

# Sovereign debt (re)structuring

## Where do we stand?

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*Argentina's debt default in 2001 moved the international community to launch initiatives to develop procedures for the orderly restructuring of unsustainable sovereign debt. These initiatives come against the backdrop of the increase in public debt in emerging market economies over the last decade, of large-scale financial crises linked to the level or structure of sovereign debt and, a recent development, of several cases of sovereign default on international bonds.*

*These developments pose two challenges. Firstly, the complexity of sovereign debt dynamics makes it necessary to strengthen international institutions' assessment capacity. The International Monetary Fund (IMF) has thus launched initiatives to improve the assessment of debt sustainability and balance sheet weaknesses.*

*Secondly, the developments have prompted the re-examination of IMF facilities for managing debt crises. The absence of a clear framework in this area could create a moral hazard risk, as the international community could be tempted to avoid necessary restructuring by granting substantial financial assistance. In practice, defining such a framework is complex, given that reforms in the area of restructuring influence the way in which debts are structured. In fact, the features of sovereign debt aim to reconcile two requirements: first, ensuring that the sovereign debtor honours the terms of the debt contract if it has the means to do so (ex ante efficiency); second, making sure that the cost of default is not excessive when the sovereign debtor is effectively unable to pay back (ex post efficiency).*

*The international community currently favours a market-based approach. Its first pillar is a result of the development and spread of collective action clauses (CAC), following the Quarles Report by the Group of 10. Incorporated into debt contracts, CAC aim to reduce the problems arising in inter-creditor co-ordination, by defining, in advance, the decision rules applicable in the event of re-negotiation. The "Principles for Stable Capital Flows and Fair Debt Restructuring in Emerging Markets", whose definition was fostered notably by the Governor of the Banque de France and the Group of 20, form the second pillar. They supply guidelines for the parties involved to steer the exchange of information and facilitate co-ordination between debtors and creditors.*

*The market-based approach is not exclusive of a formal regime, e.g. the IMF's Sovereign Debt Restructuring Mechanism (SDRM), where such a regime is feasible. In the market-based approach, the IMF acts as an expert via the supply of information and analyses, and also as a "monitor" via the negotiation and monitoring of programmes. The provision of loans, which is in principle limited, aims mainly to facilitate renegotiation by giving credibility to the sovereign's policy. By contrast, a more formal regime would suppose limiting IMF involvement, so as to guarantee the independence of the mechanism. Whatever the case, the efficiency of the overhauled restructuring framework, which is built on contractual provisions and general principles rather than on a formal regime, will depend on the Fund's capacity to fully perform its three functions.*

NB: This article takes up the main elements of the presentation by Marc-Olivier Strauss-Kahn at the panel discussion of the fourth Journée organised by the Banque de France Foundation on "Micro, macro and international liquidity". Daniel Cohen, Olivier Jeanne, José de Matos, Hyun Song Shin and Jean Tirole also participated.

This paper aims to provide insight into the rationale behind the recent changes in the international financial architecture with regard to the (re)structuring of sovereign debts.

Broadly speaking, there are two categories of reform: those that aim to counter the risk of illiquidity and those that aim to counter that of insolvency. To cope with liquidity crises, several proposals have been advanced to restructure the IMF's financial assistance facilities, which for some goes as far as giving the Fund the role of a quasi international lender of last resort (LLR) following the example of Fischer (1999);<sup>1</sup> or of first resort following that of Cohen and Portes (2004). At the same time, the efficiency of the Fund's financial assistance has been analysed theoretically and empirically,<sup>2</sup> with the conclusions suggesting that the catalytic effect of the Fund's financial assistance is neither systematic nor automatic.

With regard to the risk of insolvency, the proposal for the adoption of a formal international bankruptcy regime presented by Krueger (2001) undoubtedly constitutes a key contribution to recent initiatives in this field, notwithstanding Sachs's proposal for such a regime back in 1995. However, the importance of this proposal should not conceal the fact that debt restructuring has been discussed throughout the last decade and on the basis of approaches that have not been limited to the statutory approach proposed by the IMF. The main aspects of the so-called market-based approach in fact emerged in the middle of the 1990s. Collective action clauses (CAC) were proposed back in 1995, notably by Eichengreen and Portes (1995), i.e. seven years before the Quarles Report published by a G10 Working Group, which aimed to generalise the use of these clauses. In addition, work has been initiated on the concept of temporary payment

suspension without international bankruptcy law, for example in Haldane and Kruger (2001), Samuels (2000) and Couillault and Weber (2003). Proposals based on contractual engineering were advanced by private agents, such as Bartholomew *et al.* (2002).

The paper first examines the level and structure of the debt incurred by emerging market sovereign debtors, as well as its optimality (1). It then goes on to review the implications of various reform (or no reform) options in the area of restructuring, explaining why the international community, which includes international financial institutions and informal discussion groupings (mainly the G7, G10 and G20), currently favours a market-based approach (2).

## 1 | RISKS AND RATIONALITY OF VARIOUS FORMS OF DEBT

### 1|1 Too much debt?

#### THREE STYLISED FACTS

Three stylised facts<sup>3</sup> on emerging market sovereign debt come to light when the last ten years are compared to the 1980s.

- The share of sovereign debt<sup>4</sup> in GDP is once again on the upswing after reaching a low point in 1996: sovereign debt represented 68% of GDP on average at the end of 2003, up from 56% in 1996 (see Chart 1, in which 16 out of 28 countries are situated below the bisector indicating that the stock of debt, as a percentage of GDP, has remained constant).

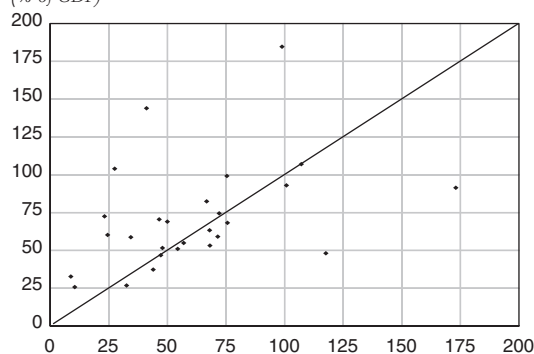
<sup>1</sup> See also Lerrick and Meltzer (2003). For a discussion of the LLR, see Kremer and Pfister (2000).

<sup>2</sup> For a theoretical study, see Morris and Shin (2003); for a survey of the empirical literature on the catalytic effect of IMF programmes, see Diaz Cassou (2005).

<sup>3</sup> See Bachelier and Couillault (2005) for additional information.

<sup>4</sup> For the sake of expediency (data availability), no distinction is made between sovereign debt and public debt in the rest of this paper. This is also because, in practice, non-sovereign public debt is often considered to be guaranteed by the state in emerging markets.

**Chart 1**  
**Stock of public debt**  
 Comparison 1996 (X axis)-2003 (Y axis)  
 (% of GDP)

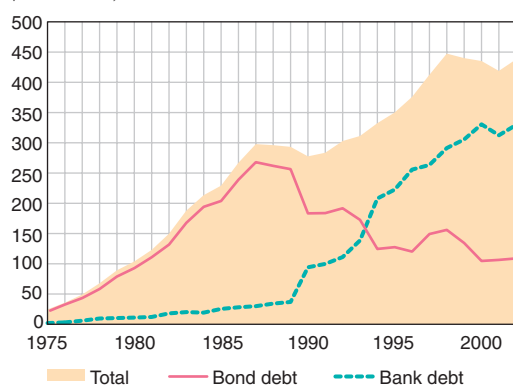


NB: Sample of 28 countries (Argentina, Brazil, Bulgaria, Chile, China, Columbia, Costa Rica, Côte d'Ivoire, Ecuador, India, Indonesia, Israel, Jordan, Korea, Malaysia, Morocco, Mexico, Nigeria, Pakistan, Panama, Peru, Philippines, Poland, Russia, South Africa, Turkey, Uruguay and Venezuela).

Sources: IMF, national sources.

- The debt structure of emerging market sovereigns has undergone two major transformations since the 1980s. External bank debt has dropped while bond financing has risen (Chart 2).

**Chart 2**  
**Breakdown of the stock of external public debt**  
 1975-2002  
 (USD billions)



NB: Public debt and debt guaranteed by a public body. Same sample as for Chart 1 (Excluding Korea and Israel).

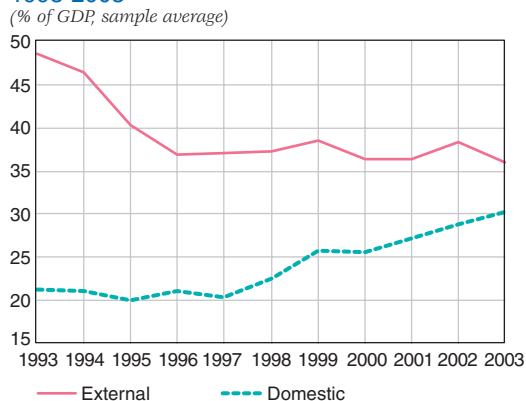
Source: World Bank (2004), GDF (Global Development Finance) – Banque de France calculations.

In addition, emerging market sovereigns increasingly obtain financing from their domestic markets. While the average share of the external public debt in GDP remained stable over the second half of the 1990s, that of domestic debt rose from 20% in 1995 to 31% in 2003 (Chart 3).

The structure of sovereign debt issued on the international markets is fairly homogenous across emerging market economies: it is mostly made up of foreign-currency denominated fixed-rate bonds. International floating rate securities therefore accounted for less than 5% of the securities included in the calculation of the Global EMBI index<sup>5</sup> in 2003, compared with 40% in 1994, according to Borensztein *et al.* (2004). Estimates provided by the same authors suggest that debt incurred on the domestic markets is more heterogeneous across regions (Chart 4).

- Lastly, the 1975-2004 period saw a transformation in the problems related to sovereign debt servicing.

**Chart 3**  
**Stock of external and domestic public debt**  
 1993-2003  
 (% of GDP, sample average)

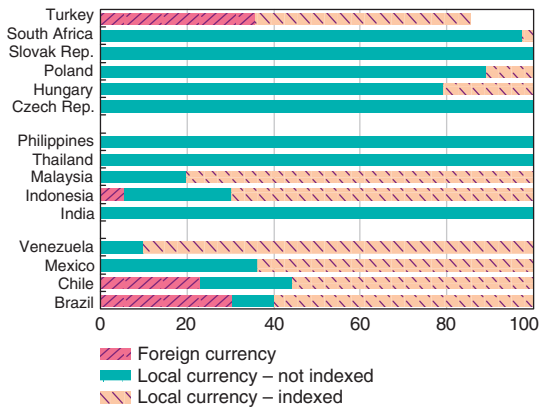


NB: Same sample as for Chart 1.

Sources: IMF, national sources – Banque de France calculations.

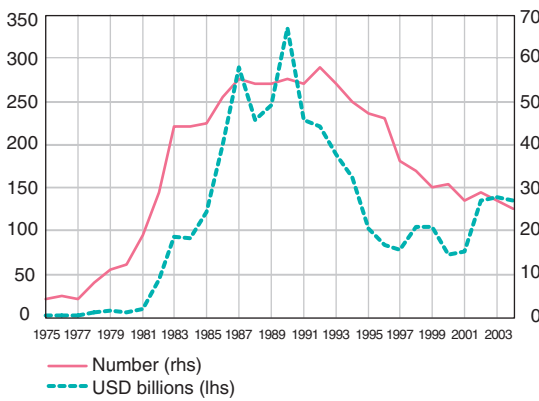
<sup>5</sup> JP Morgan's Global Emerging Market Bond Index (EMBI) provides an indication of sovereign risk. Bonds issued by the main emerging market sovereigns are included in this calculation.

**Chart 4**  
Structure outstandings  
of domestic government bond debt  
at the end of 2001  
(% of total)

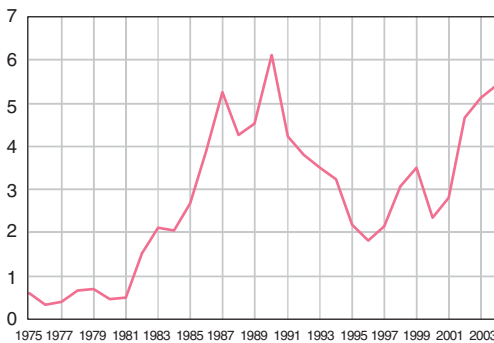


Source: Borenzstein and al. (2004).

**Chart 5**  
Sovereign defaults on private creditor debt 1975-2004  
A| Number of sovereign defaults and amounts involved  
(USD billions)



B| Average amount of defaults  
(USD billions)



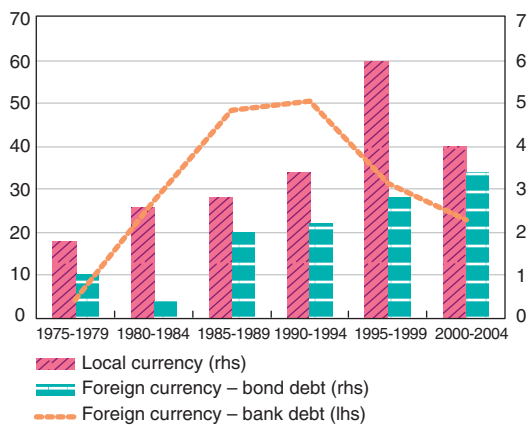
Source: Standard & Poor's (2004) - Banque de France calculations.

While the number of sovereign defaults had dropped regularly since 1992 following the implementation of the Brady Plan (Chart 5A), the average volume of defaults is once again on the upswing, climbing from USD 1.8 billion in 1996 to USD 5.4 billion in 2004, i.e. hovering close to the USD 6.1 billion peak reached at the end of the 1980s (Chart 5B).

At the same time, while remaining predominant, sovereign defaults on foreign-currency denominated bank debt decreased. They dropped by an average of 55% between the 1990-1994 period and the 2000-2004 period. By contrast, defaults on foreign-currency bond debt have increased regularly since the first half of the 1980s: they increased by 8.5 on average from 1980-1984 and from 2000-2004 (Chart 6). The trend is even more marked if it is borne in mind that certain sovereign debtors only managed to avoid default because they received sometimes massive financial assistance from the IMF. In any case, this rise reflects the increasing share of bond financing.

Albeit few in number, restructurings of sovereign bonds have shaken investors' perception, related to their assessment of the bank debt crisis of the 1980s, that the risk of default on this type of financing was lower than for other forms of debt.

**Chart 6**  
Sovereign defaults  
Average number by type of debt 1975-2004



Source: Standard & Poor's (2004) - Banque de France calculations.

In this context, the international community, in particular, international financial institutions, must improve techniques for assessing the sustainability of sovereign debt, all the more so since sustainability is a prerequisite for the definition of an action plan to prevent and manage sovereign debt related crises.

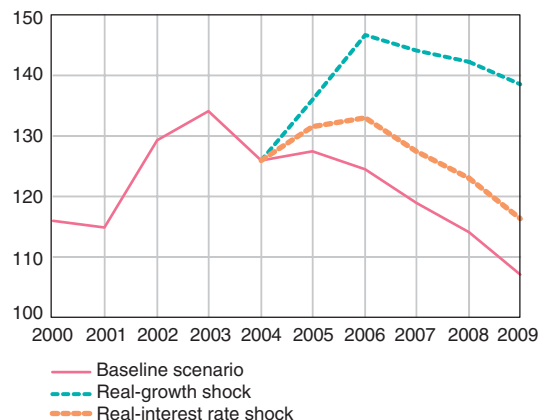
### WHAT IS THE RATIONALE BEHIND DEBT SUSTAINABILITY ANALYSES?

While significant efforts have been underway in recent years to bolster the IMF's analysis framework, it is still difficult to assess the sustainability of sovereign debt given current knowledge and tools.

The recent strengthening of the IMF's assessment capacity explores two avenues: improving projections on trends in the ratio of public debt to GDP and drawing up a framework for the balance sheet analysis of the risks of cross-sector contagion effects.

The systematic conduct of public debt sustainability analyses initiated by the IMF in 2002 corresponds to the first avenue. The approach favoured by the IMF (2002b) does not, strictly speaking, provide indications on the sustainability of the public debt-to-GDP ratio, but makes it possible to calculate the primary surplus required to stabilise or reduce the share of debt in GDP. It remains fairly mechanical at present. By construction, the shocks designed to assess the risks of the increase in debt do not produce any effects beyond the period in which they are applied (Chart 7). Their deterministic nature limits the IMF's analyses. Unlike other approaches, such as that proposed by Ferrucci and Penalver (2003) whose operational character is nonetheless yet to be confirmed, they do not give a clear indication of the probability distribution of debt over time.

**Chart 7**  
IMF analysis of public debt sustainability  
Antigua and Barbuda  
(% of GDP)



Source: FMI, Article IV staff report

The balance sheet analysis of cross-sector contagion risks constitutes a second avenue for the improvement of IMF assessment, but its operational integration in the Fund's financial programming has not yet been completed. A first approach, already applied to assessing the situation in Argentina, Uruguay, Turkey, Brazil, Peru and Lebanon, for instance, makes it possible to identify net sector positions (particularly of exchange rates and interest rates) and thus better determine the weaknesses of the economy and potential cross-sector spill-over channels. It also makes it possible to conduct targeted robustness tests, such as the drop in the market value of the assets of a sector or the depreciation of the exchange rate.

A second approach of balance sheet analysis, proposed by Gapen et al (2004) is under study by the IMF. It consists in assessing the risk of sector default by calculating the "distance to distress".



Applied for example to the corporate sector, this indicator combines, in a single measure, the market value of aggregated assets, financial leverage, and commercial risk. It is expressed in the number of standard deviations (the “distance”) of the market value of the assets of the sector from a “distress barrier”, which corresponds to the situation in which the value of the sectoral net wealth drops to the point where it is no longer possible to meet commitments (aggregated). In spite of their real intrinsic interest, balance sheet analyses of this type come up against statistical limitations, particularly with regard to non-financial private sector data.

The relevance of debt sustainability analyses is of utmost importance for the international community in two respects. Firstly, assessments of debt sustainability are instrumental in the design of a response in times of crisis, restructuring and/or financial assistance. In this regard, sustainability analyses play a crucial role in the reduction of the moral hazard risk associated with IMF interventions. In practice, the sustainability of the stock of public debt is now one of the criteria for exceptional access to IMF funds, i.e. access to an amount of over 100% of the quota in annual terms and 300% in cumulative terms. Secondly, one of the possible outcomes of debt sustainability analyses is the definition of a more normative approach to debt problems. Certain recent studies are consistent with this. Cohen and Portes (2004) for example propose a system in which the sovereign debtor undertakes to refrain from incurring debts if the risk premium exceeds a pre-defined level: the sovereign would then avoid “validating” spread levels that destabilise the debt dynamics, which would then make it possible to reduce the risk of a self-fulfilling confidence crisis. The advantage of this “debt regime” for the sovereign is that if spreads rise beyond this destabilising threshold, the IMF will intervene financially.

Mendoza and Oviedo (2004) outline an approach which, although not normative, may be useful for the international community's decision-making if it proved to be operational. It notably makes it possible to assess a “natural debt limit” that corresponds to the difference between the worst performance in terms of tax revenues and the lowest level of public expenditure that the government may commit itself to reaching in the event of a “fiscal crisis”, this being defined as the worst performance in terms of tax revenues recorded over a “long period of time”. This debt limit

therefore represents the maximum stock of debt that the government may incur without having to bring public expenditure under the politically acceptable, or achievable, minimum level. Observance of the natural debt limit is therefore a criterion that makes it possible to check the credibility of the government's commitment to honouring its debt.

## 1|2 Debt structure: a chosen risk?

Debt structuring is also a crucial issue. The use of short-term market financing that is indexed on volatile variables may entail risks for the parties to the contract, either directly (sovereign issuers, private creditors) or indirectly (private issuers, IMF). One of the issues at stake for the international community is to understand the reasons why the parties to these financial contracts prefer such financing methods.

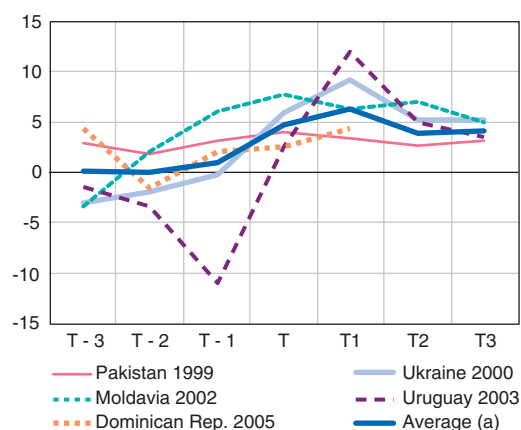
### ARE THE FORMS OF DEBT RISKY?

The financial crises of the last decade have highlighted the risks associated with forms of debt that are characteristic of emerging market sovereigns. Some analysts, such as Reinhart *et al.* (2003), even go as far as casting doubt on the idea that more limited access to capital markets hampers the growth of these economies.

The use of short-term financing instruments denominated in foreign currency — or indexed to the exchange rate — and/or floating interest rate is a source of financial vulnerability. It is in fact often associated with balance sheet vulnerability, in terms of foreign currencies and maturities. It contributes in addition to weakening debt dynamics by making them more sensitive to variations in macroeconomic performances and to volatile market expectations. Lastly, it complicates the conduct of economic policy.

The case of “innocent victims”, i.e. sovereign debtors that experience a confidence crisis in the absence of economic or financial imbalances, is very rare. This type of debt structure nevertheless constitutes a channel for the dissemination of financial pressures: the drying up of internal or external liquidity in the event of a rise in investors' risk aversion increases risk premiums and hardens the sovereign's budget

**Chart 8**  
**Real growth in the main countries that experienced**  
**sovereign bond restructuring**  
**Pre-default restructuring**  
 (%)

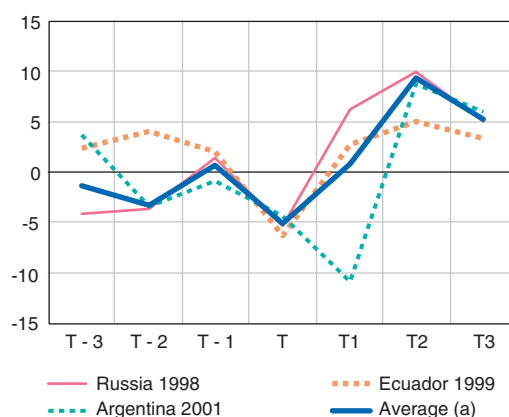


NB: T corresponds to the date indicated in the key for each country, i. e. year in which restructuring was announced or payments were suspended.  
 IMF forecasts for 2005 and 2006

(a) Weighted average (GDP): for the cases of pre-default restructuring, excluding the Dominican Republic

Source: IMF – Banque de France calculations.

**Post-default restructuring**  
 (%)



constraint. Refinancing at higher rates leads to an increase in the stock of debt to be refinanced subsequently, which is liable to generate unstable debt dynamics.

In addition, debt structures and financial pressures interact. The deterioration of sovereign debtors' financing conditions is traditionally accompanied by a change in the nature of debt flows. To try to limit the snowball effect linked to the rise in risk premiums and prevent the shortening of the maturities of new debt flows, sovereigns have recourse to financing instruments that are safer for investors, by favouring securities indexed to the exchange rate or a domestic price index for instance. The changes in the structure of Brazilian government bond debt between 2001 and 2003 illustrate this (Box 1).

Risky forms of debt tend to amplify the phenomena traditionally associated with the problems of sovereign debt servicing. The Argentine (2001), Brazilian (2002) and Uruguayan (2003) crises are cases in point of the risks incurred when the sovereign borrows mostly in foreign currency.

The IMF (2002b) and Diaz Cassou and *al.* (2005) show that the difficulties of sovereign debt servicing lead to a weakening of domestic banking systems, as these systems are often significantly exposed to sovereign risk: during default crises, government securities represented 31.8% of the assets of domestic banks in Russia (June 1998), 14.3% in Ukraine (June 1998), 30% in Pakistan (March 1999) and 21% in Argentina (December 2001). The risk for credit institutions is all the greater when indexed or foreign-currency-denominated government securities are used as hedging instruments. In addition, the problems of servicing sovereign debt often go hand in hand with massive withdrawals of bank deposits, flight from domestic currencies, net capital outflows by residents and the hardening of external financing conditions. They also generate negative wealth effects linked to residents' holdings of the sovereign debt. Lastly, episodes of re-negotiation of sovereign debt are associated with a sharp depreciation of the exchange rate, inflationary pressures and a rise in short-term interest rates, occurrences that in turn increase the share of foreign-currency denominated debt. The combination of these factors leads to a marked slowdown of growth in the year of the crisis. It stood on average at a negative 5.1% in the last three cases of sovereign default on international bond debt (Chart 8).

Box 1

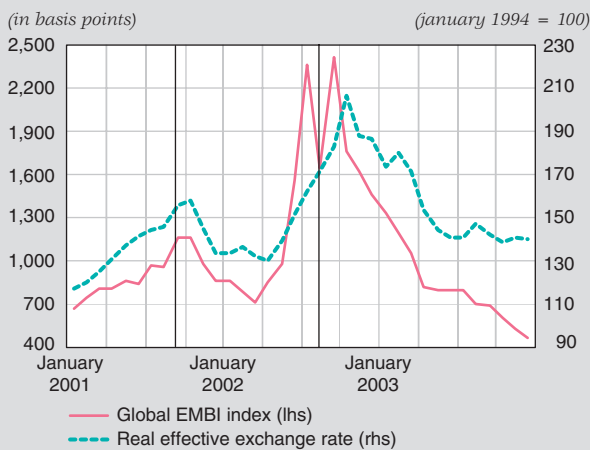
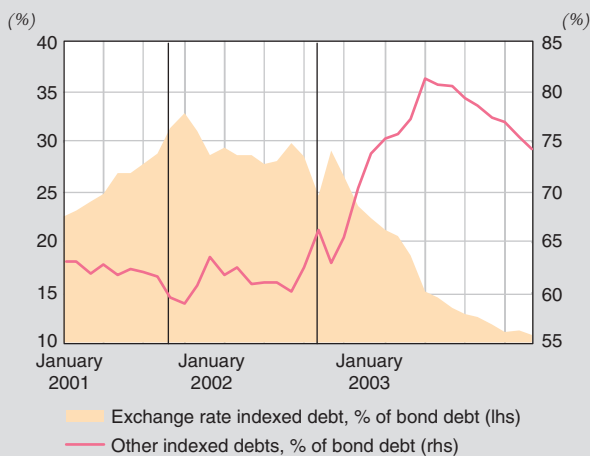
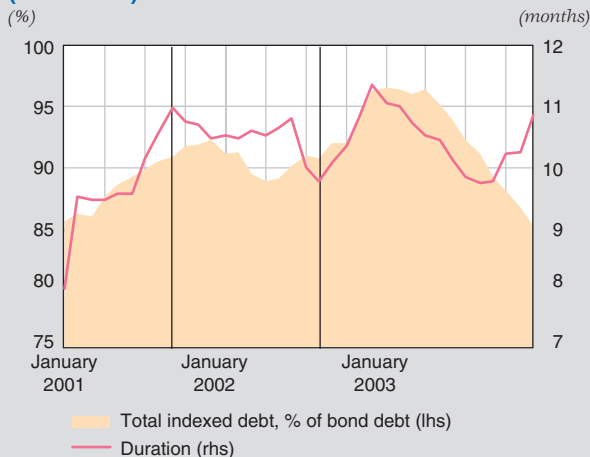
Structure of public debt and financial crisis: the case of Brazil

Up till the end of 2001, the Brazilian government conducted a strategy of lengthening the maturity of the federal bond debt, which led to a rise of over 10 points in the share of the debt indexed to the exchange rate in the total outstanding amount between January and October 2001. This increase in currency risk for the sovereign fuelled reservations on debt sustainability, at a time when the continued existence of the Argentine currency board was uncertain and, therefore, the risk of depreciation of the Brazilian real was increasing (see chart).

The lengthening of the maturity of the debt was discontinued at the end of 2001. To avoid the sudden shortening of the maturity while reducing exchange rate risk, the government substituted domestic inflation-indexed securities for exchange rate indexed securities, in the particularly turbulent context of electoral transition. This change in the indexation structure accelerated from September 2002.

It was only from August 2003 that the lengthening of the debt maturity ceased to be subject to the issuance of indexed securities, whose stock amounted to up to 96.4% of total debt in April 2003, a sign of increased investor confidence.

Changes in the structure of government bond debt (2001-2003)



NB: The vertical lines correspond to the implementation of the two IMF programmes of USD 15 billion and USD 30 billion respectively. Sources: national authorities.



## Renegotiation of sovereign bond debt

### Characteristics of the main cases since 1995

(Haircut in %, debt and outstandings in USD billion)

	Date (a)	Nominal haircut	Eligible debt	Outstandings of IMF loans
<b>Pre-default</b>				
Pakistan	1999	1	0.61	1.81
Ukraine	2000	0	3.30	2.73
Moldavia	2002	-10	0.04	0.14
Uruguay	2003	-1	5.35	2.08
Dominican Rep.	2005	0	1.10	0.28
<i>Average (b)</i>		-0.6	2.32	1.41
<b>Post-default</b>				
Russia	1998	-42	31.80	19.22
Ecuador	1999	-27	6.50	0.02
Argentina (stage 2)	2001	-57	81.80	14.08
<i>Average (b)</i>		-51.4	40.03	11.10

(a) Year in which restructuring or default was announced.

(b) For the haircut, weighted average (amount of eligible debt); otherwise simple average

Source: IMF, Drage (2005) – Banque de France calculations.

Private creditors' balance sheets were affected by the loss of value of the assets held in the form of sovereign debts. The analysis of the major recent cases of restructuring of bond debt (Table) show that, in the event of restructuring, the nominal haircut is significantly higher when it is accompanied by payment suspension: the average reduction of the nominal value of the debt came to 51 %, as compared with less than 1 % when the process took place without payment suspension.

## WHAT DO DEBT STRUCTURES REFLECT?

As Tirole (2002) emphasises, it is difficult to assume that even risky forms of sovereign debt do not reflect an equilibrium sought by market participants given that they themselves are directly impacted in the event of a crisis. More generally, sovereign debts features reflect a trade-off between two requirements analysed, among others, by Gai and *al.* (2001) and Dooley (2000): firstly, ensuring that the sovereign debtor honours the terms of the debt contract when it has the financial means to do so (*ex ante* efficiency); secondly, making sure that the forms of debt do not make unavoidable defaults too costly for the sovereign (*ex post* efficiency). The analysis of these two dimensions is crucial for the

international community: a poor understanding of the determinants of debt structures leads to the risk of addressing crisis symptoms rather than market imperfections and fundamental causes.

There are several types of incentives for sovereign debtors and investors to prefer risky forms of debt.

Creditors' shift to risky forms of debt may be a response to the weakness of safeguards at hand to ensure compliance with the terms of sovereign debt contracts. In fact, the guarantees required by creditors offer limited protection: Bolton and Jeanne (2004) report that the collateral backing debt instruments issued by the 79 developing and emerging economies with at least one international debt represented 6.2% of total outstandings on 1 January 2003. In addition, guarantees are difficult to enforce or seize when they exist and the jurisdictional solutions are costly and uncertain. These difficulties, which are inherent to sovereign debt make it difficult for creditors to differentiate between debtors facing debt servicing problems for fundamental reasons (inability to pay) and those that default for reasons of convenience (refusal to pay). In this regard, increasing the cost of non-compliance with the contractual terms of the debt is a way of reducing the sovereign's incentive to default for tactical reasons. Lastly, Bolton and Jeanne (2004) point out that private investors also face the risk of the dilution of their claims with the increase in the probability of sovereign default. In fact, it is in the interests of a sovereign debtor that plans to suspend debt service payments to issue new securities in order to complicate *ex post* inter-creditor co-ordination and reduce the recovery value that they may obtain from the process of renegotiation.

For the sovereign, the recourse to risky forms of debt makes it possible to reduce immediate financing costs by taking on the cost of exchange rate risk premiums for instance. It also allows the sovereign to enhance its creditworthiness. Indeed, contracting forms of debt that potentially increase the cost of crises is a guarantee of discipline, which is all the more necessary since monetary policy is not always entirely credible in emerging market economies. Risky forms of debt also have the advantage of limiting the risks of temporal inconsistency, given that they create a *de facto* link between successive governments. However, the predominance of risky financing, particularly foreign-currency denominated or exchange-rate indexed securities, is also the

consequence, not only of structural problems, but also economic policy choices. Tirole and Pathak (2004) suggest for example that in countries with a fixed exchange rate regime, it is difficult for the sovereign to openly reduce its foreign currency denominated debt or recommend that its private residents do the same, given that this could contribute to damaging the credibility of the adopted exchange rate.

More generally, sovereign debts in forms and for amounts that are risky reflect certain characteristics of the international capital markets and the monetary history of the sovereign. With regard to the functioning of markets, Eichengreen *et al.* (2002) identify three main factors that weaken investors' incentive to hold securities that would however be less risky: the existence of cross-border transaction costs, the asymmetrical size of issuers and the fact that returns from portfolio diversification are diminishing at the margin. Reinhart *et al.* (2003) show that the monetary (hyperinflation) and financial (default episodes) track records of sovereigns help explain some sovereigns' inability to sustain even relatively low levels of external debt.

## 2 | ORDERLY DEBT RESTRUCTURING: WHAT KIND OF BANKRUPTCY REGIME FOR SOVEREIGNS?

Following the switch to disintermediated financing and with the emergence of sovereign defaults on international bonds, numerous proposals for reform have been put forward to adapt the international financial architecture, which, taken broadly, encompasses not only official sector institutions and bodies but also covers contractual practices and market conventions.

### 2|1 Grounds for reform

#### COMMON CONSIDERATIONS

The various reform proposals put forward in the past five years share a number of common features

that converge towards the idea that sovereign debt restructuring processes (*ex post* efficiency) may be improved without necessarily weakening market discipline (*ex ante* efficiency).

The lack of a clear framework for dealing with unsustainable sovereign debt poses a moral hazard problem. It is a source of uncertainty as regards the response of the international community in the face of these situations. The international community could be tempted to avoid necessary restructuring by granting large-scale financial assistance. Such a practice is likely to encourage sovereigns to manage their liabilities less than prudently and creditors to underestimate risks. To avoid such a situation, it is necessary to make the actions of the international community more predictable.

A first response to this problem consists in strengthening the discipline of the IMF's financing policy, by making operational the principle that holds that the granting of additional liquidity is not an efficient response to a sovereign's insolvency. This was the effect expected of the implementation in 2003 of criteria and procedures governing exceptional access to IMF resources. In the same way, efforts have been made to clarify the Fund's policy on lending into arrears, which, *via* conditionality, has an influence on sovereigns' and investors' relative bargaining power in the event of default (Box 2).

None of the suggestions for reform call into question the importance of both market discipline and the financial cost arising in debt crises as incentives for the sovereign to honour its commitments.

That said, the various proposals note that the cost of restructuring is particularly high, not only for private creditors and sovereign debtors (*via* the loss of access to the international capital markets over a period of time, the weakening of the financial system and the shrinking of trade and economic activity), but also for the international community. The Fund's financial commitment in recent sovereign debt crises has increased its credit risk. While the institution's liquidity is not currently at risk, the fact remains that the three major IMF debtors as of 31 December 2004 — Argentina, Brazil and Turkey — i.e. 70% of the outstandings of loans drawn on the General Resources Account, all recorded a public debt-to-GDP ratio of over 55%, with the average climbing from 39% in 1997 to 87% in 2004 (Chart 9).

## Box 2

## IMF lending into sovereign arrears to private creditors

The IMF's Lending Into Arrears (LIA) Policy is one of the two pillars of the IMF's strategy for addressing sovereign debt crises. It complements the principle that holds that signing a programme with the IMF is a prerequisite for the renegotiation of debt by private creditors.

As part of the LIA policy, the Fund's financial assistance aims mainly, first, to give credibility to programme conditionality, and second, prevent private creditors from having a de facto right of veto on the programme. In fact, until 1989 when the G10 recognised that this created problems, the financial policy of the IMF prohibited it from assisting countries that had not discharged the payment arrears on their private debts. Initially limited to arrears on payments to banks, it now covers bonds.

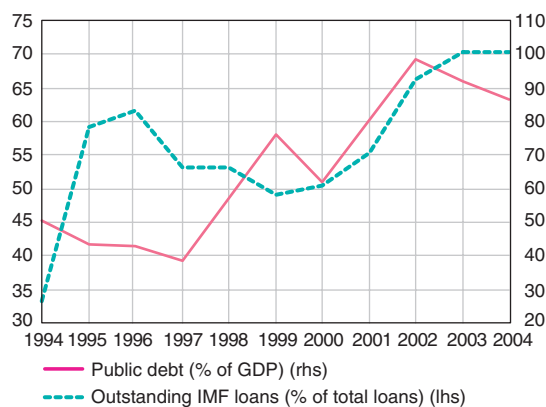
In order to prevent abuse, this policy is activated on a case-by-case basis and governed by several criteria that have been revised with the transformations in the financing of emerging market economies. The last reform (1999), which extended to arrears on bond debt, introduced the criteria according to which the sovereign debtor must "make good faith efforts" to arrive at an agreement with its creditors. In practice, this policy is little used (Ecuador 2000, Ukraine 1999).

Recent experience in the area of default and the renegotiation of sovereign debt suggests that the current form of the LIA policy needs to be revisited. It is indeed enlightening that in the case of Argentina, the IMF's strategy did not make it possible to structure the renegotiation of the sovereign debt either via the Fund's conditionality as an insurance provided to creditors of sound macroeconomic management, or via the LIA policy as a means of leading the parties to an agreement.

Several signs point to the need to improve current workout procedures for sovereign debt crises. Firstly, certain sovereigns' tendency to accumulate unsustainable debt and "gamble on their resurrection" reveals the limits of market discipline (notably common agency problems). Secondly, in the event of default, the lack of information provided by relative prices encourages players to behave in a non-cooperative manner and, therefore, increases the cost and duration of the renegotiation process. It has been noted that recent pre-default renegotiations have been settled more rapidly than those that are accompanied by payment suspension (Chart 10).

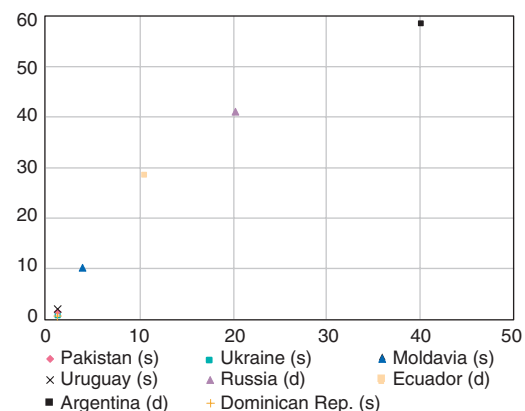
**Chart 9**  
Three main debtors of the IMF  
IMF exposure and public debt

(average, %)



Sources: IMF, national authorities – Banque de France calculations.

**Chart 10**  
**Sovereign bond renegotiation**  
**Negotiation period and nominal haircut**  
*(months; % of face value)*



(s) = pre-default; (d) = post-default

Sources: IMF, Drage (2005) and various sources.

## REFORMS CENTRED ON RESTRUCTURING

The main reform proposals put forward in recent years aim to make the working out of unsustainable sovereign debt more intelligible and more predictable. Others, such as the previously mentioned “debt regime” put forward by Cohen and Portes (2004), are backed by a framework for sovereign debt restructuring.

This is due to the growing recognition of the need to strengthen the Prague framework defined in 2000 by the International Monetary and Financial Committee (IMCF) by proposing predictable rules of action.<sup>6</sup> While this general framework for crisis resolution defines a number of broad principles, it in fact provides little information on the management of sovereign debt restructuring. Yet when the probability of default of a sovereign issuer increases, clear rules of action play a decisive role in arriving at a co-operative solution. Indeed, in such situations, creditors, acting individually, can have an incentive to seize assets or collateral belonging to the sovereign (“grab race”), or undertake legal action in the event of default, although collective action would lead to an optimal solution.

In addition, the definition of a clear and predictable bankruptcy regime is the counterpart of the introduction of the Fund’s new financing facilities.

The creation in 1998 and 1999 of the Supplemental Reserve Facility (SRF) and the Contingent Credit Line (CCL) was perceived as the start of the IMF’s move towards the status of an international quasi-lender of last resort. In terms of amounts, conditions in both the SRF and the CCL were more flexible than in existing facilities, and these new instruments entailed a moral hazard risk that was underlined by the opponents of these reforms. In fact, even the proponents of these changes in the IMF toolkit, such as Fischer (1999), affirmed that the constitution of a bankruptcy regime going beyond the informal procedures of the Paris and London Clubs was a necessary complement for reducing the moral hazard risks associated with the Fund’s new loan instruments.

Initiatives have been launched on the prevention and structuring of sovereign debt. Firstly, in 2001, the international community published recommendations on the management of public debt, based notably on the recognition of the financial risks entailed in certain forms of sovereign borrowing and the identification of “best practices” in this area.

Secondly, Borensztein and Mauro (2002)<sup>7</sup> give substance to the notion, which emerged in the 1980s, of reducing the sensitivity of the debt-to-GDP ratio to macroeconomic shocks via the issuance of securities whose coupons are indexed to GDP growth. These types of securities are expected to yield higher (or lower) interests when growth is stronger (or weaker) than a predefined level. For the investor, an asset of this type would have the same characteristics as a share, insofar as it gives the investor an interest in the macroeconomic performance of the issuing country. This type of instrument exists: for instance, within the framework of Phase 2 of its debt restructuring, Argentina has issued securities that include elements indexed to GDP. However there are a number of obstacles hindering the diffusion of such instruments such as verifiability of GDP values, depth and liquidity of the markets trading these securities.

Lastly, recent analyses focus on assessing the implications for the IMF of the agency problems observed on bond markets. The central argument

<sup>6</sup> For recognition by the private sector, see the IIF’s Action Plan (2001).

<sup>7</sup> See also Borensztein et al. (2004), who broaden the debate and discuss the idea of indexation on real variables.

of these analyses is that the delegated monitor function,<sup>8</sup> which banks perform *de facto* on behalf of investors on the bank lending market, is not performed on the bond market. The issue is whether the IMF can and should make up for this deficiency in the international financial system. The empirical results obtained by Eichengreen, Kletzer, Mody (2005) suggest that the Fund already plays this role: they find that the monitoring function of IMF programmes, as opposed to the lending function, has a more marked impact on the risk premium when the country borrows mainly from the bond market. In institutional terms, these studies reconsider the relative weight of macroeconomic monitoring and lending functions in IMF activities. In certain respects, the notion of a non-borrowing programme brought up within the G7 in 2004 is an extension of this type of analysis. Tirole (2002) goes as far as to consider that the IMF should focus on its monitoring function.

## 2|2 Formal regime and market-based approach

While they all aim to define a bankruptcy regime for sovereigns, the main initiatives in the area of restructuring are based on different approaches. Krueger's proposal (2001) in favour of a "Sovereign Debt Restructuring Mechanism" (SDRM), favours a formal approach based on an international legal framework. The recommendations on collective action clauses (CAC) made by the G10 Working Group chaired by R. Quarles and the code of good conduct suggested by the Banque de France for their part favour an informal approach to restructuring. These two approaches are more complementary than oppositional. Their link is notably based on the demarcation of the roles that the Fund must play in the various stages of debt crises.

### IS IT IMPOSSIBLE TO DEVISE A FORMAL BANKRUPTCY REGIME?

Krueger's proposal was meant to be a direct response to two features of the second half of the

1990s. Firstly, with the increasing recourse to bond financing, emerging market sovereigns' investor base has spread considerably and diversified. Secondly, the success at the end of the 1990s of hold-out strategies against sovereigns that had restructured their bond debt was considered liable to upset the functioning of international capital markets. These strategies may be financially advantageous if they make it possible to obtain repayment at par value, given that participation in a securities exchange offer goes hand in hand with a loss in net present value. Insofar as they introduce some uncertainty in the result of the exchange offer, hold-out strategies may nevertheless weaken creditors' incentive to participate in the exchange and prevent the global restoration of debt sustainability. They also increase the risk of liquidity crises, as investors seek to rapidly part with securities that are likely to be restructured.

Over the 18-month work period, the proposal in favour of a SDRM has undergone significant changes. Broadly speaking, the first version gave the Fund a predominant role in the renegotiation process. In particular, it was up to the Fund to grant the sovereign an international stay on litigations, so as to allow it to suspend repayment and draw up a reform programme and a renegotiation offer. In the second version, the Fund played a highly reduced role, with the suspension of legal action being subject to the approval of a qualified majority of creditors.

The *de facto* interruption of work on the SDRM in April 2003 reflects both the political and technical concerns raised by this mechanism.

Some of the political reticence stems from the extent of the overhaul that would have arisen from the implementation of the SDRM, in order to counter a risk whose real existence and scope had not been clearly proven.<sup>9</sup> In addition, as Sgard (2004) shows, the reduction in the IMF's role, as work on the mechanism proceeded, shows that the first version of the mechanism created the risk of the interference of the official sector in private contracts, all the greater because the IMF would have had the status of both bankruptcy judge and preferred creditor. By virtue

<sup>8</sup> The meaning of the term "monitor" as used here covers the notions of adviser/guide/instructor, while also emphasising the supervisory aspect. Guitián (1992) seems to consider IMF surveillance as a form of "monitoring".

<sup>9</sup> Hold-out strategies are long, costly and uncertain, which makes them less attractive to most private investors. In addition, a number of legal reforms have been implemented to limit them (notably under Belgian law). Lastly, the participation rates observed in exchange offers following the Elliott vs. Peru court decision (2000) – which led to the Krueger proposal – do not confirm the fears underlying the Krueger proposal.



of the tacit agreement – not based on law – between all member countries, the IMF in fact enjoys a privileged status, which gives its loans precedence in the order of repayment over all private sector loans in particular.

Technically, the SDRM was hampered, despite the changes, by a number of limitations that cast doubts on any potential benefits. Firstly, it obviously could not liquidate all the issuer's assets, though, in a formal bankruptcy regime, this possibility is an incentive for economic agents to co-operate in order to arrive at a sustainable solution.

Secondly, there was the risk that the SDRM could effectively undermine the financial discipline of some sovereigns. In fact, it did not ward off the possibility of repeated restructuring requests from sovereigns that have not been able to restore solvency in a first restructuring processing (or from those that conduct undisciplined economic policies).

Thirdly, the comparative advantage of the SDRM over *ad hoc* resolution was not clearly established. The complex majority rules to approve the terms of restructuring – notably loan aggregation clauses – did not ensure that the process would lead to a decision to restructure. Given the impossibility of liquidating the sovereign's assets, the only solution allowing the mechanism to lead to an agreement would have been to give a decision-making body the power to impose restructuring terms in the event of continuing disagreement between creditors, in the manner of the “cram down procedure” that exists in US bankruptcy law, which largely inspired Krueger's proposal. The SDRM did not provide for this solution.

### WHAT WOULD BE THE SHAPE OF A MARKET-BASED APPROACH?

The difficulties of establishing a formal bankruptcy regime for sovereign debtors, the desire to prevent government interference in private contracts, the need to refrain from weakening market discipline and the realisation that bond debt exchange offers had made it possible to resolve some cases of unsustainable debt all led to the emergence of a market-based approach. Specifically, while the SDRM was based on the idea that a profound overhaul was required to address the difficulties posed by the new

forms of sovereign debt, the market-based approach aims to adapt the international financial architecture. It is based on two complementary pillars:

- the contractual definition, *via* collective action clauses (CAC), of a set of rules applicable to the main decisions of the restructuring process, e.g. acceptance of exchange offers, modification of the financial terms of contracts, creditor representation and information provision;
- the definition of general principles aimed at making sovereign debt crisis resolution more predictable.

Since the G10 Quarles Report (2002), CAC have become a standard element in bond contracts drawn up by sovereign issuers on the main primary markets, including the New York market, which did not previously use these types of clauses (Box 3). They are a decentralised response to collective action problems between bond creditors. Though the G10 Report contains a number of technical recommendations, the international community did not wish to define them as standards. Consequently, the rationale behind the spread of CAC is that of appropriation by market players and gradual standardisation in line with their own requirements. Interestingly, and in contrast to the fears of a number of players, empirical studies by Eichengreen and Mody (2000), Becker, Richards and Tchaicharoen (2001) as well as Gugiatti and Richards (2003) show that the incorporation of these clauses in emerging market issuers' contracts does not lead to a significant rise in the risk premiums that are applied to them. At this stage, despite the widespread use of CAC, their ability to enhance the sovereign debt restructuring process has yet to be put to the test. In addition, recent security exchange offers suggest that restructuring based on market techniques is not necessarily subject to the activation of CAC.

The definition of general principles for sovereign debt restructuring is the second pillar of a market-based approach. This initiative, discussed for the first time at the G20 Ministerial Meeting in New Delhi in 2002, responds to three considerations. First, the forms of emerging market sovereign debt reflect market equilibrium. Second, reforms in sovereign debt restructuring must not lead to a reduction in capital flows towards emerging markets. Third, the costs of restructuring may be reduced if the risk of unsustainable debt is identified in a



## Box 3

## Collective action clauses

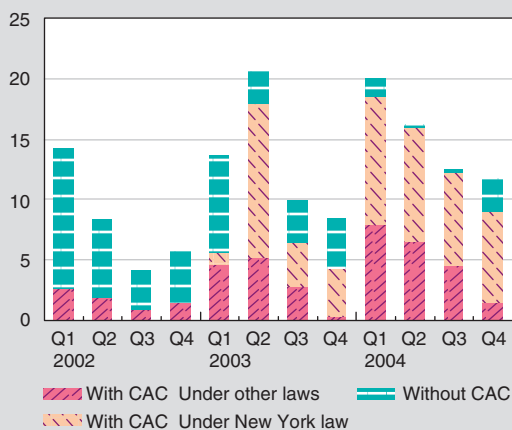
Incorporated into debt contracts, collective action clauses organise in advance the majority procedures and rules required for the renegotiation of contractual terms. Those recommended in the Quarles Report covered the appointment of creditors' representatives, the convening of creditor meetings, majority rules for modifying various contractual terms ("reserved matters" and other matters), payment acceleration, initiation of litigation against debtors, information provision and the exclusion of certain securities from the required calculation of majorities.

While there has been widespread use of these clauses since 2002 on the main markets, especially the New York market (see chart), this use does not cover all the clauses mentioned in the Quarles Report. Creditor representation clauses, for instance, particularly for renegotiating contracts, have been taken up very marginally. In addition, the majority rules used have not always been homogenous.

## CAC and emerging market sovereign bond issues

## Volume

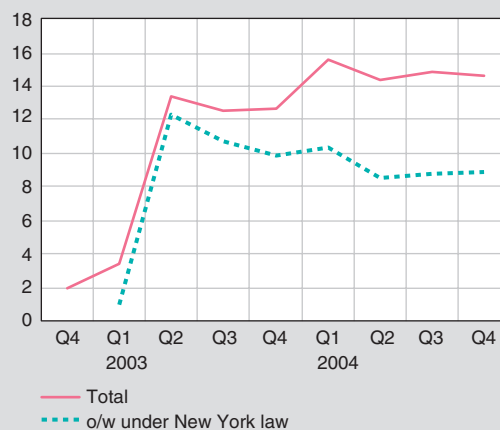
(in USD billions)



Sources: IMF – Banque de France calculations.

## Number of issues with CAC

(weighted average (volume) year-on-year)



timely manner and resolved through co-operation by market players.

Research in this area was conducted by an informal group bringing together emerging market sovereign issuers, representatives of private creditors and the official sector. It resulted in the "Principles for Stable Capital Flows and Fair Debt Restructurings in Emerging Markets" (Box 4).

The Principles currently have several limitations. Firstly, the parties involved, both sovereign issuers and the private sector, are yet to fully accept them. For the private sector, there is the fear that despite the strictly voluntary nature of the Principles, they might have legal force in certain jurisdictions and therefore prove to be binding on private creditors.

Secondly, the Principles do not clarify certain crucial points for the orderly restructuring of sovereign debt: circumstances that legitimise concerted and temporary payment suspension, role of creditor committees. Thirdly, the Principles are not sufficiently operational in their current state to serve as a reference in the assessment of restructuring processes, not only by the parties involved, but also by the IMF. For instance, they could contribute only marginally to the assessment of creditors' good faith within the Fund's lending into arrears policy.

The real impact of the Principles shall depend mainly on the monitoring of their implementation. The idea of entrusting this task to a non-government body, which was discussed during the definition

## Box 4

### The “Principles for Stable Capital Flows and Fair Debt Restructurings in Emerging Markets”

This short document presented in November 2004 by a group including the Institute of International Finance (IIF), which brings together 320 financial institutions, and several representatives of sovereign issuers (Brazil, Mexico, Turkey, South Korea, Russia, etc.) is based on four fundamental principles:

- transparency and timely disclosure of information,
- close dialogue between debtors and creditors and co-operation in order to prevent default,
- good faith actions,
- fair and equal treatment.

These Principles provide a non-binding reference whose strictly voluntary implementation should be considered on a case-by-case basis.

of the Principles, has been set aside, at least for the moment. This solution brought to mind the experience of Britain's Corporation of Foreign Bondholders (CFB), which operated from 1868 to the 1950s and has been analysed by Mauro and Yafeh (2003). It raises difficulties with regard to technical – protection of information confidentiality – and legitimacy issues that make it untenable to duplicate some of the features and practices that made the CFB relatively efficient.

### WHAT ROLES SHOULD THE IMF PLAY?

Generally, in sovereign debt restructuring, the IMF performs, *de facto*, a threefold function of expert, “monitor” and lender.

The function of expert entails providing economic and financial information as well as assessing sovereign debt sustainability and the government's ability to carry out the adjustments required to preserve this sustainability. The Fund's monitoring of member countries, either pursuant to Article IV of its statutes or within the framework of

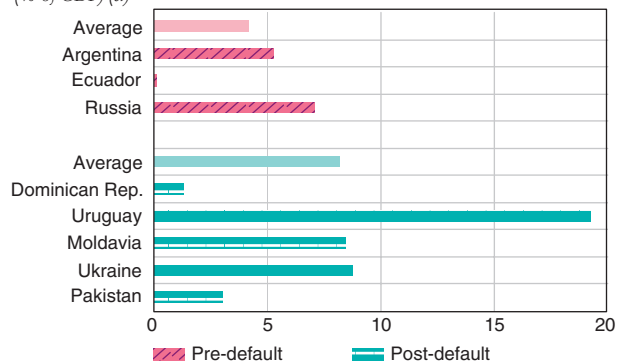
programme reviews, turns up – or forces sovereigns to disclose – the main information required for the potential re-negotiation of debt contracts. By clarifying the economic and financial stakes, the IMF facilitates the renegotiation process.

In addition, when sovereign debt has to be renegotiated, the definition of the macroeconomic framework – particularly in terms of fiscal performance and international reserves – determines the allocation of the economic and financial effort between the various parties involved. In this regard, the monitoring of the programme – and consequently, of the burden-sharing of economic adjustment – makes the Fund the co-ordinator between the various interests represented.

Lastly, the IMF often has financial commitments when sovereign debt is renegotiated. In recent sovereign bond renegotiations, outstanding IMF loans thus amounted to 8% and 4% of GDP in the pre-default and post-default cases respectively (Chart 11). Nevertheless, the IMF's role as provider of capital is not solely a response to the financial requirements of the crisis country. It is also, and perhaps even mainly, aimed at allowing orderly renegotiation and giving credibility to the sovereign's commitments to the programme. This aspect of financial assistance is notably reflected in the fact that IMF loans are paid in tranches and made conditional to the attainment of pre-defined objectives.

**Chart 11**  
Outstanding IMF loan

(% of GDP) (a)



NB: Outstanding amount of the month preceding announcement of renegotiation or default.

(a) As a % of GDP in the year of restructuring or default.

Source: IMF – Banque de France calculations.

The efficiency of the market-based approach depends on the IMF's effective performance of these three functions. In fact, this approach is an adaptation, rather than a questioning, of the debt crisis resolution framework of which these three functions constitute the matrix.

The Fund is best placed to create the incentive for the parties to implement the market-based approach. One of the benefits expected from this approach is that a sovereign facing a stock of unsustainable debt will be less tempted to "gamble for redemption" by putting off the decision to renegotiate the debt for as long as possible, and even going as far as default. Such a scenario supposes that there are incentives to reach a solution well before default.

Provision by the IMF of economic information and debt sustainability analyses are decisive to ensuring neutral and transparent information and, therefore, favouring a co-operative renegotiation process. In addition, programme conditionality and the Fund's financial assistance are two levers for catalysing

the efforts of the sovereign towards reaching a co-operative solution before default.

Work on the SDRM has brought to light that in a formal bankruptcy regime it is difficult for the IMF to play a direct role exceeding that of an expert. However, the implementation of a formal regime for managing post-default restructuring could have a positive effect on the market-based approach. In fact, for sovereigns and creditors, the prospect of having to activate an unwieldy and costly process in the event of default could incite them to anticipate this extreme situation and, therefore, implement a more informal approach beforehand. In other words, "the shadow of the law" of this bankruptcy regime on the market-based approach could contribute to making it more attractive.

However, the challenge facing any scheme in which both approaches coexist is to establish rules and procedures that create the best incentives for the parties involved. The experience off the SDRM reveals the magnitude of such a task.

*At least two lessons may be drawn from the financial crises experienced over the last decade. First, emerging market sovereigns' current financing methods are a source of risk for all parties involved. Second, it is now widely acknowledged that the bond debt of emerging market sovereigns is as liable to be restructured as other forms of debt.*

*The emphasis placed by the international community on research into debt restructuring reflects the fact that while there are fewer defaults, they involve larger volumes. It also reflects the need to reduce the moral hazard risk arising from an unclear crisis resolution framework that depends too heavily on financial assistance from the IMF. In practice, the international community is making the implicit choice to pursue the practice developed at the end of the 1980s. Recent reforms (CAC, Principles, policy of access to IMF resources) adapt, rather than transform the existing framework to the development of capital markets. This approach is not in opposition to a formal sovereign bankruptcy regime as proposed by the IMF in 2001. In certain aspects, such a regime, if it were feasible, would enhance the credibility of the market-based approach: the prospect of having to roll out an unwieldy and costly mechanism in the event of default could incite the parties to anticipate this extreme situation and, therefore, implement a more informal approach beforehand.*

*In this overhauled framework, the IMF would retain a central role insofar as it performs the triple function of expert, "monitor" and lender. The effectiveness of this framework based on principles will depend mainly on the Fund's ability to fully perform these three functions.*

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