

Second Draft
Comments are welcome

**Bail-In, Burden-Sharing, Private Sector Involvement (PSI) in Crisis Resolution and
Constructive Engagement of the Private Sector.
A Primer:
Evolving Definitions, Doctrine, Practice and Case Law¹**

by

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**July 2000
Revised: September 2000**

¹ This paper was written while the author was a Visiting Scholar at the IMF. The usual disclaimer applies with stronger force: the views presented in the paper are strictly personal and do not reflect those of any present or past institution the author has been affiliated with. I thank Brad Setser and Jens Nystedt for discussions and detailed comments on a previous draft and Olivier Jeanne, Don Mathieson, Mike Mussa, Mike Dooley for useful discussions. I also thank, without in any way implicating them, my former colleagues at Treasury who, in long conversations and discussions, have helped me to shape my views on this topic.

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1. Introduction.

The issue of the appropriate ways to involve the private sector in crisis resolution has been one of the most hotly debated and contested policy questions that have emerged since the onset of currency and financial crises in the 1990s.² It is one of the core issues in the current debate on the reform of the international financial architecture.

Even the definition of the problem has been debated. A first term used to discuss this issue was “bail-in” as a way to connote the need to avoid systematic “bail-outs” of private sector creditors during crises. This term was deemed a bit too coercive by some who preferred instead the term “burden sharing”. But even the latter definition was contested as suggesting equity considerations rather than the need to fill a financing gap; the term also had coercive connotations that appear at odds with the goal of constructively involving the private sector in crisis prevention and resolution. Thus, the increasing use by the official sector of the term “private sector involvement in crisis resolution” (often referred to as PSI policy) with the adjective “appropriate” often added in front of PSI to stress the view that such involvement should be as voluntary, constructive and cooperative as possible. Most recently, the new IMF Managing Director Köhler (as well as Stanley Fischer) have suggested a new definition “constructive engagement” that emphasizes the need for voluntary and market based solutions, as opposed to forced or coercive approaches, to private sector involvement.

Regardless of this definitional semantics, that is itself loaded with the views of different actors (creditors, debtors and the official sector) of what such involvement should be, the issue of PSI remains highly contentious and complex.

In a sense, PSI is not new at all as the evolving strategy to deal with the international debt crisis of the 1980s already implied a significant, and somewhat coercive, involvement of the private sector in crisis resolution: sovereigns stopped payments on their syndicated loans to international banks, significant debt servicing difficulties emerged, banks loans were first rescheduled, restructured and rolled over; new money was at times put on the table; and eventually debt reduction did occur via the Brady plan workouts.

What is new in the 1990s is not PSI but the nature of the debt instruments, creditors and debtors: as for instruments, bonded debt, short-term interbank loans, other structured debt securities and derivative instruments have increasingly supplanted syndicated medium-long term bank loans; for what concerns creditors, commercial banks have been increasingly supplanted by a whole host of other creditors such as small and large bondholders, investment banks, hedge funds and real money investors (such as mutual funds and pension funds); and among debtors, while sovereigns are still important, private sector debtors in

² Recent official sectors views and policy on PSI can be found in Köhler (2000), Fischer (2000), Summers (2000), G7 Fin Mins Fukuoka Communiqué (2000), G7 Fin Mins Architecture Report (1999) and IMF (1999). Private sector views include IIF (1999), Corrigan (2000), Bucheit (1999), CFR (2000) and Standard & Poor’s (1999a and 1999b). Some academic views include Eichengreen (1999, 2000), Eichengreen-Ruhl (2000), Dooley (2000), Portes (2000), Friedman (2000) and Rogoff (2000).

emerging markets (such as financial institutions and corporations) are increasing their share of cross border borrowing.

While in the 1980s the challenge was to restructure and reschedule the loans of a limited set of commercial banks, the challenge in the 1990s has become the one of rescheduling and restructuring bonded instruments (as well as cross border short term interbank loans). Bond rescheduling was not an issue in the former period as bonded debt was mostly “de minimis” compared to bank loans. Initial attempts by the public sector to include bonded debt into PSI were received with skepticism by the private sector as well as the debtors. It was argued that, while in the 1980s, it was relatively easy to convince a small set of homogenous creditors subject to regulation and pliant to forbearance – commercial banks – to reschedule a set of homogenous instruments (syndicated bank loans), it would have been impossible to restructure instruments such as bonds that did not have collective action clauses, that were very different and non-homogeneous in their legal and economic features (Eurobonds, Brady bonds and other bonded securities) and were held by thousands of creditors that were marking to market, not heavily regulated and not expert or willing to engage in bonded debt instrument restructuring. The collective action problem of coordinating the actions of such a disparate and large group of creditors without creditor committees, majority and sharing clauses was deemed to make it all but impossible to restructure bonds. Also, it was argued that the short-term nature of the interbank loans would make them hard to restructure: creditors would stop rolling them over and would close their positions before the debtors could even start thinking about a possible non fully voluntary rollover. The reality of PSI in the 1990s turned out to be quite different than these pessimistic assessments.³

For one thing, the collective action problems were also quite serious in the 1980s: there were hundreds of commercial banks with different exposures and interests; the holdout problem was as serious then as now; and the debt instruments were quite non-homogenous as hundreds of very different syndicated loans has to be repackaged and restructured. Moreover, as the recent restructuring of the bonded debt of Pakistan, Ukraine, Russia and Ecuador suggest, bonded debt restructuring is feasible even in the absence of *ex-ante* use of collective action clauses (CACs). Also, with the emergence of short-term interbank loans in the 1990s, in part a reaction to the bail-in of longer term bank loans in the 1980s, an appropriate bail-in of such instruments became necessary as the short-term nature of this debt made it more prone to sudden liquidity driven runs. In different ways and with different degrees of coercion

³ Some may argue that a difference between the 1980s and the 1990s was the absence of PSI or concerted money in some major liquidity cases (Mexico, Brazil) while all major 1980s cases implied quasi-coercive rollovers, new money or Brady-type deals. In this view, the 1990s strategy was aimed to avoid the 1980s lost decade of growth. However, the reasons for the lost decade had more to do with the relatively deeper macro and structural problems faced by Latin America in the 1980s and the lack of significant stabilization and reform than with the nature of the 1980s PSI.

or voluntarism, the restructuring or rollovers of cross border interbank loans in Korea, Brazil, Russia and Indonesia became part of the PSI policy of the 1990s.⁴

Even the rationales for PSI have been contested and hotly debated. The official G7 doctrine on PSI stresses the following rationales for PSI. First, when a current account or a capital account- based crisis occurs, there will be an external financing gap: even after the debtor makes domestic adjustments to policy and reduces domestic absorption as part of its policy adjustment process, a financing gap may remain as the amount of capital outflows and debt that has to be serviced (net of inflows such as FDI, privatization receipts and other long-term inflows) may be in excess of the foreign reserve resources of the country available for external debt service. Second, official creditors involvement may contribute to fill this external financing gap but it cannot fill it altogether. Even very generous Paris Club restructurings of official bilateral debt and normal access multilateral creditors financial support (by the IMF, the WB and other MDBs) may leave a financing gap. In other terms, official money, unless is exceptionally large (a hotly contested issue) cannot in most cases fill in all the debtor's financing gap. Third, exceptional financing is not only not feasible given political, financial and other constraints to large scale official support but it is also not desirable apart from a few special cases. It is not desirable as expectations of official sector bailout of creditors would lead to severe moral hazard distortions of cross-border borrowing and lending. Thus, financing gaps, the limited availability of official money and moral hazard considerations are at the basis of the need for appropriate PSI for purposes of crisis resolution.

Other goals of PSI have been mentioned from time to time. For example, the "unfairness" of bailing out private investors and having the official creditor sector to fill in the full financing gap is beyond the references to "burden sharing". But fairness and burden sharing can also be seen as motivated by the lack of enough official money ("there is not gonna be enough money to fill in all gaps") and the moral hazard distortions of large scale bailouts ("creditors and debtors would be reckless if they knew that the official sector stand ready to systematically bail them out").

The basic logic behind PSI, i.e. the need to finance in a appropriate way external gaps, the limited availability of official money and the need to avoid moral hazard distortions, appears quite sensible and uncontroversial. Thus, the initial private sector furor over PSI appears as quite perplexing and self-serving. But indeed, while the principle of PSI may be quite uncontroversial, and even the private sector has reluctantly come to accept it, the application of PSI to specific cases, has remained complex and controversial. This paper will thus make a broad assessment of the logic of PSI, the evolution of the official doctrine, its application to specific cases and the wide range of open and controversial issues.

⁴ One can even argue that, in the 1990s, short-term claims (both interbank and short-term government debt) were more of a problem than longer-term bonds (both as causes of financial crisis and in terms of their malleability to rollover/restructuring) as the latter paradoxically turned out to be easier to restructure than the former.

This paper will concentrate on the role of PSI in crisis resolution while touching only marginally on the use of PSI for crisis prevention. For one thing, appropriate PSI for crisis prevention partly overlaps with crisis resolution. If a rollover of interbank loans is arranged – maybe through ex-ante coordination mechanisms such as creditors committees - before asset prices such as exchange rates, stock price and sovereign debt prices have collapsed, one can think of this as crisis-preventing PSI; after the crisis is triggered, this becomes crisis-resolving PSI but the substance of the problem is quite similar.⁵ Thus, a lot of proposals for crisis prevention could be discussed: capital controls, standstills, creditor committees, voluntary rollovers, private contingent credit lines. We will touch on these as part of our discussion of crisis resolution rather than crisis prevention but a serious, difficult issue remains open. Ideally, one would want to constructively involve the private sector before, rather than after, the free fall of currency and other asset prices have caused recession, significant financial distress and bankruptcy of sovereigns, corporations and financial institutions. Thus, PSI for crisis prevention is preferable to that for crisis resolution. But how to avoid the crisis in the first place remains a difficult issue.

The official PSI doctrine has also evolved over time. As discussed above, PSI was part and parcel of the official strategy to deal with the 1980s debt crisis culminating in the Brady plan and its implementation in the early 1990s. The Mexican peso crisis of 1994-95, the first major capital-account based crisis of the 1990s, brought back the issue of whether and how to appropriately involve the private sector in crisis resolution. The effective bailout of private investors, while ex-post appropriate and successful given that Mexico was close to a liquidity run episode and its economy rapidly and successfully recovered after such official support, led to the now familiar concerns about moral hazard, the political limits to the size of official support packages and the need for better private sector involvement. The 1996 G10 Rey Report came out with recommendation about the need for collective action clauses

⁵ Moreover, there is a continuum of crisis prevention and resolution. First, one wants to avoid a crisis; then if a crisis is looming, one wants to avoid a deep crisis with appropriate bail-in, official finance and policy adjustment; finally, if a deeper crisis, one will have to resolve it with appropriate post-crisis PSI. The goal in Mexico in 1995 was to prevent liquidity squeeze from becoming a solvency problem (both by financing and by getting needed policies and by convincing the Mexicans that this was not a chance to go populist and walk away from debts). The goal in Korea in late 1997 was to prevent a default and deeper crisis. The goal in Russia after August 1998 was to prevent outcomes worse than a major sovereign default (economic free fall, loose nukes, the break-up of the country, etc). The goal in the debt restructuring cases (Pakistan, Ukraine, Ecuador) was to resolve a financial crisis by appropriately bailing in the private sector on top of policy adjustment and official financing.

(CACs), IMF lending into arrears and appropriate PSI⁶; they remained unimplemented but this debate resurged in the aftermath of the Asian crisis. The latter crisis brought back the question of PSI, both in practice and as a doctrine. Before official doctrine was formally fleshed out, the need to deal with the crisis cases led to effective PSI cases in Korea, Indonesia and Thailand. These cases were limited to cross border bank loans (to financial institutions and corporates) and did not address the issue of restructuring bonds, that were “de minimis” in these episodes. The official PSI doctrine was next developed as part of the attempt to reform the international financial architecture. The October 1998 reports of the G22 Group included one on private sector involvement in crisis prevention and resolution. The formal G7 doctrine was fleshed out in early 1999 in preparation of the July 1999 Köln G7 summit where PSI was addressed as one of the building block of the new international financial architecture; the Köln document on architecture reform included a large section on the new G7 PSI framework and doctrine.

This official doctrine can be characterized as a “case-by-case approach with principles and tools”. While the approach was a case-by-case one, a series of clear principles and tools were provide to clarify the process to be used in implementing PSI. While some suggested the need for more precise rules to guide PSI, rigid rules were deemed not realistic because the complexity and novelty of the issues to be addressed that did not allow outlining a rigid set of rules. For example, under which circumstances should PSI be implemented? Which kind of PSI is appropriate in different cases: soft, semi-coercive, concerted, coercive? Which claims to include in PSI, bonded debt, short-term interbank flows, other short-term credits, Eurobonds, Brady bonds, domestic debt (local and foreign currency denominated)? Which class of creditors to include, foreign, domestic, bondholder, bank creditors? How to decide how much adjustment and how much external gap filling to do? And how would the financing gap be filled between multilateral creditors (IFIs), bilateral official creditors (Paris Club (PC) creditors) and the private sector? How to define and measure PC comparability (PC request that private claims be restructured on terms broadly comparable to those of official PC claims)? How to divide the financing pie among different creditors? Should restructuring of private claims be done before or after a PC rescheduling? Should the official sector accept reverse comparability (private sector demands of restructuring of official claims on terms comparable to that of private claims in cases, - like Russia and Ecuador – when private claims are restructured before Paris Club ones)? Should one use a market soundings process followed by debt exchanges or rely on committees and formal negotiations between debtors and creditors? It is important to have and use collective action clauses or not? How much to micro-manage the restructuring process? What to do in liquidity and systemic cases? How to distinguish insolvency from illiquidity? This is only a partial list of the very

⁶ Apart form specific recommendations, the overall message of the report was a warning that investors could and should not expect that broad range of debts would be immune from payments suspensions and restructurings, hence the need for clauses and capacity to lend into arrears on broader range of debts. I.e., the solution to the Mexican crisis would be an exception, not the norm.

difficult questions that the official sector had to address in designing its PSI policy. Since many of these questions did not have a simple answer, the case-by-case approach cum principles and tools for PSI provided the right balance between the need to provide clear guidelines to market participants and the need to maintain the flexibility of the policy to address specific case studies.

The official doctrine has also stressed two other points that are of paramount importance. First, PSI should be “appropriate”; whether and which type of PSI is needed will have to be considered on a case by case basis. Blanket rules suggesting PSI for all countries in crisis and/or for all countries that may have an IMF program should be avoided. In each case, the merit of appropriate PSI should be carefully assessed. Second, strong preference should be given to cooperative and voluntary solutions relative to more coercive solutions. Given the importance of enforcing international debt contracts and ensuring a steady flow of capital to emerging markets, semi-coercive or coercive solutions should be considered in extreme situations and strong preference should be given to crisis resolution processes that are as little coercive and as cooperative as possible. The aim of PSI is not to “punish” or inflict losses on private sector investors. It is the one of resolving crises, ensuring an appropriate financing of external financing gaps and creating conditions that ensure stable flows of capital of emerging markets that support long run economic growth. At times, the private sector has perceived the action of the official sector as unfair, punitive and unpredictable but, as this paper will try to detail, the whole PSI policy has been guided by an extreme awareness of the importance of maintaining sound international capital markets and avoid actions and policies that may disrupt flows of capital in undesirable ways.

The difficult tradeoff in PSI policy is the one between the official desire to limit large money packages, while maintaining the optionality of having them when appropriate, and the desire to implement PSI policies that are as voluntary and cooperative as possible. This difficult tradeoff is, for example, apparent from the first remarks of the new IMF Managing Director on the issue of PSI (Köhler (2000)). On one side, he sensibly suggests a preference for limiting large official packages; on the other one he strongly supports “constructive engagement” of the private sector that implies, among other things, a preference for cooperative and voluntary, as opposed to semi-coercive, solutions to crises. The two goals, while each separately valid, are at times in dialectic tension with each other. Less official money may mean more PSI (and at times more coercive forms of PSI when voluntary ones are not feasible) while more voluntary forms of PSI or of constructive engagement may require more, rather than less, official money. This basic tension between the desire to limit official finance and the goal of having constructive and voluntary forms of PSI has not been fully resolved in official doctrine and practice.

At the same time in which the official PSI policy was being formulated, developments in the policy arena led to the first cases of bonded debt restructuring.

First, the Paris Club extended the comparability principle to bonded debt for the case of Pakistan in January of 1999; while the principle was not new, it had not been applied before to bonds as they were de minimis in most cases. The restructuring of Pakistan’s Eurobonds and other bonded claims was then successfully performed in the fall of 1999.

Second, the pressures on the Brazilian currency in the fall of 1998 that eventually led to the devaluation and float of this currency in January 1999 reposed the issue of whether and how to appropriately involve the private sector in crisis resolution. Cross-border short-term bank lines were, again as in Korea, at stake and in risk of no rollover; moreover, a large stock of very short term domestic debt was also subject to roll over risk. Eventually, the form of PSI in Brazil turned out to be very mild with a system of monitoring of bank lines followed by a mild commitment in March 1999 to maintain exposures to February levels. Such mild PSI worked as the catalytic role of the official package and the adjustment efforts of the country prevented a destabilizing loss of confidence and eventually restored economic growth without the need to resort to coercive outcomes.⁷

Third, large external financing gaps debt servicing difficulties in 1999 by Romania and Ukraine led to attempts to restructure their bonded liabilities⁸. Such attempts were ad-hoc and only partially successful: PSI in Romania was attempted (the official policy was to consider bond restructuring but then to back down and let Romania pay its maturing instruments in return for promise to raise new money) but eventually abandoned. The debt and bond restructurings in Ukraine (the structured note in 1998, the ING structured note in the summer of 1999 and an ECU-based claim in the fall of 1999) were first partial, ad-hoc and unsustainable over the medium term as the strict market approach led to restructurings that were of very short maturity and at interest rates that were unsustainable in the medium term. Only later in 2000, Ukraine took a comprehensive approach to its bonded debt restructuring (restructuring of "Eurobonds" and an assortment of Eurobond-like instruments created in earlier restructurings).

Fourth, the effective default of Russian debt following the August 1998 crisis led to a process that would eventually lead to the restructuring in 2000 of its bank and bonded liabilities.⁹

⁷ To justify – with 20/20 hindsight - the soft PSI approach taken in Brazil, one could argue that the overarching problem there was not the risk of runoff on domestic debt because of concerns that Brazil could not honor such debt but rather the desire to avoid an inevitable devaluation; thus, the incentives to take short positions on the currency. In other terms, Brazil was more like a currency crisis than a debt crisis, so PSI may not have been as obviously a core issue. But there was indeed some risk in Brazil in 1998-99 that short term domestic debt may not be rolled over, just as in the Mexican case.

⁸ Strictly speaking, the first restructuring case was Ukraine in 1998; in that case, the instrument was not a classic bond but a structured financing (local currency claim packaged with guaranteed access to foreign exchange from the central bank). This was not strictly a bond restructuring but certainly a restructuring of something that was not a bank line.

⁹ First, there was the default on GKO and non-deliverable forwards (NDF) in August 1998; then, cascading defaults on Min Fins, Prins, Ians and other Soviet era debt eventually lead to a restructuring of a broad range of external and domestic London Club and bonded obligations.

Fifth, the effective decision by Ecuador to stop payments on its external debt in August 1999 represented the first episode where the previously restructured Brady bonds were effectively defaulted upon leading to the need to restructure them (as eventually was attempted in July-August 2000).

Sixth, the drive to restructure bonds via market based debt exchanges was successfully implemented in 1999 and 2000 in Russia and Ukraine (a comprehensive deal for Ukraine in 2000 rather than the ad-hoc deals in 1998-99) after the successful Pakistani episode. And Ecuador bonded debt exchange was successfully launched and completed in July-August 2000.

Finally, as suggested by recent market reports, Nigeria and Cote d'Ivoire may become the next cases where sovereign debt restructurings may be implemented.

As these case studies played out, the official doctrine evolved as well. While the case-by-case approach was maintained and deemed appropriate given the complexity and differences of case studies, in part as a response to private sector requests for greater clarity, the G7 agreed in April 2000 on a set of "operational guidelines" for PSI. These guidelines were reaffirmed as part of the Finance Ministers Communiqué prepared for the July 2000 G7 summit in Fukuoka, Japan.

One other general point is worth discussing at this stage. The appropriate form of PSI will depend on where a debtor country stands in the broad spectrum that goes from pure "liquidity" cases to pure "insolvency" cases. Of course, this is a most complex issue. First, deciding whether a country is insolvent or not is very hard given that debt servicing depends both on "ability to pay" and "willingness to pay" (see section 8). Second, the spectrum of cases is not limited to corners of pure illiquidity and pure insolvency cases but is more gray and continuous. Often, countries that are mostly illiquid may have significant policy problems (such as Mexico in 1994 and Korea in 1997) so that a simple solution such as full unconditional large official support without any PSI may not be appropriate. At the other end, countries that look insolvent (for example Ecuador) may eventually be able to service their restructured, rather than reduced, debt if they implement enough policy adjustment. In between the cases of liquidity (with or without policy problems) and the pure cases of insolvency, there are many cases of countries with significant macro and structural adjustment problems whose debt burden may not be unsustainable in the long run but that do face significant payment humps in the short run (Pakistan, Ukraine, Romania); in these cases some appropriate form of PSI short of outright debt reduction may be appropriate.

One could argue that the severity of the PSI policy should depend of where a country stands along this spectrum. Debt reduction may be warranted for clear cases of insolvency subject to a country effort to adjust its underlying problems. Debt restructuring, rescheduling and rollovers that do not formally touch the face value of principal payments may be warranted in cases where severe policy problem exist, the debt burden is not unsustainable but payment humps in the short run and lack of market access do not allow the country to

service its debt in full and in time in the short run.¹⁰ A solution closer to large official support packages (full bailout) may be warranted in cases of pure illiquidity, especially if the country is large and of systemic importance. But, as we will discuss in detail below in Section 2, the appropriateness of PSI in such liquidity cases is a much more complex issue than this simple logic suggests.

The paper is structured as follows. Section 2 presents a discussion of PSI in liquidity cases; as this issue is related to the debate on the need for an international lender of last resort (ILOLR), this matter is discussed as well. Section 3 discussed whether moral debtor and creditor moral hazard, an important component of the argument for PSI, is a serious issue in international financial flows. Section 4 considers the arguments in favor and against standstills of payments. Section 5 considers recent PSI cases involving bank loans. Section 6 considers the question of PSI for bonded debt. There, we discuss the official PSI doctrine, when and how to do PSI, the critiques of the Paris Club, which assets to include in the restructurings, the role of collective action clauses, alternative models of the restructuring process and the lessons from recent cases studies of bonds restructurings.

Section 7 discusses the issue of sweeteners and credit enhancements as tools of PSI policy. Section 8 discusses how to assess insolvency versus illiquidity. Section 9 presents some concluding remarks.

2. PSI in liquidity cases.

The issue of PSI is most complex in the cases in which there is a liquidity crisis. Even the need for PSI in these cases is hotly debated as some argue that in pure liquidity cases large “bailout” packages are justified and no PSI (“bail-in”) is warranted. Indeed, even the official PSI doctrine as elaborated by the G7 only partially addresses the question of what to do, if anything, in liquidity cases, especially if the country is large and has systemic effects.¹¹

¹⁰ Even in such cases, the restructuring will imply some NPV reduction of the debt as interest rate and principal payments will be rescheduled at rates that are below current market rates. Thus, some real debt reduction will occur and does occur even in cases in which face value reduction is not formally performed. As official bilateral claims are also rescheduled at rates that do not truly reflect repayment risk, PC debt is also subject to effective NPV reduction even if it is formally not written down. This will be discussed in more detail in section 6.

¹¹ The PSI framework is meant to cover both liquidity cases and semi-insolvency or insolvency cases but emphasize the latter and de-emphasizes the former. The preamble of G-7 operational guidelines suggests two approaches to liquidity cases -- catalytic financing and voluntary arrangements that recognize the collective interest in staying in. The overall approach to liquidity case is case-by-case but constrained by the PSI framework, as for the other cases. But the G-7 have not addressed head on the role that restructurings/ reprofiling should play in liquidity cases. For example, one should not lump the PSI approach to Korea with that to Brazil as the commitment to stay in Korea was much harder and led to formal

(continued...)

In fact, the official PSI doctrine effectively deals and applies with more specificity either to cases close to “insolvency” (Ecuador) or to cases where the country is small, has serious policy adjustment problems, may not strictly insolvent but has significant debt servicing difficulties that derive from large payment humps (external financing gaps) and limited market access (i.e. cases such as Pakistan, Romania, Ukraine, et cetera).

2.1. Full bail-out or full bail-in in liquidity cases? Some conceptual issues

An official doctrine for pure liquidity cases has not been formally articulated and presented given the complexity of such cases. The issues in these liquidity cases are very difficult. First, it is not obvious if there are pure liquidity cases. Formally, a country may not be insolvent in the sense that its debt servicing problems are caused by sudden illiquidity (lack of market access and unwillingness of creditors to roll over credits) but even such country may have weak fundamentals and serious policy shortcomings. Indeed, it is hard to believe that a country with fully sound fundamentals and policies would become illiquid and subject to self-fulfilling speculative runs and panic. For one thing, even in theory, if fundamentals are strong enough such multiple equilibria runs may be ruled out; i.e. weak fundamentals are necessary for an economy to be in the multiple equilibria region. Second, empirically, all observed cases where something close to an illiquidity problem were the immediate source of the crisis, were characterized by some fundamental or policy weaknesses. In cases like Mexico, Korea, Brazil and Indonesia that are conceptually closer to the illiquidity problem, some serious macro, structural or policy shortcomings certainly played a role in triggering the crisis. Thus, talking of pure liquidity cases and what, if any, PSI to implement in such cases is a bit unrealistic.¹²

But, for the sake of the conceptual argument, let us consider first “pure” liquidity cases. Some argue that a solution closer to very large official support packages (full bailout)

extension of maturities via rescheduling. And the G-7 guidelines for restructuring are not explicitly applying to liquidity cases. Thus, there is still a lot of room for fleshing out the G-7 views on liquidity and systemic cases. This issue is addressed in more detail in section 2.

¹² However, note that liquidity with policy problems can become solvency if policy problems not addressed, or if financing package does not work and prompts wider crisis. There is some fear that this describes what happened in Indonesia. While one could rightly argue that the Indonesian case was mostly due to bad policy - not bad financing - and to a bad political regime incapable of implementing good policies, the extent of the free fall and implosion of Indonesia leaves open the issue of how to avoid liquidity cases with serious policy problems from turning into severe crises and insolvency situations.

may be warranted in cases of pure illiquidity. This full bailout solution may be further warranted if the country is not only illiquid but also large and of systemic importance.¹³

While in such pure liquidity cases one could make the argument that a “full bailout” is the right policy, one could also argue that the alternative policy of a “full bail-in” (i.e. a combination of wide standstills, capital controls and other measures to lock in all investors that are rushing to the door) is as desirable, efficient and optimal. Indeed, if there is no uncertainty, no risk aversion and there is a pure liquidity problem/run, both the full bailout and the full bail-in solution are equivalent solutions to the collective action problem faced by investors (the coordination failure) that is the cause of the liquidity driven run. So, paradoxically, the full bail-in solution is optimal even in the cases in which the full bailout solution seems as warranted.

Paradoxically, in these pure liquidity cases, the bail-in solution may be superior to the bailout one as the ex-ante threat of a full bail-in solution is sufficient to sustain ex-ante the good equilibrium of “no run” without having to resort to such a threat ex-post. In fact, if all agents know that, if and when a run occurs, the official sector or debtor will introduce standstills and/or capital controls to avoid the run, the incentive to run will disappear as everyone will know that no one will have the incentive and desire to rush to the door and no real losses will be incurred (in the domestic analogue no one will want to stand first in the line at the bank if a bank holiday prevent the run from occurring). Thus, the threat of a full bail-in is sufficient to rule out the bad equilibrium and, ex-post, no run will occur and the threat will not be exercised thus avoiding the need to implement the threat in the first place.

This conceptual superiority of the full bail-in solution is, however, extremely fragile in practice. In fact: a. if the case under consideration is not one of pure illiquidity but one in which some policy shortcomings are behind the illiquidity; b. if there is some uncertainty about the fundamentals and the policy response to the crisis; and c. if creditors are risk-averse; the dominance of a “full bail-in” solution will break down. When fundamentals are weak and uncertain and agents are risk-averse, they will react to the expectation or threat of a bail-in by rushing to the front of the line as the threat of a bail-in may actually be implemented and as such bail-in may imply real costs and financial losses to investors when the country is subject to policy and fundamentals shortcomings rather than being purely illiquid.

Indeed, the fundamental problem with any solution that represents partial or full bail-in (i.e. any coercive policy such as partial or complete standstills and/or capital controls) is that it may actually trigger earlier a crisis or even trigger a crisis that would have not otherwise occurred in the absence of such policy.¹⁴

¹³ A complex issue to be discussed below is what to do if the country is large and systemic but its crisis is not purely due to illiquidity; i.e. what to do if serious macro and policy shortcomings are at the root of the crisis.

¹⁴ One can argue that hair-triggers (liquidity runs) by creditors are the response of creditors who want shorter maturities so can get out at par (indeed, hair-triggers in secondary markets for long-term instruments are not as damaging). Indeed, as suggested by Jeanne (1999) and
(continued...)

This point is familiar from economic theory: while “unexpected” capital controls may prevent a speculative attack and run on a currency, “anticipated” ones may actually trigger one or make it occur earlier than otherwise as creditors will rush to the door to avoid the controls and the risk of being locked in and suffer losses. This “rush to the exits” effect is the main potential drawback of any semi-coercive PSI policy: if creditors anticipate partial or full bail-in they may try to avoid it by unwinding their position before the policy is implemented. A standstill solution has a number of other shortcomings that will be discussed in detail in Section 4.

So, what to do with liquidity cases (especially considering that some policy shortcomings imply that these are not going to be “pure” liquidity cases)? A full bail-in, a full bail-out or something in between? If one were to apply the logic of PSI, i.e. that some external financing gaps may occur, that official money will not be enough to fill such gaps and that a solution based only on official money (full bailout) is not desirable because of moral hazard distortions, then the right answer would be: do a combination of things. Specifically, part of the solution will be policy adjustment by the debtor country if macro, structural and policy shortcomings caused the crisis; part of the solution will be official money, the larger the package the closer one is to a pure liquidity case and the smaller when shortcomings are important; and part of the solution may be appropriate forms of PSI that may be more or less “voluntary” depending on the circumstances and the nature of the problem being addressed and that will take the form of “partial” bail-in, i.e. include only a subset of instrument and creditors that may be running.

In recent liquidity cases (Mexico, Korea, Brazil), the response has been a combination of policy adjustment, official money and PSI with the relative weights being different in different circumstances. Mexico was a case closer to that of full bailout of investors (cum domestic policy adjustment). Korea was closer to a semi-coercive rollover of interbank lines as the loss of foreign reserves had put the country close to the brink of default in the face of the attempt of foreign banks to reduce their exposures. Brazil was in between with a mild form of PSI (a monitoring of bank exposure followed by a commitment to maintain exposure at reduced levels) that combined with policy adjustment and significant official support was successful in avoiding a wider loss of confidence and prevented a disruptive loss of market access.

Indeed, effectively the official response to these liquidity cases has been based on the view that a combination of adjustment, catalytic official money and appropriate PSI (partial rather than full bail-in) can be successful in preventing a wider crisis, restore confidence and market access and return the country on a path of recovery and growth.

Jeanne and Wyplosz (2000), the maturity of external debt is endogenous and may serve as a discipline mechanism. But, if debtors believe that short maturities increases the risk of liquidity crises, and if and liquidity crises are costly, debtors have countervailing incentives to lengthen maturities. One should maybe accept that there will always be some risk of shortening maturities (that can lead to liquidity runs) and that this threat that can be compensated by policy action by debtors to lengthen maturities.

Conceptually, however, the “middle” solution, as opposed to the “corner” solutions of full bail-out or full bail-in has been intellectually challenged as not being feasible. Observers (such as Paul Krugman)¹⁵ have argued that only corner solutions are feasible in these liquidity cases: either there is an “international lender of last resort” (IOLR) with enough resources to engineer a full bail-out and avoid a disruptive run; or, at the other extreme, a full bail-in (that locks in all assets and domestic and foreign creditors trying to turn short term claims into foreign assets) is necessary. In fact, in this view a partial bail-in would not work because, as long as the economy is in the multiple equilibria region, locking in some creditors and assets (but not all) would lead all the others to run to avoid being locked in next. Conversely, a partial bail-out would not work either because, as long as the financing gap is not eliminated, the multiple equilibria problem is not solved and agents will rush to the exits and trigger a default by claiming all the limited foreign reserves including those provided by the partial official support. Thus, conceptually, it is argued that the “middle” solution may not be feasible.

Indeed, the Krugman hypothesis is supported by some theoretical work. Zettelmeyer (1999) formalize this hypothesis by showing that partial bail-outs are bound to fail in models where illiquidity may lead to self-fulfilling. Such partial bail-out (or bail-ins) would not avoid the possibility of a bad equilibrium because, as long as the size of this support is not large enough to fill in the financing gap, the possibility that agents will coordinate on the bad equilibrium cannot be ruled out. Worse, partial bailout will imply that the more is the official support the larger is the reserve loss if a run occurs. Indeed, if a partial package cannot avoid a run, the operating constraint on the size of the run is the amount of official reserves (including those provided by the bailout package); thus more support in this case means only a larger run on reserves. Goldfajn and Valdes (1999) make a similar point on the ineffectiveness of partial bail-out even if they do not provide a proof of such statement in their model of self-fulfilling runs.

This theoretical ineffectiveness of “middle solutions” (partial bail-outs and partial bail-ins) is in stark contrast to the PSI philosophy that catalytic official money, domestic policy adjustment and partial and appropriate bail-in may indeed succeed and avoid the bad equilibrium even when such three-pronged solution does not formally fill all of the external gap. The middle view solution is predicated on the view that this combination of action will restore confidence and lead investors who are not bailed in, and who could thus run, to avoid running to the exits even if the remaining external financing gap is such that if they were to decide to run the bad equilibrium could not be avoided.

The gap between the theoretical analysis (that supports the “corner” solutions) and the actual policies and case studies (that support the view that “middle” solutions can be successful) can be bridged as follows. In multiple equilibria models, as long as the financing gap is not completely filled via full bail-in or full bail-out, the possibility of a self-fulfilling

¹⁵ Mervyn King (1999) supports the idea of “middle way” solutions; but he also argues that, in some circumstances, broad standstills on debt payments may make sense, and be desirable a view closer to the idea of “corners”.

run cannot be ruled out completely; the economy may end up in the bad equilibrium if those who are not bailed in do decide to rush to the exits. Moreover, in the multiple equilibrium region, there is nothing (apart from “sunspots”) that can nail down the probability that the economy will end up in the bad equilibrium as opposed to the good equilibrium. Since the bad equilibrium requires that enough agents decide to focalize on that equilibrium (i.e. decide to run), the question is how much fundamentals and policy actions can affect such decision. In existing models, such probability is indeterminate and the economy may be as likely to end up in one equilibrium or the other. In reality, however, domestic policy choices, official support and the amount of bail-in do affect such probability (even if they do not do so in our abstract analytical models). Indeed the argument for a “middle” solution is based on the view that domestic policy adjustment will reduce the probability of a run as the debtor government credibly commits to reduce the imbalances that created the risk of a run in the first place; that the amount of official support can also affect the probability of a run as more official money means that the size of the remaining gap is proportionally reduced; and that appropriate PSI may also reduce the probability of a run by leading some investors and asset classes to stay in (voluntary and/or concerted rollover) and leading the other ones who are not subject to bail-in not to run as the domestic adjustment, the official money and the bail-in of some other investors help to restore the confidence of the remaining ones. Thus, while middle solutions (with different degrees of partial PSI) may not work in theory they do appear to work in practice as recent episodes (Mexico, Korea, Brazil) seem to suggest.^{16 17}

¹⁶ One can however have a sophisticated defense of the Zettelmeter critique of partial bailouts and support of solutions closer to corners. One way of addressing this critique is to make bailouts less partial, closer to a full bailout. Putting \$5 billion on table when \$20 billion can potentially run (roll-off) at par risks to lead to a scramble for the exits, i.e. a greater reserve loss without solving the run. If official packages are big enough, even partial forms of bail-in (not full controls or standstills) can work; instead, too small an official packages runs the real risks of being less effective than a bigger one. Conversely, to justify a solution closer to the other extreme, if very large official support is not available, one may need a very large contribution from private creditors (who assume the risk of policy failure if there is a policy problem). Note however that the downside of this restructuring a large – but not the full amount – of runnable private claims is the risk of prompting a wider run on the claims that are not locked in. But, the risks of putting small amounts of official money on table without doing anything to much larger amount of runnable private claims and thus triggering a continued scramble to get out are also real. Also, there is a tension between addressing liquidity problems (that may be best done with big, upfront and unconditional packages) and addressing policy problems (that is best done with tranching, conditional packages with financing contingent on policies). Maximizing conditionality means putting less official money on table initially, making financing more partial and arguably not doing enough to prevent the scramble to get out the uses up the resources provided by partial rescues. But maximizing liquidity takes pressure for difficult policy changes off. There is an inherent tension here and there are no simple or good answers to these complex issues.

In practice, this implies that liquidity and systemic cases should be dealt on a case-by-case basis: no simple or rigid rules can or should be applied and all relevant factors may have to be considered to decide whether and how much PSI should be applied. Moreover, some degree of “constructive ambiguity” may have to be maintained in this regime to provide the appropriate response to specific cases and avoid expectations of systematic bailouts.

This view that middle solutions may work in practice is not going unchallenged. Some may argue that recent episodes are consistent with the view that only corner solutions can work. Consider in more detail the cases of Mexico, Korea and Brazil.

For what concerns Mexico, this case is the closest to the one of a full bail-out. The amount of official support was large and covering all the short-term sovereign liabilities (Tesobonos) that were coming to maturity and that were not being rolled over by investors. It is true that, once this support was given, other liquid assets that could have been turned into foreign currency stayed in and did not flee (mostly domestic liquid assets such as bank deposits and other domestic currency sovereign liabilities). But since, after the fall of the Peso, the currency was allowed to move to a float, the sovereign had no obligation to provide foreign currency to holders of short term domestic currency assets: attempts to turn those assets into foreign currency would have only led to further currency depreciation. Thus, once the Tesobono hole was plugged with large official finance, most of the other short term assets that could have been turned into foreign currency were covered and the official support turned out into an effective full bailout of foreign investors. Note that, as the Mexican case was the closest to one of a liquidity crisis (i.e. in spite of macro problems the punishment was well beyond the crime), this effective bail-out support may have been warranted (apart from concerns about future moral hazard distortions): indeed the crisis was V-shaped with a sharp output contraction (caused by the sudden stop of capital flows and the need to reverse the current account balance) followed by a very rapid recovery.

Korea’s case at first appears as one of a “middle” solution as both large amounts of public money and partial bail-in of the private sector occurred. Things are however more complicated. Since, in Korea, inward portfolio investment was highly restricted there was not

¹⁷ Also note that, while agree that middle solutions work in practice, middle solutions that have worked best have been those with most financing such as Mexico in 1995 and Korea at the end of 1997 when private restructuring increased amount of funds really on the table by adding private contribution to official package. This is especially true if the crisis is primarily one of liquidity. In the case of Indonesia, initial disbursement were much smaller than in Korea and one can thus argue that it may have contribute to the deepening of the crisis. However, policy problems and the lack of commitment to adjustment and reform were more serious in Indonesia, a factor that can explain the failure of the original rescue package and the deeper crisis experienced by this country. Similarly, the first Korea package (early December 1997) did not work in sense of preventing a deepening of crisis because of a combination of the official package being too partial (in terms of disbursements, not committed resources), not enough commitment to sound policies and reform before the presidential elections and the inherent desire of smaller creditors to exit.

much portfolio investment in the country. Also, as public deficits and debt were low there was not much sovereign bonded debt held by foreigners. Essentially, most of the foreign investors' exposure was in the form of cross-border interbank loans. One could thus argue that the short-term interbank loans concerted rollover represented a case of full bail-in of foreign investors as the main (if not only) external source of potential flight was plugged. It is also true that the reserve loss during 1997 and the resources provided by the official support helped foreign investors (mostly foreign banks) to reduce their exposure before the rollover agreement, and even after such an agreement: the overall exposure of foreign banks fell by over \$30 between 1997 and end 1998. Thus, the official support did indeed provide some bail-out of foreign investors in spite of the rollover of the most short term interbank liabilities; also, the rollover and transformation of these claim into medium term claims was accompanied by upgrading the seniority of such claims with a government guarantee, another bail-out feature of the Korean deal.

In the case of Brazil, one could argue that the PSI policy was so mild that this case was again closer to the corner of a full bail-out. In fact, the exposure of foreign banks was significant reduced between June 1998 and the end of 1998; the original PSI component of the Brazil program was just a system of monitoring of foreign banks exposure (instituted in November 1998); this did not have not much teeth and did not prevent further reduction in exposures. The following component of PSI, the commitment of foreign banks in March 1999 to maintain exposures to February 1999 level, was also quite mild. By that point, exposures had already been drastically reduced and the devaluation plus policy adjustment by the domestic authorities was already bringing back confidence. More coercive forms of PSI, such an early concerted rollover of interbank lines (as in Korea), were not implemented and even more radical solutions such a semi-forced restructuring of the very short-term government domestic debt never seriously considered.

While bail-in in Brazil was relatively mild, one could argue that the official response did not represent a case of full corner bail-out. The amount of official support was much smaller than the liquid claims that could be turned into foreign reserves (as there was a massive amount of very short term domestic debt that was either foreign currency based, foreign currency linked or in domestic currency but effectively claimable foreign reserves under fixed exchange rates). Thus, domestic adjustment, official support and mild PSI did indeed help to provide a catalytic restoration of confidence that prevent a possible massive greater run on reserves and the currency. While, ex-post the mild form of PSI turned out to be appropriate as the package restored confidence, maintained the country's market access and led to a short-lived and shallow recession followed by a sustained recovery, it is indeed the case that Brazil represented a case of PSI-lite that was the closest to a voluntary private sector involvement in the resolution of the crisis.

Also, the mild recession and avoidance of a broader banking and financial crisis was helped by the government foreign reserve policy in the period preceding the devaluation. Over \$50 billion of reserves were lost between the summer of 1998 and January 1999; this massive intervention allowed domestic banks and financial institutions, domestic and foreign corporations and foreign investors to hedge their foreign liability position and thus avoid the financial distress that a sharp devaluation would have caused. In effect, these costs of the

devaluation were fiscalized as the sharp increase in the gross foreign debt to GDP ratio (from 40% to over 55% after the devaluation) shows. Thus, this loss of reserve and the resources provided by the international community allowed the government to minimize the losses to domestic and foreign investors but they also avoided a larger set of financial distress and bankruptcies that would have emerged if such a policy had not been implemented.¹⁸

In conclusion, the evidence from these three cases studies is ambiguous on whether “middle” solutions are feasible; all cases had some middle solution component as official assistance was well below the size of assets that could have been run upon but a careful observation suggests that these cases are also, in some dimension, closer to the corners than originally thought.

The corner solutions have a number of practical shortcomings: a full bail-in, as discussed above and as we will discuss in more detail when we consider standstills (section 4) is dangerous as it may lead to a rush to the exits and contagion in a world of uncertainty and risk-averse investors. While the other corner solution of a full bail-out may have some appeal in the pure liquidity cases, there are a number of problems with it as well. An important one is moral hazard, the evidence on which will be discussed in more detail in section 3. A full bail-out solution also implies the effective existence of an international lender of last resort (IOLR) that is problematic for several reasons that will be discussed next.

2. 2. IOLR, Too Big to Fail (TBTF) doctrine and appropriate PSI

Is the full bailout solution warranted and does it require the existence of an international lender of last resort (IOLR)? One simple, and mistaken view, would be to argue that since a full and credible IOLR would always prevent international bank runs from occurring in the first place, there is no need to bail-in private investors. Such investors would not rush to the door if they know they are insured. Reality is, of course, more complex especially since countries suffering of illiquidity do so because of some fundamental or policy weakness. Conceptually, countries with fundamentals out of line should not get unlimited and unconditional resources. If unlimited resources were available and the country had fundamental weaknesses, the funds lent by an IOLR facility would be used by domestic and foreign investors to liquidate domestic assets and turn them into foreign ones eventually exacerbating a crisis driven by weak fundamentals. This is also the reason why, in a domestic context, it would be destabilizing to give extensive lender of last resort support to banks that

¹⁸ An interesting question is whether it is better to have fiscalized cost of balance sheet effects of foreign exchange changes born by taxpayers (as in Brazil) if local banks short the currency, hedge their foreign currency liabilities and get windfall profits or to have the fiscal costs of bank recapitalization or bank bail-outs when banks have domestic currency asset positions and large foreign exchange liabilities and thus suffer enormous losses when exchange rate adjustment occurs. One could argue that the latter solution is preferable as it avoids the real costs of bankruptcy and insolvency of the financial and corporate sectors; but moral hazard distortions should be seriously discussed in considering alternative solutions.

are in serious financial distress or bankrupt. More funds to such banks leads to moral hazard, i.e. Agambling for redemption@as the S&L crisis and many other episodes suggest. This is also why the correct response of a central bank to a banking crisis caused by poor behavior of the banking system is to provide emergency support (to avoid panic) in exchange of very strict controls of the financial institution under distress.

In an international context, there are three implications of the above observations. First, a country in severe distress because of fundamental weaknesses should not receive unconditional ILOLR support as such support would bail-out investors and eventually fail to prevent a crisis as the country is in serious fundamental distress in the first place.

Second, if support has to be given to incentivate reform and adjustment, then the support should be of the conditionality form that comes with IMF packages.

Third, to appropriately bail-in private investors to reduce moral hazard, the amount of support should be lower than the amount of total domestic assets that could be potentially converted into foreign currency; i.e. official financing support should be partial.

One important problem with providing less money than it is needed to cover all creditors is that, if such policy is known, it may increase the probability of a liquidity run (the “middle” solution curse). This is an important issue that suggests the delicate tradeoff between the goal of avoiding liquidity runs and the need to minimize moral hazard. In general, the optimal amount of official finance would be less than full if moral hazard will have to be addressed. Indeed, any policy of PSI implies the risk that the probability of a run will be increased; this does not, however, imply that PSI should be abandoned to minimize this risk.

What about the issue of big money packages? Are they warranted and when so? Do they exacerbate moral hazard biases? And should big money packages be accompanied by appropriate private sector burden sharing or not?

Historically, when international capital mobility was not widespread and restrictions to capital flows dominant, the IMF was not allowed to provide large and exceptional support for crises generated by capital account problems. IMF was restricted to provide financing limited to current account problems. The increased capital account liberalization and size of international capital flows led to the emergence of financial crises driven by capital account problems, the type of liquidity crises associated with the existence of large stocks of short-term foreign debt that may not be rolled over when confidence was lost. Hence, the trend to develop facilities such as the Supplemental Reserve Facility (SRF), the General Agreements to Borrow (GAB), the New Agreements to Borrow (NAB) and the Contingent Credit Line (CCL) that would allow to address these capital account crises.

Consider now the issue of big money packages. If a country experiencing a crisis because of weak fundamentals is large, suffers of a liquidity problem, is systemically important, is a potential source of contagion to other countries and suffers of a capital account crisis (due to creditors unwillingness to roll over bank loans and other short term credit), large financial packages significantly in excess of quota may be warranted to stem default due to illiquidity and avoid further international contagion. The SRF facility, NAB, GAB represent the tools to deal with these new types of capital account crises for countries

that do have fundamentals problems (as opposed to the CCL that provides money to sound economies under the threat of contagion).

In this respect, such big package for systemically important countries is the international equivalent of the too-big-to fail (TBTF) doctrine in domestic lender of last resort context. Just like we do not let big banks to fail even if not all of their liabilities are covered by deposit insurance because of concerns of systemic effects and contagion to other sound banks, we cannot allow big countries to fail for the same reasons.

A domestic TBTF doctrine may increase the risk of moral hazard. However, in a domestic context there are a number of mechanisms that limit such a risk; also, there are differences between the domestic and international economy context that may exacerbate the moral hazard problem in the international context.

First, in a domestic economy both large and small banks are subject to ex-ante direct regulation and supervision, reserve requirements, capital adequacy standards, deposit insurance with risk adjusted premia. Thus, supervisors and regulators have broad powers to control the behavior of such banks before financial distress forces the authorities to bail them out.

Second, while the FDCIA provides an out for systemically important institutions, such a doctrine was never formally embraced by the Fed and there are a number of hurdles to such TBTF rescues: the Fed Board has to take a large vote and there has to be concurrence by the Secretary of the Treasury. Moreover, some constructive ambiguity is used to prevent expectations that large institutions will be systematically rescued on a regular basis.

Third, once a TBTF institution is rescued, the authorities have a broad range of powers on how to dispose of it: it may be cleaned up, or recapitalized, or merged with other institution or even closed down and liquidated. Also, while an institution may be rescued to avoid systemic contagion, its managers and shareholders may be replaced. Thus, the moral hazard problems of rescuing the institution are reduced, even if there is still the issue of the depositors, including the un-insured depositors. In an international context, the idea of taking over countries, closing them down and merging them with others or replacing its shareholders is quite meaningless (in an era where, fortunately, debtor's prison and gunboat diplomacy are no more an option). Moreover, the kind of preventive regulation and supervision that is imposed on TBTF institutions in a domestic context is also severely limited in an international context. Sovereignty issues as well as the lack of leverage of the IMF over countries that are not yet in a crisis, and thus do not have an IMF program, limits the ability to provide such ex-ante supervision and regulation. Thus, while in a domestic context moral hazard deriving from expectations of TBTF support may be tempered with adequate supervision and regulation, the same cannot be easily done in an international context.

In general, while TBTF arguments for big money packages for systemically important countries have some merit, the potential moral hazard distortions created by such programs have to be carefully addressed. While the rescue package for Mexico may have been the adequate response to that liquidity crisis, such bailout may have affected the investors' expectations that other large countries may be bailed out. Indeed, the big money packages for Thailand, Indonesia and Korea may have reinforced such perceptions. While the Russian

default cracked the belief that a large country was too-large-to fail (or better, “too-nuclear-to-fail”), the shock deriving from Russia to the international financial system in the fall of 1998 led to the large Brazilian package that reinforced again the perception that big countries would be rescued. Recent mixed official signals, on whether PSI would be applied to liquidity cases, may have led to the perception that big money will be forthcoming the next time a large country is under pressure.

In an ideal world, one would want to provide big money package only to sound economies without any substantial weaknesses (CCL type of economies). One would want to minimize the use of big money packages for the many cases where serious fundamental fragilities interacted with illiquidity to generate financial crises. If one had to design a long term regime from scratch, big money packages would not normally be part of the rules of the games, apart from very clear liquidity cases. A credible commitment to avoid big money would force borrowers and creditors to be more cautious in their investment and borrowing decisions; and, if crises did occur because of a loss of confidence, adequate market mechanisms to avoid a generalized financial meltdown (orderly workouts, concerted market-based rollovers, insurance schemes based on private credit lines) would be found. After all, such mechanism for dealing with domestic and international bank panics and run emerged in the market before the Fed and the IMF were created (see Calomiris and Kroszner (1999) on this).

This purely market based solution with no big money bailouts may not be feasible or credible in the current regime and, even in an historically perspective, banking crises and international financial crises were messy and protracted when domestic and international financial lender of last resort were missing. Indeed, as suggested in work by Calomiris and Kroszner, before the formation of the Fed, the private sector resorted to market mechanisms to deal with bank runs. However, the performance of these private mechanisms did not prevent recurrent banking crises and runs and eventually, its failure in the 1907 crisis, led to the creation of the Fed. On the other hand, in such an hypothetical world, the market (borrowers and lenders) would endogenously react to this change of regime and find market mechanisms, however imperfect, to cope with such capital account / liquidity run crises.

However, if investors, debtors and the official sector have to live in a world where the TBTF doctrine will be at times implemented for countries that are systemically too important and contagious, there is a need to design mechanisms that would minimize the moral hazard and the distortionary effects of such doctrine. Constructive ambiguity may partially help but it is not a full solution; one may even argue that it may exacerbate uncertainty and trigger crises that could have been avoided. So, what is the right policy?

In a domestic banking context, there has been a growing realization that the TBTF doctrine may be a source of serious distortions in the incentives of borrowers and lenders. This is the reason why proposals have been advanced to mitigate the effects of such a doctrine. In 1991, Congress partially fixed the moral hazard problem of 100 percent coverage of deposit by passing the Federal Deposit Insurance Corp. Improvement Act (FDICIA). Among other things, FDICIA substantially increased the likelihood that uninsured depositors and other creditors would suffer losses when their bank fails. The fix was incomplete, however, because regulators can provide – subject to a Board decision to be concurred by the

Treasury - full protection when they determine that a failing bank is too-big-to-fail (TBTF)—that is, its failure could significantly impair the rest of the industry and the overall economy.

Some, for example the Minneapolis Fed, have argued that the TBTF exception is too broad; there is still much protection. The moral hazard resulting from 100 percent coverage could eventually cause too much risk taking. Consequently, the Minneapolis Fed has proposed amending FDICIA so that the government cannot fully protect uninsured depositors and creditors at banks deemed TBTF.¹⁹ The proposed reform attacks the problem of 100 percent coverage by requiring uninsured depositors of TBTF banks to bear some losses when their bank is rescued. They also recommend that regulators treat unsecured creditors with deposit-like liabilities the same as uninsured depositors, while providing no protection to other creditors. TBTF banks would then have to pay uninsured depositors and other creditors higher rates for funds when the chance of bank default increases, thus muting their incentive to take on too much risk. Such reforms, by increasing market discipline, may make bank runs and panics more likely. Consequently, they suggested to cap the losses that uninsured depositors and unsecured creditors with deposit-like liabilities can suffer. Keeping losses relatively low also makes this plan credible because it eliminates the rationale for fully protecting depositors after a bank has failed.

Consider now how such proposals to limit TBTF-related moral hazard could be applied in an international context. The simple answer is that some form of private sector burden-sharing (PSI) would replicate the type of incentives suggested by the Minneapolis Fed to limit the perverse effects of an international TBTF. This means that, even (or especially) in cases of liquidity crises, investors should be expected to participate in burden sharing (commitment to rollovers, concerted semi-voluntary rollovers and even small haircuts depending on the circumstances) when a TBTF country is receiving a big money package. The need to limit moral hazard is thus a fundamental reason for insisting on meaningful PSI for large countries that are receiving big money packages. Thus, the argument that large countries who do suffer only of liquidity problems should not be subject to PSI is conceptually flawed: you do want and need PSI especially for TBTF countries that are expected to receive exceptional financing during a liquidity crisis to limit moral hazard problems.

Of course, the most difficult practical issue is how specifically implement PSI to illiquid systemically important countries in ways that do not exacerbate either the risk of a liquidity run or the risk of moral hazard. The issue is partly analogous to the question of how to deal with the rescue of uninsured depositors in the case of banking crises. Rescuing all uninsured depositors based on a TBTF principle may avoid runs but it increases the moral hazard distortion. In this context, one can argue that the logic of rescuing uninsured depositors is somewhat stronger for domestic banks than it is for countries. In both cases, uninsured depositors are in principle depositors that, differently from small uninformed depositors, are large enough (with deposits above the FDIC cap for domestic banks) that they

¹⁹ This Fed proposal was first advanced in the Minneapolis Fed 1997 annual report; see <http://www.mpls.frb.org/pubs/ar/ar1997.html>

should monitor their investment decisions and take the risk that the institution may fail. However, the sophistication, information and size of cross border bank creditors and other lenders should be in general larger than that of large depositors in domestic banks: “Citibank” should be more informed about “Seoul Bank” than a small-sized uninsured domestic depositor is informed about Citibank. Similarly, financial institutions and highly leveraged players (such as hedge funds) investing in short term debt (in local and foreign currency) of a country like Russia should be more informed and assess more carefully the risk of investing in high yield securities of a country such as Russia or Brazil than a small domestic investor is about the risk of buying a small amount of domestic Treasuries. Systematically rescuing such large international investors – cross border bank activities of international banks and highly risky investments of sophisticated international investors on the basis of the risk of a run on a systemically important illiquid country would seriously exacerbate the moral hazard problem of large rescue packages.

2. 3. Concluding observations on liquidity cases

The appropriate, if any, form of PSI in liquidity and systemic cases is a complex issues. In general, these should be dealt on a case-by-case basis: no simple or rigid rules can or should be applied; all factors may have to be considered to decide whether and how much PSI should be applied; and some degree of constructive ambiguity may have to be maintained to provide the appropriate response to specific cases and minimize the moral hazard problem of the “too-big-to-fail” expectations. While middle solutions (with different degrees of partial PSI and partial official support) may not work in theory they do appear to work in practice as recent episodes (Mexico, Korea, Brazil) seem to suggest. If problems are systemic but the country is sound, a solution closer to a package of official support may be warranted as it may restore confidence, market access and minimize the real losses deriving from a self-fulfilling run. If there are serious policy issues (Russia, Brazil), appropriate forms of bail-in and significant policy adjustment is required in addition to official support.

Given the recent experience with successful bond restructuring (see section 6) and the increasing political resistance to large official packages, solutions a’ la Mexico (as case closer to the full bail-out corner) are less likely to be the norm in the future. In some extreme cases concerted rollovers and semi-coercive attempts to have standstills and/or rollover short-term bond instruments may also have to be attempted. While such rollovers are easier in the case of bank loans (Korea) than short term bonded debt (Mexico), it is not obvious, given the experience with PSI, that in another case like Mexico the full bail-out solution will be followed. But the option of being able to have and use large official packages when they are appropriate should not be ruled out or restricted with mechanical rules such as “there should always be PSI in liquidity cases”. Such mechanical rule may end up restricting excessively the ability of the official sector to provide the appropriate response and may, at worst, trigger an avoidable crisis if it leads to a rush for the exits.

Ideally, some combination of significant but not always exceptional official finance, domestic adjustment and cooperative, semi-voluntary and least-coercive PSI of some categories of debt should restore confidence, prevent a wider crisis and provide a middle

solution to a crisis. Such a “middle solution cum constructive ambiguity” may be the best way to address the tradeoff between the need to avoid moral hazard deriving from systemic expectations of bail-out and the risk that self-fulfilling runs may occur in cases closer to the illiquidity corner. Moreover, it is likely that future liquidity case will involve significant amounts of both (short-term and long term) bonds, interbanks loans and other short-term claims coming to maturity. How to successfully address and restructure these varied claims, if appropriate, will be a major challenge for the international community.

3. Moral Hazard

The issue of moral hazard in international capital flows has been hotly debated. Moral hazard in this context has to do with the potential distortions deriving from implicit and/or explicit official guarantees of debts and the potential effects of official creditors’ support packages. Since one of the fundamental rationales for PSI is the idea that excessive official support may lead to moral hazard it is important to assess the importance of this distortion in international capital markets.

Some definitional distinctions are important. One can be concerned about debtor moral hazard or creditor moral hazard. The debtor moral hazard is caused by expectations that official money (in the form of multilateral and bilateral lending and support) would reduce the incentive of a debtor to follow sound policies in the first place and affect its incentives regarding payments on its external liabilities to the foreign private investors.

Even within the class of debtor moral hazard, one may want to distinguish between the moral hazard of the sovereign and the moral hazard of domestic private agents. The latter refers to the case where implicit and/or explicit government guarantees lead domestic agents in emerging markets (financial institutions, corporations and households) to borrow excessively (directly and/or indirectly from foreign creditors) relative to what it would be optimal and make distorted investment decisions. Debtor government moral hazard derives instead from expectations that some external official agent (multilateral or bilateral official creditors) will provide bailout support to a country, thus leading ex-ante the sovereign to follow loose economic policies that may eventually cause economic and financial problems.

Creditor moral hazard can be of two types. First, it refers to the distortions in the lending decisions of international creditors that derive from either expectations that the official creditor sector will bail-out a sovereign or from expectations that a sovereign will ex-post guarantee liabilities of its private sector that have been incurred with private international creditors. Second, it refers to the effects of domestic implicit and explicit guarantees (provided by debtor government to domestic financial and non-financial institutions): in this case, governments take risk of bad outcomes away from creditors who lend to entities thought to enjoy a guarantee. Thus, this is analogous to creditor moral hazard from international official lending to debtor governments to repay creditors. However, in the case of domestic creditor moral hazard, most of the fiscal costs of these guarantees represent a wealth redistribution within the country (as taxpayers eventually bear the fiscal costs of the guarantees) rather than a fiscal redistribution to external creditors.

There is a broad range of views on the analytical and practical importance of moral hazard distortions in international capital flows. Some, such as Summers (2000), the IIF

(1999) and Mussa (1999) do not think that such distortions are important while others such as Meltzer (2000), Calomiris (1998), Schwartz, Dooley (1999, 2000), Corsetti, Pesenti and Roubini (1999, 2000) believe that such distortions are potentially and practically more important. The issue is obviously one of quantitative degree rather than absolutes: official policy has always the potential to lead to moral hazard; the issue is how important such distortion is. Let us consider these issues in more detail.

Lets start with debtor moral hazard. The simplistic idea that a sovereign would follow reckless policies that lead to financial distress for the country in order to end-up receiving IMF assistance does not make too much sense. First, such policies are highly costly, in terms of output, inflation and other welfare measures; second, sovereigns tend to resist the idea of asking for IMF support as it is perceived to be costly; third, IMF assistance comes with strings, conditionality and is subject to often painful adjustment policies.

On the other hand, it is also true that, while a sovereign may not purposely follow reckless policies to get IMF support, its policies may at the margin be biased towards risky and unsound behavior if there is some expectation of external financial support in case of trouble.

One argument sometimes made is that IMF and other official support packages do not cause debtor moral hazard as they are in the form of loans rather than grants. This issue is, however, tricky. First, there may be some subsidy element in IMF loans as they are provided at a price that may represent the opportunity cost for the lender but not the rate at which the borrower could borrow in private markets. Even this argument is imprecise: since IFIs lending is senior to other lending (it has “preferred creditor status”) the risk that such loans will be defaulted upon is much smaller than for private loans. Thus, the interest spread on such loans (over a risk free rate) should obviously much lower than market spreads. Whether such IFIs loans are priced correctly is, however, not clear: since some countries may eventually default on their IFIs loans (and the recent experience with HIPC suggest that, eventually, insolvent poor countries may not pay in full their loans to the IFIs), it is not clear whether the loan rates include a subsidy element or not. Some recent estimate suggest that this subsidy element is positive but modest.²⁰ However, apart from IFIs and MDBs loans, official creditors provide loans in the form of bilateral loans that end up being rescheduled (if not serviceable in full and in time) in the Paris Club (PC) framework. The subsidy component of such loans may be even more significant than that of multilateral loans and it may distort lending and borrowing decisions. Indeed, it has been argued that PSI was in part necessary to ensure that PC reschedulings are used to bail out private creditors (the “burden sharing” argument for PSI). Thus, official bilateral loans may distort borrowing and investment decision of debtors and expectations of reschedulings/restructuring/reduction of such debt may also be a source of moral hazard. Indeed, it is often argued that such bilateral loans are not made based on strict economic criteria but are also affected by broader political, military and strategic considerations.

²⁰ Jeanne and Zettelmeyer (2000) provide a first estimate of such a subsidy element in IMF loans.

For what concerns creditors' moral hazard, one cannot discount a priori the view that lending decisions by international investors may be affected by expectations that either the sovereign will bail-out domestic agents that borrowed excessively from international investors or that official international support will allow the debtor country to receive financial support that will be used to bail-out international investors. There is plenty of anecdotal evidence of creditors' moral hazard as in the case of the "moral hazard" play in the "too-nuclear-to-fail" Russia episode in 1998. The counter-argument, that many foreign investors suffered significant losses in the Asian and global crisis of 1997-98, is only partially valid as it does not rule out moral hazard for some set of investors and securities. It is correct that portfolio investors who bought emerging market stocks and bonds suffered significant losses as the result of the financial turmoil in the 1990s. Even international commercial banks with significant local retail operation in emerging market suffered losses on these commercial operations. But, other investors were able to flee without incurring significant losses: commercial banks creditors were usually able to lower exposures and were generally bailed-in, if ever, in forms that tended to minimize their losses. Many foreign investors were able to pull out before reserve drawdowns forced more coercive forms of bail-in. Even many short-term bond investors were able to unwind positions and be effectively bailed-out (as in Mexico) either before or after the onset of a crisis.

Moreover, it is clear that international creditors carefully assess whether a country is large and systemic, and thus more likely to be partially or fully bailed out or not. The bail-out of Mexico may have marginally affected spreads and flows to other systemic emerging market economies. A moral hazard play was certainly driving a lot of the inflows of capital to Russia. The experience of banking crises where sovereign provide ex-post guarantees to avoid a bigger run whenever a severe banking crisis is underway is similarly affecting the behavior of international investors. The existence of multilateral financial support, especially the large packages seen in a number of recent crises (Mexico, Korea, Thailand, Indonesia, Russia, Brazil) may have affected investors' expectations of official bailouts. The Russian devaluation and default and unwillingness of the official sector to provide exceptional financing in the presence of failure to make adjustment and reforms may have reduced the moral hazard expectations that might have emerged after the large packages to Mexico, Thailand, Korea and Indonesia but the global turmoil following Russia and the large support to Brazil may have restored the expectation that, if a large and systemic country is under pressure, large packages of official money may be provided. But, next, the pretty robust implementation of PSI policies for small and non-systemic countries such as Pakistan, Ukraine and Ecuador may have reduced moral hazard related expectations that the private sector would not be bailed in crisis resolution.

Some have argued that the bailout of Mexico was behind the large scale increase of debt flows to Asia and emerging markets in the middle of the 1990s. Others have counter-argued that "it is hard to make the case that investments in emerging markets have been heavily influenced by the expectation of the availability of official resources for bailouts. For example, there is not systematic evidence that flows to official creditors rose relative to flows to private creditors following the official response to the Mexican financial crisis" (Summers (2000)).

A more serious and pervasive form of moral hazard is the one deriving from debtor governments' implicit and explicit guarantees of private domestic claims (of banks, financial firms and corporations) and ex-post bailout of such entities. Such bail-outs and implicit and/or explicit government guarantees lead domestic agents in emerging markets (financial institutions, corporations and households) to borrow excessively (directly and/or indirectly from foreign creditors) relative to what it would be optimal and make distorted investment decision. Such bail-outs and guarantees also distort the lending decisions of international investors who may be lending under the expectations that the government will bail-out such private sector entities. Such ex-post bail-out are especially egregious, and fiscally costly, when they involve the non-banking financial sector and the corporate sector.

While one could make the case that saving the payment system (i.e. the banking system) is of paramount importance to the stability of the domestic financial system, there is little justification for bailing out non-bank financial institutions and corporations. However, during the Asian crisis (in Korea, Thailand and Indonesia) and other financial crises episodes such ex-ante or ex-post extension of guarantees to merchant banks, finance companies, other financial institutions and corporations, while not being systematic, was pervasive enough to become a matter of serious concern. This source of moral hazard is the most prevalent and serious element of distortion of investment, borrowing and lending in emerging markets. A combination of connected lending, directed lending, poor corporate culture, incestuous relations between policy makers, financial institutions and corporations, a lack of credit culture, relationship (as opposed to arms length) banking, implicit and explicit guarantees, ex-post bail-out were at the crux of many of the problems faced by emerging market economies and important causal factors in recent financial crises.

Even in the case of the banking system, pervasive ex-post bail-outs of the claims of foreign investors (such as cross-border interbank flows) appear as undesirable. In a situation of crisis, panic and run, governments may be led to provide guarantees on all the liabilities of the banking system but such a policy is inappropriate. While safeguarding smaller depositors may make sense, bailing out ex-post large foreign creditors is not appropriate and is thus source of distortions. In these cases, appropriate PSI such as concerted rollovers, as in the case of Korea, may be more desirable. The extension of a government guarantee to such cross border liabilities in Korea (as well as in many other crisis episodes) cannot be properly justified. If a run has already occurred and foreign creditors are already effectively locked in (by the lack of foreign reserves) a concerted rollover becomes inevitable and guarantees should be avoided. If, instead, the government is trying to prevent a run by providing ex-post guarantees, actions other than guarantees to large foreign creditors should be provided to avoid a run.

The discussion above suggests a wide range of view on the importance of moral hazard distortions. These different views on moral hazard and the determinants of the flows to emerging markets in the 1990s are hard to test; in part, formal and systematic evidence on these issues is hard to come up with. There is, however, some recent econometric evidence. A recent IIF (1999) paper attempts to test formally for moral hazard by trying to assess whether the significant reduction in sovereign spreads in the period before the Asian crisis can be explained by fundamentals or could be related to bailout expectations following the Mexican

rescue. This study does not find evidence of moral hazard but has some methodological shortcomings. Lane and Phillips (2000) consider whether IMF programs are a source of moral hazard. They find that this type of “moral hazard is difficult to detect in market reactions to various IMF policy announcements and there is no evidence that such moral hazard has recently been on the rise. [Zettelmeyer and Dell’Ariccia (2000, in progress) are also testing for moral hazard by considering sovereign spreads and their variance before and after the Russian crisis].

In summary, both debtor moral hazard (of the sovereign and the private sectors agents) and creditor’s moral hazard deriving from expectation of bail-out via official external or internal support are important enough to be a concern for the design of an efficient international financial system. Moral hazard affects issues such as the optimality of an international lender of last resort, the optimality of small and large official support packages and the issue of whether and which form of PSI is appropriate. The overall analytical and empirical evidence suggests that the moral hazard rationale for PSI is legitimate enough to be a valid argument for appropriate forms of private sector involvement in crisis resolution.

4. Issues with standstills

It has been suggested that some broad debt standstills (suspension of debt payments) may be at times necessary either to prevent a period of turmoil to turn into a full blown crisis or to prevent further asset prices overshooting and the risk of an outright default once a crisis has occurred. This is certainly a most controversial issue. A standstill, if temporary, can be seen as a radical form of “bailing-in” the private sector and, according to some, it is a better orderly way to gain time and restore confidence than a disorderly rush to the exits. A standstill could be the right policy response both in liquidity cases when there is an “irrational” rush to the exits and in other crisis situations, where serious policy problems are afflicting the debtor country, but the rush to the exits of creditors is disorderly and risking to create a worse outcome.²¹

Standstills pose a lot of complex questions: would they include only sovereign payments or payments on all (private sector inclusive) debtor country’s claims? Do standstills require systematic capital and exchange controls? Would they be sanctioned by the IMF or the official sector? Could they be associated with a stay of litigation? What are the risks and benefits of standstills?

What are the potential benefits of standstills? As discussed in section 2, in pure liquidity cases where there is uncertainty and no risk aversion, the threat of a standstill is

²¹ One could also argue that, in a dynamic game, the possibility of standstills implies that debtors may choose not to borrow at the shorter terms that creditors want to lend them to (creditors prefer short term lending to be able to run and avoid a standstill); so, one outcome of the threat of standstills might be less short-term lending and fewer liquidity type crises. But this is only a conjecture.

enough to support the good equilibrium, i.e. ex-post there is no need to implement the threat and agents will avoid rushing to the exits if they know that everyone would be locked in. In reality, uncertainty, risk aversion and policy problems make this first best equilibrium unlikely and standstills would have to be introduced (rather than just threatened) to prevent investors from rushing to the doors.

If standstills will have to be imposed, what are their benefits? The main benefit may be to prevent a disorderly rush to the exits when, even if the country has serious policy problems, investors panic and overreact to such negative developments. Such a disorderly rush is inefficient for two reasons: first, it may force the debtor into effective default (inability to make debt payments) when, even if solvency is not at stake, the stock of foreign reserves is below the short-term claims that are coming to maturity and are not being rolled over. Second, when the exchange rate is allowed to float rather than being fixed, the rush to the exits may lead to severe overshooting of the exchange rate that may be extremely costly as it may lead to financial distress and bankruptcy of a large set of debtor (both sovereign and private).

Take for example the cases of Korea and Indonesia. If the concerted rollover of interbank loans in Korea had occurred by Thanksgiving 1997 rather than a month later at Christmas, widespread financial distress would have been limited. The difference between the two dates is that, at the former, the won/ US \$ exchange rate had fallen from 900 to 1,100 (beneficial in terms of competitiveness) while by Christmas it had fallen to over 1,800 (causing widespread financial distress). In spite of the fact that many chaebols were already distressed earlier in 1997 before the fall of the won, 1,800 was a rate at which many more foreign currency debtors, financial firms and corporates, were effectively distressed if not bankrupt. Thus, the implications of the delay in the concerted rollover was a significant worsening of the financial conditions of Korea and a worsening of the real output effects of the exchange rate shock.²²

In the case of Indonesia, some have argued that the lack of an early standstill on the payments by the local corporates to their international creditors contributed to the free fall of the currency. Such a collapse in the value of the currency, especially the move of the rupiah / US \$ exchange rate from 4,000 to 8,000 and then 12,000 (and above) led to the widespread effective bankruptcy of most financial institutions and firms in the country. At the end, the burden of foreign debt was so high, given the fall in the value of the currency, that such corporates effectively stopped payments and an informal standstill occurred by default in a situation of complete financial distress. Thus, it has been argued that an early, formal and orderly standstill would have helped to avoid a free fall of the currency limiting all the disruptive effects of such a fall in terms of bankruptcies and real output costs of distress.

²² But the argument that earlier bank standstill in Korea could have kept the exchange rate at 1100 assumes that official foreign reserves not deposited in Korean banks could have been used to defend the exchange rate, and that spending money to defend the exchange rate would have worked. This outcome may or may not have worked depending on the source and size of other pressures on the currency.

The above arguments suggest that an early standstill may have helped and minimized the costs of the further turmoil that derived from a lack of orderly workouts. But the reality is more complex. In the case of Indonesia one could argue that the free fall of the rupiah had less to do with the attempt of corporates to hedge their foreign currency positions and more with many policy mistakes that shook confidence in the country: the lack of commitment to macro and structural reform, political uncertainty, the health of Suharto and its crumbling power regime, the monetization policy of Bank of Indonesia, the capital flight of the ethnic Chinese who were escaping violence against them were all more important than hedging demand in driving into free fall the rupiah. In the absence of a more serious and credible adjustment program, a standstill may have not worked out and would have not been able to stem the fall of the rupiah and the generalized panic that enveloped domestic and foreign investors. Flight and asset stripping may have continued even under strict capital and exchange controls given the many sources of leakage in capital flows. So, it is not obvious that a standstill on private payments would have worked. Also, unlike the case of a standstill on sovereign payments, standstills on payments by private firms are harder to arrange. Who will declare one, how to enforce it, et cetera are difficult issues.

Also, in the case of Korea, it is not clear that a standstill would have worked. The won started to precipitously fall in early December when, in spite of an IMF program, a series of bad news hit markets: the low level of reserves were revealed, the extra offshore liabilities of Korean financial institutions and chaebols emerged, the upcoming election and the policy uncertainty surround it became important source of uncertainty and a source of concern about the willingness of the government to credibly implement macro and structural reforms. Also, all the players in the game, international creditors, the Korean government and the official creditors were not ready to go early on for a concerted rollover. It was only when – at the end of December - it became clear that Korean banks were on the verge of defaulting on its liabilities that a concerted rollover became feasible and acceptable to creditors.

Standstills have a number of other potential drawbacks that need to be considered.

First, as for the case of anticipated capital controls, anticipations of a standstill may either lead to an earlier crisis (as all investors rush to the doors in expectation that the doors will be shut) or, worse, can even trigger a crisis that would have not otherwise occurred. This is the main drawback of standstills, one that cannot be avoided if there are clear rules that imply some automatic standstills in some circumstances. Constructive ambiguity, rather than rules, may help but if investors may fear that standstills may be imposed with some probability (in spite of the lack of mechanical rules on this) the rush to the exits may still occur. Proponents of standstills have not seriously addressed this main shortcoming of this tool. For example, it is clear that the Korean concerted rollover led investors to believe that such semi-coercive policy may be imposed on Brazil as well. The sharp reduction in interbank exposures to Brazil in the summer and fall of 1998 was clearly affected by the experience of Korea and expectations that a similar coercive solution may be imposed in Brazil.

Second, standstills risk to lead to international contagion. Contagion may occur either because investors may start to expect that such standstills may be imposed on other countries or via the financial contagion channels that the literature has highlighted (common creditor

effects, proxy hedging and cross-country hedging, proxy plays, increase in risk aversion of investors, portfolio adjustment effects). Indeed, the experience following the Russian default and imposition of capital controls by Malaysia clearly led to a severe contagion effect in the summer-fall of 1998.

Third, partial standstills may not work and they may have to be quite extensive and widespread. A standstill on sovereign payments may have to include most of such payments to be effective; otherwise, claims not included may flee. Similarly, standstills only on sovereign claims may not be enough for several reasons. First, as in Korea and Indonesia, the source of reserve loss and currency depreciation may be the claims of domestic banks and corporates. Second, standstills on sovereign payments may not close the financing gap if private claims can also flee and the existence of a sovereign standstill leads private investors to worry that a broader stay of payments may be imposed on them.

Fourth, as a consequence of the point above, broad capital controls and exchange controls may have to be imposed that restrict the payment ability of private agents in the economy. Since, under fixed exchange rates, all liquid claims even those in domestic currency can be turned into foreign assets, widespread capital controls may be necessary to reduce the pressure on official reserves. Under flexible rates, the same attempt of the private sector to turn domestic assets into foreign ones will lead to a sharp currency depreciation that may be very harmful if there are many foreign currency liabilities. Thus, again broad capital and exchange controls may be necessary to prevent an overshooting of the currency and other asset prices.

Fifth, standstills on payments of domestic private agents, especially, corporates are difficult to arrange; they effectively imply the imposition of capital and exchange controls. Also, such controls may lead, as the experience of Indonesia shows to perverse effects such as “asset stripping”. It is one thing to impose controls to avoid a destabilizing rush to the exits; however, if such controls are used to have strategic avoidance of sustainable debt payments and/or if they are used to strip the assets of the underlying firms (as it happened in the case of the Indonesian corporates), the effects may be perverse. Thus, while some form of standstill may make sense in countries where there is an efficient and functioning insolvency and corporate restructuring legal system, it can have perverse effects in countries where, because of institutions, corruption and archaic legal systems, creditors cannot seize firm assets and prevent asset stripping.²³

Sixth, standstills present complex legal issues. The main problem is whether a standstill can prevent litigation aimed at seizing the assets of the debtor. One solution would

²³ On the other hand, one could note that exchange rate depreciation leading to a de facto standstill (as most firms go bankrupt) meant that the burden of preventing asset stripping fell on the Indonesian courts in the no-standstill scenario as well. The incentives not to asset strip with a poor court system may be stronger if firm owners believe that the financial distress problem is temporary and the firm will be back in business and able to service its debts normally after crisis tide passes rather than in the case where they expect to be in distress or bankrupt for a long time.

have been to provide such a power to the IMF, i.e. the power to sanction standstills. It is however agreed that providing such a power to the IMF will imply amending Article VIII.2.b of the Funds Articles of Agreement. There is a significant amount of resistance among the main Fund creditors to take a route that would provide the IMF with such an authority. All sorts of economic and institutional concerns have been expressed about such an amendment even if several influential voices (including that of the former IMF Managing Director Camdessus and other official sources) have expressed support for such a change.

In the absence of such an amendment, the issue becomes whether, in the presence of a standstill informally sanctioned by the IMF with a policy of lending into arrears, a court would provide a stay of litigation (prevent litigation aimed at seizing the assets of the debtor) especially if/when the debtor is cooperatively working to work out its payments with its creditors. While there is some limited legal precedent in the U.S. to courts imposing such stays, it is an open and complex issue whether such stay could be successfully imposed as a temporary tool aimed at allowing an orderly workout. Also, while threat of litigation is an issue, the actual occurrences of litigation may be limited, especially because the ability of creditors to seize the assets of sovereign and private debtors in emerging markets may be quite limited. Costs of litigation may effectively reduce the occurrences of such a problem.

In spite of these serious shortcomings with formal debt standstills, one cannot rule out the possibility that, in some circumstances, their benefits may outweigh their costs. Thus, while having formal rules that determine when a standstill may be introduced may be counterproductive as they may anticipate trigger the rush to the exit that one wants to avoid in the first place, one should not rule out their use in extreme situations where failure to impose them may lead to worse outcomes. Some degree of constructive ambiguity may be helpful in this regard even if the uncertainty on whether, how and how widespread a standstill may be could be counterproductive by itself. Temporary, targeted standstill in situations where commitment to policy reform is existent (but is not fully credible to market participants) may be part of the tool kit of crisis prevention and resolution. But such a tool should be used with extreme care to prevent worse consequences than the problems that it is aimed to cure.

5. PSI in interbank rollovers

To Be Written

Recent episodes: Korea, Thailand, Indonesia, Russia, Brazil.

Creditor coordination issues.

6. The G7 PSI framework and its application to bonded debt

In this section we will discuss in detail the many aspects of the PSI official doctrine and practice as emerged in a number of recent or forthcoming case studies (Pakistan,

Ukraine, Romania, Ecuador, Nigeria and Russia²⁴). These recent episodes have involved countries that are small (non-systemic, with perhaps the exception of Russia) and where restructuring of bonded debt has become an element of the PSI in crisis resolution. Indeed, bonded debt restructuring is a relatively new, controversial and complex issue. Thus, we will discuss in detail the many issues that have emerged in applying PSI to the case of bonded debt and other similar securities. We start with the official PSI doctrine that can be characterized as a “case-by-case approach cum principles and tools”. Note that such doctrine does not apply only to bonds but to overall claims of a debtor country (including bank claims). But the framework has been recently applied to many bonded debt restructuring cases.

6.1. The official PSI doctrine: case-by-case approach cum principles and tools.

The official PSI doctrine has evolved over the last two years as the G7 and the IMF reached a consensus on a number of criteria to guide PSI, including the issue of restructuring bonded debt. After the Mexican peso crisis, the 1996 Rey report came out with recommendations about collective action clauses (CACs), IMF lending into arrears and appropriate PSI. These recommendations remained unimplemented but re-emerged in the aftermath of the Asian crisis. The latter crisis brought back the question of PSI, both in practice and as a doctrine. Before the official framework on PSI was fleshed out, the need to deal with the crisis cases led to effective PSI cases studies in the cases of Korea, Indonesia and Thailand. These cases were limited to bank loans and did not address the issue of restructuring bonds, that were de minimis in these episodes. Next, the official PSI doctrine was developed as part of the attempt to reform the international financial architecture. The October 1998 reports of the G22 Group included one on private sector involvement in crisis prevention and resolution. The formal G7 doctrine was then developed in early 1999 in preparation of the July 1999 Kohl G7 summit where PSI was addressed as one of the building block of the new international financial architecture; the Kohl document on architecture reform included a significant section on the official G7 PSI framework. This official doctrine can be characterized as a “case-by-case approach with principles and tools”. While some have suggested the need for more precise rules to guide PSI, the G7 agreed that rigid rules were not realistic for several reasons:

²⁴ Strictly speaking the Russian debt restructuring in 2000 was not a case of application of the PSI doctrine but resulted from the decision of the country to restructure its old London Club debt, the Prins and Ians bonds. These old instruments were exchange for new 10-year and 30-year dollar denominated bonds and cash. While not being a case of PSI, the Russian restructuring provide interesting lessons on how to restructure bonded claims. For example, creditors accepted a significant haircut in face value for the Prins (37.5%) and Ians (33%) but got new claims with alleged greater seniority as the Russian Federation took on claims that were formerly obligations of a sub-sovereign entity, the Vneshconombank.

1. The set of issues involved in PSI (whether to do it, when to do it, how to do it, what to include, who to include, which sequence to follow) was too complex to be formalized in a set of rigid rules. A case-by-case approach framed by some basic principles and tools was more realistic.

2. Since each case study was special and different, only experience and a build-up of “case law” could eventually lead to more defined rules on PSI.

3. Rigid rules may lead the private sector to try to evade PSI; for example, a rule that excludes a certain category of claims of claimants may lead to PSI-diversion through emergence of new instruments harder to restructure.

The need for a case-by-case approach was confirmed by the complexity and novelty of the issues to be addressed that did not allow outlining a mechanical set of rules. Under which circumstances should PSI be implemented? Which kind of PSI is appropriate in different cases: soft, semi-coercive, concerted, coercive? Which claims to include in PSI, bonded debt, short-term interbank flows, other short-term credits, Eurobonds, Brady bonds, domestic debt (local and foreign currency denominated)? Which class of creditors to include, foreign, domestic, bondholder, bank creditors? How to decide how much adjustment and how much external gap filling to do? And how would the financing gap be filled between multilateral creditors (IFIs), bilateral official creditors (PC creditors) and the private sector? How to define PC comparability? How to divide the financing pie among different creditors? Do PSI before or after a PC rescheduling? Consider reverse comparability? Use a market soundings process followed by debt exchanges or rely on committees and formal negotiations between debtors and creditors? Use collective action clauses or not? How much to micro-manage the restructuring process? What to do in liquidity cases? How to distinguish insolvency from illiquidity? This is only a partial list of the very difficult questions that the official sector had to address in designing its PSI policy. Since many of these questions did not have a simple answer, the case-by-case approach cum principles became the right balance between the need to provide guideline to market participants and the need to maintain the flexibility of the policy to address specific case studies.

While the case-by-case approach was deemed to be the appropriate one, a series of principles were outlined to provide transparency and clarity on the approach to be taken by the official sector. Also, a set of tools for PSI were described to guide policy.

The basic set of principles, considerations and tools for PSI, as outlined in the 1999 G7 Architecture Report²⁵, can be summarized as follows. There are five basic principles for guiding PSI policy.

First, the approach to crisis resolution must not undermine the obligation of countries to meet their debts in full and on time. So, strategic defaults should be avoided by ensuring that there are costs to such opportunistic behavior.

Second, market discipline will work only if creditors bear the consequences of the risks that they take. In other, terms, debt claims with substantial spreads over risky assets bear credit and repayment risk. Thus, investors cannot expect to be paid in full and on time in all

²⁵ This report can be found at: <http://www.library.utoronto.ca/g7/finance/fm061999.htm>

states of the world, nor they can expect to be bailed out by the official sectors if a country is unable to pay either because of insolvency or illiquidity.

Third, in a crisis reducing net debt payments to the private sector can potentially contribute to meeting a country's immediate financing needs and reducing the amount of finance to be provided by the official sector. I.e., when there is an external financing gap, appropriate burden sharing filling of such gap is necessary.

Fourth, no category of private creditors should be regarded as inherently privileged relative to others in a similar position. When both are material, claims of bondholders should not be viewed as senior to claims of banks. This is not a new doctrine regarding burden sharing but a straightforward application of the Paris Club doctrine of comparability to bonds when these are material, i.e. not *de minimis*.

Fifth, the aim of crisis management whenever possible should be to achieve co-operative solutions negotiated between the debtor country and its creditors. In other terms, PSI should be appropriate to the specific cases; strong preference should be given to co-operative, as voluntary as possible solutions with semi-coercive and/or coercive solution used as sparingly as possible for the cases in which no sensible alternative can be found.

A number of considerations were to be made in applying such principles. Thus, the application of this PSI doctrine required a case-by-case approach constrained and shaped by the basic principles. A case by case approach is needed as "the appropriate role for private creditors, if any, and the policy approaches needed to induce private creditors to play this role will vary depending on the circumstances of the particular case. There are advantages to making clear in advance the basic considerations that will guide our actions and specific approaches we will employ. The principles and tools we propose should help provide a degree of predictability for investors, without sacrificing the flexibility required to address effectively each particular financial crisis." As discussed in more detail in the next section, PSI would be generally necessary when a country faces an external financing gap that cannot be financed given limited market access ("there is a variety of circumstances where countries might face external financing pressures"). PSI would also needed as moral hazard distortions need to be minimized . PSI "can also contribute to maintaining appropriate incentives for prudent credit and investment decisions going forward." PSI should, however be implemented cautiously as "these potential gains must be balanced against the impact that such measures may have on the country's own ability to attract new private capital flows, as well as the potential impact on other countries and the system in general through contagion." While the G7 PSI doctrine did not addresses in detail liquidity cases with systemic effects, it was aware of the issues of systemic risk and potential contagion.

Some flexibility was required also because "the feasibility of different policy approaches will depend on the nature of outstanding debt instruments. These will influence assessments of which claims need to be addressed to resolve the country's financing difficulties, the magnitude of possible concerns about equitable treatment among various categories of creditors, and the scope for voluntary versus more coercive solutions. The nature of the relevant debt obligations can differ along many axes, including whether the debt obligations are principally private or public; foreign or local currency; short-term or long-

term; payment of principal or interest; offshore or onshore; secured or unsecured; held narrowly or held by a diffuse group of creditors.”

Co-operative solutions meant that “there is a variety of circumstances where countries might face external financing pressures. There are circumstances where we believe emphasis might best be placed on market-based, voluntary solutions to resolve the country’s financial difficulties. There are also cases where more comprehensive approaches may be appropriate to provide a more sustainable future payments path. In practice, there will be a spectrum of cases between these two extremes. Where a country falls on this spectrum, will help to determine the policy approach best suited to its particular circumstances. Relevant considerations include the country’s underlying capacity to pay and its access to the markets.

Finally, to address the wide range of potential cases and have appropriate PSI, it was agreed that a broad range of tools should be available to the international community. Such tools were to include:

“1. Linking the provision of official support to efforts by the country to initiate discussions with its creditors to explain its policy program.

2. Linking the provision of official support to efforts by the country to seek voluntary commitments of support, as appropriate, and/or to commit to raise new funds from private markets.

3. Linking the provision of official support to the country’s efforts to seek specific commitments by private creditors to maintain exposure levels.

4. Linking the provision of official support to the country’s efforts to restructure or refinance outstanding obligations.

5. In cases where a country’s official debt needs to be restructured in the Paris Club, the Paris Club principle of comparability of treatment applies to all categories of creditors other than the international financial institutions. The Paris Club should adopt a flexible approach to comparability, taking into account factors including the relative size and importance of different categories of claims.

6. Imposing a reserve floor that effectively ensures that the private sector makes an adequate contribution, such as through debt restructuring, alongside official resources in the resolution of crises.

7. In exceptional cases, it may not be possible for the country to avoid the accumulation of arrears. IMF lending into arrears may be appropriate if the country is seeking a cooperative solution to its payment difficulties with its creditors.

8. In exceptional cases, countries may impose capital or exchange controls as part of payments suspensions or standstills, in conjunction with IMF support for their policies and programs, to provide time for an orderly debt restructuring.”

Thus the PSI tools included, subject to specific caveats, the options of linking the provision of official money to co-operative attitudes by the debtor, the private provision of new money, the maintenance of exposures, the debtor’s willingness to restructure obligations when needed. A flexible application of PC comparability was supported. Floors to foreign reserves were to be used to avoid situations like that of Romania when payments are made,

reserves are depleted and the lack of market access does not allow to raise new money. Lending into arrears was a policy option given to the IMF under appropriate circumstances.²⁶ And, in extreme circumstances, both standstill and capital controls could be required and used.

The G7 PSI framework gave to the IMF a central role in the specific application of such a doctrine and called “on the IMF further to develop and define the legal and technical questions involved in implementing the specific approaches identified in the framework agreed here”. Indeed, the IMF has taken a lead role in the application of the PSI framework to specific studies and the development of this framework.²⁷

Following in part the private sector demands for greater transparency, clarity and rules and provide clearer guidelines to the IMF, the case-by-case approach to PSI was refined in April 2000 through a set of “operational guidelines” providing more details on the process and substance of PSI; these operational guidelines were agreed by the G7 at the Ministerial meeting around the IMF/WB spring meeting and was later formally adopted in the G7 Fin Mins and CB Governors communiqué prepared for the July 2000 G7 summit in Fukuoka, Japan.

This document reaffirmed the central role of the IMF in the PSI policy. The G7 “agreed that the IMF should consider whether private sector involvement is appropriate in programs, using the operational guidelines described in the annex. The IMF should play a central role in deciding if private creditors should contribute to any program financing, while taking duly into account the specific circumstances of individual cases. The IMF should also review the results of the country's efforts to secure financing from private creditors.”

The G7 “also agreed to continue our work to implement fully the wide range of measures to strengthen the international financial architecture endorsed at the Cologne summit, including promoting appropriate private sector involvement. Private external creditors, including bond holders, have contributed to the financing of several recent programs of policy reform and recovery. This has confirmed the importance of making operational the framework Ministers laid out in their report to Heads in Cologne, which provides for flexibility to address diverse cases within a framework of principles and tools.”

The operational guidelines presented in the Annex to the G7 document were as follows. First, support of crisis prevention measures, including a regular and open dialogues of debtors with their creditors was reaffirmed. Second, the G7 confirmed their support of collective action clauses.²⁸ Next, the G7 reaffirmed the case-by-case approach but specified

²⁶See “IMF Policy in Lending into Arrears to Private Creditors” at <http://www.imf.org/external/pubs/ft/privcred/index.htm> for details of the on the implementation of this policy.

²⁷ Many IMF documents on PSI are internal but the IMF views on PSI have been widely presented publicly in a series of documents. See for example ‘Involving the Private Sector In Forestalling and Resolving Financial Crises’, March 1999 to be found at <http://www.imf.org/external/pubs/ft/series/01/index.htm>.

²⁸ “The IMF should also encourage the use of appropriate measures, including collective action clauses, to facilitate more orderly crisis resolution. We agree to facilitate the use of collective action clauses in international bonds issued by emerging market economies in our own financial markets. We urge the World Bank and other
(continued...)

in more detail the criteria to be used to decide whether PSI is necessary and which forms of it are appropriate. “With regard to crisis resolution, we agreed that the approach adopted by the international community should be based on the IMF's assessment of a country's underlying payment capacity and prospects of regaining market access, informed by the country's economic fundamentals, payment profile, history of market access, and the market spreads on its debts. All programs will need to include analysis of the country's medium-term debt and balance of payments profile, including a section explaining the assumptions taken about the sources of private finance. In some cases, the combination of catalytic official financing and policy adjustment should allow the country to regain full market access quickly. In some cases, emphasis should be placed on encouraging voluntary approaches as needed to overcome creditor coordination problems. In other cases, the early restoration of full market access on terms consistent with medium-term external sustainability may be judged to be unrealistic, and a broader spectrum of actions by private creditors, including comprehensive debt restructuring, may be warranted to provide for an adequately financed program and a viable medium-term payments profile.”

Finally, they agreed that in those cases where debt restructuring or debt reduction may be necessary, IMF programs should be based on the following operational guidelines:

- i. “Put strong emphasis on medium-term financial sustainability, with the IMF determining the appropriate degree of economic adjustment required by the country and the IMF and the country agreeing on a financing plan compatible with a sustainable medium-term payments profile.
- ii. Strike an appropriate balance between the contributions of the private external creditors and the official external creditors, in light of financing provided by IFIs. In cases where a contribution from official bilateral creditors (primarily the Paris Club) is needed, the IMF financing plan would need to provide for broad comparability between the contributions of official bilateral creditors and private external creditors. The Paris Club, if involved, should of course continue to assess the comparability desired and achieved between its agreement and those to be reached with other creditors.
- iii. Aim for fairness in treatment of different classes of private creditors and for involvement of all classes of material creditors. The IMF should review the country's efforts to secure needed contributions from private creditors in light of these considerations, as well as medium-term sustainability.
- iv. Place responsibilities for negotiation with creditors squarely with debtor countries. The international official community should not micromanage the details of any debt restructuring or debt reduction negotiations.
- v. Provide greater clarity to countries at the start of the process about the possible consequences for their programs, including in terms of official financing, of

Multilateral Development Banks to work to have such clauses used in international sovereign bonds or loans for which they provide a guarantee.”

any failure to secure the necessary contribution from private creditors on terms consistent with a sustainable medium-term payments profile. Such consequences could include the need for a program revision to provide for additional adjustment by the country concerned or the option of reduced official financing, or, conversely, a decision by the IMF to lend into arrears if a country has suspended payments while seeking to work cooperatively and in good faith with its private creditors and is meeting other program requirements.

- vi. When all relevant decisions have been taken, the Fund should set out publicly how and what certain policy approaches have been adopted, in line with the Cologne framework.”

6.2. When and how to do PSI?

While conceptually there are many different ways to approach the question of whether, when and how PSI solutions should be implemented, a simple and sensible conceptual approach is to consider the case of a country that faces an “external financing gap”. Indeed, the G7 framework suggest that PSI is certainly to be considered when such a gap emerges. How to define such a gap? Assume that, after considering quantitatively:

1. the domestic economic adjustment that will improve the current account imbalance (and overall external imbalance)
2. The external financial support (under normal quota terms) that an IMF program will provide as well as the support of the other multilateral creditors (World Bank and MDBs)
3. the expected amount of net foreign direct investment, net medium-long term private capital inflows (both portfolio and otherwise).

the country still has a financing gap and has little market access. A gap means a situation where:

A. The sum of the current account imbalance plus the upcoming principal debt payments to official creditors (including possibly arrears to such creditors) and to private creditors (bonds payments coming due, expected outflows of other short term claims such as bank loans and interbank lines not expected to be rolled over) minus expected official multilateral financing, private medium-long term financing (and any other private inflows such as trade credits) are greater than the foreign exchange resources (after taking into account of any reserve floors) that the country has available for debt payments. I.e. after considering all the external cash flows, there is a payments gap that cannot be otherwise be expected to be filled without some rescheduling of official bilateral and private creditor claims.

B. the country has little or no international capital market access, i.e. it cannot be expected to fill this remaining financing gap with rollovers of existing claims and/or new borrowing from the private sector at interest rates that do not undermine medium term sustainability of the debt profile.

In these situations where there is an external financing gap of the sort defined above, this gap has to be filled with contributions from official bilateral creditors (Paris Club creditors) and the private sector. The private contribution is not fully voluntary in these cases (i.e. there is PSI) as the country has little market access. Thus, concerted rollovers of claims and/or restructuring/rescheduling/reduction of bonded debt and other securities becomes necessary as a way to fill this financing gap.

How to decide how much of this gap will be filled by official PC creditors and how much by private creditors (how to slice the financing gap pie) is a difficult and complex issue.

Before we get to the “slicing of the pie” issue, consider the steps involved in figuring out the gap and whether the private sector should be involved in these earlier steps.

Suppose you start with a country that has a current account imbalance, has large debt payments coming due, has an expected financing gap and has little market access.

The first step to fill the gap is to make domestic adjustments, macro (monetary, fiscal and exchange rate) policies and structural policies that will reduce the current account deficit (and the external financing gap) over the horizon of an upcoming IMF/IFIs adjustment program. The more is the domestic adjustment the less will be the financing gap and the less the amount of needed PSI and official multilateral and bilateral contribution.

Second, once the amount of domestic adjustment has been decided, one has to figure out the amount of net new multilateral financing provided by IMF, WB and MDBs. For countries that are not large and systemic, this multilateral support will be usually normal, i.e. within IMF quotas and standard criteria for MDBs support.

Once, this support is decided and an estimate of the residual current account and amount of medium-long term net inflows are made, there may still be the residual “external financing gap” to be filled by official bilateral and private creditors and the allocation of this gap determines the amount of PSI on the part of the private sector.

Consider the role that the private sector may have in the various steps. The initial decision on how much adjustment the country should make as opposed to how much financing is usually made by the IMF in negotiations with the debtor country. This decision should, in principle, be based on economic criteria, i.e. how much is the feasible amount of adjustment that a country can make but in a deep sense the decision is also political, in the political economy sense of the term. The decision is not only “economic” as a country could conceivably try to adjust domestically more, squeeze domestic demand and imports and have a large contraction in output to obtain a greater external imbalance adjustment; but there are limits to the amount of adjustment that is economically and politically feasible. Adjustment beyond what is reasonable and sensible can be counterproductive: a protracted recession, fall in consumption and excessive up-front external burden payment effort may eventually lead to the collapse of the adjustment program itself with worse consequences for long-term sustainability of adjustment and reform. How much adjustment and reform is feasible is thus an art rather than a science and, eventually, it is in the interest of the country to own a program, reform and build the basis for sustainable long-run growth.

Attempts to reduce the short term pain with more financing and less adjustment may work for a while and postpone the pain but long term growth viability may be compromised.

It is thus in the interest of the country itself (apart from political economy distortions) to make as much adjustment as feasible. Of course, since the decision is in part “political” (in the best sense of the word), the IMF may at times give more slack than correct to a country and provide more financing than necessary. Also, some countries may repeatedly fail to properly implement such programs and become IMF “addicts”.

The issue is then whether the private sector, as claimed by some, should have a role in this part of the gap filling process, before being asked to do its part in the form of PSI. Most observers would agree that the private sector does not have the expertise to decide how much adjustment should occur versus how much financing. It is true that, in the 1980s, the bank loans workout process in the framework of the London Club implied economic subcommittees of the creditors that were apparently somewhat involved in this first stage of the process. But the reality in the 1980s was that these subcommittees were really more monitoring the commitment to an adjustment rather than setting the parameters and extent of it. And in the 1990s, it is hard to believe that hundreds or thousands of bondholding creditors could have a role in this stage of the gap filling process. Steady and transparent provision of information by the debtor to the creditors about data and expected policy actions is one thing; involvement of the private sector in the decision of how much adjustment to make is unrealistic. Indeed, the best discipline device that investors can impose on debtor to ensure enough adjustment is market discipline in the form of reducing access to capital market and borrowing to debtors that are not making a serious effort to adjust and reform and who, thus, reduce their growth prospects for the long run.^{29 30}

Regarding the second step of the process, again the decision of how much multilateral finance to provide is usually made by the IMF, the WB and the MBDs in negotiations with the debtor. Standard practices regarding normal quota access and amounts of MDBs support should provide a predictable estimate of how much multilateral support should be provided. Again, the process is, at the margin “political”, as there is some leeway to decide how much

²⁹ This market discipline, however, may not be “renegotiation proof”: a long memory may actually be against creditors’ interest going forward, as they can ex-ante set a high spread instead of actually reducing the amount available to the debtor.

³⁰ On the other hand one could argue that private sector involvement in determining the adjustment needed for a country may not be all that messy and time consuming. Investors vote with their feet in the end and hence will have a say on the adjustment effort and whether it is appropriate or not. Bringing them in at an earlier stage of consultation may make sense to make sure that adjustment and financing options are broadly agreeable to the private sector (as in the 1980s economic subcommittees of the London Club). One can make the case that this should not be too hard. For example, at least publishing the IMF’s BOP and financing assumptions may soothe private sector fears that the adjustment is too small or that the country has been favored politically. But all this opens a complex Pandora’s Box of what information should be made available by the IMF and debtor and when, an issue discussed in more detail below.

multilateral support to give; more may be provided to countries that may credibly commit to reform.

Sometimes, countries that are politically/strategically important (but not systemically important) may, at the margin, get some extra slack.³¹ But the amount of slack is very limited. It is true that IMF support may be, at times, exceptional but such exceptional (beyond quota) support is limited by precise rules (for CCL and SRF access) and is partly limited to countries that may have systemic effects. Smaller countries not suffering of pure or semi-pure liquidity problems, for which the PSI doctrine was developed and applied, will usually not have access to exceptional financing. Thus, the amount of multilateral support under normal rules/quotas should be quite predictable. It is also clear that the private sector should have little say on this stage of the process. Obviously, the private sector always wants more financing by multilateral (and bilateral) creditors as more official financing would imply less need for private financing and “coercive” PSI. But it is hard to make an argument that the private sector should have a say in this multilateral support decision. IFIs support is senior in the sense that it has “preferred creditor status” and is thus senior to both bilateral official finance and private finance. The rationale for this seniority is, among other ones, that such financing is “new money” or DIP (“debtor in possession”) financing that should have seniority over other claims.³² The only case in which the private sector may legitimately argue to have a claim in the amount of multilateral financing is when the country is already heavily indebted to official and private creditor and additional amounts of official senior money may effectively reduce the ability of the debtor to service its private debts.

Once adjustment and multilateral support have been figured out (according to quite predictable and transparent formulas), the third stage is the allocation of the remaining financing gaps between bilateral official creditors and the private sector has to be determined. The current process, that has been criticized by the private sector, is one where the Paris Club (effectively in iterative consultation with the IMF) determines how much to receive during the program/consolidation period (and thus how much bilateral claims to restructure/reschedule) so that the private sector becomes effectively a “residual claimant”, i.e. the leftover financing gap is filled by the private sector. The private sector has been quite critical of this residual claimant role considering it unfair, unpredictable and non-transparent. Since most private sector participants do not realistically expect to be involved and have a say in stage one and two, they do usually believe that they should be involved in stage three, in the division of the slicing the burden of the financing pie between official bilateral creditors and themselves. They would like to have a say in this stage as it deeply affects the

³¹ Note that, while there is a difference between systemically important and politically/strategically important, the two are often correlated. As the overlap is substantial, it may lead to the private sector perception of the lack of clear rules as politics may affect policy decisions (as alleged in the case of Nigeria).

³² This is particularly true is IMF funds are truly “new money” (crisis financing) rather than rollovers of previous exposure.

burden that is shared by the private sector. These and other critiques of the Paris Club have been expressed by the private sector and will be discussed separately in the next section 6.3. We will also discuss below whether the process can be improved to make the dialogue between creditors and debtors more open and transparent.

Leaving aside for now such concerns, let us briefly consider how the slicing of the gap pie could be “fairly” be decided. One possible and sensible approach is to compute how much payments are due during the program/consolidation period (say one year) to official bilateral creditors and to private creditors. Then, allocate the burden of the financing gap comparably or proportionately among these two classes of creditors. Say for example that bilateral creditors are owed \$1 billion over the consolidation period while private creditors are owed \$2 billion. Proportional allocation means that, if the country has only \$1.2 billion in resources during the program period (its foreign reserves plus IFIs support corrected for reserve floors³³) to pay all the residual creditors then private creditors receive \$800 (2/3 of \$1.2 b) and reschedule \$1.2 b of their claims while official bilateral creditors receive \$400 million (1/3 of \$1.2 billion) and reschedule \$600 million of their claims; each creditor group gets only 40% of its claims in cash as resources available for payments are only 40% of the total payments due to both groups. Of course, not only the amount of cash available outright should be comparable but also the terms of the amounts that are rescheduled rather than paid upfront in the program period. This latter aspect of comparability (comparable treatment of rescheduled amounts) will be discussed later. Application of such a proportionality rule may be complex in reality depending on which claims are rescheduled, how you treat domestic debt, which claims you exclude or include, whether the PC goes first or not et cetera but, if applied, it would provide a relatively predictable rule that, setting aside fairness issue, would give transparency and predictability to the PSI process.

The private sector indeed complains about two separate issues: the fairness of the distribution of the burden between private and public and the lack of predictability/transparency of this process. Setting aside for a moment the fairness issue, i.e. whether the private sector should be involved in the three stages of deciding the allocation of the burden sharing, the process described above suggests that there is already a lot of transparency in the current system. First, analysts can fairly infer the amount of adjustment that the country is expected to make; the uncertainty about economic fundamentals and prospects for reform is a form of residual economic uncertainty that cannot be eliminated and markets are supposed to know how to price it. Second, the amount of multilateral support can be similarly estimated for most of the cases, i.e. those where exceptional financing is not even an issue. Third, as clarified below, the rules followed by the Paris Club are quite clear and the criteria, amounts and terms of restructurings quite forecastable given the track record and procedures of the Paris Club (normal terms for middle income countries, Houston terms for low income ones, HIPC terms for those who qualify for HIPC, et cetera). Thus, the

³³ Such reserve floors are determined by the IMF to ensure a sustainable amount of reserves that minimizes liquidity risk.

private sector should be able to infer how much finance will be provided by the Paris Club creditors and how much residually by the private creditors.

In this sense, the complaints of the private sector about the unpredictability of PSI process are vastly exaggerated. Most informed private sector analysts can and should do their homework and figure out whether PSI will be involved and how much the contribution of the private sector will be. In most if not all cases, the general PSI principles, tools and operational guidelines together with case history, IFIs financing rules and PC procedures provide enough information to make a sensible if uncertain assessment of the private sector share of this burden. The residual uncertainty in the process is the underlying economic uncertainty that cannot be eliminated.

6.3. Critiques of the Paris Club

The Paris Club has become the lightning rod of the many complaints of the private sector against PSI. The PC has been accused of being a secretive organization arbitrary and unfair in its decisions, forcing the private sector to be the residual claimant, expecting private debt reduction when it does not provide any itself, lacking transparency, predictability and openness, unwilling to engage the private sector in negotiations and dialogue, politically biased in its decisions and imposing comparability while not accepting reverse comparability.

Many of these critiques are misguided and suggest a deep misunderstanding of the role and functions of the Paris Club.

The first misconception about the Paris Club is that its claims are senior to those of the private sector. While official bilateral claims are perceived to have seniority over private ones the reality of international finance is that Paris Club claims are always effectively junior to private ones. Note that, when a country experiences debt-servicing difficulties, the first payments that are suspended are those to Paris Club creditors. Debtors know that going into arrears to PC creditors has little consequence (as such claims are eventually rescheduled) while non payments to private creditors have consequences (formal default, acceleration, litigation risk, et cetera). Thus debtors are most eager to stop paying official bilateral creditors well before they stop paying private creditors. Indeed, for too long strategic non-payment to PC has been used by debtor as a way to continue paying in full and in time to private creditors. The accumulation of arrears to PC creditors is a systematic and endemic phenomenon that has allowed the continued payments to private claims; for example, Nigeria accumulated over \$23 billion of arrears to PC and has so far paid in full its private debts. This is a most “unfair” and distorted system of incentives: no private creditors would be willing to provide credits to a sovereign at the terms, risk features and spreads provided by official bilateral creditors. Indeed, the fact that countries were still able to have market access in spite of rising PC arrears (as in the case of Ecuador issuance of Eurobonds in the mid 1990s) implied that investors believed that the financing burden would be shifted to the official creditors and they would not be bailed in. Fortunately, recent applications of the PSI framework have shattered this distortion; investors do now realize that countries with significant PC arrears and where private claims are material are quite likely to be involved in PSI.

Second, PC claims not only are the first to go into arrears but they are not subject to litigation risk; they are not subject to rollover risk as they effectively have a rollover option given to the debtor as the latter can always stop paying with little consequence, they are not subject to liquidity risk driven by panic of official creditors withdrawing line. Also such claims are restructured at terms that are often quite generous and at interest rates that do not truly reflect repayment risk. Note that if the market had to provide similar claims not subject to rollover, liquidity, litigation risk, the pricing of such debt (in terms of spread over risk-free assets would be most expensive). So, the treatment of PC claims is much more generous in most possible dimensions for the debtor than that of private claims.

Third, while the Paris Club does not generally provide debt reduction (apart from the cases in which the country qualifies for such debt reduction such as HIPC qualification or other criteria), the terms of rescheduling are extremely generous and imply some significant effective NPV reduction of the value of such claims. In fact, the fiction of rolling over claims at the contractual original low interest rate and discount the present value of restructured claims with a discount rate equal to such rollover rate allows the accounting fiction of maintaining NPV neutrality while the use of a more correct discount rate reflective of the actual expected repayment probability would imply some significant NPV reduction. While finding the correct discount rate for PC claims is not easy (as it is likely to be smaller than market rates but much higher than the officially used rate), the terms of PC claims and their restructuring (systematic arrears; no rollover, liquidity and litigation risk; generous restructurings with long grace periods and low interest rates; and eventual debt writedowns for some qualifying debtors) suggest that, in most case, PC claims are effectively reduced rather than just restructured even if they are formally not subject to face value reduction. Thus, critiques arguing that PC restructurings are unfair when, as in the case of Ecuador, the private sector is asked to provide for debt reduction while the official sector is not, are missing the point: PC restructuring are usually not NPV neutral. Thus, PC restructuring can be comparable to private claims debt reduction even when formal face value reduction is not immediately provided by PC creditors.

Fourth, the rules followed by the Paris Club are quite clear and the criteria, amounts and terms of restructurings quite forecastable given the track record and procedures of the Paris Club (normal terms for middle income countries, Houston terms for poor one, HIPC terms for those who qualify for HIPC, et cetera). Thus, the private sector should be able to infer how much finance will be provided by the Paris Club creditors. The current process is not much different from the one in the 1980s where PC restructurings were followed by London Club restructurings on “comparable” terms. The main difference is that now bonded debt may also be subject to comparability as it is not “de minimis”.³⁴

³⁴ One could still argue that the PC process is not fully predictable. For example, special considerations were made for countries such as Poland and Egypt; cut-off points have been moved; decision points for HIPC are changing over time; it is not always clear to markets when and how much of principal and interest payments are rescheduled. Part of this problem
(continued...)

Fifth, the Paris Club could do marginally better in terms of providing more information and transparency about its activities but there are limits to what can be done. There is some misunderstanding about the PC; it is not a structured formal organization but rather an hoc group of rotating creditors. In this sense, there is no an official PC view, spokesperson or common view; any external view would have to be cleared by all relevant creditors.

Sixth, the idea that “reverse comparability” would be imposed or that the Paris Club would engage in an extensive negotiation with creditors on how to divide the burden of filling the financing gap is not desirable for many reasons. 1. some clear burden-slicing rules such as the proportionality principle presented above would provide a more, simple, predictable and fair distribution of the burden than a formal negotiating process. 2. negotiations with official creditors or debtors may lead to endless and costly delays in restructurings. It is better to have a leader that sets priorities in a restructuring and avoid games and delays to develop (however, according to some in the private sector, the leader can do a much better job than the PC does currently) 3. the nature, motivation and terms of the official bilateral claims is very different from that of the private claims; thus attempts to negotiate a fair distribution of the burden are burdensome and adding to uncertainty rather than reducing it. 4. the current structure of the distribution of the financing burden (country adjustment first, senior status for new IFI money, more junior status for PC claims with clear and established rules for their restructurings, residual financing by private sector) provides a clear and mostly predictable system of adjustment and financing. It is not clear that a system where the financing burden on the private sector is negotiated would improve on this system. 5. just because private creditors look at the NPV of their claims and thus the intertemporal value of the payment stream and are willing to do debt reduction if there is no NPV cost at current prices does not mean that the PC, with different preferences, should be obligated to do the same thing that privates do just because private creditors do so.

Seventh, while private sector participants concentrate on the contribution of the PC creditors, it is clear that the effective contribution of the official sector to PSI also includes the new money provided by the multilateral creditors; this contribution is often significant and may be even larger than that of bilateral creditors. Conceptually, the larger the combined support of official creditors (both bilateral and multilateral) the less is the amount of private claims that are subject to PSI. And, indeed, the private sector knee-jerk response to request for PSI was one of asking for the official creditors as a whole to fill in the entire financing gaps to avoid non payments on private claims and shift the full adjustment burden on the official sector.

Eight, some confusion is deriving from the fact that the PC does flow restructurings while the private sector does stock restructuring. The origin of this distinction goes back to the 1980s. The Paris Club would restructure all the claims (including arrears) that come due during the consolidation period; thus, only current payment flows are restructured rather than

may be just lack of information rather than unpredictability; thus, the PC may provide a service to markets by describing in more detail its procedures and rules.

the total stock of outstanding debt to official creditors. This also means that repeated flows restructurings of PC claims are necessary as the stock of debt is not dealt with once and for all but only the consolidation period flow payments.³⁵ The London Club instead would take a stock approach, given the nature of the claims rescheduled, i.e. syndicated bank loans, and restructured the entire stock of claims that were due in the consolidation period, both interest and full principal. Once the doctrine of PSI was applied to bonds in the last two years, it also made sense to take a stock approach for the bonded debt. While restructuring only payments due in the consolidation period could be technically feasible, dealing with the full stock makes more sense as bond restructuring require bond exchanges. It would be extremely cumbersome and inefficient to have only flow restructurings and do bond exchanges over and over again every few years. It makes more sense to deal with the stock of bonded debt once for all and restructure it according to terms that ensure medium-long term viability of the debtor.

Ninth, formal negotiations with the Paris Club to discuss the “slicing of the pie” are not realistic nor desirable. First, PC rules for restructuring vs. upfront cash payments are clear and known for a long time. Second, negotiations may lead to endless delays that are beneficial to none. Third, the current system is effectively close to the proportionality distribution of the debt burden described in the previous section; this proportional burden sharing is reasonably fair, sensible and could not be improved upon with negotiations. Also, once the upfront cash payments distribution has been figured out, there is little to negotiate as the constraint of medium term debt sustainability and standard PC rules for the terms of the restructuring of the remaining liabilities determine clear parameters of what is comparable and what is sustainable. Private sector may want to negotiate with the PC a better deal for itself, in terms of upfront cash and terms of reschedulings, but it is hard to believe that a negotiated process would lead to outcomes that are very different from the actual ones in current restructuring cases: given a financing gap, there is very little or no leeway in terms of upfront cash and how to distribute it and restructuring terms cannot be in sharp contrast to comparability and medium term sustainability. Thus, the idea that the PC should sit and negotiate the slicing of the pie with the private sector is not sensible nor desirable for the system; it would not systematically provide private creditors with much better terms and deals than the current system that is already quite generous, probably too generous, to them in many dimensions.

Finally, while the original PC claims against a sovereign may be financing projects that may not be motivated on strict commercial terms, this does not mean that all PC loans are strictly “political”. If there is a political element in such loans, the effectively subsidized terms of the loans (sub-market rates adjusted for repayment risk) also price that subsidy transfer. Also, some of the financed project are either formally or informally of a tied-aid nature that provides benefits to private sector firms of the creditors country. Thus, the private sector often significantly benefits from such “politically” motivated loans.

³⁵ Note also that, since cut-off points do not usually change, new PC debt is senior to old PC debt and is not generally rescheduled even if it goes into arrears.

6.4. What claims to include in PSI policy?

Even if one accepts the multi-step approach to how to do PSI outlined in Section 6.2, it is still necessary to figure out which claims should be included in the restructuring process and which ones should not. This is a difficult issue. Should Eurobonds be excluded? Should Brady bonds be excluded? Should domestic debt be included? Should short-term claims such as trade credits be excluded from PSI?

In the 1980s, PSI included mostly syndicated bank loans as other debt securities were “de minimis”; in recent year PSI has been extended to short-term interbank claims (Korea, Indonesia, Brazil) and to bonded debt (Pakistan, Ukraine, Russia, Ecuador) as these forms of debt are not “de minimis” any more.

In the category of bonded debt, should one include or exclude Eurobonds and Bradies? Some have argued that either one of these categories should be excluded but such arguments do not make much sense. The argument for excluding Bradies, as presented by the private sector, is that they are already restructured and reduced debt; by restructuring them again, the investors get punished twice. This argument does not make sense for various reasons.

First, one could argue that if something should be excluded this should be Eurobonds as the debtor will have to issue this type of debt again rather than Bradies that are not going to be reissued again.

Second, as the experience of Ecuador suggest, it is close to impossible to ring-fence some category of external debt as cross-default clauses³⁶ and acceleration and cross-acceleration clauses³⁷ are likely to be triggered when a country defaults on one external debt instrument but not others.

Third, some foreign investors found it unfair to try to exclude some external bonds and not others and this partly explains their decision to accelerate in the case of Ecuador.

Fourth, the fact that Bradies were restructured once has little relevance. For one thing, the original holders of the pre-Brady claims or even the original investors who bought the Bradies when issued are unlikely to holding them at a later stage when they are restructured again. Given the vast amount of Brady bonds trading, it is likely that other investor bought these assets in recent times at prices that reflect current repayment prospects, not those of the time when Bradies were issued. Why should these recent investors get significant mark-to-

³⁶ Cross-default occurs when a default on one type of claim leads to default on other claims, as defined by the specific cross-default clauses in the bond contracts.

³⁷ An acceleration clause allows a minimum percentage of bondholders to call on a loan in default as due and payable in full right away. Cross-acceleration clauses allow an investor to accelerate its claims when someone else has accelerated theirs (this is what is usually included in Bradies).

market gains when they bought a highly risky asset? Even if some original holders suffered losses relative to initial prices of the Bradies, these were the result of their decision to hold on these assets (and risk capital gains and losses given high spreads) rather than locking in their value by selling them. So, any further loss of original holder is consequence of their risky portfolio decisions. In no financial system, holders of risky assets (whether restructured once or many times before) would expect to be guaranteed a price/return just because they originally bought at a higher price and suffered previous losses.

Fifth, the Bradies were issued only with partial collateral (usually the principal and a limited rolling interest guarantee). This is why Bradies are priced at high stripped spreads over Treasuries: only part of the asset is guaranteed (and investors can sensibly expect to get their collateral in case of default) while the non-guaranteed component is subject to standard credit risk and is accordingly priced. If Bradies were to be excluded from PSI, they would suddenly become risk-free assets and their stripped spreads over Treasuries should go to zero. This is a most illogic outcome as these assets are, by definition, risky in their uncollateralized component.

Finally, what is the sense of making some external debt claims more senior than others when they were never intended to be so and when their pricing and spreads already reflect their repayment risk? Making Bradies more senior would mean that, given the country capacity to pay, other claims will be become even more junior and their spreads would accordingly rise: so Eurobonds spreads would become higher if Bradies are exempt from restructuring. Since the average spread on a country's debt depends on its ability to pay, any attempt to make one claim more senior will make others more junior; i.e. there is no free lunch here. When a country faces debt servicing problems, all its pool of private external bonded debt should be subject to restructuring as no category of debt has any formal seniority (with the exception of the collateralized component of Bradies).

Similar points can be made to rebut the argument that Eurobonds should be excluded from restructurings. The main argument in favor of this exclusion is that, since debt restructuring take usually the form of debt exchanges where new Eurobonds are offered, it would be nice to give a halo of seniority to such instruments. Again, these arguments make little sense. Cross-default and acceleration will prevent that; the Eurobonds spreads already price the fact that these are junior instruments subject to repayment risk; the country's overall payment capacity determines its average spread and any attempt to exclude one junior claims will make other claims worse off; the entire pool of private bonded claims should be available for restructuring aimed at restoring medium term debt sustainability; the halo argument is meaningless as inability to pay will force a country to restructure its overall bonded debt regardless of perceived, but legally unfounded, attempt to pretend that some debt claims are more senior than others. The reality is that, both on legal and economic substance, there is no merit to the arguments that Eurobonds (as well as Bradies or other form of bonded debt) should be more senior than other bonded claims. Finally, the distinction between Bradies and Euros may be less relevant than what many think as the investors holding both are usually the same (as they are both part of the EMBI+ any benchmarking investor will hold both).

A more complex issue is to whether to include domestic debt claims, in addition to external debt, in the claims to be restructured. Domestic public debt claims include both those in local currency and those in foreign currency. One can easily argue that domestic local currency debt should not be put in the same “pot” as external debt when considering the claims that should be subject to PSI. Domestic local currency debt is subject to devaluation risk and its real value is already significantly reduced (if not wiped out) when a debtor country in crisis experiences a sharp devaluation of its currency (and/or when high inflation reduces the value of fixed interest domestic currency debt). Thus, the holders of such debt (be it domestic or foreign investors) are already automatically bailed in and participate in burden sharing.

The issue is whether to include in the private sector restructuring “pot” domestic foreign currency denominated (or foreign currency linked) debt. Note that the issue here is not whether such debt should be treated: it is often the case that a country experiencing severe debt servicing problem will be forced to restructure such debt (as most recently in Ecuador). The issue is whether such debt should be in the same “pot” as external debt and restructured according to comparable terms.

The argument for excluding such debt goes as follows. In principle, if one were to follow the logic that both domestic agents (workers and holders of asset) and foreign investors have to share the burden of adjustment, one should distinguish between the adjustment effort made by domestic agents and that made by foreign investors. Domestic agents share a large part of the burden because domestic fiscal adjustment required a painful increase in taxes and cuts in public spending and services. The tax burden included not only increases in direct and indirect taxes but all capital levies on domestically held financial assets including real reduction of debt via inflation, devaluation, forced debt restructurings and formal capital levies. The domestic cost of adjustment also includes the output, unemployment and consumption costs of adjustment programs that cut domestic demand in order to improve the external balance of the country. Once this domestic adjustment is made (and its distribution between workers and domestic holders of assets is determined in the domestic political arena), external financing and PSI provide the plug for any remaining external financing gap. So, conceptually one should separate the adjustment costs paid by domestic agents versus the burden sharing provided by foreign investors. Ideally, one would want to separate the two and separately decide how much pain should be inflicted on domestic agents as a way to put the country back on a sustainable growth path and how much external relief in the form of new finance, restructuring of externally held debt and debt reduction should be provided by external (official and private) creditors. Thus, if one were to assume that most of the foreign currency domestic debt is held by domestic investors, the logic above of burden sharing would suggest that such debt should be put in a separate “pot” from external debt as the restructuring of the former is part of the domestic adjustment cost process.

Of course, the reality is more complicated because it may be hard to distinguish, and treat differently, debt held by domestic residents and that held by foreign residents. Part of the domestic local currency debt may be held by foreign investors and part of the external debt in foreign currency may be held by domestic investors. Also, legal impediments may prevent

discriminating between domestic and foreign holders of external debt and between domestic and foreign holders of foreign debt. Also attempts to distinguish between the two classes of domestic and foreign debt may lead to distorted incentives in the future, i.e. investors preferring the claims subject to less harsh restructuring risk.

While it is very hard to discriminate between domestic and foreign holders of foreign debt, one could and probably should restructure domestic foreign currency debt separately from external foreign debt. Fairness among creditors in this case would imply treating equally domestic and foreign holders of such debt. The arguments for keeping domestic foreign currency debt in a separate restructuring pot are as follows.

First, often this debt is mostly held by domestic investors. So, treating it separately may get you close to the principle of separating the overall adjustment burden on domestic agents from how much should be provided by foreign creditors.

Second, this debt is subject to a different legal framework than foreign debt and can thus be treated separately; i.e. cross-default and acceleration clauses do not apply.

Third, such domestic debt is often held by domestic banks that are in distress, if not bankrupt, and will have to be bailed out by the government anyhow (as in Ecuador for example). Restructuring domestic bonds at comparable terms as foreign debt would thus imply that the financial distress of these institution will be larger and the eventual cost to the government of dealing with their bad assets unchanged: the more these bank held bonds are restructured the lower is the initial burden for the government but the greater is the burden of bailing them out down the line.

One could argue that, if treating such debts is net wash for the government in terms of fiscal costs of banking bailout, why not to treat them in the same pot as foreign debt? This would avoid the risk that wealthy domestic holders of such claims (and equity owners of the banks) are effectively bailed out (or subject to smaller losses). However, the net fiscal costs may not be unchanged. If a bank is not yet bankrupt, treatment of such claims may make it insolvent with all the additional cost of having to deal with a formal bank bankruptcy. Thus, the potential additional costs of treating such claims together with foreign debt may be high. This logic does not mean that such domestic claims should not be treated at all or that domestic debt holders should be treated more favorably than foreign ones. If fiscal sustainability implies the need to restructure the overall public debt, both the domestic and foreign components of it will have to be treated. The argument here is only to treat such domestic foreign currency claims separately from external debt to avoid creating further financial and real disruption deriving by greater distress imposed on the financial system.

Thus, one could make sensible arguments that domestic debt, both in local and foreign currency should be treated, but in a separate “pot” from external debt.

Another issue in terms of which types of debt to include in the restructuring process is the issue of whether to take a piecemeal or comprehensive approach to restructuring. In the former, only claims coming to maturity are restructured and you have series of sequential restructurings; in the latter you take the complete set of bonded securities and you restructure them all to create a new debt profile that, in terms of liquidity risk and medium term viability, is more sustainable. The first approach was followed in the early stages of PSI for Romania and Ukraine. The problems with it were, however, numerous. Since these countries had very

limited market access, they tried to rollover maturing debts and bonds by borrowing on the markets at interest rates that were obviously incompatible with medium term debt sustainability: as their debt servicing prospects were weak and spreads on their debt very high this piecemeal market-based approach to restructuring implied having to borrow very short-term at rates of 20% or more. Thus, these market restructuring made the debt servicing problem worse by creating big lumpy payments humps coming due in short order with interest rates that created an unsustainable debt dynamic. Moreover, in a piecemeal approach, if claims are not restructured on purely voluntary basis but after a suspension of payments, the risk that cross-default and acceleration may lead to a default of all other bonded debt claims is high. Thus, for substantial economic sustainability reasons as well as legal constraints, a piecemeal approach does not usually work. The only cases in which it may work, and where you can discriminate between different types of debt, restructuring some but not others, is where, as in Russia, cross-default and acceleration clauses do not apply to all debt instruments because the claims are subject to different legal frameworks (GKOs, pre and post-Soviet Fin Mins, Ians, Prins and Eurobonds).

And, indeed, a country like Ukraine, after trying through 1998-1999 a piecemeal market based approach to restructuring, was eventually forced to recognize that a comprehensive restructuring of its bonded debt was necessary and did actually proceed to do so in its bond exchange in the first half of 2000. Similarly, Ecuador's attempt in 1999 to discriminate between Par, Discount Bradies, PDIs and Eurobonds failed given the decision of creditors to accelerate. Ecuador was thus forced to default on all its external bonded debt and offer a comprehensive exchange offer for all these claims in July 2000 that was successfully approved in August 2000.

Finally, a difficult question is the decision of which, among the many private sector claims – bonded debt, interbank lines and other bank loans, trade credits and other short-term claims – should be restructured. Above we stressed the issues of which bonded debt claims should be restructured but have not discussed in detail this broader question. This is a most complex issue as it is likely that future financing crisis will be of a type whether large amount of all these types of claims may be at stake. A simple but incomplete answer to this question is: include in PSI all claims that are material, with a partial exception for short term claims such as trade credits that are essential to the trade and payments system. In principle both short term and long term banking contracts (i.e. interbank lines as well as syndacated loans and other medium-long term loans) as well as a broad range of short term and long term bonded debt should be included in a restructuring..

6.5. Collective Action Clauses: Are they overrated?

The arguments in favor and against collective action clauses (CACs) are by now familiar and the views on CACs of official creditors, private sector and debtors quite known. CACs were first proposed in the Rey Report as a way to facilitate the restructuring of bonded debt. Next, both the official sector in its many expressions of PSI doctrine (see Köln G7 Summit Architecture Communiqué) and academics (such as Eichengreen, Portes and many others) extolled their benefits. It was argued that the lack of such CACs would make it very

hard, if not impossible, to restructure bonds. Lack of collective representations mechanisms (such as bondholder committees, trustees and similar coordination mechanisms) would make it hard to coordinate actions of a multitude of dispersed bondholders and implement restructurings. Lack of majority clauses would require unanimity in the decision of changing the terms of the bond contract and hold a possible large majority of bondholder willing to restructure hostage to a possible miniscule minority of holdouts and vulture. Lack of sharing clauses would open up room for disruptive litigation by disruptive and litigious creditors.

The differences between bonds issues under UK law and those issued under New York law were also highlighted by many: the former had effectively collective representation, majority and sharing clauses (especially trustee bonds) while the latter did not. CACs were first strongly resisted by the private sector under the logic that they would make restructuring too easy and would thus tip the bargaining power balance in favor of debtor with the risk of making defaults more frequent (strategic opportunistic defaults based on unwillingness to pay rather than inability to pay) and thus eventually undermining new debt flows to emerging markets. On the other hand, it was argued that spreads could be higher for instruments where restructuring was very hard as the costs of necessary restructuring would be too high. Even emerging market economies were wary of CACs being forcibly imposed on their debt contracts under the concern that spreads on such instruments would be higher. Next, some academic research (Eichengreen and Mody (2000)) suggested that, actually, spreads on bonds with CACs are lower for good credit countries and higher for poorer credit countries: thus the benefits of reducing restructuring costs outweigh the risk of opportunistic default for good credits. Academics (Eichengreen and Ruhl (2000), Portes (2000)) also sharply criticized the ad-hockery of the case-by-case approach to PSI and argued that CACs would have provided a much more transparent and simple approach to all PSI problems.

In spite of these arguments in favor of CACs, recent experience with bonded debt restructurings suggests that, while CACs may be marginally beneficial, their importance and necessity has been somewhat exaggerated. Indeed, in all recent cases of bond restructurings (Pakistan, Ukraine, Russia and Ecuador) CACs have had a very marginal role. First, note that all these debt restructurings have occurred through “debt exchange offers” rather than via the use of CACs even in cases in which, as in Pakistan and Ukraine, the instruments included CACs. The use of debt exchange offers obviates the need for CACs as such an offer is voluntary and can be made regardless of the existence of majority or other collective action clauses. Thus, one can envision a system where debt exchanges are the norm and the CACs are not needed, nor used when available. CACs have had a marginal benefit only in two cases: in Ukraine, where three out of four restructured instruments had CACs, such clauses allowed to “bind-in” holdout creditors after a vast majority of bondholders (over 90%) had accepted the terms of the offer. Thus, they were used ex-post rather than ex-ante to lock-in holdouts and prevent disruptive litigation. In the case of Pakistan, where restructured bonds all had CACs, such clauses were not used neither ex-ante nor ex-post. However, one could argue that they were marginally useful as the possible threat of their use may have convinced some undecided creditors to accept the exchange offer. In Russia and Ecuador, debt restructuring were performed without any CACs as the underlying instrument did not have such clauses. But in the case of Ecuador, legal ways were found to dilute the litigation

benefits of holdouts by the use of “exit consent” amendments. Thus, worse terms were “crammed down” on holdouts via the use of these amendments.

Thus, the practice of bond restructurings so far has been one where exchange offers have been the norms and CACs have not been used ex-ante to force the restructuring even when instrument including them were available. Thus, the importance of CACs has been minor. The question is thus why CACs may not be as important and essential as it was suggested by many.

One first answer is that exchange offers allow a restructuring of bonded debt event in the full absence of CACs. Litigation risk by holdouts is an issue to be considered in these cases but experience, so far, has been that such risk has been limited for reasons to be discussed in more detail below. So, exchange offers provide a good alternative to CACs as a tool to implement bonded debt restructuring. Also, CACs can always be used in a second round if an exchange offer were to fail; so they are an instrument of second resort rather than first resort.

Second, debtors and debt agents (such as trustees) are obviously wary of the idea of using collective representation clauses (such as creditor committees) and majority clauses because they are concerned that, even just calling a meeting of bondholder creditors, may lead to undesirable outcomes. Such meetings may start a protracted negotiation process that may take too long, it may allow creditors to coordinate their decisions and take legal action against a debtor. In reality, no debtor or trustee would ever want to call a meeting of creditors unless previous market soundings and bilateral meeting with creditors have allowed these agents to figure out all the details of a possibly successful debt exchange offer. Thus, the model of debt exchanges without use of CACs - where financial and legal advisors of the debtor make broad market soundings before the offer is launched to figure out which terms will maximize the probability of a successful offer - provides a better alternative to a potentially disruptive, long-delaying formal negotiation under creditor committees and via the use of CACs.

As suggested above the model of “debt exchanges cum market soundings” has been successfully working so far and the role of CACs has been only to either provide a tool to “bind-in” holdouts ex-post or to credibly threaten their use in case an exchange offer does not work. This experience also suggest that academic critiques of the current PSI process as being ad-hoc and dominated by one with CACs are a bit off the mark. CACs are only an empty shell that may or may not help a restructuring process. They are not, by themselves, a tool that provide the answer to the complex set of questions (when, how, how much, which assets, which creditors, in which sequence) that have to be addressed when trying to restructure bonds. CACs do not provide a magic wand through which these questions can be answered and solved in practice.

6.6. Two models of the restructuring process

Some creditors have expressed unhappiness with the current process of bonded debt restructurings (i.e. the “debt exchange offer preceded by market soundings” model) in spite of the success of recent restructurings based on this model. In their view, the current process is unfair, it does not include enough of their input, it does not allow for a meaningful

negotiation with the debtor and official creditors on the allocation of the burden sharing pie and biases the negotiating power in favor of debtor, thus undermining the incentives to service in full and in time debt payments. Some (for example a group that has been meeting under the CFR umbrella) thus suggest that an alternative process should be followed in such restructurings based on creditor committees and more formal negotiations. In this alternative process, an ad-hoc group of bondholders (and possible other creditors) would be formed and a formal negotiation with the debtor would take place. Some also suggests that the negotiations should be extended to official creditors to ensure that the private sector is not a residual claimant but rather has a say on how much of the burden will be borne by private creditors compared to public creditors. To sweeten this shift in alleged bargaining power to private creditors, it has been suggested that creditors may be willing, in exchange for formal committees and negotiations, to accept a voluntary debt standstill accompanied by a legally enforceable stay of litigation.

While one should study carefully the benefits of this or other alternative restructuring processes, it is not obvious that the model suggested above makes sense and is preferable to the model of “debt exchanges cum soundings”. First, it is not clear that, in debt exchanges, too much bargaining power is shifted to debtors. In fact, such offers are voluntary in the sense that the debtor has to offer terms that maximize the probability that a large fraction (often formally over 85%) of creditors accept it. Thus, if one looks at recent bond restructuring episodes (Ukraine, Pakistan, Russia and Ecuador) one can observe that the terms of the restructured bonds have been extremely generous (too generous in the view of some) and have provided significant mark-to-market gains to creditors who have accepted such offers. Advisors make extensive market soundings before the offer is launched to figure out the preferences of creditors for the type, terms and conditions of the restructured instruments. It is thus not clear that an alternative process based on formal negotiations would provide a smaller slice of the burden pie to creditors.

Second, formal negotiations with debtors risk to drag forever and inflict “delay losses” to both creditors and debtors. A situation where debts are in default for protracted periods of time is highly disruptive to debtors as cutoff from market access, output losses and other real costs accumulate over time; such losses eventually hurt the debtor ability to pay and are thus costly to creditors as well. It is better to have a process where the negotiation time and inefficient renegotiation delays are minimized.

Third, as discussed in section 6.3, there are serious obstacles and reservations to the idea that creditors could be involved in the decision of how much adjustment the debtor should do, how much official multilateral support should be provided and how much of the sharing burden should be borne by the Paris Club creditors.

Fourth, systematic bilateral market soundings between debtors and creditors appeared to have worked fine in Pakistan, Ukraine and Russia. If anything the experience of the Ecuador Consultative Group where the debtor regularly met with a broad representation of bondholders has been criticized as unproductive and unsuccessful; it became, at times, an unconstructive forum where frustrated creditors vented their unhappiness with the slowness of the adjustment and restructuring process rather than a productive procedure to accelerate

the restructuring process. Sometimes, bilateral soundings are more efficient than large public fora where both sides posture to stake their claims.

Fifth, it is not obvious that one restructuring process provides more incentive for strategic non-payments or defaults than other ones. In the debt exchange offer model, the debtors are usually very wary of stopping payments to private creditors and would rather avoid non-payment for as long as possible as possible economic (and legal) costs of such formal default can be very high: loss of output, loss of market access, trade sanctions, et cetera. It is not clear why a formal negotiating process (especially one where standstills are sanctions and stays of litigation imposed) would provide a lower bargaining power to the debtor. It is ambiguous in theory and in practice that either process has a systematic effect on the relative bargaining power of debtors versus creditors. Indeed, some processes that would lead to delay in negotiations may actually be negative sum games where inefficient costs of delay imposed welfare losses on both debtors and creditors. Thus, a system of debt exchange with market soundings may be beneficial to all.

In conclusion, it is thus not obvious that an alternative process based on negotiations and formal creditor committees would even be in the interest of creditors. But, it is certainly worth to study alternative process schemes and improve on existing ones. For example, the current system of “market soundings” has been somewhat unstructured. Maybe, a more structured process may contribute to provide financial advisors with the information necessary to design successful debt exchanges. Also, while negotiations between private and official creditors are not realistic nor desirable, there may be ways to improve the flow of information to the private sector. Official creditors may be more clear about the PSI doctrine and its application; the Paris Club could become somewhat more transparent and explain better its procedures and terms for restructuring; the debtor country should provide information to creditors in good and bad times and keep them fully informed of economic prospects, external debt and payment stream data, economic forecasts, possible external financing problems and plans to address these problems; the IMF should have a closer dialogue with the private sector and more regularly brief investors of program developments for a debtor country with external debt servicing problems. All these would increase transparency, openness, the predictability of PSI and reduce the impression that the PSI process is arbitrary and unpredictable. Constructive ideas along these lines could improve the current system and support the cooperative goals of the PSI policy.

6.7. Lessons from recent cases studies of bonded debt restructuring

Bonded debt restructurings have occurred in the last two years following the adoption of the official PSI policy. Successful recent case studies include Pakistan, Ukraine and Ecuador. Russia successfully restructured its Prins and Ians but this was not formally part of the official PSI policy (as such restructuring were the result of country’s decision to restructure its liabilities). In Romania, PSI was attempted but eventually abandoned as the country made payment on maturing debt and then was unable to raise new money as required by the PSI components of its IMF program.

What are the lessons learned from these restructuring case studies? There are several.

1. Debt exchanges (following extensive market soundings) are a good alternative to the use of CACs or formal negotiations. In all these episodes CACs were not used ex-ante and the benefits of their existence was only the ex-post ability to “cram down” new terms on holdouts (as in Ukraine) or threaten their use (as in Pakistan). Even in the case of Ecuador, where there were no formal CACs in the restructured instruments, the legal advisor found legal ways to “cram down” new terms on the holdouts to make the old bonds less appealing to the holdouts. Note that while Ecuador’s bonds require unanimity to change payments terms, only a simple majority of 51% is required to change non-financial terms. Thus, “exit consent” clauses for those who accept the deal were used to change the terms of the old bonds and make them less appealing to potential holdouts.

2. All these deals provided mark-to-market gains to investors as the terms of the deals were quite generous and inclusive of various sweeteners. Such sweeteners included generous terms, informal upgrade in the seniority of the claims (in Russia) and substantial upfront cash payments (Ukraine, Ecuador, Russia). Indeed, one could argue that such deals were often too generous to investors as they led to sharp mark-to-market gains relative to the pre-deal prices of the restructured bonds. Such gains were equivalent to over 20% for Ukraine, 32% for Russian Prins and 18% for Russian Ians, 3.5% for Pakistani bonds and averaging over 30% (based on the jump in the price of Bradies, PDIs and Euros after the deal was announced) for the case of Ecuador. One could argue that the sweeteners in these deals were generous in order to avoid litigation but one could still argue that the deals were too generous.

3. The reasons for the mark-to-market gains after the deals were announced are not fully clear. Some argue that the gains were due to better than expected (more generous) terms but, if a country’s debt price depends on its ability to pay, it is not clear why unexpectedly generous terms should affect that price. Some explanations are: a. a better than expected deal signals something about the country’s desire to do more adjustment than otherwise or more commitment to attempt to keep the new payment profile (as debt prices depend not only on the ability but also on the willingness to pay); b. the deal implies that the official bilateral creditors will bear a greater burden and the private sector will thus bear a smaller burden; c. the new instruments have or are perceived to have a greater seniority than other instruments; again, this makes sense only if official creditors or other private creditors not in the bond deal are worse off as a consequence of the deal; d. the upfront cash in most of these deals (very significant in the Ecuador one as the principal collateral was to be released to creditors) was a positive surprise that effectively gives senior payments treatment to investors who took the deal; i.e. cash today is much more valuable than a promise of payments down the line; so, whoever gets cash first does so at the expense of future other creditors (official ones?) that are likely to be hurt by the deal. Thus, in most cases, the jump in price signals a deal that makes some creditors better off most likely at the expense of official creditors.³⁸

³⁸ Another reason for the jump in price is that the debt exchange aligns the incentives of the government with those of the creditors by giving to resolve the debt crisis and allow the country to grow again rather remain stuck in a bad equilibrium where the debt burden is too high, the country does not adjust and grow and it is thus not even able to make some debt

(continued...)

4. It is not obvious that in all cases medium term debt sustainability has been restored. For cases such as Pakistan or Ukraine where the overall external debt burden was not unsustainable (i.e. the country was not insolvent), a restretching of payment terms allowed to avoid the payment humps and, subject to economic reform, the debt profile may be sustainable. Similarly, the default by Russia and semi-forced restructuring of its external and domestic debt is likely to have put the country on a path of solvency. The same may not be said of the Ecuador deal that appears excessively generous to creditors. Even after the deal is concluded and even assuming the most optimistic scenarios for domestic adjustment, the country will end up in the medium run with a debt to GDP ratio of around 100% and debt to exports ratio and debt to government revenues ratio that are well above HIPC criteria for significant debt reduction. While the country's GDP does not allow it to qualify for HIPC relief, it is disturbing that the country will remain with debt ratios that are patently unsustainable. Moreover, considering that the assumptions about fiscal adjustment and trade balance adjustment embedded in the IMF program are the most optimistic in terms of intensity of the country's policy adjustment, any slippage in performance will make such ratios much worse. One could argue that the country has only delayed for a few years its debt servicing problems and further debt restructurings will occur as the current debt profile keep the country insolvent.³⁹

5. As the failed experience with PSI in Romania suggests, attempts to expect "new money" at below market rates from creditors as a form of PSI do not work if the country has lost market access and is allowed to make large debt payments that are coming to maturity. In 1999, Romania facing \$720 m of payments on maturing instrument was allowed to use dwindling reserves to make such payments under the condition of raising 80% again in new money (\$600 m). Once the payment had occurred, the country lost any leverage (non payment threat) over creditors and the IMF/G7 lost their leverage over the country. The subsequent attempt to raise \$600 were sequentially diluted in the face of the country lack of market access; thus, eventually the IMF waived the PSI requirement in an obvious failure of PSI policy for that country.

The country then bore the consequences of its decision to make the payments on its external debt. The domestic adjustment was deeper than necessary with output falling in 1999 and early 2000 more than needed. Thus, the subsequent build-up of reserves depleted by the large 1999 debt payments was made at the cost of a substantial and sharp contraction of imports that was feasible only with an excessively large contraction of output. Thus, the unwillingness of the country to restructure its external debt (that was sustainable in terms of

servicing payments. In other terms, one could explain the reduction in spreads after the exchange with a multiple equilibrium model where the exchange allows the economy to go from a bad equilibrium to a good one.

³⁹ This assessment that the Ecuador deal keeps the country in a state of insolvency is shared by some market participants; see Goldman Sachs Emerging Market Daily Comment, July 1998, 2000.

its size but characterized by a very lumpy payments profile in the short run) was a mistake that was paid for with high real costs.

Thus, while official PSI doctrine rightly suggests the official sector should never “force” a country to get into a non-payment but should rather make clear to the country the consequences of continuing to pay when restructuring may be warranted (i.e. payments will imply a greater amount of domestic adjustment, not greater amounts of official support), in reality countries may still take mistaken decision that are quite costly and such decision may, eventually, shift some of the debt burden on official creditors (if official support is effectively directly or indirectly greater or if the terms of the IMF program become effectively more lax to allow breathing space to the country).

Therefore, finding appropriate ways (short of pushing the country not to pay) to incentivate the country to take a restructuring route, rather than pay and hope for the better, need to be found. In the dynamic game between debtors, private creditors and official creditors, it is always the interest to the first two groups to maintain payments to private creditors in full and on time and shift the adjustment, financing and relief burden to the official creditors. This coalition game is not just “unfair” but it reinforces moral hazard that distorts lending and borrowing decisions; thus appropriate ways to limit it have to be devised.

6. The official sector and the IMF should make extra efforts to ensure that the debt exchange are not excessively generous to the private sector. The financial terms of these deals, the amount of upfront cash, the upgrade in seniority terms, the implications for medium term sustainability should be more carefully assessed to decide whether such deals are appropriate. The system of incentives and the financial interests of advisors and debtors are distorted in a direction of deals that may be too generous (as proven by the jump in prices of the old debt in all recent exchanges) and jeopardize official sector claims. Financial advisors have principal-agent conflicts of interest: they are interested in deals that are more generous because such deals maximize the probability of success (reduce deal risk), increase their fees and commissions that are conditional to a successful deal, reduce the burden sharing burden for the buy-side of their firms (that hold the old bonds) while the sell-side is involved in pushing through the new bonds.

Thus, while the official doctrine properly suggests that the official sector should not “micromanage” debt restructuring, some early and systematic way to assess whether a deal is appropriate should be reinforced. The current system of checks and balances is sound but not yet ideal with a somewhat greater amount of official monitoring of the deals probably required. It is true that the generosity of the deal may be at times required to ensure its success: in Ukraine, up to 100,000 creditors were to be convinced to get the new bonds; in Ecuador, upfront cash, on top of the collateral release, was necessary to incentivate PDI and Euro holders as such claims did not have collateral; upgrade of seniority made the Russian Ians and Prins deal more palatable to creditors; et cetera. The issue is rather the extent of these sweeteners: the jump in the price of restructured bonds suggest that, at times, they may have been excessive.

7. Debt reduction, in the form of face value reduction should be applied only to cases (such as Ecuador) when the assessment that the country may be insolvent can be sensibly made. In other cases (Ukraine, Pakistan, Romania) where it is not clear whether the country is

insolvent or rather facing illiquidity given lumpy payments coming due, a rescheduling/restructuring may be more appropriate. Even in such cases, the restructuring will imply some NPV reduction of the debt as interest rate and principal payments will be rescheduled at rates that are below current market rates. Thus, some real debt reduction will occur and does occur even in cases in which face value reduction is not formally performed. As official bilateral claims are also rescheduled at rates that do not truly reflect repayment risk, PC debt is also subject to effective NPV reduction even if it is formally not written down. Comparable treatment of official bilateral and private claims is thus possible only in approximate terms as exact comparability is hard to define. In this regard, the Pakistan exchange appears as broadly comparable to the PC deal. Other cases cannot be assessed as private claims rescheduled has preceded Paris Club rescheduling.

8. While a normal/standard restructuring sequence would have seen, as in the 1980s, an IMF program being followed by PC rescheduling of official claims followed by London Club rescheduling on comparable terms of private claims, only the Pakistan deal followed this sequence. In the other cases (Ukraine, Russia, Ecuador and, possibly Nigeria in the future), the IMF program was followed by debt exchanges of private claims with PC rescheduling to follow next. This reverse sequencing complicates the application of the comparability principle and may create strategic incentives in the private sector to “impose” “reverse comparability” or to stake ex-ante limits to the amount of private sector burden sharing. This reverse sequencing also confirms the need for a case by case approach as simple rules even for the sequencing process (such as a debt exchange to be following PC rescheduling), appear to be difficult to implement given the recent case history.

9. Differences among classes of creditors and conflict of interests among them have to be addressed. Short-term investors (such as highly leveraged institutions, hedge funds, vulture funds and other similar players) willing to buy distressed debt at low market prices have received hefty returns when, following exchange offers, the price of debt has rebounded. Longer term investors, such as real money funds, asset management firms and other investors with longer term horizons, have at times disposed of their holdings of distressed emerging market debt when restructuring became likely and prices of such debt have plunged. While having short-term investors who bought low and who obtained significant capital gains made the chances of a successful exchange deal more likely as such investors obtained significant mark to market gains, the losses incurred by more dedicated and longer horizon investors on their holdings of emerging market debt may reduce the core longer term demand for this class of debt and lead to lower flows and higher spreads for this category of debt. Official policy should thus be careful not to negatively affect the longer term prospects for emerging market debt.⁴⁰ These conflicts of interest among creditors is also one of the reasons why the model

⁴⁰ Some longer term investors (such as mutual funds and pension funds) are often forced by their covenants to sell distressed debt. Hence, they are not allowed to wait and stick around for a restructuring. Hence, they will tend to sell to vulture investors. A policy initiative would be to perhaps reduce that kind of automatic sell-off mechanism that unfortunately hurts “good” long-term creditors as well as the system as a whole.

of creditors committees may as a way to restructure debt may not work: such creditors may have very different interest and agendas and the collective action problem of finding a common creditor position may be as difficult as the problem of negotiating with the debtor. Also, serious issues about whether Chinese walls are too leaky in a world where mark-to-market investors are buying and selling distressed debt may limit the possibility of having a representative creditor group; the actual composition of the holding group may change due to trading; also, some investors may be actually shorting the distressed debt rather than holding significant long position in the asset.

10. Litigation risk has been, so far, limited. Acceleration and cross-default occurred in the case of Ecuador but no legal action was taken by creditors to enforce their rights. The usual limits to litigation were at work: it is costly, it takes a long time, debtor assets are relatively hard to attach (even in cases, such as Nigeria, where the waiver of sovereign immunity is quite broad). Also, CACs have been successfully used to bind-in holdouts, cram down new terms on such dissenting minorities and dilute their potential legal claims even in cases, such as Ecuador, where their ex-ante availability was quite limited. Also, the generous terms of recent exchange offers, together with the sweetener of significant upfront cash, has effectively helped to bribe possible holdouts.⁴¹

In the absence of “exit consent” clauses in the new bonds or ex-ante clauses that allow to bind in ex-post potential holdouts, the debtor has to decide how to deal with such holdouts. A credible threat not to provide holdouts with better terms than an those of the exchange offer is the only way a debtor can ensure that the offer will be accepted; otherwise many creditors would be better off waiting and trying their luck. Once the offer has been successfully accepted by the minimum threshold of the deal (a minimum 85% acceptance rate for the Ecuador case for example), the debtor has to decide whether to keep its threat and risk litigation or whether it is better to appease the holdouts and pay them on terms that will lead them to settle. The former solution makes sense to ensure that the ex-ante threat is not time inconsistent; otherwise, the game would unravel at the next debt restructuring episode. But buying off some marginal holdouts may, at times, be better than engaging in costly and lengthy litigation.

7. Sweeteners and credit enhancements in PSI: creating value out of thin air or redistribution of value?

As we discussed in the previous section, various types of sweeteners and credit enhancements have been part of recent restructuring episodes.

In general, sweeteners that provide effective seniority to the new bonds should be strongly discouraged. Such deals create different level of formal or informal seniority among private claims that negatively affect other claims (be it private or official) that do not have the same features. As a country’s ability to pay, while uncertain, is certainly given, there is no

⁴¹ A useful role of CACs (and the ex-ante threat of them) is to reduce the size of the sweetener needed and thus enhance medium-term viability.

free lunch here and any provision of greater seniority to some claims comes at the cost of less seniority for other claims. This burden shifting game, often at the expense of official creditors claims, is not only unfair but it also distorts debt flows. Deals in which new claims are provided collateral in the form of future exportable receipts are particularly egregious and may not be legal (as they may clash with “negative pledge clauses” in World Bank and MDBs loans). They are a clear case of burden shifting that is not justifiable. Milder forms of seniority upgrades (such as the sovereign taking responsibility for claims of semi-sovereign entities) are also unappealing. Other seniority upgrades are embedded (or hidden?) in the fine print of the new bonds. The Ecuador’s deal reinstatement of original principal (i.e. recession of the haircut on principal payments) in case the new bonds are restructured down the line is an example of this cryptic attempt to drive seniority into new instruments.

The arguments forwarded to justify such reinstatement clauses (and general seniority upgrades (i.e. it is unfair that instruments that have, as Bradies, already experienced two haircuts, should experience a third one) are quite weak. First, investors that want to lock in the value of the new bonds (inclusive of any mark to market gains) can do so by selling these new bonds at current market prices; holding them over time implies accepting the credit risk (potential gains and losses) embedded in the underlying claims. Second, as long as such new instrument trade at significant spreads over risk free assets, it means that they are not risk free or senior relative to other instruments; if they were treated as effectively fully senior they should trade at risk free rates (or at some positive but lower spread if they are more senior than old claims but not fully risk-free). Third, creating degrees of grayness with some restructured claims being informally more senior (but not fully risk free) than other private and public claims adds only to confusion, lack of transparency and predictability of the claims. Either new claims have clear collateral (as Bradies had) and whatever seniority is embedded should be formally agreed upon so that absolute and relative pricing of different claims can be clearly made. Otherwise, one risks of creating a new system of pseudo senior claims that adds to the pricing uncertainty and unpredictability of the system of debt flows to emerging markets.

Apart from the issue of sweeteners in bonded debt restructuring cases, there is a broader question of whether credit enhancements should be used as part of PSI policy. Recent cases, such as the Thailand EGAT loan and the World Bank policy of “policy based guarantees” recently applied to Argentina’s loans, open up the question of what the scope and breath of such guarantees should be. A related issue is the one of MDB’s B-loans that have preferred creditor status; the status and scope of these loans should also be a matter of discussion even if they do not directly related to the PSI issue.

More generally, some - like Corrigan (2000) - have suggested that credit enhancements and broad guarantees should be used as an alternative to large official packages of money. In principle, if one wanted to avoid large official packages and minimize the use of semi-coercive PSI scheme, one could think of a world where countries, subject to a run or whose currency is under pressure, could get temporary loans from the private sectors that are guaranteed by the official sector. This, in Corrigan’s view, could be a useful alternative to PSI and big official packages. It is, however, not clear whether this solution is truly different from a large official package. Conceptually, there is little difference between

the IMF directly borrowing from its official shareholders resources at risk-free rates and lending them in big packages at approximately risk-free rates to a country in crisis and having instead the private sector lend the same amount of money to the country in crisis under a full guarantee of the loan. The latter scheme is no different, for all practical purposes, from one where the official sector/IMF is directly lending these resources. Such guarantees may thus be just a shell game that implies lots of official resources lent to countries in crisis. As long as there is political opposition to big money, the same resistance to big packages can be expected to emerge for such, equivalent, guarantees. If the country is facing serious adjustment problems, not just a pure liquidity shock, there is some repayment/default risk (as well as possible moral hazard distortions) and this risk is going to be the same regardless of whether the funds are directly lent by the IMF/official sector or, indirectly equivalently lent, via credit enhancements.

So a widespread use of such credit enhancements does not seem to be a sensible way to either involve the private sector (there is no meaningful PSI in this case) nor of minimizing the burden borne by the private sector. At worse, the perception that there may be here a free lunch (that does not truly exist) may imply significant implicit liabilities for the official sector that would emerge when a debtor country that enjoyed these enhancements faces debt servicing difficulties. Thus, extreme care should be used in using such guarantees and enhancements.

The broader conceptual question is whether such enhancement provide any “value” to debtors beyond the direct benefit/transfer to the debtor deriving the implicit subsidy involved in the guarantee. It is not obvious that this is the case. For example, take a private loan that is enjoying a partial guarantee (such as a rolling interest rate guarantee as in the EGAT case). Conceptually, investors should price this loan correctly; the component that is guaranteed will have a value equivalent to a risk free loan while the uncollateralized/unguaranteed part should have a “stripped” spread equal to that of other unguaranteed loans to the debtor. Thus, while the loans provides a financial benefit to the debtor, the subsidy value of the guaranteed part, there is no extra value created here. The private sector could have, as well, given the debtor a loan that was not guaranteed at all and the official sector could given the debtor a grant equal to the subsidy value of the guarantee. The guarantee cannot create extra value beyond this subsidy/transfer. Some argue that value can be created in these enhancement but the arguments are either dubious or right for the wrong reasons.

The argument that is often made to justify such enhancements is that, while the guarantee is limited to only part of the cash flow (say a rolling interest payment), the “halo” of the official creditor (an MDB or the World Bank) who is providing the guarantee will fall on the entire loans; as a “pixie dust” effect, the spread on the uncollateralized component of the loan will also be reduced as it is unlikely that the debtor would want to default (and thus trigger the guarantee) on the payments that are guaranteed. The “halo”/ “pixie dust” effect is, most likely, as imaginary as a holy “halo”. First, Brady Bonds did not benefit of such halo for the uncollateralized component of their payment stream. Second, the pricing of the Thai EGAT loan suggests that the halo effect was miniscule: the spread on the uncollateralized

part of the loan was not significantly different from that on other non-guaranteed Thai borrowings. Thus, there is little evidence that such enhancement provide value.

Finally, there may be an indirect channel through which “value” is created but, if so, this is a distortionary and moral hazard-biased channel. The non-enhanced component of the loan could have a lower (stripped) spread than that on other non-guaranteed instruments only if investors truly perceived the instrument to have lower repayment/default risk than other instruments because of the official sector “halo” on the enhanced component of the loan. But if this is the case, the holders of the non-guaranteed part of the partially guaranteed loan benefit only because this relative seniority occurs at the expense of other creditors, those holding non-guaranteed claims. Thus, again no real value is really created: you only get a transfer of value from some creditors to others. Regimes where such fuzzy hierarchies of seniority are created are not efficient nor desirable. If relative seniority has to be provided, it should be explicit with clear collateral or definition of the position of the asset in the pecking order of claims, not implicit and couched in “halo” effects. Otherwise, incentives are distorted, transparency reduced and creative financial engineering used to stake seniority.

The above arguments are not necessarily a critique of all credit enhancements. In a situation where the risk of a liquidity run is existing, official money, either directly or indirectly through private loans that have guarantees may improve welfare by avoiding self-fulfilling runs not justified by fundamentals. Thus, enhancements may not imply any subsidy cost to the official sector when they prevent avoidable crises. But in those cases, the optimal choice is a large package of official money; the alternative of a fully guaranteed loan is not, in any substantial terms, different from the big official package. Thus, if political constraints and resistance to official money exist they will for both the first and the latter scheme. And, in cases in which the enhancement does provide some subsidy to the debtor, such transfer/grant of official resources may be justified at times but should not be provided under the pretense that it is anything but a subsidy/transfer. Attempts to create “halos” may cause greater distortions than the benefits they are aimed at generating.

Similar concerns can be expressed for debt restructuring deals where some of the cash flow payments are collateralized with some future foreign currency resources of the country (such as future oil receipts or other export receipts). Such deals do not increase the creditworthiness of the country as the ability to pay depends on the country’s debt relative to its assets inclusive of the discounted values of any future stream of foreign currency receipts. They do only shift seniority to those creditors who get such deals at the expense of other creditors (both private unsecured or official creditors). These collateralized deals may also be in contradiction with “negative pledge clauses” on World Bank and other MDBs loans. Thus, collateralized deals do not usually create value but they just redistribute it among creditors: since the average sovereign spread on a country depends on its ability to pay, reducing the spread on some instrument by collateralizing them means that the spread on other instruments that have become junior relative to the collateralized ones will go up with the average country spread remaining unchanged. Thus, one should be wary of schemes that just redistribute claims among creditors in arbitrary ways with no overall benefit for the country.

8. Insolvency and illiquidity

8.1. Conceptual issues

To decide whether a country may need debt reduction (or debt rescheduling that effectively implies some NPV reduction of the debt) or not (or how much debt reduction/restructuring) requires assessing whether a country suffers of a solvency problem or a liquidity problem. In the former case, debt reduction may be necessary to achieve a sustainable medium term path for the external liabilities of a country. In the latter case debt reduction may not be necessary; instead, debt rescheduling/restructuring may be sufficient – together with policy adjustment and some official support - to provide a sustainable medium-term profile for the debt of the country. Indeed, the official PSI framework stressed the importance of medium term sustainability of the debt profile as a guiding criteria for the amount of PSI; it requires to “put strong emphasis on medium-term financial sustainability, with the IMF determining the appropriate degree of economic adjustment required by the country and the IMF and the country agreeing on a financing plan compatible with a sustainable medium-term payments profile.”

In general, there is no simple rule that can help us determine when foreign debt accumulation is sustainable or not, i.e. whether a country suffers of a solvency or liquidity problem. However, there are a number of criteria that ought to be used in assessing the sustainability of the foreign debt of a country. Here, we will discuss various indicators that can be used to assess whether a particular foreign debt accumulation and current account deficits are sustainable or not.

The analytical literature on current account and foreign debt sustainability provides a useful starting point. A theoretical criterion for foreign debt and current account sustainability is not particularly stringent because the intertemporal budget constraint of a country imposes only very mild restrictions on the evolution of a country's current account and foreign debt. As long as the discounted value of the country foreign debt is non-zero in the infinite limit, the country is solvent; this means only that the country cannot increase its foreign debt faster than the real interest rate on this debt. Subject to this constraint, any path of the current account such that the infinite sum of all current accounts is equal to the initial foreign debt of the country is consistent with solvency. A country could run very large current account deficits for a long time and remain solvent as long as there are surpluses at some time in the future. The solvency constraint also implies that the stock of foreign debt of the country can increase without limit as long as it does not increase faster than the real interest rate. If the real interest rate is greater than the rate of growth of an economy, solvency is consistent even with a foreign debt to GDP ratio that grows continuously over time. The intertemporal solvency criterion does however impose some limits on the behavior of trade balances. Such solvency constraint implies that the discounted value of trade balances should be at least equal to the initial foreign debt of the country; if a country is initially running a trade deficits and has a stock of foreign debt, it needs to run trade surpluses over time to remain solvent.

Similar conceptual difficulties in determining solvency emerge when one considers whether a country's government, rather than the country as a whole, is solvent, i.e. whether the (domestic and foreign) public debt of a government is sustainable or not. This is important because, in practice, a large fraction of the foreign debt of a country may be government debt and debt reduction will often, in practice, take the form of a reduction of the debt of a government. Again the theoretical criteria for government solvency are quite loose. Specifically, as long as the discounted value of the government debt is non-zero in the infinite limit, the public sector is solvent; this means only that the government cannot increase its debt faster than the real interest rate on this debt. Subject to this constraint, any path of the fiscal (cum interest) surpluses/deficits such that the infinite sum of all fiscal balances is equal to the initial debt of the government is consistent with public sector solvency. The stock of public debt could increase without limit as long as it does not increase faster than the real interest rate. Again, the intertemporal solvency constraint does impose some limits on the behavior of the non-interest fiscal balance (i.e. the primary fiscal balance). The solvency constraint requires that the discounted value of primary balances should be at least equal to the initial public debt; if a government is initially running primary deficits and has a stock of initial debt, it needs to run primary surpluses over time to remain solvent.

Given the looseness of the theoretical criteria for solvency and sustainability, it may be more reasonable to recur to more practical criteria for sustainability. In fact, a dynamics of the current account that leads to an increase without bounds of the foreign debt to GDP ratio can be seen as being effectively unsustainable: the financial markets will eventually get concerned about the country's ability and willingness to repay its debt and will limit its borrowing leading to a foreign debt crisis. Therefore, *a non-increasing foreign debt to GDP ratio* is seen as a practical sufficient condition for sustainability: a country is likely to remain solvent as long as the ratio is not growing. This criterion is related to the "resource balance gap". In a country where the debt to GDP ratio is growing, the gap is the difference between the current trade balance and the trade surplus required to stabilize the debt to GDP ratio. Such a required trade surplus will be larger the bigger are the debt to GDP ratio and the differential between the real interest rate and the growth rate of the economy. In considering the resource gap, one should look not at current levels of real interest rates and GDP growth rates but rather at their medium/long-run levels, i.e. stabilization of the debt to GDP ratio should be considered in a medium term perspective, not a short term one.

Note also that movements of the real exchange rate and terms of trade shock importantly affect the debt dynamics. Specifically, a real depreciation of the currency leads to an increase in the foreign debt to GDP ratio (as it increases the real value of foreign currency denominated liabilities of a country) and will worsen the debt sustainability of a country: i.e. a larger trade surplus will be required to stabilize the debt to GDP ratio when a real depreciation increases the debt to GDP ratio. Similarly, a negative terms of trade shock (a fall in the relative price of the exports of a country) will also lead to an increase in the debt to GDP ratio (as it reduces the real income of the country) and will thus require a larger trade surplus adjustment to avoid an unsustainable increase in the debt to GDP ratio. Note, however, that while a real depreciation increases the stock for debt (relative to GDP), it may

also improve the external balance (especially if the traded sector is large relative to GDP) and does help to improve sustainability.

A similar practical criterion can be used to assess the sustainability of public debt: public debt can be viewed as sustainable as long as the public debt to GDP ratio is non-increasing. In a country where the public debt to GDP ratio is growing, the fiscal “primary gap” is the difference between the fiscal primary balance and the primary balance required to stabilize the debt to GDP ratio. Such required primary surplus will be larger the bigger are the public debt to GDP ratio and the differential between the real interest rate and the growth rate of the economy. Real depreciations and terms of trade shock impact this public debt sustainability in ways that are similar to those of the foreign debt of the country as a whole.

While the “practical criterion” for foreign and public debt sustainability provides as useful benchmark (i.e. debt is not sustainable if its ratio to GDP is growing over time without bounds), it does not directly provide a tool to assess whether a certain stock of debt is sustainable or not. As long as the debt ratio (to GDP) is stabilized over the medium term, it is sustainable regardless of its level; i.e. a debt to GDP ratio of 150% is as sustainable as a debt to GDP ratio of 50%. While the practical criterion provides a normative rule (how much a trade surplus or primary surplus is required to close the resource or primary gap), such debt stabilization goal may not be realistically achievable if the initial level of the debt is too high; in that case, the country/government may not be able to close the resource/primary gap over time and debt reduction may be required. In other terms, the initial debt to GDP ratio may be so high that, given the expected long-run values of real interest rates and growth rates, the trade surplus or primary surplus required to achieve debt ratio stabilization may not be economically and/or politically sustainable. For example, foreign debt may be so high and the interest rate on it so large that the country may be unable to have a trade surplus large enough to service such debt in a way that stabilized the debt ratio. Achieving the required trade surplus may imply a draconian cut in domestic private consumption or government consumption (public services) or private investment that may not be economically/politically feasible. Similarly, achieving the required primary surplus that stabilizes the public debt ratio may imply a draconian cut in government spending or increase in public revenues that may not be economically/politically feasible.

Another way to consider the same problem is to note that a country may be able to achieve (via a draconian policy effort to squeeze resources for debt service) a medium-term stabilization of the debt ratio. However, if the initial debt ratio is too high, the achievement of such a goal may be so costly (in terms of the future growth rate of the economy and the effort required to service the debt) that the country should be allowed to get some debt relief so as to allow it to sustain investment and long-term satisfactory growth (i.e. milking a denourished cow to the extreme may leave the poor animal comatose for the long haul). Again, in this case it makes sense to provide some degree of debt relief (debt reduction) to allow the country to emerge from the burden of an unsustainable debt.

8.2. Inability to pay versus unwillingness to pay

When considering the issues of solvency, one should also be careful to distinguish between “inability to pay” versus “unwillingness to pay”. As the theory of sovereign debt clearly suggests, the latter is an important issue. The latter phenomenon, i.e. strategic defaults and opportunistic non-payments, can be avoided via intertemporal and static market discipline. Punishments include trade sanctions, cutoff from lending in international capital markets and the output costs that creditors can inflict on defaulting sovereigns. Indeed, some punishment should be, and is, in the system to avoid strategic defaults. Some (Dooley (2000)), however, go as far as arguing that the rationale behind PSI policy and IMF’s lending into arrears policy is faulty as it will reduce the costs of strategic defaults. In Dooley’s view, the output costs of default are the only meaningful punishment that prevents default in a world where the IMF or other agents cannot distinguish between non-payment due to inability to pay and non-payment due to unwillingness to pay. In his view, anything that reduces such debt renegotiation costs and make it easier to restructure sovereign debt (such as CACs, IMF lending into arrears, official sanctioning of defaults) will make the current system of international capital flow more inefficient and will cause a reduction in the flows of capital to emerging market. Dooley’s basic point (there must be costs to opportunistic default) is sensible but the argument is taken to the extreme in ways that are not sensible. First, some countries will stop paying because of inability to pay; thus, in these cases it is in the interest of both the debtors and creditors to renegotiate the debt contract and restructure/rollover/reduce the debt. Making it very costly to do this restructuring will only hurt both creditors and debtors. Thus, a system where the output punishment is as high as possible and the renegotiation costs are as high as possible is not efficient or desirable. Second, in case of pure liquidity runs, there is a collective action problem that needs to be solved. Part of the solution (that is welfare beneficial to all) can be at times concerted rollovers of short term debts that are coming to maturity. Thus, a system where the costs of renegotiating debt claims and making reschedulings/rollovers is prohibitively high is also going to be welfare inferior to a system where renegotiation is possible. Thus, the optimal system is one where the tradeoff between the need to avoid strategic default (via punishments) and the need to renegotiate efficiently contracts when liquidity runs or insolvency require so is rightly balanced. A system where the costs of renegotiation are too high is obviously inefficient and of no benefit to either debtors or creditors.⁴²

8.3. Some Indicators to Assess Insolvency versus Illiquidity

The discussion above suggests that it is not easy to distinguish in practice between insolvency and illiquidity. Also, debt sustainability and solvency are inherently dynamic concepts. A country that may look today as insolvent may not be so at some future date. For example, a country exporting primary commodities (such as oil) may appear insolvent when

⁴² Note however that Dooley’s arguments have greater importance if one believes that debtor moral hazard (especially the effects of government guarantees on the local financial system) is a serious problem.

the price of such commodities is depressed but may be solvent if commodity price will increase again on a sustained long-term basis. Similarly, economic reforms and fiscal reforms in a previous “basket case” country may lead to higher long-run economic growth and restore solvency of the country and its public sector. Given the uncertainty about future external and domestic shocks, about the possibility of growth enhancing policy changes and about political and institutional changes that may or may not occur, it may be hard to assess whether a country is insolvent.

One approach is to rely on traditional indicators of external and domestic debt sustainability. For what concerns external debt, various authors and suggested alternative criteria such as external debt to GDP, external debt to exports, debt service to GDP, debt service to exports. For the public debt, indicators such as public debt to GDP, public debt to government revenues, debt service to GDP, debt service to government revenues have been proposed. Market prices of the value of the external debt of a country also provide a measure of market perception of the likelihood that a country may not pay in time and in full its external liabilities.

Each one of these indicators has some benefits and drawbacks that have been extensively discussed in the literature. In practice, assessing solvency is an “art” that requires considering a very broad range of indicators, factors, forecasts about likely future policy events and shocks in a country.

In practice, a careful analysis of a country and its medium terms prospects may lead to a reasonable assessment that the country may be insolvent under sensible scenarios. In making this assessment, one can consider previous average historical values of key variables (such as GDP growth rates, trade and current account balance balances, fiscal deficits, interest rates, non-debt creating capital inflows such as FDI) to project how much resources will be likely available to service the interest payments on the debt (under the assumption that principals will be rolled over). Then one can compare the expected resources likely to be available to service interest payments with actual interest payments coming due in the medium term. If there is a significant shortfall of resources relative to payments due, this suggests that the problem is not just one of liquidity (as the exercise assumes that principal payments are rolled over) but rather one of solvency.

Indeed, the official PSI policy is aware of this practical difficulty to assess solvency and the medium term sustainability of a debt profile. It thus suggests that “the IMF's assessment of a country's underlying payment capacity and prospects of regaining market access, informed by the country's economic fundamentals, payment profile, history of market access, and the market spreads on its debts. All programs will need to include analysis of the country's medium-term debt and balance of payments profile, including a section explaining the assumptions taken about the sources of private finance.”

In this regard take, for example, a country such as Ecuador. According to the above criteria, the medium term sustainability of the debt of the country in 1999 was highly unlikely and the country looked like it was insolvent.⁴³ Note also that:

- over 40% of the public budget was used to service the debt of the country.
- the country had been buffeted over and over again by a series of negative shocks to the price of the commodities it is exporting; while the price of oil may go up again in the future is likely that it may fall again somewhere down the line.
- the banking crisis that enveloped the country in 1999 implied a further sharp increase in the implicit public sector liabilities associated with the need to need to rescue the banking system; such fiscal cost of a banking system bailout may turn out to be over 20% of GDP.
- the degree of debt relief that the country obtained in the early 1990s via the Brady plan was very modest and did not significantly reduce the debt burden of the country. Debt indicators thus did not improve much and, instead, worsened, over time.

The overall consideration of a broad range of economic indicators thus suggests that the country was insolvent, rather than being illiquid. Thus, reduction of the face value of the debt appeared be warranted to restore the medium term sustainability of the debt profile of the country.

9. Concluding Remarks.

The development and application of the PSI policy in the last few years has not led to the dire consequences and apocalyptic “the-sky-will-fall” outcomes predicted by some a couple of years ago. Not only the international capital market has not been destroyed; but also there is no evidence that the flows of debt (and their pricing) to emerging markets have been affected by this policy in ways that are undesirable. Moreover, a combination of official money and appropriate PSI allowed to minimize the cost of crises in a number of large systemic countries and thus supported their rapid resumption of economic growth. Also, moral hazard distortions have been somewhat reduced and there is evidence of healthy greater discrimination by creditors between better and worse sovereign debtors: average spreads do not seem to have been affected by PSI while the distribution of such spreads appears to be more reflective of underlying credit/repayment risk. Finally, several cases of bonded debt restructuring have been successfully implemented even in the absence of an ex-ante use of collective action clauses.⁴⁴

⁴³ The assessment of the likely insolvency of Ecuador was shared by some private sector participants. See, for example, the recent July 1999 report by JP Morgan on Ecuador. This assessment was next shared by many other private sector analysts.

⁴⁴ There are still lingering questions of whether these debt exchanges are sustainable in the medium-long run. Pakistan may need further restructurings; same thing for the case of Ukraine. In Ecuador, the deal was very generous to creditors and the solvency of the country

(continued...)

The official PSI framework provided a reasonable balance between the need for rules (to reduce uncertainty and unpredictability of policy) and the need for discretion to deal appropriately with each individual and complex case study. The overall balance of principles, criteria, consideration and tools in a PSI framework where a case-by-case approach has been shaped by basic principles and operational guidelines seems, so far, to have provided the right tradeoff between rules and discretion. Maybe, over time, case history will allow the development of clearer rules even if, some degree of constructive ambiguity, may remain a desirable component of a efficient PSI regime.

Many complex issues are still to be addressed both in the “liquidity” cases and the “insolvency” cases. They are difficult, complex and not prone to simplistic answers and solutions. But the overall PSI strategy in the 1990s has been successful in ensuring that the flows of capital to emerging markets continue to be the main source of finance to such countries while not being distorted by expectations of systematic bail-outs of investors.

Such PSI policy may lead to endogenous financial engineering to create new classes of claims that are not as easily restructurable. In the 1990s, the emergence of interbank loans and bonded debt was partially – but only partially- the result of the bail-in of syndicated loans in the 1980s. Similarly, one can expect that new structured instruments embedded with complex derivative features may emerge as a strategy to avoid the bail-in of current debt instruments.

But there are limits to how this PSI-avoidance process can go. At the end of the day, a country’s repayment ability depends more on its “ability to pay” than its “willingness to pay”⁴⁵ as there are enforcement mechanisms (reputation and market discipline and punishment) to reduce the risk of opportunistic default. Thus, if a country will face debt servicing problem because of either an unsustainable debt burden or a profile of burden that is incompatible with short term liquidity resources, some rollover, restructuring, rescheduling or, at the extreme, reduction of the debt payments will become necessary and will not be avoidable, however sophisticated the new instruments are.⁴⁶ Such instruments may shift the burden from some sheltered creditors to others (and the official sector need to be vigilant that their result is not to shift the burden to the official sector in ways that are distortive of efficient flows and undesirable) or they may just make the costs of renegotiating debt claims higher and thus make more difficult and more delayed such restructurings.

may not have been restored. In Russia, medium term debt servicing prospects will depend on market reforms, growth prospects and the price of oil.

⁴⁵ See section 8.2 for a more detailed discussion of the implications of inability versus unwillingness to pay.

⁴⁶ It is however true that debtors and creditors may have strong incentives to create complex structured instruments that make claims de-facto senior and make restructuring very difficult. One saw examples of this in the case of Ukraine and more of such schemes are certain to emerge.

As long as the debt servicing problems derive from true inability to pay or avoidable liquidity humps that lead to liquidity runs, a system that makes it harder to restructure debts is not efficient and will impose severe costs not only on debtors but also creditors. Since creditors do not internalize the negative externalities or collective action effects of their unilateral attempts to stake seniority at the expense of other actors or the overall system, the official sector should remain vigilant and prevent the development and widespread use of instruments that provide effective seniority to some private claims relative to other private claims or official claims and make it harder to restructure debt. Attempts to thwart appropriate PSI will thus fail or lead to undesirable consequences that impose negative sum costs on both debtors and creditors.