the 'non-poor' employed.

But, most importantly, the 'developing middle class' (earning $4-13 per day), increased even more, i.e., by 11.3 percentage points, accounting for about 57% of the total increase in the 'non-poor' employed.

GHANA	1990s	2000s
GDP	4.4	6.4
Employment indicators		
All non-poor (USD 2-13+, PPP)	32.6	53.5
Near poor (USD 2-4, PPP)	24.4	33.2
Developing middle class (USD 4-13, PPP)	8.0	19.3
Middle class and above (USD 13+, PPP)	0.1	1.0
Wage employment	15.9	21.8
Vulnerable employment	81.4	73.5
Fiscal indicators		
General government revenue	10.5	16.6
ODA	9.9	9.0
Fiscal balance	-7.5	-5.1
Gross government debt	63.7	59.7
Monetary indicators		
Inflation	27.5	16.9
Broad money growth	36.0	35.5
Real interest rate	n/a	n/a
Financial indicators		
Domestic credit	21.4	29.6
External debt stock	79.9	65.8
Short-term debt	10.6	16.8
Exchange rate indicators		
Current account	-5.4	-6.3
Trade balance	-7.5	-13.5
International reserves	7.8	11.6
Development indicators		
Total investment	19.9	22.3
Secondary school enrolment	37.1	48.2
Electricity consumption	344.9	281.2

On the back of increased growth rates, government revenue in Ghana increased from a meagre average of only 10.5% of GDP during the 1990s to almost 17% during the 2000s. But Ghana's government was still running an average fiscal deficit of about -5% of GDP during the 2000s.

Ghana's revenue level was reaching 20% of GDP during 2012, but this was below the average of about 25% for all Lower-Middle Income countries. And Ghana was still receiving Official Development Assistance that averaged 9% of GNI during the 2000s. Thankfully, this average dropped to 5.2% of GNI during 2008-2013.

Ghana did manage to marginally reduce its gross government debt between the 1990s and 2000s. This form of debt, expressed as a ratio to GDP, fell from about 64% of GDP to only about 60% for the 2000s and to about 40% for 2008-2013.

Ghana did make some progress in reducing inflation between the 1990s and 2000s. Consumer price inflation dropped, for example, from 27.5% to just below 17%. However, the growth of the money supply remained pretty much unchanged, at about 36%. So, external factors, such as the price of key imports, must have played a key role in lowering the price level.

Unfortunately, information on the real interest rate in Ghana is unavailable but domestic credit provided by the banking system did increase to some degree between the 1990s and 2000s, i.e., from 21.4% of GDP to 29.6%. But the resultant level for the 2000s was still well below the average of about 40% for all LMIs.

Ghana benefitted substantially from a reduction of its external debt burden. During the 1990s, this external debt, as a ratio to GNI, was about 80% on average, which was a relatively onerous level. During the 2000s, this debt declined to an average of about 66%.

Moreover, during 2008-2013 Ghana's average external debt declined further, to below 30% of GNI. This reduction resulted from the HIPC debt-relief initiative, which Ghana had joined in 2001.

However, there was an ominous rise in the share of short-term debt in Ghana's total external debt. This increase was from 10.6% during the 1990s to almost 17% in the 2000s. And by 2008-2013, short-term debt exceeded, on average, 20% of all external debt. This is an unfortunate trend, which policymakers in Ghana should strive to contain in order to address the danger of capital outflows.

While Ghana benefitted significantly in the past from the export of gold, oil production started off its coast in 2010. As a result, since 2011 oil has contributed about 20% of the country's export revenue (IMF Article IV, 2013).

Despite this apparent windfall, both Ghana's trade balance and its current-account balance deteriorated during the 2000s. The country's trade deficit almost doubled between the 1990s and 2000s, namely, from -7.5% of GDP to -13.5%. Its current account also widened during the same period from -5.4% of GDP to -6.3%.

The one notable countertendency was the rise in Ghana's stock of international reserves, from about 8% of GDP during the 1990s to close to 12% of GDP during the 2000s. Since this stock is quite low even by LMI standards, policymakers should prioritize expanding this form of protection against exchange-rate instability, especially because of the probable appreciation of Ghana's exchange rate.

Total investment, as a ratio to GDP, did increase in Ghana between the 1990s and 2000s. But this increase was relatively modest, from just under 20% to 22.3%. However, the average for all LMIs was only 23% of GDP during the 2000s.

Ghana did make some progress in raising its secondary school enrolment ratio, i.e., from 37% of the relevant age group to 48%. But the LMI average for the 2000s was much higher, at 69%.

Regrettably, available statistics suggest that the average electricity consumption per capita in Ghana actually declined between the 1990s and 2000s. But even if there had been no such decline, the average electricity consumption in Ghana would have still been only about one-third of the average for all Lower-Middle Income Countries (about 940

kWh). Hence, Ghana still has to make significant progress in expanding its investment in social and economic infrastructure.

There are many positive signs of progress in Ghana. It has grown fairly rapidly, especially during the 2000s, and has recently become a Lower-Middle Income country. Also, it can enjoy the potential benefits of being a significant exporter of oil. On the back of economic growth, Ghana has also made some significant progress in expanding the share of the employed that are non-poor, especially those considered 'developing middle class'.

But its government still runs substantial fiscal deficits and faces a dauntingly high debt burden. Despite any recent windfalls from oil, Ghana's government still needs to augment its revenue base, as well as contribute to an overall increase in total investment in the country, especially in both social and economic infrastructure.

Ghana definitely benefitted from substantial debt relief during the 2000s but it still relies heavily on short-term debt. And it continues to run substantial trade and current-account deficits. Hopefully, increased oil revenues in the future will help allay these problems. But there is still much work to be done in the midterm in strengthening the fiscal stance of the government and improving the country's external trade and current-account position.

Indonesia

Despite suffering the disruption from Asia's Financial Crisis in 1997-98, Indonesia has been able to sustain credible rates of economic growth over roughly the past 20 years. In fact, its growth of GDP accelerated from 4.5% during the 1990s to 5.3% during the 2000s.

As a consequence, it has managed to double the share of the employed that are 'non-poor' (earn more than $2 per day), from 20% to 40%. However, only about 6 percentage points of this 20 percentage-point gain represented the employed who had reached labour incomes of $4-13 per day. In addition, those employed that had earned more than $13 per day still represented less than 1% of all employed. Hence, almost 70% of all of the employed who had left poverty were still 'near-poor' during the 2000s (earning only $2-4 per day).

Despite gains in economic growth, general government revenue has remained fairly modest in Indonesia. By the 2000s, it had risen to only 18.4% of GDP (though some government revenue is generated at the regional level).

Despite low revenue, the government has managed to maintain fairly small fiscal deficits. During the 2000s, for example, they averaged -1% of GDP. In addition, Indonesia's debt level during the 2000s was only 45% of GDP on average, and declined further to a 30% average during 2008-2013.

The government has also managed to reduce consumer price inflation, from an average of 14.6% in the 1990s to 7.9% in the 2000s. Concurrently, broad money growth halved from almost 28% to less than 14% annually. These trends facilitated, no doubt, the decline in the real interest rate, which fell from 8% during the 1990s to below 4% during the 2000s.

Concomitantly with the fall in the real interest rate, domestic credit provided by banks declined moderately, from over 52% of GDP during the 1990s to about 45%. But the resultant level of domestic credit during the 2000s was about average for a Lower-Middle Income country.

INDONESIA	1990s	2000s
GDP	4.5	5.3
Employment indicators		
All non-poor (USD 2-13+, PPP)	19.9	41.8
Near poor (USD 2-4, PPP)	15.3	30.9
Developing middle class (USD 4-13, PPP)	4.2	10.1
Middle class and above (USD 13+, PPP)	0.4	0.8
Wage employment	33.8	33.0
Vulnerable employment	62.9	64.0
Fiscal indicators		
General government revenue	16.2	18.4
ODA	1.2	0.5
Fiscal balance	-0.5	-1.0
Gross government debt	n/a	49.4
Monetary indicators		
Inflation	14.6	7.9
Broad money growth	27.7	13.4
Real interest rate	7.9	3.7
Financial indicators		
Domestic credit	52.5	45.3
External debt stock	80.1	52.1
Short-term debt	18.9	13.8
Exchange rate indicators		
Current account	-1.2	2.2
Trade balance	2.3	4.8
International reserves	10.1	13.5
Development indicators		
Total investment	27.6	26.3
Secondary school enrolment	46.3	65.4
Electricity consumption	260.5	502.6

Indonesia was also able to improve its external debt burden. While its stock of external debt during the 1990s was high, at 80% of GNI, this level had been reduced to 50% during the 2000s. Indonesia had also managed to reduce the share of short-term debt in its total external debt, from about 19% to less than 14%.

Indonesia significantly improved its external position during the 2000s. Its trade balance expanded from 2.3% of GDP during the 1990s to almost 5% during the 2000s. Concurrently, Indonesia's current account improved from a deficit of -1.2% of GDP to a surplus of 2.2%. Indonesia was also able, as a result, to modestly expand its holding of international reserves, from about 10% of GDP to 13.5%, though this level during the

2000s was still below-average (especially for a country that had suffered dramatically from the Asian Financial Crisis). In fact, Indonesia's average current account surplus during the 2000s turned into an average deficit of -0.5 of GDP during 2008-2013, in the wake of the Global Financial Crisis.

One of the most important drivers of Indonesia's success has been its investment. Total investment as a ratio to GDP declined slightly from 27.6% of GDP during the 1990s to a little over 26% during the 2000s. But this latter level was still above-average for a Lower-Middle Income country. Moreover, during the period 2008-2013, its average investment exceeded 30%.

A commitment to investment in social infrastructure has been reflected in the significant rise in the secondary school enrolment ratio, from about 46% during the 1990s to about 63% during the 2000s.

However, although Indonesia was able to increase its average consumption of electricity per capita, from 260 kWh to 500 kWh, between the 1990s and the 2000s, the country's level in the 2000s was still far below the average for all LMIs, i.e., about 940 kWh. This statistic suggests that there has been under-investment in economic infrastructure in Indonesia over the last two decades. This has not been uncommon, even among countries that otherwise have had a credible macroeconomic record.

In summary, Indonesia has done fairly well across-the–board on improving its macroeconomic conditions. But it still suffers from some weaknesses that are quite common among many developing and emerging economies. These include a lack of fiscal revenue, a shortage of domestic credit and low investment in economic infrastructure. There also appears to be a lack of meaningful structural change in conditions of employment in the country. While 'working poverty' has been reduced, the employed who are 'near-poor' have remained a large group.

Uzbekistan

Uzbekistan is an interesting transition economy in macroeconomic terms. During the 1990s, it had a smaller decline in income than most of the economies formerly linked to the Soviet Union. In the end, its average growth for the whole period was 1%.

But during the 2000s it averaged a growth rate of GDP 6.8%, which was well above the average for all Lower-Middle Income countries. Like China and Vietnam, its policymakers have endeavoured to manage the economy. And its deployment of macroeconomic policies has mirrored this strategic approach.

As a legacy of being a transition economy, about half of its workers were already earning wages or salaries in the 1990s. This share improved modestly in the 2000s, coincident with a modest decline in workers vulnerably employed. More impressively, the share of the employed that managed to rise above poverty-level incomes—and become 'near-poor', 'developing middle-class' or 'established middle-class or above'—increased by 13

percentage points. However, most of these employed (about two-thirds) remained 'near-poor' (earning $2-4 per day). Roughly the other third became 'developing middle-class' (earning $4-13 per day).

Unlike some other transition economies, such as Vietnam, Uzbekistan has managed to generate consistent surpluses on both its trade account and current account. During the 2000s, its trade surplus averaged 3.7% of GDP and its current-account surplus 5.2%. This record contrasts with the country's plight during the 1990s, when both its trade account and current account averaged -3% to -4% deficits during the initially difficult transition period.

UZBEKISTAN	1990s	2000s
GDP	1.0	6.8
Employment indicators		
All non-poor (USD 2-13+, PPP)	29.7	43.0
Near poor (USD 2-4, PPP)	25.9	35.0
Developing middle class (USD 4-13, PPP)	3.4	7.4
Middle class and above (USD 13+, PPP)	0.4	0.6
Wage employment	48.9	52.0
Vulnerable employment	50.4	47.2
Fiscal indicators		
General government revenue	35.9	35.6
ODA	0.6	1.1
Fiscal balance	-4.9	2.8
Gross government debt	7.3	28.4
Monetary indicators		
Inflation	370.0	15.3
Broad money growth	n/a	n/a
Real interest rate	n/a	n/a
Financial indicators		
Domestic credit	n/a	n/a
External debt stock	15.3	32.3
Short-term debt	9.8	4.5
Exchange rate indicators		
Current account	-3.2	5.2
Trade balance	-3.9	3.7
International reserves	n/a	n/a
Development indicators		
Total investment	27.1	22.6
Secondary school enrolment	95.0	98.8
Electricity consumption	1979.3	1716.3

But the surpluses during the 2000s have been due primarily to its exports of energy products, natural gas in particular, as well as other primary commodities such as gold. The country has also remained a major exporter of cotton despite the comparative decline in this traditional sector.

Since Uzbekistan's major trading partners have been relatively diverse, including China and Turkey as well as Russia, Kazakhstan and Ukraine, the country has not suffered appreciably from the effects of the global recession.

Uzbekistan has also managed to run fiscal surpluses. These surpluses averaged 2.8% of GDP during the 2000s. This record contrasts with its average deficits of about -5% during the 1990s. The surpluses in the 2000s benefitted greatly from the government's relatively high level of revenue, which averaged over 35% of GDP. As a result, the government has continued to confront a relatively modest level of debt, only about 28% of GDP. Hence, the country is noteworthy for having maintained a relatively strong fiscal position.

The external debt stock of the country has also remained relatively low, at about 32% of GNI during the 2000s though this level represented an increase from the average during the 1990s of about 15%. Uzbekistan's share of short-term debt in the total in 2000s was very low, at only 4.5%. This ratio was less than half what it was during the 1990s (i.e., about 10%). Hence, the country has not increased its vulnerability to the instability of global portfolio flows.

Uzbekistan has also been able to maintain a credible level of total investment. During the 2000s economy-wide investment averaged about 23% of GDP, which corresponded closely to the average of all Lower-Middle Income Countries. However, Uzbekistan's investment level during the 1990s was higher, at about 27% of GDP.

In contrast, the economies of both China and Vietnam have been much more investment-driven. Their investment levels have ranged between 30% and 40% of GDP, which have been remarkably high levels. But China has already recognized that it must make a gradual transition to an economy that incorporates more domestic consumption demand.

Drawing in part on its legacy as a transition economy, Uzbekistan has maintained relatively high levels of social and economic infrastructure. For example, the country's secondary school enrolment ratios have been maintained at over 95% and average Kilowat hours per capita have been about 1700, well above the average of only about 940 Kwh for all Lower-Middle Income countries. However, the country's access to electricity dipped in comparison to the 1990s, when the average Kilowat hours per capita were close to 2000 Kwh.

While many external analysts have not contested the basic accuracy of many of Uzbekistan's macroeconomic indicators, they have explicitly questioned the accuracy of its inflation estimates. The IMF estimates, for example, that the country's consumer price inflation averaged about 15% during the 2000s.

Since internationally vetted data are lacking on such key related indicators as broad money growth, the real interest rate and the size of domestic credit, it is difficult to make a judgment on such monetary and financial outcomes. And this lack of data also makes it difficult to form a comprehensive judgment on the overall viability of Uzbekistan's macroeconomic policies and its development strategy.

Nevertheless, on many basic macroeconomic indicators, such as on the country's domestic fiscal position, including its government debt, its trade and current-account

positions, and its international financial liabilities, Uzbekistan does appear to have maintained a relatively strong position.

Vietnam

Vietnam's strategy of development is often compared to that of China. Though Vietnam's strategy and macroeconomic policies resemble China's to some degree, Vietnam remains a poorer country and has not succeeded in replicating the success of China's manufacturing export-led strategy.

While China has advanced rapidly to become an Emerging Economy during the late 2000s, Vietnam has become a Lower-Middle Income Country. Vietnam does generate significant exports of clothing, shoes and electronics, and its main trading partners have been China, the US and Japan. But its trade and current-account balances have remained mostly in deficit during the 2000s. On average, its trade deficit was about -3% of GDP and its current-account deficit almost -8% of GDP during the 2000s. The sizes of these deficits were higher than they were in the 1990s.

VIETNAM	1990s	2000s
GDP	7.4	7.1
Employment indicators		
All non-poor (USD 2-13+, PPP)	15.1	46.8
Near poor (USD 2-4, PPP)	13.1	34.1
Developing middle class (USD 4-13, PPP)	1.8	11.9
Middle class and above (USD 13+, PPP)	0.2	0.8
Wage employment	17.1	25.2
Vulnerable employment	82.3	74.4
Fiscal indicators		
General government revenue	19.9	26.2
ODA	4.0	3.8
Fiscal balance	-0.9	-2.3
Gross government debt	n/a	43.1
Monetary indicators		
Inflation	21.1	7.9
Broad money growth	30.9	28.2
Real interest rate	8.4	2.4
Financial indicators		
Domestic credit	21.5	79.2
External debt stock	172.4	38.8
Short-term debt	10.5	12.4
Exchange rate indicators		
Current account	-5.5	-3.2
Trade balance	-2.4	-7.8
International reserves	8.0	16.9
Development indicators		
Total investment	23.5	36.0
Secondary school enrolment	46.5	n/a
Electricity consumption	161.6	608.4

Vietnam's record on achieving economic growth and expanding quality employment has been above-average. During the 2000s its GDP rate of growth averaged 7.1% (compared to 7.4% during the 1990s). While the share of its total employment that is wage and

salaried employment remained modest, at about 25% during the 2000s, the country succeeded in boosting this share by about 8 percentage points compared to it level during the 1990s. And Vietnam correspondingly reduced the share of vulnerable employment by the same number of percentage points.

What is most impressive about its employment performance is that it has increased the share of the employed that have escaped poverty by 30 percentage points. This certainly represents the best record among Lower Middle-Income Countries. But, in fact, the majority of the employed (i.e., about 21 percentage points out of the total) who escaped poverty remained 'near-poor', earning $2-4 per day. However, another 10 percentage points did become 'developing middle-class', earning $4-13 per day.

Where Vietnam has managed to emulate China has been in the size of its domestic investment. During the 2000s, Vietnam's total investment as a ratio to GDP averaged almost 36%. This represented a qualitative leap from a level of about 24% during the 1990s. This represents a major macroeconomic achievement.

Yet its economic infrastructure, such as the degree of access to electricity (as proxied by Kilowat hours per capita), has remained low by the standards of Lower-Middle Income countries. Its average level during the 2000s was only a little over 600 Kwh while the group average was about 940 kWh. This discrepancy suggests that Vietnam has to continue prioritizing investment, especially in improving access to economic infrastructure.

Vietnam has succeeded in expanding domestic credit through its banking system in order to fuel economic development. During the 2000s, its domestic credit, as a ratio to GDP, averaged almost 80% (up from about 22% during the 1990s). The level in the 2000s was much lower than China's (which was 140%). But Vietnam has maintained similarly low real rates of interest (at an average of 2.4% during the 2000s). During the 1990s, the country's average real interest rate was much higher, at over 8%. Hopefully, Vietnam's financial sector will not contribute to instability in the future by inundating the economy with cheap credit.

Vietnam's broad money growth was also above-average during the 2000s, at about 28% per year. Despite the possibility that such trends could become more problematic, its consumer price inflation was contained at about 8% during the 2000s, which was about average for LMIs. Also, this inflation level was a pronounced improvement over its average inflation of about 21% during the 1990s.

Vietnam has also managed to keep its fiscal deficits under control. These deficits averaged -2.3% during the 2000s. However, its government revenue has been a bit above-average, at about 26% of GDP (with almost 4 percentage points of this total attributable to ODA). Vietnam's government debt has also remained at below-average levels

(compared to the levels for both LMIs and Emerging Economies). During the 2000s, its average, as a ratio to GDP, was 43%.

While Vietnam has run significant trade deficits during the 2000s, its external debt stock has remained below-average, at just under 40% of GNI. During the 1990s, its debt stock was much higher, at over 170% of GNI. Vietnam's short-term debt as a ratio to total external debt during the 2000s remained about average for LMIs, at about 12%--up only slightly from about 10% during the 1990s.

So, while Vietnam would be well advised to improve its external trade and financial position, it has not yet placed itself in a particularly vulnerable position. Meanwhile, the country has managed to progress relatively rapidly from being a low-income country to being a middle-income country. From a relatively low base, wage and salary employment has improved significantly, and a sizeable proportion of the employed now earn levels of income significantly above poverty levels.

Despite having its growth rate initially set back by the global recession, its trade position has improved in recent years, partly as a result of a managed depreciation of its exchange rate. This policy of management of the exchange rate has been important in improving the prospects of its export-led model of development (and in competing, in particular, with China in exporting manufactured goods).

C. Least Developed Countries

General Summary

This research has conducted four case studies of Least Developed Countries. They include Senegal and Uganda in sub-Saharan Africa and Bhutan and Nepal in South Asia. All four countries have been relatively successful in promoting economic development in recent decades. During the 2000s Bhutan was the fastest growing economy among the four: its GDP grew, on average, by 8.4%. Bhutan was followed by Uganda, which grew by 7.2%. However, the economies of Nepal and Senegal grew much more slowly, at 4.2% and 3.9%, respectively.

Though Uganda grew relatively fast, its record on expanding quality employment was the least successful among the four countries. Between the 1990s and the 2000s, it managed to increase the share of the employed earning $2 per day or more by 14.6 percentage points. But 8.5 percentage points, or about 58% of this total, remained 'near-poor' employed (earning only $2 to $4 per day).

Senegal expanded the ranks of its total 'non-poor' employed (those earning more than $2 per day) by 16.3 percentage points. Of this total, however, 10.5 percentage points, or about 64%, remained 'near-poor' employed. Nepal achieved a sizeable absolute increase in its total 'non-poor' employed, i.e. 18.8 percentage points. But about 73% of this increase remained, however, as 'near-poor' employed. So, though there was progress in improving employment in these LDCs, many of the employed remained vulnerable to falling back into poverty.

Bhutan made the most progress on improving the quality of its employment. The share of its non-poor employed almost doubled, from 32% to 58%, between the two decades. While there was a 14 percentage point increase in the 'near poor' (earning $2 – 4 per day), Bhutan still managed to increase the size of the 'developing middle class' (those who earn $4 – 13 per day) by 13 percentage points.

With the exception of Bhutan, the other three LDCs have not had above-average levels of government revenue. Senegal's average revenue during the 2000s, at about 21% of GDP, was the highest among these three. Uganda averaged only about 18% while Nepal averaged only about 14%. The average for all LDCs during the 2000s was 23.5%. In stark contrast, Bhutan had, by far, the highest government revenue, at 35% of GDP, during the 2000s. But, in general, it seems clear that most LDCs lack the 'fiscal space' to carry out public investment projects that would promote economic development.

All four of these LDCs received substantial amounts of Official Development Assistance, ranging from about 6% of GNI to about 14%. So, with the exception of Bhutan, these countries generated very little domestic revenue. The lack of adequate fiscal space remains a serious constraint on the development of most LDCs.

And, despite receiving ODA, these LDCs *still* suffered from fiscal deficits, ranging from -1.1% of GDP to -3.3%. As a result, their government debt as a ratio to GDP ranged from about 45% to about 68%. Servicing such sizeable debt burdens still consumed a significant share of their domestic revenue as well as the ODA that they received. Hence, despite their successes, these countries remained severely fiscally constrained during the 2000s.

Monetary policies appeared to have significantly contained inflationary pressures in these four countries. Their average inflation rates during the 2000s ranged only between 2.1% (for Senegal) to 7.3% (for Uganda). Senegal's consumer price inflation was remarkably low but appeared to be based on relatively low growth in its broad money. Hence, it was clearly implemented fairly restrictive monetary policies, which could have placed undue constraints on its economic growth.

Yet the real interest rate in this small sample of countries varied significantly: it seemed too high in Uganda (over 14%) and too low in Nepal (a mere 0.4%). Not surprisingly, domestic credit as a ratio to GDP appeared to be too high in Nepal (i.e., about 52%) and

too low in Uganda (only about 12%). Undoubtedly, the financial sector in all four of these economies was decidedly weak and underdeveloped. And few of these governments had the capacity necessary to effectively regulate these sectors.

However, thanks in part to international debt relief initiatives, such as HIPC, three of these LDCs had faced external debt stocks during the 2000s that were only 46% of GNI or less. The one exception was Bhutan, which did not benefit from HIPC. Thus, it still shouldered an external debt of 72% of GNI. This debt was due, however, to large infrastructure projects, which were helping to modernize its economy. Not surprisingly, very little hot money flowed into these four countries: the share of each country's short-term debt in total external debt was miniscule in all cases.

One of the greatest weaknesses of these LDCs was the very large trade deficits that they continually generated. Their trade deficits averaged between -19% of GDP (for Bhutan) and -12.5% of GDP for Uganda. But, while Bhutan, Senegal and Uganda also suffered from significant current-account deficits, Nepal did succeed in generating a small average surplus of 2.6% of GDP during the 2000s, due in part to a significant inflow of remittances.

Where these four LDCs appeared to do relatively well was in their record on total investment. Uganda averaged total investment of about 22% of GDP during the 2000s (which was close to the LDC average). And both Nepal and Senegal averaged total investment over 25% of GDP. But, extraordinarily, Bhutan's total investment was over 50% during the 2000s (thanks to the large infrastructure projects already mentioned above).

Not surprisingly, however, the achievements of these four LDCs on investment in social and economic infrastructure varied significantly. Bhutan achieved an average secondary school enrolment ratio of 54% and Nepal 41% during the 2000s. But Senegal and Uganda achieved enrolment ratios in the range of only 21-26%.

But only Senegal recorded average Kilowat hours of electricity per capita that approximated the LDC average of a mere 146 kWh. Investments in social and economic infrastructure have been areas of particularly weak development in all LDCs. For example, during the 2000s, the average enrolment ratios of all LDCs were only about half the level of LMIs and their average electricity generation only about 17% of the LMI level.

Bhutan

Bhutan is a Least Developed Country that has had a very impressive growth and employment record for the past two decades. This small South Asian economy managed to accelerate its growth rate from a strong 5.3% during the 1990s to beyond 8% during the 2000s.

Also, growth appeared to have benefitted a broad segment of the employed. The share of the non-poor employed almost doubled from 32% to 60% between the two decades. The strongest gain, 14 percentage points, was among the 'near poor' (earning $2 – 4 per day), followed by a 13 percentage-point gain among 'the developing middle class' (those who earn $4 – 13 per day).

However, these gains did not coincide with an increase in the share of wage employment. This share declined, in fact, by about 4 percentage points. At the same time, the share of vulnerable employment increased by similar percentage points.

Bhutan's general government revenue as a share of GDP was close to 40% during the 1990s, a level far beyond the average for Least Developed Countries (21%). Simultaneously, Official Development Assistance received by the country was also extraordinarily high, i.e., 23% of GNI.

But ODA declined significantly during the 2000s, to less than 11% of GNI. At the same time, government revenue decreased to 36% of GDP. [Why???] Moreover, the overall fiscal stance of the country deteriorated: its fiscal deficit enlarged to -3.1% of GDP and, most worryingly, its government debt ballooned to almost 68% of GDP. The country's deteriorating fiscal position can be explained by the large infrastructure investment it has been undertaking. Half of Bhutan's debt is concentrated in commercially viable hydropower projects, mitigating a potential risk of debt distress.

There were contradictory trends in Bhutan's monetary performance between the 1990s and 2000s. Consumer price inflation dipped to about 5% while the growth of broad money declined to about 17%. But the real rate of interest rose from 6% to 9%. Such a trend in the real interest rate was common among LDCs. By the 2000s their average real rate of interest was 9.5%. But this trend indicated that their financial sectors were not providing enough credit at affordable rates.

BHUTAN	1990s	2000s
GDP	5.3	8.4
Employment indicators		
All non-poor (USD 2-13+, PPP)	31.6	59.5
Near poor (USD 2-4, PPP)	19.9	34.1
Developing middle class (USD 4-13, PPP)	9.2	22.9
Middle class and above (USD 13+, PPP)	2.5	2.5
Wage employment	33.9	29.6
Vulnerable employment	65.8	70.2
Fiscal indicators		
General government revenue	37.6	35.9
ODA	23.0	10.6
Fiscal balance	-0.3	-3.1
Gross government debt	44.0	67.6
Monetary indicators		
Inflation	9.9	5.4
Broad money growth	24.9	17.3
Real interest rate	6.3	9.2
Financial indicators		
Domestic credit	7.3	18.4
External debt stock	38.2	72.1
Short-term debt	1.2	0.9
Exchange rate indicators		
Current account	-3.1	-10.6
Trade balance	-12.5	-18.8
International reserves	48.3	61.3
Development indicators		
Total investment	39.6	50.9
Secondary school enrolment	34.9	53.8
Electricity consumption	n/a	n/a

Consistent with this concern, domestic credit provided by Bhutan's banking system increased to only 18% of GDP, on

average, during the 2000s. This has recently changed as credit expansion picked up strongly during the mid-2000s, reaching 36% of GDP during the late 2000s. The quick pace of private credit extension requires close monitoring to prevent a build-up of financial fragility. Meanwhile, the country's external debt almost doubled between the 1990s and 2000s, reaching the alarming level of about 72% of GNI. There was little comfort, however, in the fact that less than 1% of this debt was short-term in nature.

Bhutan's external position deteriorated dramatically between the 1990s and 2000s. This was due during the 2000s to large hydropower-related imports. The country's average trade deficit was almost -19% of GDP and its current-account deficit was close to -11%. Given Indian loan disbursements associated with the hydropower projects, Bhutan was able to amass a large stockpile of international reserves. They averaged about 61% of GDP during the 2000s. This build-up was due, in part, to a large inflow of remittances.

Despite a deteriorating macroeconomic performance that has been reflected in key fiscal, monetary, financial and external-account outcomes, Bhutan has still managed to boost its total investment from an already high level of almost 40% of GDP during the 1990s to almost 51% during the 2000s.[We have to explain this anomaly] Though there are no data on electricity consumption, Bhutan was able to significantly increase its gross secondary school enrolment ratio from about 35% during the 1990s to about 54% during the 2000s.

Nepal

While Nepal's GDP grew strongly over the 1990s, at a rate of almost 5% on average, this rate slowed to 4.2% during the 2000s. Nevertheless, the share of the non-poor employed increased substantially, from over 13% of the total during the 1990s to about 34% during the 2000s.

However, only about 6 percentage points of the 20 percentage-point increase in the non-poor employed were due to increases in the employed earning more than $4 per day. Two-thirds of the increase in the non-poor employed was attributable, in fact, to substantial increases in the 'near-poor' employed (who earned only $2-4 per day).

During the 2000s, Nepal still suffered from a lack of 'fiscal space' to carry out development efforts. General government revenue as a ratio to GDP was only about 14% during the 2000s, while ODA represented almost 6% of GNI. Thanks, in part, to ODA, the government ran only an average deficit of -1.1% of GDP during the 2000s. In addition, its government debt as a ratio to GDP stood at about 49%, a relatively low level for a Least Developed Country.

The government of Nepal has managed to improve some of its monetary indicators. The rate of consumer price inflation dropped from an average of close to 10% during the 1990s to just above 6% during the 2000s. At the same time, the growth of broad money declined marginally, from about 19.5% to 17%.

However, the real interest rate, which was already relatively low during the 1990s, plummeted to an average of only 0.4% during the 2000s. This is an incredibly low level for an LDC, where real interest rates were close to 10% on average during the 2000s. Not surprisingly, domestic credit provided by the banking system expanded rapidly, from about 32% of GDP during the 1990s to over 50% during the 2000s. Such a level could be a source of financial instability in Nepal.

NEPAL	1990s	2000s
GDP	4.9	4.2
Employment indicators		
All non-poor (USD 2-13+, PPP)	13.4	33.5
Near poor (USD 2-4, PPP)	11.4	25.2
Developing middle class (USD 4-13, PPP)	1.8	7.4
Middle class and above (USD 13+, PPP)	0.1	0.9
Wage employment	21.4	24.5
Vulnerable employment	75.4	71.5
Fiscal indicators		
General government revenue	n/a	14.2
ODA	9.8	5.9
Fiscal balance	n/a	-1.1
Gross government debt	n/a	48.9
Monetary indicators		
Inflation	9.8	6.2
Broad money growth	19.5	17.0
Real interest rate	5.3	0.4
Financial indicators		
Domestic credit	31.9	50.4
External debt stock	52.5	38.1
Short-term debt	1.3	1.5
Exchange rate indicators		
Current account	-3.7	2.6
Trade balance	-10.8	-18.1
International reserves	13.9	19.2
Development indicators		
Total investment	22.7	25.0
Secondary school enrolment	37.4	41.2
Electricity consumption	44.9	80.3

However, Nepal did manage to significantly reduce its external debt stock between the 1990s and 2000s, namely, from 52.5% to about 38% of GNI (without having benefitted from the HIPC initiative). Moreover, short-term debt continued to play an insignificant role in Nepal's total external debt during the 2000s.

Nepal's trade position has been decisively shaped by its links to the economy of India. Dominated by trade with India, Nepal's trade deficit ballooned from almost -11% of GDP during the 1990s to about -18% during the 2000s.

However, the country's current account recovered from a deficit of -3.7% of GDP during the 1990s to a surplus of 2.6% during the 2000s. Nepal receives significant inflows of

both ODA and remittances (with personal remittances averaging about 15% of GDP during the 2000s). As a result, it has managed to increase its holdings of international reserves from 14% of GDP to almost 20%.

During the 2000s, Nepal's investment efforts accelerated, reaching 25% of GDP, a threshold often regarded as necessary to achieve sustainable growth and economic development. Nepal's average level was well above the LDC average of only 21.6% of GDP.

However, Nepal made only marginal progress in raising its secondary school enrolment ratio, which edged up from 37% during the 1990s to only 41% during the 2000s—even though Nepal's resultant level was above the average for all LDCs. Average electricity consumption per capita did increase in Nepal between the 1990s and 2000s. But the initial average level in the 1990s was incredibly low, at only 45 kWh. Nepal's success in boosting this average to 80 kWh still meant that its electricity consumption lagged well behind the average even for LDCs (i.e., about 146 kWh).

In some respects, Nepal has done remarkably well, especially given its LDC status. It has managed to grow at decent rates and expand the ranks of its non-poor employed. It does continue to suffer from a lack of government revenue but its overall investment performance has been superior. However, concretely, investments in both social and economic infrastructure continue to lag behind the country's considerable needs for improvement.

Nepal has made significant progress, overall, on improving its fiscal and monetary conditions. But its financial conditions remain problematic, based on incredibly low real rates of interest and the excessive expansion of domestic credit. Nepal has improved its current-account position between the 1990s and 2000s, despite the daunting size of its trade deficits. But this condition has made the country heavily reliant on net transfers, such as ODA and remittances.

Senegal

Senegal had only moderate rates of economic growth during the 1990s and 2000s. Its growth of GDP was only 2.7% during the 1990s and reached 3.9% during the 2000s.

Partly as a result, between the 1990s and 2000s it was only able to expand the share of wage employment in total employment by a little less than 5 percentage points. In a similar fashion, it succeeded in reducing vulnerable employment by only about 5 percentage points. But the latter category still comprised over three-quarters of all employment in Senegal.

However, Senegal did succeed in enlarging the share of the 'non-poor' employed by over 16 percentage points, so that it reached 36% of all the employed. However, about two-thirds of this total increase (i.e., 10.5 percentage points) represented an expansion in the

‘near-poor’ employed (earning only $2-4 per day). There was only a 5.5 percentage increase in the employed who earned $4-13 (the so-called ‘developing middle class’).

There are limited data on fiscal indicators for Senegal in the 1990s. But what the data for the 2000s show is that general government revenue in Senegal, standing at less than 21% of GDP, was below-average even for LDCs. At the same time, Senegal was receiving sizeable contributions of ODA, which were worth 8.6% of GNI on average. Yet the government still ran an average fiscal deficit of -3.3% of GDP during the 2000s, due partly to increased expenditure on infrastructure projects.

However, thankfully the general government debt still averaged only 45% of GDP. This level was quite low compared to the LDC average of about 86%.

SENEGAL	1990s	2000s
GDP	2.7	3.9
Employment indicators		
All non-poor (USD 2-13+, PPP)	19.2	36.0
Near poor (USD 2-4, PPP)	14.6	25.1
Developing middle class (USD 4-13, PPP)	4.3	9.8
Middle class and above (USD 13+, PPP)	0.3	1.1
Wage employment	18.9	23.7
Vulnerable employment	80.5	75.7
Fiscal indicators		
General government revenue	n/a	20.9
ODA	11.9	8.6
Fiscal balance	n/a	-3.3
Gross government debt	n/a	45.0
Monetary indicators		
Inflation	4.4	2.1
Broad money growth	7.5	12.0
Real interest rate	16.9	n/a
Financial indicators		
Domestic credit	26.1	24.3
External debt stock	76.8	46.0
Short-term debt	7.9	3.9
Exchange rate indicators		
Current account	-5.9	-7.8
Trade balance	-6.9	-15.3
International reserves	4.1	13.6
Development indicators		
Total investment	12.5	25.3
Secondary school enrolment	15.4	25.8
Electricity consumption	110.5	151.3

It appears that the Government of Senegal was committed to trying to achieve low rates of inflation. Between the 1990s and 2000s, it succeeded in reducing the rate of consumer price inflation from the already low level of 4.4% to a mere 2.1%. This represented an unusually low level of inflation for an LDC.

Corresponding to this low level of inflation during the 2000s was a relatively slow growth of broad money, i.e., only 12%. Hence, monetary policies in Senegal during this period were unusually tight and could have contributed to slowing its rate of economic growth.

Data on the real rate of interest for the 2000s are lacking but this rate was quite high, at about 17% on average, during the 1990s. It appears that such a high cost of borrowing carried over, to some degree, into the 2000s since the provision of domestic credit by the banking system represented only about 24% of GDP, down from the 1990s' average of about 26%.

However, Senegal did benefit from joining the HIPC initiative. Its external debt stock declined, as a result, from an average of almost 77% of GNI during the 1990s to 46% during the 2000s. At the same time, Senegal was able to reduce the share of short-term debt in its total external debt. This share declined from about 8% to only about 4%.

Like many other LDCs, Senegal has suffered chronically from running large trade and current-account deficits. The country's trade deficit more than doubled between the 1990s and 2000s, i.e., from -6.9% of GDP to -15.3%. Over the same time period, Senegal's current account deficit worsened from -5.9% of GDP to -7.8%.

However, Senegal did manage to more than triple its international reserves, from about 4% of GDP to 13.6%. Such a stockpile will give its central bank some limited control over the value of its exchange rate.

One of the most striking features about Senegal's recent economic progress has been the rapid rise in its total investments. As a ratio to GDP, total investment soared from an average of only 12.5% during the 1990s to an average of over 25% during the 2000s. Rising investment levels were led by government infrastructure investment, accounting for just over one third of capital expenditure in recent years (IMF Article IV 2012). These investment efforts attracted, in turn, substantial private-sector investment, resulting in overall investment levels that were higher than the average even for Emerging Economies.

In the absence of countervailing factors (such as the drag produced by a large trade deficit), one would expect such levels of investment to accelerate economic growth. Economic growth did accelerate, but only to 3.9% per year, on average during the 2000s.

Such investment should have enabled Senegal to substantially improve its social and economic infrastructure. The country did succeed in raising its gross secondary school enrolment ratio from 15.4% during the 1990s to almost 26% during the 2000s. But this resultant level still stood below the overall LDC average of about 33%.

Senegal did manage to increase its average electricity consumption from the very low level of 110 kWh during the 1990s to about 150 kWh during the 2000s, with the latter

level corresponding roughly to the LDC average. But this LDC average is exceptionally low, especially when it is compared to the LMI average of about 940 kWh.

In summary, Senegal was moderately successful in accelerating its economic growth and expanding 'non-poor' employment during the 2000s. It was also a prime beneficiary of international debt relief during this period. Yet its government revenue has remained low, it still relies heavily on ODA and it still runs fiscal deficits.

The government has certainly tightened up on its monetary policies, driving the inflation rate to a mere 2% average during the 2000s. But the financial sector appears to have benefitted very little since domestic credit remains relatively scarce (a condition that Senegal shares with most LDCs).

Senegal is noteworthy for having dramatically boosted its total investment rate, namely, to over 25% of GDP during the 2000s. But there have not yet been radical improvements in investment in social and economic infrastructure. And its total investment has not yet translated into substantially expanding its exports in order to overcome its chronic trade and current-account deficits.

Uganda

Uganda grew strongly throughout the 1990s and 2000s. The growth of GDP accelerated, in fact, from 6.4% during the 1990s to 7.2% during the 2000s. However, in the wake of the Global Financial Crisis, its growth rate slowed somewhat, back to 6%.

Though starting from a very low base, Uganda was able to expand quality employment over the course of both decades. The share of wage employment did increase from about 9% to a little over 16%. And vulnerable employment declined from the very high share of 91% to less than 84%.

Uganda was also able to increase the share of the 'non-poor' employed by 16 percentage points between the 1990s and 2000s. But the resultant share was still below 30%. In addition, more than half of the new 'non-poor' employed were still earning only 'near-poor' income (only $2-4 per day).

UGANDA	1990s	2000s
GDP	6.4	7.2
Employment indicators		
All non-poor (USD 2-13+, PPP)	13.7	29.4
Near poor (USD 2-4, PPP)	12.8	21.3
Developing middle class (USD 4-13, PPP)	0.8	7.2
Middle class and above (USD 13+, PPP)	0.1	0.8
Wage employment	8.9	16.1
Vulnerable employment	91.0	83.6
Fiscal indicators		
General government revenue	17.6	17.9
ODA	15.9	13.9
Fiscal balance	-2.3	-2.9
Gross government debt	73.3	60.3
Monetary indicators		
Inflation	19.1	7.3
Broad money growth	36.1	19.3
Real interest rate	11.2	13.2
Financial indicators		
Domestic credit	8.8	11.2
External debt stock	74.4	39.8
Short-term debt	4.1	7.3
Exchange rate indicators		
Current account	-5.8	-5.3
Trade balance	-13.6	-12.5
International reserves	6.9	16.6
Development indicators		
Total investment	16.1	21.7
Secondary school enrolment	10.3	21.1
Electricity consumption	n/a	n/a

During the 1990s and 2000s, Uganda was not able to translate its stellar record of economic growth into commensurate increases in government revenue. In fact, revenue as a ratio to GDP stagnated at just below 18% (well below the LDC average of 23.5%). At the same time, Uganda was receiving very large amounts of Official Development Assistance, worth 14-16% of GNI.

Despite such levels of ODA, the government continued running fiscal deficits, which edged up from an average of -2.3% of GDP in the 1990s to -2.9% in the 2000s. Government debt also remained worryingly high though it declined from an average of about 73% of GDP during the 1990s to an average of about 60%.

Monetary policy was successful in reducing consumer price inflation from close to 20% on average during the 1990s to 7.3% during the 2000s. Correspondingly, the growth of broad money slowed from a rate of 36% to 19%. However, despite such trends, the real rate of interest remained high. In fact, it edged up from an average of just above 11% during the 1990s to slightly more than 13% during the 2000s.

Such a high real rate of interest has dampened the extension of credit for productive investment. Domestic credit provided by banks was a mere 8.8% of GDP during the 1990s and it expanded to only a little over 11% by the 2000s. This level for the 2000s

was less than half the LDC average. This severe lack of credit poses a major obstacle to expanding private investment in Uganda.

Uganda has benefitted appreciably from debt relief provided by the HIPC Initiative. As a result of such efforts, its external debt declined from over 74% of GNI during the 2000s to less than 40% during the 2000s. At the same time, there was only a marginal increase in the share of its short-term in total external debt, i.e., from about 4% to about 7%.

Like many LDCs, Uganda has continued to suffer from fairly large trade and current-account deficits during the 1990s and 2000s. Its trade deficit declined only slightly between the 1990s and 2000s, from -13.6% of GDP to -12.5%. Meanwhile, its current-account deficit edged down only from -5.8% of GDP to -5.3%.

Nevertheless, Uganda has managed to expand its holdings of international reserves. These more than doubled between the 1990s and 2000s, from close to 7% of GDP to over 16%. The percentage for the 2000s was close to the average for all LDCs.

Despite high real rates of interest, Uganda has boosted its total investment, as a ratio to GDP, from about 15% during the 1990s to about 21% during the 2000s. Its level during the 2000s was about average for an LDC.

Unfortunately, there are no data on Uganda's average electricity consumption. However, data for its gross secondary school enrolment ratio suggest that it has made only modest progress between the 1990s and 2000s. Starting from a very low ratio of about 10% during the 1990, Uganda's ratio increased to only about 21% during the 2000s. This attainment was well below the average for all LDCs of 33%.

In summary, Uganda has made notable progress on achieving relatively high rates of economic growth and beginning to expand productive employment from a very low initial level. But it has not managed to translate its growth success into a stronger fiscal position, particularly by boosting government revenue.

Thankfully, Uganda has benefitted from substantial international debt relief and this has eased, to some degree, the fiscal pressures. But its domestic economy remains starved of credit. Though it has managed to reduce inflation, its average real rate of interest has stayed stubbornly high.

Uganda continues to put itself in a disadvantaged position internationally by consistently running substantial deficits on both its trade account and current account. Were the current sizeable inflows of Official Development Assistance to diminish significantly, Uganda would be in a particularly vulnerable position.

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