

# ECONOMIC REPORT ON PARTNER COUNTRIES 2005

A report by the

Development Economics Advisory Service (DEAS)

# **ECONOMIC REPORT ON PARTNER COUNTRIES**

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#### SUMMARY AND CONCLUSIONS

This year's Annual Economic Report on Partner Countries prepared by the Development Economics Advisory Service (DEAS) includes an overview of the recent performance of Partner Countries against the background of major trends in the global economy. There are also two thematic sections, the first devoted to the problems of prevention and management of natural disasters, starkly highlighted by the December 2004 Tsunami in the Indian Ocean. The second thematic section analyses the incipient development of domestic bond markets in Mediterranean, African and Caribbean Countries, that are attracting attention as means to consolidate macroeconomic stability and mobilise domestic savings.

The overview section highlights the fast pace of activity of the world economy in 2004, fuelled by rather favourable financial conditions. Together with geo-political concerns and capacity constraints, buoyant demand caused oil prices to reach nominal levels not seen since the early 1980s. Oil market developments have burdened oil-importing countries and rekindled fears of an inflation spiral, but they also provided Mediterranean Partner Countries (MPC) with a favourable regional environment, strengthening demand and private investment. Similarly, the rising importance of the oil sector in sub-Saharan Africa contributed for the region's robust growth performance. Although growth was more modest than in other developing regions, it represented a 8 year high and the tenth consecutive year in which regional per capita incomes scored a net improvement. This notwithstanding, the attainment of the Millennium Development Goals by 2015 by most countries in the region remains a distant goal. In this context, the decision agreed at the G8 Finance Ministers meeting of June 10-11 to cancel the HIPC debt for all countries reaching HIPC's completion point brightens the region's medium-term outlook and it will hopefully contribute to sustain the region's quest for improved governance and development policies.

The thematic section on natural disasters analyses the reasons behind the high cost of natural disasters in developing countries and explores policy options and their limitations. Natural catastrophes have become increasingly costly over the past thirty years. This reflects both an increased frequency of sizeable events and a greater impact due to rapid urbanization and population growth in many catastrophe-exposed areas. The impact in developing countries has been amplified due to insufficient prevention and insurance of risk both on behalf of the private sector and of public authorities. The reasons behind insufficient risk mitigation are numerous: to name just a few, they include the size of the event, its uncertainty, and the "Samaritan Dilemma" – the expectation that help will be provided ex-post. Some of these failures could be potentially addressed by well-designed public policy, but policy priorities in developing countries are often elsewhere. Even when that is not the case, incentives are distorted and/or short term and implementation capacity inadequate, which suggests a broader and more effective role for international development organizations to play in this policy domain.

The thematic section on domestic bond markets argues that the development of domestic debt instruments has a strong potential to foster macroeconomic stability and generate growth in Mediterranean, African and Caribbean countries (MACs) as it can help reduce currency and payment risk, improve the functioning of local financial markets, and mobilize savings. Conditions for local currency bond markets in MACs have improved considerably, and some progress is being made towards developing these markets. There remains however a substantial agenda for further action before these markets can fulfill their potential. This includes further strengthening macroeconomic stability, improving the regulatory and supervisory environment and settlement systems, enhancing transparency, developing the maturity structure through benchmark issues, expanding market access, reducing reliance on traditional bank financing, and fostering cooperation with foreign partners.

This report was written on the basis of information available up to 25<sup>th</sup> May 2005.

# OVERVIEW OF RECENT ECONOMIC TRENDS AND STRUCTURAL ISSUES IN PARTNER COUNTRIES

by Pedro de Lima and Simona Bovha Padilla

#### 1. Introduction

1.0 This section looks at recent trends in partner countries viewed against the backdrop of trends in the world economy. It also identifies some issues that have been critical to developments in the various regions – oil and non-oil commodity prices, the end of multi-fibre agreements, and the implementation of structural reforms – and it discusses growth prospects over the near and medium terms.

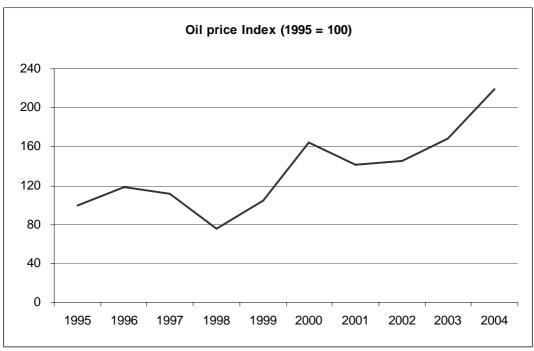
#### 2. Global Overview

- 1.0 In 2004 the world economy put forward one of the best growth performances of the last 20 years, as the world's output expanded by 5.1 percent relative to the previous year. This performance was driven by strong consumption and investment growth in the United States, higher than expected investment and production levels in China and an overall robust level of activity in developing and emerging market economies, with real GDP growing by 7.2 percent during the year. Most regions across the globe benefited from these high activity levels, driving world trade volumes up by 10 percent in annual terms, the fastest rate of growth since 2000, a fact that also reflects the continued integration of China in the world economy.
- 2.0 To a large extent, the factors enabling this performance are still a legacy of the anti-recessionary measures adopted in many developed economies during the 2000/2001 slow down, notably the fiscal stimulus in the United States and the overall easing of monetary conditions. Although most developed economies in 2004 were already tightening their monetary policy stances, interest rates remained close to zero in real terms, with long-run interest rates in particular seemingly well below equilibrium levels. Households and corporates in particular have taken advantage of this rather supportive environment to strengthen their balance sheets, and have in the process generated rather healthy earnings. As inflationary expectations have remained remarkably contained, credit spreads were squeezed to historically low levels and with global liquidity aplenty, investors have been involved in a quest for yield. In this context, and given the perceived reduction in emerging markets external vulnerabilities, flows of private capital to emerging markets have been quite significant.
- 3.0 While the world economy enjoyed a mostly positive year, there were however some troubling spots and a few unbalances developed or got magnified during 2004. Among the former, the growth performances of the second and third largest economic zones in the world i.e. the economies of the euro area and of Japan had only lacklustre performances, growing at rates considerably below potential. In the euro area, growth was particularly anaemic in the second half of the year, as the contribution of net exports turned negative, and business confidence levels deteriorated. In Japan, the export-driven recovery of 2003 came to a halt in the second quarter of 2004, as exports, but also investment and consumption, weakened sharply. While developments in those two regions reflect weak domestic demands they are also closely linked to the depreciation of the US dollar relative to their respective currencies.
- 4.0 This depreciation of the US dollar a trend initiated in early 2002 and still one of the most salient economic facts of 2004 is closely related to one of the most significant unbalances threatening the stability of the world economy, the US current account deficit. However, even before its more recent rally against the euro, the dollar depreciation was limited in real effective terms, due to its stability relative to the currencies of the US main emerging market trading partners, and did not prevent the current account deficit to reach in 2004 the all-time record figure of 660 billion USD or 6.6 percent of GDP. Furthermore, owing to the rather favourable constellation of financial and economic conditions, the current account deficit has been financed relatively easily, even if net foreign purchases of private sector assets so prominent in the late 1990s dried up and actually turned negative in the first half of 2004 and have been replaced by flows from Asian central banks into US government and other bonds. This notwithstanding, the sheer size of the deficit and the large net external liability position of the US economy estimated at some 2.7 trillion USD poses a significant threat to the world economy, also because financial flows depend to a large extent on confidence factors that can turn relatively quickly, in which case a much more precipitous correction of the dollar and of the current account balance could unfold.
- 5.0 To a certain extent, the flip side of the large US current account deficit is the large accumulation of foreign reserves in developing countries. Widening current account surpluses, which have been

growing steadily since 2000 to reach 153 billion USD in 2004, fuel this phenomenon. At the end of 2004, foreign reserves held by developing countries are estimated to be in the order of 1.6 trillion USD, a 31 percent increase since 2003 and almost 2.5 times the amount held at the beginning of 2000. While China accounts for the lion share of the total (almost 40 percent), the reserve build-up is shared quite uniformly across the developing world and the situation reached at the end of 2004 has some aspects that might qualify it as excessive. In a significant number of countries reserves now exceed six months of import coverage and/or short-term debt. While reserves enhance a country's creditworthiness, they also accrue some costs for its holder, namely those stemming from monetary sterilization and those associated with potential capital losses from hard currency fluctuations. The potential unfolding of the Chinese positions has generated some nervousness in currency markets, with many calling for a revaluation of the Chinese renminbi.

6.0 Another development marking 2004 was the rapid increase in oil prices, which climbed from 30 USD dollars per barrel at the beginning of 2004 to over 50 USD in recent months. This development went hand in hand with a significant increase in the demand for oil resulting from the expansion in activity levels around the world. In particular, China accounts for roughly half of the extra 2.7 million barrels consumed daily in 2004 (a 3.4 percent increase, the fastest growth since 1976), while developing countries are estimated to be responsible for three quarters of that figure. The increased demand for oil - which is projected to expand by another 1.5 million barrels in 2005, met some constraints on the supply side, namely low stock levels and little spare production capacity, driving prices up, a spiral that was further fed by the heightened political and military tension prevailing in the Middle East. For oilproducing countries, this oil prize bonanza translated into a stream of mostly unanticipated large revenues and strong growth rates for their economies. For non-oil-producing countries, the oil price hike fed some inflationary expectations, which have yet to materialize for the most part. As oil market developments in the second half of 2005 are not expected to differ radically from those in the recent past, inflationary pressures will likely continue to brew, even if a slight easing in oil prices is assumed by most professional forecasters.

Chart 1: Oil price dollar index



Source: IMF

7.0 As for the prospects for the short- and medium-term, the world's output rate of growth is widely expected to slow down in 2005 and 2006 to values closer to the historical average – around 4 percent – in line with developments in the economies of the main engines of growth, the United States and China. In the United States, the continued tightening of monetary policy will favour savings, contributing to reduce the current account deficit and to cool down the real estate market further. In addition, the increase in interest rates also provides an extra incentive for foreign investors to buy US debt, thereby assuring the financing of the current account deficit. On the other hand, fiscal policy remains slightly expansionary or at least providing little incentives for increased savings. In China, growth has eased somewhat since the end of 2004, in line with the moderation of the global expansion and weaker

semiconductor market and higher oil prices. Together with the substantial accumulation of foreign reserves, this price increase might lead the authorities to tighten monetary policy. Prospects for Japan remain relatively subdued, but there are signs of improved fundamentals for the Japanese economy, namely, increased profitability in the corporate sector, a stronger banking sector, and economy-wide productivity gains. However, price deflation was not yet been completely defeated and the recent tightening of liquidity targets by the Bank of Japan did not reassure markets of the continued commitment to the policy stance followed in recent years. In the euro area, growth forecasts for 2005 have successively reduced as the year progresses, as leading indicators such as industrial production levels show continued gloomy economic conditions. Furthermore, confidence levels, which were already weak, have not been boosted by the recent consultations on the political future of the Union, as indicated by the recent drop in value of the euro vis-à-vis the other major currencies. If sustained, that drop could however provide some support to a revival in external demand.

# 3. Developments in Partner countries

# 1.1 The Mediterranean Partner countries<sup>1</sup>

- 1.0.0 Over the past few years' growth in MPCs have been on an upward trend, which in 2004 acquired a more marked pace. While Turkey was undoubtedly the star performer real GDP expanded by some 8 percent all countries grew rather robustly on the account of favourable global conditions and improved regional conditions owing to all oil market developments. These in turn helped strengthen domestic demand in Jordan, Lebanon, Tunisia, and Turkey, which benefited from a surge in private investment and consumption. In Algeria, on the other hand, the economy slowed in 2004 due to a moderation in the expansion of the energy sector. With its ailing oil sector and some difficulties to adjust to the post Iraqi war economic realities, Syria was the economic laggard of the region.
- 2.0.0 Favourable oil market conditions, stronger workers' remittances, politically-induced grant flows, and a recent pick up in tourism have also led to an improvement in the overall external current account position for the region. This shift is more marked in Maghreb countries, with Algeria recording a current account surplus of almost 15 percent of GDP in 2004 mostly due to the oil revenues. The improvement in the regional current account position is even more pronounced if Turkey is excluded. Strong economic recovery in Turkey over the past couple of years has been supported by a surge in domestic spending, which has swelled imports and widened the current account deficit to 5 percent of GDP in 2004.
- 3.0.0 Most countries pursued on the path of structural reforms aimed at improving the investment climate. A number of countries in the region have undertaken fiscal reforms in recent past. Algeria has improved fiscal transparency and has set aside an oil stabilization fund. In Jordan, budgetary measures aimed at boosting tax revenues and controlling current expenditure have strengthened the fiscal position significantly. More recently, Egypt has engaged in far reaching tax and customs reforms while Morocco is developing a strategy to reduce the size of its structural budget deficit in cooperation with the World Bank and the IMF. On the financial sector side, the Egyptian government has begun implementing a financial sector restructuring program to tackle the deterioration in commercial bank performance, while Morocco is similarly engaged in a restructuring of its specialized state-owned banks. Algeria has recently taken steps to strengthen payments systems and improve prudential regulation and supervision.
- 4.0.0 Privatisation efforts in the region have been mixed—with a number of programs in the region having effectively stalled—although some success has been achieved in recent years, notably in Morocco and Jordan. Efforts have also been made to provide incentives to private sector operations in a number of countries. Thus, for example, in Algeria, the passage of the new hydrocarbon law, which aims at opening up the sector to private investment, is a promising development. Similarly, in Morocco, important advances have been made toward improving the functioning of labor markets, streamlining investment procedures, and initiating judiciary reforms.
- 5.0.0 While the status and commitment to reforms appears uneven across the region, the measures already taken have already contributed to improve the investment climate in the region and appear to be receiving some positive feedback from private investors. Accordingly, there has been a progressive increase in private capital flows to the region since 2001, both debt and equity. These have reached over 4 percent of GDP in 2004, reflecting significant private inflows to countries like Turkey, Morocco, Tunisia and Jordan. Private capital flows also remained substantial in Lebanon, reflecting, inter alia, investments into the real estate sector and inflows of regional savings.

<sup>&</sup>lt;sup>1</sup> In what follows, and for analysis purposes, the Mediterranean Partner countries (MPC) are split into two groups: Maghreb (Algeria, Morocco, and Tunisia), and Mashrek (Egypt, Gaza and the West Bank, Jordan, Lebanon, Syria) and Turkey. Due to its much higher level of development, Israel is not included in this analysis.

Table 1: Main economic indicators - Mediterranean Partner Countries

	Rea	I GDP	growth	(%)	Inflation (%)			Fiscal Balance (% of GDP)				Current Account balance (% of GDP)				
	2002	2003	2004	2005	2002	2003	2004	2005	2002	2003	2004	2005	2002	2003	2004	2005
Maghreb	3.1	6.2	5.1	4.4	2.1	2.4	3.3	2.9	-1.7	0.5	0.7	2.8	3.5	6.4	6.2	8.7
Mashrek & Turkey	5.9	4.7	6.4	4.8	26.6	16.2	9.8	7.6	-1.7	0.5	0.7	2.8	-0.5	-1.4	-2.5	-2.1

Source: IMF

#### 2.0 Sub-Saharan Africa

1.0.0 One of the most interesting economic stories of 2004 was the 5 percent real GDP growth rate recorded in sub-Saharan Africa. While only at par with the world's average – and not nearly as spectacular as the continued torrid pace of growth in other developing countries, notably some Asian countries - this performance represents nonetheless a 8-year high for the region and the tenth consecutive year in which GDP per capita displays a gain in real terms. Furthermore, although the cross-country distribution of growth was uneven - with oil-producers boasting the largest increases - all sub-Saharan African countries recorded positive growth in 2004, with the exception of Côte d'Ivoire, Seychelles and Zimbabwe. A rather positive development for the region is that, in addition to the broadly supportive global economic conditions, some of the factors driving growth appear to stem from purely internal conditions. First, economic activity benefited from the easing of conflicts in a number of countries namely, Burundi and the Central African Republic - even though the Darfur region of Sudan. Côte d'Ivoire, Zimbabwe and parts of Democratic Republic of Congo, were still affected by continued turmoil. Second, as an increasing number of countries has successfully implemented the necessary reforms to reach HIPC's completion point, debt relief continues to support macroeconomic stability. Finally, the coming on-stream of new oil fields in Southern and Central Africa together with a recovery in agricultural production in Eastern and Central Africa - Ethiopia, Malawi and Rwanda - has contributed positively to the pace of economic activity.

Table 2: Main economic indicators – sub-Saharan Africa

	GDP growth				Inflation (%)			Fiscal balance (% of GDP)			Current account balance (%of GDP)					
	2002	2003	2004	2005	2002	2003	2004	2005	2002	2003	2004	2005	2002	2003	2004	2005
Sub- Saharan Africa	3.5	4.1	5.0	5.0	12.5	13.7	9.1	9.2	-2.8	-2.3	-0.7	-0.6	-3.5	-2.4	-1.6	-1.1
African-oil producing countries <sup>a</sup>	4.1	8.0	6.9	6.8	18.6	17.0	12.9	11.1	n.a.	n.a.	n.a.	n.a.	-8.3	-3.4	2.3	5.5
East Africa <sup>b</sup>	4.6	3.7	6.5	5.9	3.8	8.3	8.1	5.9	-3.4	-2.9	-2.3	-1.8	-4.7	-4.4	-5.3	-5.3
Central Africa <sup>c</sup>	5.2	4.4	7.5	5.0	6.3	3.4	2.2	4.5	0.0	0.7	1.9	3.0	-9.6	-4.3	-0.9	-0.7
West Africa <sup>d</sup>	2.1	7.6	3.2	5.6	9.6	10.7	10.4	11.0	-3.5	-2.5	2.7	4.6	-7.0	-3.2	0.0	2.6
Southern Africa <sup>e</sup>	3.7	2.9	4.1	4.6	19.8	24.4	13.4	11.3	-2.4	-2.6	-2.5	-3.0	-0.8	-1.9	-2.2	-2.8

a. Angola, Cameroon, Chad, the Republic of Congo, Côte d'Ivoire, Equatorial Guinea, Gabon, Nigeria and São Tomé and Príncipe.

Source: IMF

<sup>&</sup>lt;sup>b.</sup> Djibouti, Eritrea, Ethiopia, Kenya, Sudan, Tanzania, Uganda

c. Burundi, Cameroon, Central African Republic, Chad, Congo Rep., Congo Democratic Rep., Equatorial Guinea, Gabon, Rwanda, São Tomé and Príncipe

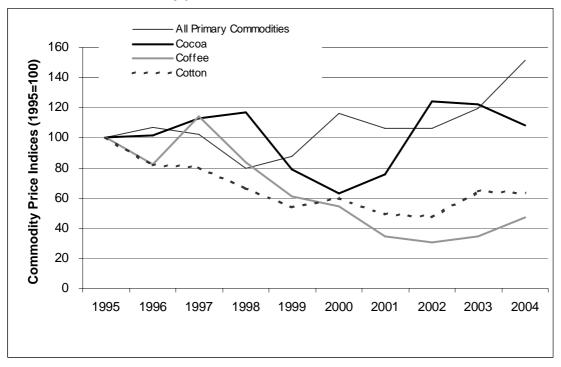
d Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, The Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal Sierra Leone, and Togo.

e. Angola, Botswana, Lesotho, Madagascar, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia, Zimbabwe

- 2.0.0 With a 6.9 percent increase, output growth was markedly stronger in oil producing countries. Production capacity increased modestly in Nigeria, but it received a significant boost elsewhere as new fields came on-stream in Angola, Chad, the Republic of Congo, and Equatorial Guinea. Compared with 2003, exports of oil increased for all oil-producing countries in the region with the exception of Cameroon and Gabon and current accounts swung from an average deficit of 3.4 percent in 2003 to a surplus of 2.3 percent in 2004. Departing from past experiences, and in line with a much sought increased transparency of oil sector operations, most oil producing countries used the increased revenues to improve fiscal positions, either by reducing domestic and external arrears - Angola, the Republic of Congo, Gabon and Nigeria - or by repaying expensive foreign loans - Angola and Gabon. In Chad, the additional revenue reverted to a stabilisation fund, as required by law, a position that was also adopted by Nigeria. Fiscal responsibility contributed to keep inflation under control, even if the high activity levels ultimately contributed for above average price level increases in oil producing countries - relative to sub-Saharan Africa - However, the rather restrained response given by the vast majority of oil producers to the largely unexpected cash inflows in 2004 provides support for a positive near-term outlook. The projection of most professional forecasters is that oil prices will be higher on average in 2005. This bodes well for sub-Saharan Africa's emergence as a significant oil supplier, with continuing capacity increases scheduled in the years ahead. In 2005, for example, new capacity will be added in Nigeria as a major offshore oilfield comes on-stream.
- 3.0.0 Among all major sub-regions in sub-Saharan Africa, West Africa is the only one that did not seem to share the broadly healthy and otherwise homogeneous activity levels across the continent. Several reasons appear to explain the relative lack of synchronicity with the rest of the region, even beyond the fact that the number of West African countries in conflict or with fragile security conditions is quite significant. First, the price of cotton declined by about 30 percent in dollar terms and by nearly 40 percent in euro terms during 2004, as the world production increased by an estimated 22 percent. Twenty-four countries in sub-Saharan Africa account for about 6 percent of world output, with countries in the CFA franc zone contributing about two thirds of the region's production. The impact is estimated to be particularly strong – in order of 2-3 percent of GDP – on four West African countries, Benin, Burkina Faso, Mali and Togo, as cotton exports account for 5-8 percent of their respective GDPs. Second, Benin, Burkina Faso, Guinea-Bissau, Mali, Niger, and Togo, as members of the CFA franc zone, have lost considerable competitiveness with the depreciation of the US dollar against the euro, to which their currency is pegged. In fact, the CFA zone economies are increasingly dependent on dollarzone markets, the United States and Asia. While the depreciation has worked as a partial buffer in the case of oil prices, it has also prevented the exporting sector in those countries to benefit from the price increase that most commodities - other than cotton - enjoyed in 2004. A third negative factor impacting on some of the countries in the region was locust infestation - the worst in 15 years. While damages were smaller than initially feared, the infestation still managed to affect the livelihood of populations dependent on subsistence farming.
- 4.0.0 Overall, growth prospects for sub-Saharan Africa may have not been this promising for a number of years. However, political and economic risks remain pervasive. Côte d'Ivoire and the Great Lakes region are examples of either conflict or rather fragile security situations. Besides, the relative lack of diversification of most economies in the region makes them vulnerable to natural disasters, notably droughts and commodity price fluctuations.
- 5.0.0 One development that is expected to drag down economic growth in sub-Saharan Africa over the medium term was the removal of trading quotas on textile and clothing on 1 January 2005. Quota removal started a decade ago but it has been a rather slow process and its full impact has yet to unfold. Even if in global terms Africa's share of world exports of textiles is rather negligible around 1 percent of world exports in both 2002 and 2003 textile exports are quite important for the economies of a few African countries. These countries send most of their exports (three fourths of the total) to the US and European markets, which are precisely the ones where competition is expected to intensify the most following the quota removal. Furthermore, African exports concentrate on formerly quota-restrained products.
- 6.0.0 The region will thus keep depending on the support and commitment of the international community to make decisive strides towards poverty eradication. It is worth noting that in 2004, while many countries have attracted higher foreign assistance, official grants as a share of GDP fell slightly for sub-Saharan Africa. On the other hand, external debt burdens declined in 2004 as more countries Ethiopia, Ghana, Madagascar, Niger and Senegal reached the completion point under the HIPC initiative. Among countries that have reached the HIPC initiative completion point, grants remained at 4.7 of GDP on average. One fourth of the countries in the region received grants in excess of 7 percent, with a large share in the form of budget support. In this context, the decision agreed at the G8 Finance Ministers

meeting of June 10-11 to cancel the HIPC debt for all countries reaching HIPC's completion point brightens the region's medium-term outlook and it will hopefully contribute to sustain the region's quest for improved governance and development policies.

Chart 2: non-oil commodity prices



Source: IMF

#### 3.0 Caribbean

- 1.0.0 Over the past few years, Caribbean countries have been faced with a difficult economic environment. Preferential access for Caribbean countries to external markets has started to erode following World Trade Organization rulings against such preferential trade agreements and the traditional sugar and banana industries of many of the Caribbean states are coming under significant pressure as preferential access to external markets is withdrawn. For example, St Kitts and Nevis has announced plans for cutting back production, and partially privatizing the state-owned sugar corporation. This will force however the redeployment and retraining of much of the workforce. On the positive side, development is the on-going economic boom currently taking place in Trinidad and Tobago, largely associated with its oil and gas resources. The country—already the largest supplier of liquefied natural gas to the United States—is determined to advance on its past success and plans to pipe natural gas to other Eastern Caribbean islands.
- 2.0.0 In 2004, the hurricane season was particularly severe, with Grenada withstanding losses estimated at 885 USD million, or nearly double the country's GDP, with the Cayman Islands, the Bahamas, Cuba, the Dominican Republic and Haiti, also suffering extensive damage. The most immediate challenge for much of the Caribbean in 2005 is therefore to recover from the impact of those losses, with the tourism sector providing some needed support. This recovery takes place against the backdrop of weak public finances across the region, raising concerns about the sustainability of public debt.

Table 3: Main economic indicators - Caribbean

Caribbean	2002	2003	2004	2005
Real GDP growth (%)	3.2	2.7	2.6	3.3
Inflation	5.0	16.5	24.9	7.0
Fiscal Balance (% of GDP)	-3.7	-3.9	-2.4	-0.7
Current Account (% of GDP)	-5.7	0.7	-0.6	-2.8

Source: IMF

#### 1. The impact of the Tsunami

- 1.0 While the Annual Economic Report does not normally analyse trends in ALA countries, this year's issue would not be complete without some mention to the Indian Ocean Tsunami of late December 2004. The human costs of this natural disaster are almost without parallel in recent history: 140,000 people are estimated to have lost their lives, 150,000 are missing and another half million have been displaced from their homes. The economic costs are also sizeable, although quite unevenly distributed across the countries hit by the disaster. In India, the largest of the affected economies, costs have been estimated at 0.2 percent of GDP and no expected impact on economic growth for 2005. At the other extreme, the Tsunami inflicted damages in the Maldives are in the order of 50 percent of the country's GDP, with the growth forecast for 2005 cut down by 5.5 percentage points to 1 percent.
- 2.0 In the other three main countries impacted by the Tsunami, Indonesia, Sri Lanka and Thailand, the estimates of costs and impact on current year economic growth, while sizeable, are however considerably smaller than for the Maldives. In all these countries reconstruction efforts were implemented shortly after the disaster with considerable support from the international community. Estimates of the damages inflicted range from 0.5% of GDP in Thailand to 1.6% in Indonesia and 4.5% in Sri Lanka.
- 3.0 Tourism was one of the hardest-hit sectors, especially in Thailand. However, the recovery is expected to be relatively quickly (tourists are already switching to the unaffected areas, such as the western coast of Thailand and Bali in Indonesia), and certainly faster than when the severe acute respiratory syndrome (SARS) and still on-going bird flu hit the region in 2003. The second sector that was severely affected was fishing. In particular, Sri Lanka is estimated to have lost almost two-thirds of its fishing fleet and several of the major fishery harbours have been destroyed. In this case, recovery will take longer, as it will be difficult for fishermen to finance the acquisition of new boats and fishing equipment. The impact on growth is largest in Sri Lanka (0.75 less in 2005 while it is much more contained in Indonesia and Thailand).
- 4.0 The reconstruction effort will naturally have an impact on government finance and the current account, though it will be mitigated by substantial aid pledged by the international community. In addition, in March 2005 the Paris Club offered a moratorium on debt payments to the tsunami-affected countries until the end of the year. The effectiveness of reconstruction efforts will depend, on the one hand, on pledges actually being translated in disbursement and, on the other hand, on the ability of recipient countries to channel aid where it is needed, minimising administrative delays and corruption.
- 5.0 In the following thematic section the issue of managing for natural disasters, starkly highlighted by the tsunami, is analysed in some detail. Economic trends in selected tsunami-affected countries can be found at the end of this report.

Table 4: Economic Impact of the Tsunami in 2005

Country	Real GDP Growth in 2005		Inflation (%)		Bal	Account ance f GDP)	Government Balance (% of GDP)	
	Pre- tsunami	Post- tsunami	Pre- tsunami	Post- tsunami	Pre- tsunami	Post- tsunami	Pre - tsunami	Post- tsunami
Indonesia	5.5	5.25-5.5	6.0	6.0	1.9	2.1	-1.0	-1.3
Sri Lanka	6	5.3	10.5	12.0	-3.2	-5.3	-7.1	-8.4
Thailand	5.9	5.6	3.0	n.a.	2.4	n.a.	1.2	n.a.

Sources: IIF. IMF.

# MANAGING THE RISKS OF NATURAL DISASTERS IN DEVELOPING COUNTRIES: ISSUES AND OPTIONS

by Valerie Herzberg

The degree of devastation caused by the December 2004 Tsunami serves as a timely reminder that natural disasters represent a significant risk to developing countries. In view of their more vulnerable institutional frameworks, they have suffered considerable growth set backs when hit by large climatic or seismic shocks. The aim of this piece is to analyse why natural disasters are so costly and why despite that too little prevention and insurance takes place. It also explores possible ways to better manage these risks in developing countries.

### 1. The stylized facts

1.1 Though the occurrence of natural disasters is geographically widespread, human losses are not. Recent UNDP statistics on global disaster risks show that Africa records the highest average number of disaster-killed persons [Table 1]. The median however is relatively low, highlighting the relevance of a small number of extreme events in a few countries. In contrast, loss distributions in the Pacific and Caribbean are less skewed, suggesting that disasters are more homogenous across countries and – perhaps therefore more predictable. In terms of type of disaster and focusing on the MPC<sup>3</sup> and ACP countries, the majority of droughts take place in Africa (Sudan, Ethiopia, Mozambique), most earthquakes in the MPC (Turkey and Algeria) and cyclones in the Caribbean and Pacific. Floods affect a large number of countries across the board.

Table 1: Number of people killed per million inhabitants in natural disasters 1980-2000

	Africa	Caribbean	Pacific	MPC	Other*
Mean (across countries)	24.9	5.8	10.6	3.8	18.2
Median	0.9	2.9	6.3	1.1	0.9
Maximum	327	21.7	33.3	16.4	605
Minimum	0.04	0.19	2.3	0.35	0.01
Standard deviation	75.1	6.8	10.8	5.9	76.1
Number of observations (countries)	43	10	8	7	84

Source: UNDP (2004).

1.2 An analysis of the impact of extreme natural events by type reveals that there is no straightforward relationship between the number of events per year, the physical exposure of populations and the human cost [Table 2]. Draughts are the biggest killers – both in absolute and relative terms - even though a smaller proportion of population is exposed to them than to earthquakes; and even though they are not much more frequent than floods. Somalia, for example, reported by far the highest flood-related human casualties – more than seems justifiable by the number of events alone [Table 3]. Haiti, in contrast, records both high frequencies and exposure – and yet proportional human losses were much smaller than in Somalia. This suggests that for a given disaster other factors related to say geography, income levels, institutional strength or political stability are key in determining how sizeable human casualties could be.

Table 2: Disaster costs and exposures in ACP and MPC in 1980-2000

	Average number of events per year	Physical exposure in % of population	Number of killed per year	Average number of killed per million inhabitants
Floods	0.30	5.3	11.7	1.4
Droughts	0.31	6.2	2409	93.5
Earthquakes	0.24	7.2	139	2.9
Tropical Cyclones	0.29	6.1	17.2	4.3

Source: UNDP

1 Natural disasters are defined as earthquakes, floods, droughts and cyclones.

<sup>\*</sup> These include developed and developing countries.

One needs to bear in mind however that these statistics do not incorporate the 2004 Tsunami in South East Asia.

<sup>&</sup>lt;sup>3</sup> MPC stands for Mediterranean Partner Countries covered by FEMIP.

Table 3: Costs and exposures to floods in 1980-2000

	Average number of events per year	Number of people killed per year	Average number of people killed per million inhabitants	Number of people exposed per year (in thousand)	Physical exposure in percentage of population
Somalia	0.5	117.6	15.4	579	7.6
Haiti	0.8	11.9	1.7	2399	34.7
Median FEMIP + ACP	0.2	3.4	0.5	245	2.8
Median total	0.3	4.7	0.5	632	4.9

Source: UNDP

#### 2. Characteristics of financial costs associated with natural disasters

2.1 Turning to financial costs, while in standard economic growth models natural disasters only have short-term effects on capital stocks and output, in practice, the negative effects on economic growth and development can be more persistent.<sup>4</sup> Research by the IMF for instance shows that when government finances were already strained before the disaster, reconstruction and thus recovery has been delayed. In institutionally weak economies, debt management, fiscal and monetary policy becomes difficult. Moreover, structural reforms tend to be delayed or watered down. Natural disasters also seem to be bad news for poverty eradication. The poor in particular are exposed to disasters: they live in remote areas, off major transportation networks (70% of the world' poor live in rural areas); their wealth is concentrated in physical assets, which are highly exposed to natural disaster (eg land, animals); and they do not have the means to mitigate risks (eg through purchasing insurance). In a nutshell, developing countries with less capacity to manage natural catastrophes bear a heavier burden [see Table 4].

Table 4: Estimates of direct costs of recent natural disasters<sup>5</sup>

Event	Country	Damages US \$ billion	Loss as % of GDP
Earthquakes 1999	Turkey	22	5
Floods 1998	China	30	0.7
Hurricane Mitch 1998	Equador	2.9	14.6
Hurricane Mitch	Honduras	3	20
Hurricane Mitch	Nicaragua	1	8.6
Hurricane Mitch	United States	1.96	0.03
Floods 1998	Poland	3.5	3
Earthquakes 1995	Japan	95-147	2.5
Hurricane Andrew 1992	United States	26.5	0.5
Cyclone/Floods	Bangladesh	1	5

Source: IMF

- 2.2 Not only are disaster costs non-negligible, they have also been rising over time (Chart 1). While world GDP has been growing at around 3.4% annually since 1950, the rate of increase of direct disaster costs has been put at over 7% per annum. This might be due to two factors: a greater impact (due to greater vulnerability) and a higher frequency of extreme weather events. According to Munich Re, the number of extreme events has risen from about 20 in 1950-59 period to close to 90 in the 1990s (Chart 1). The increased frequency of weather disturbances could be related to global warming. As a result, and looking ahead, the Intergovernmental Panel on Climate Change expects the Southern Hemisphere and hence a large number of developing countries to be particularly affected by climatic disruptions. For example, it attaches a 90-99% probability to floods and droughts becoming more frequent in Latin America, sea-level rises impacting island economies and tropical cyclones becoming more intense during the 21<sup>st</sup> century. Small island developing states are said to be particularly at risk.
- 2.3 Costs have however been increasing at a more rapid rate than the numbers of disasters, suggesting a greater destructive impact than in the past (Chart 1). Rapid and unchecked economic development,

<sup>5</sup> Direct costs measure stock losses equivalent to the replacement cost of the physical assets destroyed.

<sup>&</sup>lt;sup>4</sup> Natural disasters can weaken potential growth by adversely affecting the absorption of technological progress.

<sup>&</sup>lt;sup>6</sup> There seem to be several channels. For example, a warmer earth surface intensifies evaporation and thus the watercycle, leading to higher rainfall intensity.

One should note though that it remains unclear to what extent human activity is contributing to global warming and what the exact consequences are for the future.

including increased urbanization and population growth appear to be major factors. The proportion of people living in cities in developing countries has doubled since 1960 to about 40%. The resulting higher degree of vulnerability reflects clustering in hazardous locations, concentration in risk-prone cities, sometitutional and economic capacity limits resulting in poorly built informal settlements, and environmental damages. Moreover, deforestation or other policies to raise the amount of arable land have further increased the fragility of many low-income and still highly rural economies.

700 ■Number 600 ■ Economic losses US\$ bn (2001 500 indexed) 400 300 200 100 1950-59 1960-69 1970-79 1980-89 1990-99

Chart 1: Number of catastrophes and estimated direct losses

Source: Munich Re

#### 3. What should be done?

- 3.1 Based on economic rationale, if local disaster risks are judged too high relative to the expected future incomes derived from a certain region, the resident population should emigrate. Otherwise, it needs to invest in catastrophe prevention and risk management to reduce the effective costs of natural disasters. Public authorities need to set up risk mitigating infrastructure (eg disaster projection, risk maps, early warning systems, coastal defenses, reforestation) and legislate and enforce regulation and standards that reduce the impact of natural disasters on settlements (eg: zoning and prohibition to construct in disaster prone areas, proper building codes). As an example of these benefits, one third of Jamaica's direct losses from Hurricane Gilbert in 1988 (estimated at \$ 960 million) could have been saved by rather inexpensive but effective roof strapping. Governments should also seek to improve the dissemination of information and increase awareness of risks and hazards across the population. The latter would be improved through clarification of property rights and accounting of contingent claims in government's balance sheets.
- 3.2 Governments should also develop insurance and financial markets, which allow risks to be better managed and diversified. When risks are relatively large and institutional features insufficiently developed, a pure private-based insurance system may not be viable. In such case, the state might want to provide insurance directly or provide guarantees. Also, to reach the informal and/or poor population segments, schemes could be devised that link insurance providers with microfinance organizations.
- 3.3 As catastrophe risk unlike most other risk- tends to be correlated across policyholders, reinsurance is key to lower insurance risk retention levels (ie the non-diversifiable risk). To spread large risks even further, insurers and reinsurers need to seek global capital markets and securitise disaster liabilities. This allows risks to be thinly distributed across a sizeable market, taking advantage of the large number of investors, their different risk preferences and exposures.<sup>9</sup> The public sector could offload catastrophe

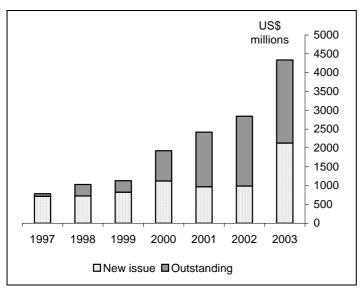
<sup>8</sup> For example, thirteen of the world's nineteen mega-cities are subject to increased risk from sea level, flooding and wind damage.

<sup>&</sup>lt;sup>9</sup> Given global bond and stock markets of around US\$ 60 trillion, the upper estimate of the direct costs of the Kobe earthquake, around US\$150 billion, represents less than 0.3% of portfolios. This should be easily absorbable, highlighting the enormous scope that global markets offer to manage catastrophe risks.

risk, for example through issuance of GDP-linked securities or weather derivatives.<sup>10</sup> But to optimally integrate local natural disaster insurers into global capital markets, local regulatory standards would need to be brought into line with international best practice and enforced. Regarding global capital markets, according to industry specialists such as Swiss Re, regulatory treatments of insurance-linked instruments need to be improved, benchmarks developed and securitisation of risk facilitated and made more transparent to boost market liquidity.

- 3.4 If all three areas prevention, insurance and capital markets could be simultaneously developed, their mutually reinforcing linkages would come fully into play. Prevention lowers insurance cost, boosting insurance and reinsurance capacity. Smaller risks are more easily absorbed by capital markets, attracting a wider investor base, raising liquidity, lowering premia and fostering insurance penetration.
- To what extent do we observe such developments and policy action in reality? There are a number of 3.5 noteworthy examples. In the mid 1990s, the Caribbean Disaster Mitigation Project in collaboration with the Cooperative Housing Foundation introduced a Hurricane Resistant Home Improvement Programme in Dominica, Saint Lucia, St Kitts/Nevis and Antigua and Barbuda. A training programme was initiated to train building contractors and artisans in safer construction and retrofitting in conjunction with a loan programme to finance home improvement. This also convinced local insurance brokers to offer groupbased insurance to the beneficiaries of the scheme. Some countries set up public insurance systems. Turkey, for example, prone to earthquakes, established the government-run Turkey Catastrophe Insurance Pool in 2000. It is a mandatory programme tied to property registration and rates depend on risk. From 2000-2003, fifty earthquakes occurred in Turkey and the TCIP paid total damages of \$ 7million to 4200 homeowners. There are also examples of private non-insurance based financial institutions cushioning disaster shocks. In Sri Lanka, the large and profitable privately-run microfinance institution Ceylinco, which caters to the needs of one fifth of the population- has played a key role in accelerating the revival of small private business following the December 2004 Tsunami. It proved more flexible and rapid in responding to acute financing needs in light of its close relationship and thorough knowledge of local entrepreneurs and rural credit risk.

Chart 2: New issuance and stock of insurance-linked securities



Source: Swiss Re

ODP-linked bonds are bonds of which the coupon and/or the redemption payments are tied to the GDP of the issuing country. Despite problems in the past, there has been renewed interest in these instruments. A recent study by the Zentrum für Europaeische Wirtschaftsforschung suggests that GDP-linked bonds are especially interesting for countries that stand at the threshold of capital market accessibility.

Yet, too little prevention and insurance takes place in the developing world (Chart 3). In Turkey, insurance penetration declined sharply after financial support was extended to all disaster victims. In the East Caribbean states, 30% of the insurable private sector housing sector remains underinsured and hardly any government buildings or assets are reportedly covered. Only 2% of India's flood costs of US\$4.5bn in 2001 were insured. Moreover, despite the absence of insurance coverage, governments provide insufficiently for the aftermath of potential events. According to the IADB Disaster Deficit Index which relates probable losses over different horizons to the possible funds available to government -a large number of Latin American governments including Chile, Peru, Dominican Republic and El Salvador, would face large financial gaps in the presence of disaster shocks.

Total Per cent **Economic** insured Loss (US \$ 100 bn) 90 80 70 60 50 40 30 20 10 <u>\_\_\_\_\_</u> Hondings 1988 LIIKEY 1989 nexico 1985 Indonesia 1996 Andre Arico 1889 JSANOST Polandingol

Chart 3: Insured and total economic loss from major natural catastrophes

Source: OECD Conference on Catastrophe Risk and Insurance

- 3.7 However, as global reinsurance markets faltered and premia shot up in the early 1990s, following the large losses due to Hurricane Andrew and the Northridge earthquake, capital markets demonstrated their potential for innovation and adaptability, filling the insurance void, through the creation of catastrophe-insurance linked securities and derivatives. 11 The market for insurance-linked securities – of which the bulk is catastrophe bonds - rose to roughly US\$ 10bn between 1996 and 2003 [Chart 2]. Weather derivatives also emerged including in developing markets. Mexico, for example, was the first developing country to reinsure its crop insurance programme via weather derivatives indexed to rainfall indices. 12
- However, despite these successes, insurance-based capital market instruments continue to lack the 3.8 necessary depth, breath and liquidity. Cat bonds tend to be solely related to windstorms and earthquakes and have not been insuring risk in developing economies, while exchange-based options trading – which developed during the 1990s in the US - has dwindled to virtually zero. In the Caribbean, the Bermuda Commodities Exchange was launched in 1997 to trade property catastrophe option contracts, but suspended activities in 1999 due to lack of activity.

<sup>12</sup> Agroasemex, a Mexican government-owned agricultural insurance company, bought a call option on a weather index, from Kansas City-based Aquila Energy to reinsure its portfolio of agricultural insurance policies. The option premium was around half the price of a comparable reinsurance contract.

<sup>&</sup>lt;sup>11</sup> Insurance linked securities can take many shapes and forms, such as catastrophe bonds, swaps and weather derivatives. Catastrophe bonds are typically issued by Special Purpose Vehicles (SPVs), set up by the risk cedent, who engages in a reinsurance contract with the SPV. Investors who purchase these "Cat bonds" receive - as long as a pre-defined loss event does not occur - a coupon payments which compensate for the use of funds and risk exposure. If the event occurs, investors suffer a loss of interest, principal or both. These funds are then transferred to the cedent in fulfillment of the reinsurance contract. Catastrophe swaps exchange a series of fixed, pre-defined payments for a series of floating payments whose value depends on the occurrence of the event. Swaps have benefits over bonds in that they are easier to structure, do not tie up capital as SPVs and hence less costly. They do however entail credit risk. A weather derivative is a financial contract whose value or payoff is derived from changes in an underlying weather event as determined from a weather index or other measure of certain weather conditions (e.g. temperature or rainfall) at a stated location. Weather derivatives have been traded on organized derivatives exchanges but are usually traded over-the-counter.

#### 4. Why is there too little insurance and prevention taking place?

- 4.1 Despite some promising developments, the overall failure of markets and public policy in developing countries in dealing with natural disasters is striking. This section explores some of the explanations. First, agents dispose of limited information about the nature and probability of natural disaster risk. Catastrophes tend to be uncertain and are consequently highly discounted. Also, the way society responds to natural disasters ex post distorts risk-mitigating incentives ex ante, the so-called "Samaritan Dilemma". The private sector expects the government to provide help following events— either because of explicit commitments (eg obligation to provide housing ex post, like in Colombia and El Salvador) or due to political and social pressures. This limits incentives of private agents to prevent and insure their own assets. Consistent with this, insurance penetration faltered in Turkey following the government's acceptance of all liabilities, jeopardizing the long run viability of the scheme. In low-income countries, binding budget constraints due, say, to malfunctioning financial systems limit further the ability of households and small firms to make necessary investments. Lastly, unclear property rights reduce the incentive to invest in asset protection instruments.
- Turning to the public sector, in many developing countries it lacks the powers and will to enforce building codes, zoning regulation or insurance requirements. This could be due to weak judicial systems, poor governance (eg corruption) or other conflicting policy objectives (eg to provide cheap housing to the poor). Political instability of course also hampers effective regulation and implementation. Governments might also have little incentive to set up costly insurance schemes or coastal protection devices when expected returns are uncertain and long run and more pressing short-term priorities exist (eg health care, public order, education). In addition, the 'Samaritan Dilemma' also exists at the government level. Many poor (and not so poor) countries can rely on international assistance and charity in the event of a large natural disaster, again discouraging preventive measures. 13 To avoid this, incentive-compatible international development programmes need to be created (eg disaster mitigation needs to be part of a country assistance strategy; ex-post disaster aid prioritized according to the degree of policy implementation). In practice, however, the international community and IFIs have often surrendered to political pressure and struggle with executing sometimes conflicting objectives (eg growth versus protection of the environment). Progress on reforms in developing countries regarding catastrophe management therefore depends to a great extent on policy commitments by developed economies.
- 4.3 Considering in more detail the failure of insurance markets it is important to highlight the intrinsic difficulties to assess the actuarial risk of natural disasters. This uncertainty pushes up premia. Moreover, unlike for other risks, the probabilities of payouts are positively correlated across policyholders, increasing the overall risk for insurers and hence the price for policyholders. Hankruptcy costs, in turn, raise reinsurers funding costs in financial markets, feeding back to primary insurers, by restricting risk coverage and increasing premia. Finally, governance problems and insufficient transparency of insurance companies (public or private) constrain their ability to reinsure and diversify exposures globally.
- 4.4 Turning to capital markets, their growth and liquidity is being hampered by the difficulty to price catastrophe linked securities. <sup>15</sup> Moreover, these tend to be complex instruments that are costly to structure, limiting the attractiveness for a wide investor base. That said, standardization, in order to reduce these information costs, diminishes the extent to which the individual risk of each risk seller is covered and hence reduces the attractiveness for the risk cedent of using customized reinsurance contracts.
- 4.5 Finally, the linkages and dependencies between different markets insurance –reinsurance capital markets also need to be borne in mind as an important element in explaining why current outcomes are suboptimal. Imperfections in capital markets for example restrict households to finance prevention measures and reinsurance companies to spread risks more widely. This, in turn, has a negative bearing on insurance premia and coverage.

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<sup>&</sup>lt;sup>13</sup> The scale of international donations and public funds made available following the December Tsunami could thus have detrimental effects on future preventive efforts.

<sup>&</sup>lt;sup>14</sup> Ordinary risk insurance benefits from the independence of risk across policyholders; pooling is thus an efficient way of lowering the cost of insurance.

<sup>15</sup> This is because the underlying asset is not traded. The pricing of financial derivatives is typically based on an arbitrage relationship between the derivative and the tradeable underlying assets.

#### 5. Conclusion

The costs of natural disasters have risen substantially over the past thirty years. This reflects both an 5.1 increased frequency of sizeable events and a greater impact due to rapid urbanization and population growth in many catastrophe-exposed areas. The impact in developing countries is amplified due to insufficient prevention and insurance of risk both on behalf of the private sector and of public authorities. The reasons for insufficient risk mitigation are numerous: low income levels, institutional weaknesses, poorly developed financial sectors, the uncertainty of disaster risk and thus high premia, the difficulty to spread disaster risk across global markets, the "Samaritan Dilemma", to name just a few. Well designed public policy could however address some of these failures by for example increasing awareness of risk, enforcing necessary regulation and standards, setting up viable and incentive compatible public disaster insurance schemes and enhancing transparency and governance to allow local insurers to reinsure globally and/or distribute the risk in international markets. Of course, in practice, progress on such an agenda is likely to be slow. Policymakers' priorities often lie elsewhere, incentives are distorted and/or short term and implementation capacity inadequate. A lot would be achieved though if international aid and policies were designed not to distort incentives in poor countries to prevent and manage disaster risks.

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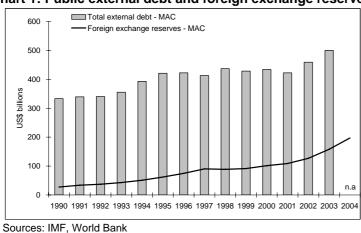
# LOCAL CURRENCY BOND MARKET DEVELOPMENTS IN MEDITERRANEAN, AFRICAN AND **CARIBBEAN COUNTRIES**

by Peter Kuenzel

# 1. Background

- Local currency bond markets will be playing an increasingly important role in Mediterranean, African and Caribbean countries (MACs). The development of domestic debt instruments is essential not only for mobilizing savings, but also for deepening financial markets and managing risks. As such, the development of domestic debt markets has the potential both to foster macroeconomic stability and generate growth.
- One of the principal advantages of developing local currency debt markets is that it enables countries to 1.2 diversify financial markets. It can facilitate the mobilization of domestically-denominated savings while reducing borrower exposure to sometimes-volatile international capital markets. Reduced investor appetite for developing country debt denominated in foreign currency as a result of real/perceived risk, or contagion, can significantly raise financing costs or prevent market access altogether, with serious repercussions for borrowers.
- 1.3 Moreover, heavy reliance on overseas borrowing in foreign currency exposes domestic borrowers to exchange rate risk. The exposure to foreign currency risk of a given corporate essentially depends on the asset and liability structure in foreign currency on the firms balance sheet. The 1997-98 Asian crisis, and the more recent examples of Turkey and Argentina, provide ample evidence of the dangers of overexposure of banks and other corporates to foreign currency denominated liabilities. In the case of most MACs, it appears that while banks have sought to offset rising foreign currency liabilities with increased domestic lending in foreign currency, the non-financial private sector has become more exposed to exchange rate risk<sup>1</sup>. Furthermore, the lack of currency forward markets in many MACs, at least at longer maturities, prevents the private sector from adequately hedging these currency exposures. The development of local currency debt markets could thus contribute to substantially reducing market exposure to currency risk.
- From a sovereign perspective, convertibility risk on foreign currency debt also argues in favor of the development of domestic bond markets. Thus in addition to ensuring that the government has sufficient funds to service its debt, there needs to be sufficient foreign exchange available in the country to make such payments. In the context of rising external public debt burdens, and to guard against currency pressures. MAC countries have been accumulating official foreign exchange reserves, which reached close to 200 billion at end-2004 (Chart 1). But while the accumulation of reserves can reduce pressure on the exchange rate and enhance the countries' credit standing, such a policy may not be optimal over the long run because countries may be accumulating low yielding foreign assets such as US securities at the expense of investing in the local economy.
- Apart from currency risk and portfolio considerations, insufficiently developed local debt capital markets expose borrowers to potential maturity mismatches and interest rate risk. At present, financing long-term projects in many MACs on local markets requires borrowers to take on short or medium-term loans, which then have to be extended or renewed. This is not only sub-optimal in terms of project cash-flow management, but also potentially risky in a rising interest rate environment. Therefore increasing the availability of domestic long-term bonds can help reduce uncertainty and limit maturity mismatches.

Chart 1: Public external debt and foreign exchange reserves



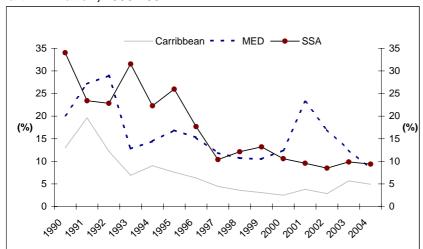
According to the IMF, foreign currency liabilities of the non-financial private sector for the Middle East and Africa region in 2002 represented nearly 40 percent of GDP, whereas their external assets represented less than half that amount.

- 1.0 Despite these notable advantages, local currency bond markets in MAC countries remain largely underdeveloped. Even the most developed local currency debt markets in the region are much smaller in relation to the size of their economies than those in advanced economies. Thus, for example, the size of the local bond market as a share of GDP in South Africa and Turkey represents 49 percent and 55 percent, respectively. In contrast, this ratio exceeds 150 percent in advanced economies such as Japan and the United States.
- 2.0 At the same time the maturity structure of local issues in MAC countries have not developed sufficiently, reflecting a high perception of risk and uncertainty about longer-term paper. In addition, and with notable exceptions, such as South Africa, secondary markets are not active or simply do not exist. These features prohibit the accurate pricing of debt as reflected in the absence of yield curves.
- 3.0 Finally, it should be noted that local bond markets in MAC countries are typically dominated by government paper, whereas corporate and banking issues represent only a fraction of total issues. To a certain extent market development, at least at initial stages, calls for governments to issue benchmarks for corporates; and as will be argued below this is starting to happen. Nevertheless, in relation to the overall domestic bond market size, most countries in the region lag well behind in terms of private sector issues, and there is substantial catching up to do.
- 4.0 A number of reasons help explain why domestic bond markets in MAC countries have remained underdeveloped relative to other developing country groups. While each country clearly needs to be judged on its own merit, a number of factors have delayed the development of local bond markets in many MAC countries. For some countries, the economies and financing needs are simply not sufficiently advanced to warrant elaborate domestic bond markets or the political situation is not conducive. The absence of clearly defined regulatory frameworks and weak contractual enforcements, have also certainly played a role in deterring potential investors. High and volatile inflation in the past has also been a contributing factor, causing uncertainty about real returns and weakening the ability of governments and corporates to issue longer term paper.
- 5.0 The lack of existing or well functioning secondary markets as well as the predominance of government paper has also undermined market development. Local bond investors in many MAC countries either consider government issues as a relatively safe return relative to other options, or in some cases hold government paper on account of moral suasion (i.e. to help support government's financing policies). As a consequence, these instruments in MAC countries are not traded actively.
- 6.0 Finally, domestic bond markets have in some instances failed to develop adequately due to the fact that many countries in the region—particularly HIPC countries—have access to external financing sources on highly concessional terms. A study conducted by the IMF (Christensen 2004) finds that total domestic interest payments for a group of Sub-Saharan African countries are as large as external interest payments, despite the fact that domestic debt was only 15 percent the size of its external counterpart. The cost of domestic borrowing therefore largely exceeds that of external borrowing for many countries in the region. However, it should be noted that the ability of countries to attract concessional finance is limited both in terms of volume, as well as in terms of utilization. As a result, countries still need to develop their domestic financing capabilities, preferably at lower cost.
- 1.12 While domestic bond markets in many MACs remain nascent, in recent years local markets have started to develop in terms of volume and liquidity, the type of instruments that are offered, as well as the maturity structure. This development reflects a number of congruent factors. First, inflation has come down significantly and price swings are generally less volatile, reducing risk to investment (Chart 2)<sup>1</sup>.

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<sup>&</sup>lt;sup>1</sup> The spike in inflation in Mediterranean countries in 2001 represents the effects of the Turkish crisis.

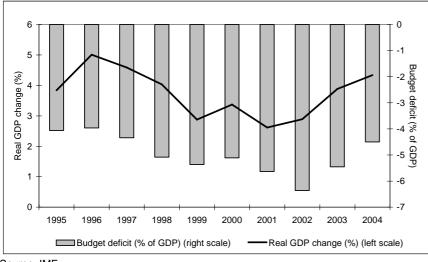
Chart 2: Inflation, 1990-2004



Source: IMF.

- 1.13 At the same time, the presence of foreign banks has increased and many countries have engaged in financial sector reforms, including through interest rate liberalization, strengthened financial sector regulation and supervision, and the opening up of the external current and capital accounts. Reduced inflation and improved financial sectors have been accompanied by a rise in real interest rates, which for much of the 1990s tended to be negative in many MAC countries.
- 1.14 These improvements have been reinforced more recently by the so-called push-pull factor to emerging and developing economies<sup>2</sup>. Low interest rates in developed economies, improved economic growth performance, and declining budget deficits over the past couple of years all help to explain rising capital flows to the region (Chart 3)<sup>3</sup>. It should be noted, however, that while stronger fundamentals certainly have attracted foreign investors to emerging and developing markets in general, foreign participation in debt markets in the MAC region remains limited to the most developed of these markets, particularly as concerns local currency issues.

**Chart 3: MACs Growth and Budget Deficits** 



Source: IMF.

1.15 In addition to these factors, there has certainly been a rising awareness of both governments and corporates of the benefits of developing local bond markets—and in particular for extending maturity—to avoid currency exposure associated with foreign-sourced lending. As a result, a number of regional governments have set benchmark issues or encouraged foreign issues in local currency with a view to developing local markets.

<sup>&</sup>lt;sup>2</sup> The push-pull factor refers to international (push) and domestic (pull) factors that can help explain the capital flow to any given country or region.

<sup>&</sup>lt;sup>3</sup> The improved fiscal position of many countries in recent years not only strengthens the quality of debt issuance, but also reduces the cost to issuers.

#### 2. Developments in local bond markets

#### 2.1. Mediterranean countries

- 2.1.1 Development of local currency bond markets in Mediterranean countries has been met with varied success both across the region and within given countries. Different countries in the region have attained different levels of debt market sophistication, to some extent reflecting the financing needs of the government. Thus, for example, Lebanon and Turkey, which have recorded double-digit fiscal deficits, have also developed a deep domestic currency government bond market. On the other hand, countries with fiscal surpluses or moderate deficits, such as Algeria and Syria, have not actively developed their local government bond markets.
- 1.0.0 But even in the more sophisticated local bond markets, the state of development has been limited for a number of reasons. In the first place, local market issues are largely dominated by the public sector, and despite benchmarking that has occurred for longer-term maturities, the private sector bond market has largely failed to develop. This reflects weaknesses in corporate governance, regulation, contract enforcement, transparency, and traditional reliance on bank financing. At the same time, secondary markets are generally not very developed and trading is limited. Several countries in the region have had some success in developing local currency bond markets, two of which—Egypt and Lebanon—are reviewed below.

# Egypt

- 2.1.3 In Egypt the local currency bond market is dominated by government securities. In the fiscal year ending June 2004, domestic government debt amounted to LE293 billion (64 percent of GDP), most of which is financed through the domestic bond market. In the same year, Treasury bills outstanding amounted to LE84 billion, and bonds LE188 billion, of which roughly one-tenth in terms of value (some 130 issues) is tradable on the stock exchange. By comparison, the total value of corporate bonds issued on the stock exchange is about LE5.5. The majority of corporate listings are bonds issued by banks. Other sectors include telecommunications, tourism, cement, and steel. Trading of both government and corporate bonds listed on the stock exchange is limited, accounting for only about 5 percent of the total value of securities traded.
- 2.1.4 In terms of maturity structure, the government bond market has a gamut of maturities up to and including 20-year notes, although many have call provisions that effectively reduce tenor. Over the past fiscal year, developments in the government local currency bond market include the issuance of three treasury bonds amounting to LE20 billion, each with a ten-year maturity and a 7.5 percent coupon. The Treasury also issued a batch of three-year paper totaling LE4 billion with a 8 percent coupon, as well as LE20 billion worth of treasury bills. Corporate paper in Egypt has been issued up to a tenor of ten years.

### Lebanon

- 2.1.5 Lebanon's large fiscal deficits have contributed to a significant domestic local currency debt market. Total gross public debt accounts for approximately 170 percent of GDP, of which roughly half is denominated in local currency. Given the precarious government fiscal situation, most domestic debt is characterized by short-term paper. Roughly one-fifth of local bonds mature in less than one year, and the majority of the remaining issues are of three-year tenor or less. However, the government has tried to extend the average maturity profile of its debt in recent years with some success. The average life on Lebanese domestic paper at end-2004 was 546 days, whereas average maturity stood at just over one year just two years ago. The average interest rate on domestic debt at end-2004 was 5.99 percent.
- 2.1.6 Domestic banks hold roughly 50 percent of public local currency bonds, and the central bank holds another third of total issues outstanding. The remaining portion is held about equally among public entities and nonresident investors. The corporate local currency bond market in Lebanon is not developed.

#### 2.2. Sub-Saharan Africa

- 2.2.1 The development of local currency bond markets in Sub-Saharan Africa is very varied reflecting to a large extent the stage of economic and financial market development. On the one hand, many smaller, insulated, economies are not sufficiently mature for local currency bond markets to develop. As noted in the background section, many governments in the region also do not rely much on domestic financing, given the concessional financing terms available on external funds. This indirectly influences the ability of local corporates to issue local currency bonds and limits the size and depth of the market. On the other extreme, South Africa has a well-developed local bond market, and other countries have made progress in developing their markets as well.
- 2.2.2 While recognizing the disparity in the stage of development of local currency bond markets in the SSA region, some features in the region predominate. A large number of local bond markets are characterized by weak foreign participation, a high proportion of commercial bank holdings, dominance of government paper, and average maturity on domestically issued debt is typically very short. Thus, for example, the average maturity on public domestic debt for a sample of 12 countries in Sub-Saharan Africa is just over one year (Chart 4). By contrast, the average maturity on domestic debt in Mexico is over two years, in Brazil over three years, and India over 8 years.

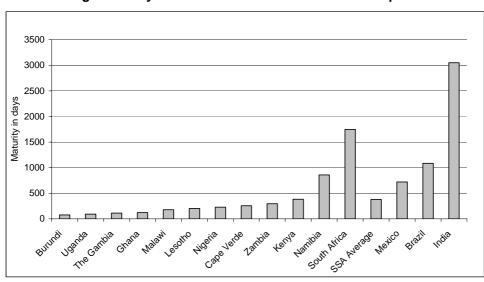


Chart 4: Average maturity structure of domestic debt for a sample of countries

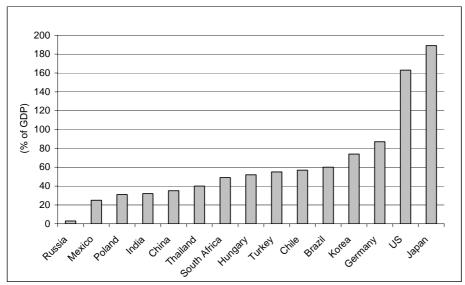
Source: IMF.

2.2.3 But while it is generally true that the region's local bond markets—with the notable exception of South Africa—lag behind those of other developing markets, significant advances have been made in a number of countries over the past few years. Recent developments in the most active market—South Africa—as well as in some of the most actively evolving regional markets—Botswana, Namibia, and Kenya—are reviewed below.

#### South Africa

- 2.2.4 South Africa is by far the most important and developed bond market in Africa. The Bond Exchange of South Africa (BESA), South Africa's independent financial exchange and debt regulator, grew from modest beginnings. In the 1980s, the South African bond market consisted of debt issued by parastatals. Following the inauguration of the Bond Market Association (BMA) in 1989, the government and corporates started issuing bonds as well. After the BMA was formally licensed and renamed BESA in 1996, the South African bond market took off, aided in part by the 1997-98 Asian crisis when global investors were looking for alternative placements. Today BESA—which is comprised of dealer banks, trading and brokerage houses, bond issuers, asset managers, as well as the South African Reserve Bank—is serving one of the most liquid emerging bond markets in the world. Over the past three years the local market turned over its market capitalization more than 20 times on average.
- 2.2.5 In terms of market size, the South African bond market represents about 50 percent of GDP. This places the South African bond market in a similar position with other advanced emerging markets, such as Hungary, Turkey, Chile and Brazil, which each have ratios in the 50-60 percent range (Chart 5). By comparison, Germany has a bond market which represents some 80 percent GDP, while countries with the largest bond markets, such as Japan and the US, have market to GDP ratios in excess of 150 percent.

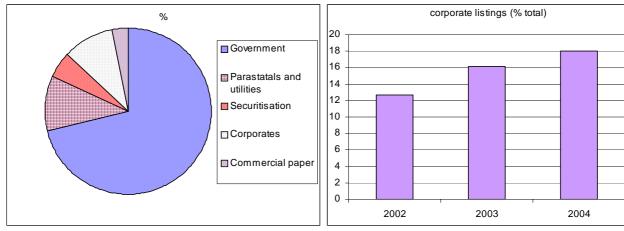
Chart 5: Size of local bond markets, 2003



Source: Euromoney.

2.2.6 The BESA is mostly comprised of government issues, which accounted for 71 percent of the market in 2004 (Chart 6). At the same time, private issuance has been on the rise in recent years, reaching 18 percent of total listing in 2004. The growth of the local corporate bond market has been favored by declining costs of bond finance, as well as portfolio diversification opportunities for South African financial institutions, which have traditionally been underweight in corporate bond holdings.

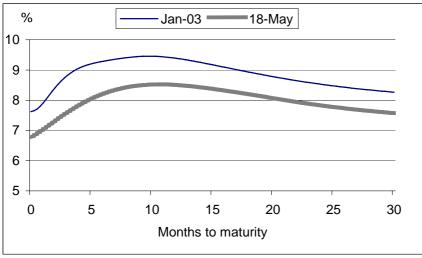
Chart 6: Composition of BESA, 2004



Source: BESA.

- 2.2.7 Foreign participation in the BESA on the buy side has averaged around 25 percent since 2005, but with variations from year to year. Thus, for example, pressure on the South African Rand in 2001 caused this ratio to fall to 20 percent. There are currently no foreign ZAR issues on the BESA, although many international banks, including the EIB, issue ZAR denominated paper on European markets. As of May 2005, the EIB had issued 21 ZAR denominated bonds with a total value of ZAR 14.5 billion (EUR 1.8 billion equivalent), with maturities of up to 11 years. In June 2004, the IFC coguaranteed 40 percent of ZAR 1 billion bond issued by the city of Johannesburg and the African Development Bank has also been involved in guaranteeing issuance of parastatal bonds.
- 2.2.8 In terms of maturity structure, the South African bond market is well developed and has bonds with maturities up to 30 years. Mark-to-market yields to maturity for all listed bonds are distributed at the end of each trading day and are used to calculate indices and the yield curve. Bond yields declined in 2004 reflecting lower inflationary expectations, and the yield on the benchmark R153 government bond, which matures in 2010, fell by about 120 basis points to 7.8 percent over the course of the year. Yields continued to fall during the course of this year and the yield curve has flattened out somewhat since the beginning of the year (Chart 7).

Chart 7: South African yield curve



Source: BESA.

2.2.9 In terms of ongoing developments, BESA has taken steps to improve governance and efficiency, inter alia, by establishing a new governing committee representing various parties' interests. At the same time, BESA has implemented a new IT platform for bond trading, is introducing new products, including bond-based derivatives, and has strengthened its surveillance and compliance capabilities.

#### Botswana

1.0.0 While South Africa's local bond market dwarfs other regional domestic bond markets, other countries have made strides in developing their markets. Botswana is a good example of a country that has made progress in developing its local market. In March 2003, the government of Botswana issued its first medium term (5 year) bond, and subsequently 12-year and 2-year paper. The longer-term issues were re-opened later in the year, raising an additional BWP700 million (\$154 million) (Table 1). The government bond auctions, which totaled BWP2.5 billion (\$550 million) were oversubscribed on average by 70 percent.

**Table 1: Government of Botswana bond auctions** 

Auction date	Bond	BWP million Supply	Demand	Yield at auction
Mar-03	BW002 - maturing 1-3-2008	500	811.7	12.65
Apr-03	BW003 - maturing 31-10-2015	500	841.2	11.5
May-03	BW001 - maturing 1-6-2005	750	1107.1	13
Oct-03	re-opening 2015 bond	400	863.2	9.99
Nov-03	re-opening 2008 bond	350	623.7	9.5
Total		2500	4246.9	

Source: Bank of Botswana

- 2.2.11 In terms of investor composition, domestic institutional investors—consisting primarily of pension funds and insurance companies—owned over three fourths of outstanding bonds in 2004. Foreign participation accounted for less than five percent of government issues and had a distinct preference for shorter-term issues, where participation exceeded 10 percent.
- 2.2.12 Meanwhile, Botswana has an over-the-counter secondary market, although it is limited in terms of activity. Through mid-2004, monthly turnover averaged only three percent of total outstandings. It is expected that government bonds will eventually be listed on the Botswana Stock Exchange, with a view to developing the secondary market further.

- 2.2.13 The recent government issues marked the first time that paper was provided beyond 91 days, and these issues were undertaken without a real financing need since the government has accumulated significant fiscal surpluses over the past twenty years. Rather, the government's intention has been to develop capital markets by setting benchmarks for private sector issues, as well as to meet market demand. The benchmarking exercise seems to have been met with some success, as both parastatals and corporates issues have flourished. Parastatal issuance has been facilitated by the sale of the government's public debt service fund loan book to a special purpose investment company, the Debt Participation Capital Funding Limited (DPCF). This entity in turn issued seven bonds in 2004 for a total of BWP1 billion (\$220 million).
- 2.2.14 On the corporate bond side, a number of local currency bonds have been issued in recent years with maturities of up to 15 years. The overall size of the local corporate bond market is smaller, however, amounting to about BWP700 million (\$154 million). Additional potential exists for the development of the corporate bond market. Commercial banks have close to BWP400 million in loans to parastatals and over BWP3 billion in loans to businesses, some of which could be converted to bonds. Another opportunity would be to pool mortgage loans, which today account for over BWP2 billion (\$440 million).

# Kenya, Namibia, and Tanzania

- 2.2.15 Kenya, Namibia and Tanzania have also had recent success in developing their local currency bond markets. The Kenyan government over the past couple of years has extended the maturity profile of its bonds with a view to establishing a benchmark for pricing of long-term corporate debt. The government bond maturity structure now includes a continuum of maturities of up to 9 years. The Kenyan bond initiative in the past few years has been facilitated by falling interest rates to record lows, although more recent inflationary pressures has seen a pickup in domestic interest rates, which has dampened bond market activity.
- 2.2.16 Namibia has also witnessed rapid growth in its local currency bond market, and in addition to 5, 7 and 12-year paper, issued a 20-year government bond in 2004. While the Namibian market is not very deep or active, the country's close ties to South Africa has certainly facilitated the development that has occurred to date and is expected to continue to do so.
- 2.2.17 Growth in the Tanzanian debt market over the past two years has been facilitated by government issues of up to 10 years in maturity. This has created a benchmark for the pricing of corporate paper, and a number of non-government long-term bonds have been issued recently, including by the East African Development Bank, the Preferential Trade Area Bank, and Bidco Oil and Soap, which issued a 5-year TSH10 billion (\$9.2 million) fixed rate bond. Tanzania's market is expected to continue to expand given its rapidly growing economy and stable political environment.

#### 2.3. Caribbean

- 2.3.1 The Caribbean domestic bond market faces many of the same challenges as those of countries in the Mediterranean and in Sub-Saharan Africa. The lack of effective and liquid secondary markets, limited numbers of investors, inadequate corporate governance and transparency, and in some cases weak public finances, have held back the development of the local currency bond market. At the same time, however, the advantages of local debt market developments are widely recognized in the region. For example, the fairly well developed domestic bond market in Jamaica has been credited with helping the government raise funds domestically, thereby staving off a potential foreign exchange payment problem.
- 2.3.2 In addition to Jamaica, Trinidad and Tobago and Barbados have made progress in developing bond markets. The Regional Government Securities Market (RGSM) of the Eastern Caribbean Currency Unit's (ECCU) has also helped develop the local bond market for smaller island economies. Recent activities in these markets are reviewed below.

#### Jamaica, Trinidad and Tobago and Barbados

2.3.3 The bond market in each of these three countries is characterized by low corporate participation. Public bonds account for 90 percent of total bonds in Barbados and more than 75 percent of total bond issues in Jamaica and Trinidad and Tobago. At the same time governments tend to issue some tenors only infrequently, making the establishment of a benchmark yield curve difficult<sup>4</sup>. Thus, for example, in Jamaica, and despite the authorities' stated strategy to extending the maturity profile of domestic debt, the stock of instruments in excess of five years remained essentially flat. The

<sup>&</sup>lt;sup>4</sup> Caribbean Money Market Brokers, a broker/dealer based in Trinidad and Tobago, and a recent study by C. Pemberton, A. Stewart, and P. Watson at the University of the West Indies, have estimated yield curves for each of these markets using interpolation methods.

- issuance of two long-term (over 5-year) instruments in 2004 saw fairly low subscriptions, reflecting recent market instability and an investor preference for shorter-tenor instruments.
- 2.3.4 While corporate issues in all three countries are typically underwritten, government securities in Jamaica and Trinidad and Tobago are issued into the primary market via an auction process. Barbados is the only country in which investors need to tender to be able to purchase fixed-income securities. The Central Bank is responsible for issuing government securities in all three countries. Secondary markets are underdeveloped and activity is primarily limited to government securities. The little trading that does occur takes place on the over-the-counter market, given the absence of a formal exchange for bonds.
- 2.3.5 In view of the predominance of government paper in local markets, the structure of local currency debt is essentially determined by public bonds. As noted above, in Jamaica, the state of public finances has made the extension of the maturity structure of debt difficult. As a percent of total outstanding local currency public debt at end-2004, paper of less than one-year tenor accounted for over 27 percent, paper of between one- and five-year tenor accounted for over 72 percent, and paper of more than five years represented less than one percent.
- 2.3.6 By contrast Barbados has been able to issue domestic debt at longer maturities, reflecting the country's relatively strong fundamentals and favorable debt servicing profile. In fact, most of the debt is long-term, with maturities exceeding 10 years, and less than a quarter of total outstanding issues are below 5 years in tenor. However, there is a noticeable absence of intermediate-term paper (5 to 10 years in tenor), making the construction of yield curves difficult. Domestic debt is held by institutional investors including commercial banks, the National Insurance Scheme, trust companies, and insurance companies.
- 2.3.7 Trinidad and Tobago is in a similar situation to Barbados in terms of maturity structure in the sense that there is a plethora of issues at the shorter (less than one year) and longer (more than ten years) end of the maturity spectrum. Furthermore, the majority of government issues are floating rate notes with built in call options, making the pricing of paper difficult.

#### 3. ECCU Regional Government Securities Market

3.1 The ECCU bond market has developed more formally than those of the larger markets of Jamaica, Barbados, and Trinidad and Tobago. The establishment of the RGSM has enabled the pooling of debt instruments offered by the eight ECCU member governments under a set of common standards and rules<sup>5</sup>. The advantage of the RSGM is that it centralizes activities of primary and secondary markets, the trading of which occurs on the Eastern Caribbean Securities Exchange (ECSE), while at the same time facilitating cross-border operations. While the market is still at an early stage, a number of local currency securities are listed on the ECSE, varying in maturity from 3-months to 10-years.

#### 4. Conclusion:

- 4.1 This paper has argued that the development of domestic debt instruments has a strong potential to foster macroeconomic stability and generate growth in MACs as it can help reduce currency and payment risk, improve the functioning of local financial markets, and mobilize savings.
- 4.2 While conditions for local currency bond markets in MACs have improved considerably, and some progress is being made towards developing these markets, additional efforts are required on a number of fronts. In particular, the experience so far suggests that markets in MACs could benefit from:
  - continued progress towards macroecononomic stability through prudent policy making;
  - further efforts toward improving regulatory frameworks and supervisory capacity, as well as contract enforcement;
  - enhanced market transparency and the establishment of formalized exchanges both for primary and secondary markets;
  - strong corporate governance, accounting standards, and transparency;

<sup>&</sup>lt;sup>5</sup> The eight members of the ECCU are Anguilla, Antigua and Barbuda, Dominica, Grenada, Montserrat, St Kitts and Nevis, St Lucia, and St Vincent and the Grenadines.

- development of the maturity structure of government issues to provide benchmarks, facilitate pricing, and to help establish a yield curve;
- improved access and diversity of the investor base;
- pooling of markets in the case of smaller, less-developed economies;
- reduced reliance on traditional bank financing, for example, through the conversion of loans into bonds:
- better clearing and settlement systems, including through IT development;
- further cooperation with foreign partners, for example through the provision of foreign guarantees on domestic issues, or, on the buy side by facilitating market access;
- Each country in the MAC region needs to find the most appropriate path for the development of its 4.3 local currency bond market, taking into account its stage of economic and financial market development. However, given the recent successes of a few countries in the MAC region and the benefits of market development for macroeconomic stability and growth, countries overall would certainly gain from more decisive steps towards developing their local currency bond markets.

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