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## SOVEREIGN DEBT AND INNOVATIVE FINANCING INSTRUMENTS FOR EMERGING MARKETS

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### Summary of the Discussions

by

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Of all the meetings held thus far (Rome, Amsterdam, Chongqing), Izmir was the more narrowly focussed, with much of the discussion centered around financial innovation issues in the context of emerging markets. The summary below presents the key highlights in what was a broad ranging set of interventions.

#### **Turkey**

Turkey's Economic Minister Ali Babacan spoke warmly about the importance of forthcoming EU accession negotiations; without the long-term political and economic stability provided by the EU accession policy framework, debt management was likely to become a real headache. He underscored that Turkey could prove to the rest of the world that Islam and democracy were not irreconcilable opposites and that Turkey's successful integration with the rest of Europe would have worldwide geopolitical implications. He reviewed recent progress made on the economic front. Following several decades of price instability inflation in 2004 ended at 9.3 percent, the lowest in more than 30 years. The budget deficit, which had been 17 percent of GDP in 2001, was projected to narrow to 4.5 percent of GDP in 2005 and was on a path to fall further in 2006, to 2.5 percent of GDP, well under the limit for the EU's Growth and Stability Pact. Along the way nominal interest rates on domestic borrowing had dropped from 66 percent to 17 percent, with an equivalent drop in real rates as well. Market spreads on eurobonds had also narrowed and GDP growth was on a roll: 5.5 percent in 2003, close to 10 percent in 2004, much of it led by the private sector. This growth had been accompanied by rising labor

productivity and an impressive recovery of exports. FDI inflows, low in the past due to Turkey's ambivalent attitude to foreign ownership of local assets, had recovered as well, helped by an easing of administrative rules.

One area where the government would have to continue to act cautiously was public debt management. Coming out of its own financial crises in 2000/01 Turkey faced the future with a not insignificant debt burden. It had some US\$70 billion of external debt, more than 90 percent of it long-term, half of it eurobonds. Turkey had been the first emerging market to introduce collective action clauses in bond contracts. In addition to efforts made in recent years to improve the debt's maturity profile, the share of variable interest rate debt had also been reduced. On the whole, Mr Babacan was cautiously optimistic about Turkey's long-term future. A young nation of 72 million people expected to grow to 100 million in the next 25 years could be an excellent complement to Europe's graying populations.

Some of these themes were also touched upon by central bank governor Sureyya Serdengeçti during an evening speech. He drew an important distinction between price stability and financial stability, stating that the latter required more efforts in terms of policy coordination, to forestall, for instance, the effects of contagion on market volatility. Turkey's many financial crises during the past quarter century had had different causes. In the 1980s these had largely been the result of reckless macroeconomic policies. In the 1990s the causes had shifted to a combination of poor macroeconomic management (particularly loose fiscal policies), poor debt management, the speculative attacks which these had brought about and poorly formulated attempts to restructure the financial sector. In his view two fundamental ingredients to reduce vulnerability to crises were: good macroeconomic management and efficient policy coordination.

In Turkey, a high debt burden had undermined confidence; the high yields and debt spreads that resulted further complicated fiscal management. Governor Serdengeçti reviewed briefly the 2001 crisis and noted that a default on domestic currency treasury bills (avoided through massive IMF support) would have led to a massive erosion in the reputation of the state, a sharp contraction of output, loss of access to markets and a drying up of trade finance. In the event, Turkey was now quickly on the mend. The central bank had been granted independence in May of 2001. Monetary policy had moved to an inflation-targeting regime and the authorities had achieved the target during each of the last three years (2002-04). For its part, fiscal policy had played a far more supportive role, with a 6.5 percent of GDP primary surplus being achieved in both 2003 and 2004. Reserves at the central bank had moved sharply up, contributing to a reduction in various indicators of external vulnerability (e.g., the ratio of foreign currency reserves to the stock of external debt). In the meantime, the economy had continued to open-up, with the ratio of total trade to GDP rising from 50 percent in 2001 to 64 percent in 2004. The Governor emphasized the salutary effect of the "good expectations environment" brought about by the forthcoming start of accession negotiations with the EU.

## **GDP-linked bonds**

Paulo Mauro presented the case for GDP-indexed bonds. The main benefits for issuing countries were to reduce the probability of default and the associated collateral damage. They would create less of a need for pro-cyclical fiscal policy and allow greater international risk sharing. For investors, presumably there would be some benefits linked to holding assets with a rate of return with low correlation with the GDP of the investors' own country. Reduced frequency of default would be an important additional benefit. He noted some of the potential problems that would need to be sorted out to facilitate this type of instrument gaining acceptance. Would the definition of growth be the same in, say, Mexico and Brazil? There had been episodes of cheating in the past, when, for instance, Brazil changed the definition of inflation in connection with the issuance of inflation-linked bonds. Presumably policy makers would want to have higher growth so that moral hazard problems would be contained. Liquidity would be important to facilitate broad acceptance in the market, which would put an ex-ante burden on ironing out technical issues.

Mauro highlighted some of the potential obstacles to this kind of innovation: externalities and coordination problems; the need for a critical mass; issues of standards, including controls over policies and statistics. On the subject of when GDP-indexed bonds might be issued he noted that the next big restructuring might provide a good opportunity. Alternatively, a G-7 country might lead the way. Daniel Marx said that Argentinian officials thought that, following the 2001 default, investors would want GDP-linked bonds, but soon discovered that investors attached zero probability to the possibility of a recovery of growth. The government then decided not to assume the future costs of high growth on behalf of investors who did not believe this was possible in the first place.

Kristen Forbes agreed with Mauro on the benefits of GDP-linked bonds, adding that they would be most directly correlated with government revenues, contribute to stabilize debt/GDP ratios, and allow for countercyclical policy. She also thought that they would benefit the poor as well, as they are the most vulnerable group during the boom/bust cycles characteristic of many emerging markets. She thought that domestic pension funds would be interested. Nevertheless the challenges were many: it is difficult to create markets for new financial instruments, for the same reasons alluded to by Mauro: critical mass, the need for standardization.

In fact, GDP-linked bonds were more "equity" than fixed income instruments. Furthermore, questions about the reliability and timeliness of growth data might require the presence of external auditors. There were also issues of pricing which would need to be sorted out, just as had been the case when CACs were first introduced, following a period of strong resistance. Nevertheless, she thought that beyond ensuring the reliability of growth statistics, the next step was to develop a code of best practices to jump start the market. Jerry Webman was sceptical that growth-linked bonds would find takers among investors. Their introduction might require price "incentives", which then would raise the issue of whether they would save money to emerging market issuers, a key justification for their introduction. Adam Weiner thought that one could not delink liquidity from pricing.

## **Innovation in EM financing**

Pierre Cailleteau raised a number of important questions during a session focused on the next steps for the creation of innovative instruments. Does financial innovation improve countries' creditworthiness? Why had governments lagged behind financial instruments in the creation of appropriate instruments? Would the creation of innovative schemes improve the conditions under which governments would be able to tap the financial markets (i.e., reduce the net present value of the debt)? Would it open the market for them, particularly in such cases where, because of risk considerations, the "plain vanilla" option was not open to them? He noted that much had already been achieved in the area of collateralized securities. Access to these was possible, allowing countries to monetize the value of otherwise illiquid assets; liquidity risk was substantially reduced although a possible rise in credit risk was an issue. Financial innovation could be a positive-sum game; there was no need to see the process as one of gainers and losers. He expected that securitization of mortgages would continue to gain popularity in the EU.

Price-linked bonds had taken a long time to develop but were now an important presence in the market. On the issue of why risk management practices in government had fallen behind those used in the markets he thought that a combination of self-protection and pressures from external regulators had spurred financial sector institutions to improve their risk monitoring practices. Banks could be shut down, management could be fired, and these facts had concentrated the attention of market participants in a very tangible way. These features were not present in the case of sovereigns. Countries could not be "closed down".

Looking ahead Cailleteau thought that risk-sharing securities would take off. Countries had begun to develop "stress tests", to identify where their main risks lied and wanted to develop instruments to help reduce their vulnerabilities. The rapid development of the derivatives market in the private sector would help governments to do better management of their liabilities. He also asked, rethorically, whether the time would not come for the introduction of "global" growth indexed bonds. Konrad Reuss argued that financial innovation was not a substitute for prudent policies, although it could (and it had) lead to the development of the domestic capital markets. Michael Marrese noted that major improvements in the creditworthiness of emerging markets, rising global liquidity, and the growing emergence of institutional anchors (e.g., EU accession negotiations for Turkey) would encourage innovation in these markets.

Alberto Musalem thought that, from the perspective of issuers, the case for innovation in emerging markets was linked to the need to minimize the stream of debt service payments and to reduce their associated volatility. Investors, on the other hand, would seek to maximize the future stream of returns and, likewise, reduce their associated volatility. While there were some inner tensions between these—specifically around the question of returns—the interests of issuers and investors converged on the need to minimize the risks of default. This coalescence of their interests was the basis for financial innovation which, in his view, should not happen only around the time of debt restructurings. Musalem argued that, ideally, issuers would like to match liabilities with future revenue and expenditure streams.

However, measurement and “verifiability“ issues meant that, in practice, instruments had tended to be built around broad, well-defined, easy-to-measure macro variables, such as inflation, oil revenues, overnight rates and so on. Nevertheless, despite these difficulties some progress had already been made. Inflation-linked bonds (“real“ bonds) had been traded already for quite some time and were growing in importance. Some long-duration bonds had already been introduced; Argentina had issued 40-42 year instruments as part of its recent restructuring and Greece and France had issued even longer 50-year bonds, with considerable success. He did not doubt that “equity-flavoured“ instruments would continue to grow in importance. Indeed, to the extent that macromanagement in emerging markets continued to make steady improvements, domestic capital markets would increase in sophistication and investors’ interest in them would continue to grow.

Jens Nystedt presented a hierarchy of vulnerability among various types of liabilities issued by sovereigns. External foreign currency liabilities were the most attractive to investors; typically they were regulated by law in some foreign jurisdiction (e.g., London) which made costly to restructure. Among these, longer-term instruments were more desirable than short-term. They generally were cheaper to serve for the issuer, becoming more costly only if the exchange was seriously misaligned. Foreign currency or overnight linked domestic debt was the next most attractive, with domestic debt in the currency of the issuer the least attractive because it tended to be of short maturity and carry with it the highest debt servicing costs. He expected hard currency debt to continue to remain the most attractive to investors; the global savings pool was just too large not to dwarf, in comparison, the resources available for investment among local institutional investors. Nystedt argued that a case could be made that perhaps emerging markets were borrowing too much, at short maturities, highlighting the need for boosting “state contingent“ EM debt, taking the investor base as given. Reducing the vulnerability of emerging market issuers would be a gradual process. Instruments which allowed them to channel windfall gains from high commodity prices toward the reduction of external debt should be most welcome.

### **Mexico and Thailand**

Eugenio Alarcon-Yturbide presented an interesting historical perspective on debt management issues in Mexico. The central objective of debt management had been to make it possible for the state to meet its debt amortization payments and to finance the public sector deficit at the lowest possible cost. To this end the government over the years had carried out a number of debt swaps involving different forms of debt: restructured debt versus market debt; market debt versus other forms of market debt; private versus public. The government had, more recently, been engaged in a number of buyback operations. In 2003 Brady bonds had been totally phased out. A total of 13 World Bank loans had also been prepaid. The effect of these policies had been a consolidation of the dollar debt, an improvement in the amortization profile, a reduction in the debt servicing cost of the external debt, and a major improvement in the confidence of investors. Mexico was now in a position to issue debt in other currencies as well. Mr Alarcon noted that Mexico’s pension system was growing quickly, at the rate of 1 percent of GDP per year and, increasingly, could be tapped into by the state as a source of funding.

Furthermore, major progress had been made in bringing domestic and external debt management under a single policy.

Mr Bandid Nijathaworn from the Bank of Thailand said that prior to the Asian financial crisis Thailand's external debt structure had a number of weaknesses: it was large in relation to GDP (66 percent); a full 44 percent of it was short-term; there was a serious problem of double mismatch. High levels of debt made the banks and corporate sector highly vulnerable to shocks through the exchange rate. By comparison, the domestic bond market was a mere 10 percent of GDP. The crisis brought about a more flexible exchange rate regime, contributed to a turnaround in the external accounts and made it possible to reduce external debt on a sustained basis. At the end of 2004 external debt stood at US\$51 billion, equivalent to 36 percent of GDP. The ratio of short-term to total external debt had fallen to 22.4 percent and Thailand's sovereign credit ratings had improved considerably. Mr Nijathaworn highlighted four key lessons from the Asian crisis: first, over reliance on external debt is risky because of the implied roll-over risk of short-term external loans; second, it is better to have a balanced financial structure, with a combination of equity, bonds and bank credit preferable to an undue reliance on bank credit as a source of external finance.

Third, monetary and fiscal policies needed to be cautious and mutually consistent and, last but not least, FX reserve levels needed to be high enough to provide security against shocks and to give confidence to markets. To the extent that Thailand has taken to heart these lessons, it has been able to mobilize domestic financial resources and to encourage the development of the domestic financial system. Indeed, progress in this area in recent years has been sustained and has included the development of hedging instruments (e.g., the interest rate swap market), a private repo market, greater liquidity in the secondary market, a rise in the share of non-resident participation in the domestic bond market, the promulgation of a Derivatives Bill in 2004 to support the establishment of a financial futures exchange.

### **Behavioural finance**

Robert Shiller thought that much would be gained by people getting out of idiosyncratic risks and investing more broadly. A combination of "math anxiety" and mistrust of government affected people's behaviour and pushed them to do "very strange" things, or do things that they should not do. One interesting example of a government that had managed to deal with the consequences of mistrust in government was Chile, through the creation of the Unidad de Fomento, an inflation-adjusted unit of account that was used broadly in contracts and other financial transactions (e.g., mortgages). Shiller saw the need to develop new country-hedge risk instruments; this would have been most useful in Argentina. He liked the appeal of GDP-linked bonds because of the proliferation of information and the technological implications of Moore's law; presumably the sorts of obstacles alluded to by other speakers to greater financial innovation in this area would be addressed through easier access to more accurate information. Shiller thought that the real estate market in the United States and other countries was showing the signs of a bubble, amplified by the widely-held expectation of future price increases. For instance, surveys in the Los Angeles area showed that homeowners thought that housing prices over the next 10 years would rise at an annual average of 10 percent, although home

prices during the past 50 years had closely tracked construction costs. At some point the logic of the market suggested that housing construction in Iowa would pick up in a major way.

