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Coping with the Crisis: Policy Options for Emerging Market Countries

Atish R. Ghosh, Marcos Chamon, Christopher Crowe, Jun I. Kim, and Jonathan D. Ostry

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Prepared by the Research Department
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EXECUTIVE SUMMARY

The current financial turmoil is confronting emerging market economies (EMEs) with two shocks: a "sudden stop" of capital inflows driven by global deleveraging, and a collapse in export demand associated with the global slump. Although some EMEs were already ripe for a homegrown crisis following unsustainable credit booms or fiscal policies, and face large debt overhangs, the majority were just innocent bystanders. This note outlines policies to help solve the debt overhang and bring about recovery in both groups of countries.

A key ingredient will be greater official financing to expand the "policy space" available to EMEs to pursue supportive macroeconomic policies—including, in countries with large debt overhangs, by helping to meet the fiscal outlays (such as bank recapitalization costs) associated with the resolution of that overhang. The International Monetary Fund (IMF), through new and existing instruments, stands ready to provide such support as required and in concert with other international financial institutions. Another key ingredient will be policies to protect the poor and other vulnerable groups.

An important first step is to ensure an adequate framework to facilitate rapid debt workouts. Debt restructuring mechanisms can provide greater scope for monetary easing by reducing the negative repercussions of exchange rate depreciation on unhedged balance sheets. Depending on circumstances, restructuring can be done ex post (recapitalizing banks after they suffer losses), or more proactively. However, the large outlays required to restore banks' solvency may limit room for conventional fiscal expansion.

Except where the loss of confidence in the currency precludes it, the basic thrust of monetary policy should be toward easing, given the evident global deflationary pressures and widening interest differentials with respect to advanced countries. Quantitative measures may also be appropriate in some cases. However, central banks need to remain mindful of the trade-off between the growth-enhancing effects of looser policy versus the negative impact of exchange rate depreciation on unhedged balance sheets. Foreign exchange reserves can be used to prevent excessive depreciation or—in some cases—to substitute for foreign credit lines to banks, allowing the latter to maintain domestic lending operations.

Depending on the available fiscal space, expansionary fiscal policy should also be deployed to support economic activity. Although the empirical evidence is not conclusive, conventional fiscal multipliers may be relatively small in EMEs, and the impact of fiscal stimulus on activity is more uncertain. This calls for a variety of fiscal measures that could include some less conventional steps such as providing credit guarantees.

It is critical that EMEs have a credible exit strategy. Monetary policy should not be loosened too quickly, as a rapid reversal would damage credibility. The same holds for fiscal policy interventions, where the stimulus should not be withdrawn too soon but may require a credible exit strategy that places government finances on a long-term sustainable footing. This would help contain the costs of financing the short-term stimulus, and have an additional benefit of strengthening investor confidence and facilitating the resumption of capital inflows in the recovery phase.

I. Introduction and Overview

The current financial turmoil is confronting emerging market economies (EMEs) with two shocks—a "sudden stop" of capital inflows resulting from the global deleveraging process, and a collapse in export demand associated with the global recession—that in turn are leading to sharply tighter domestic credit conditions and slumping aggregate demand (Figure 1). This note discusses, in broad terms, the main policy options for EMEs confronted by these shocks, recognizing that specific prescriptions must be tailored to individual country circumstances.

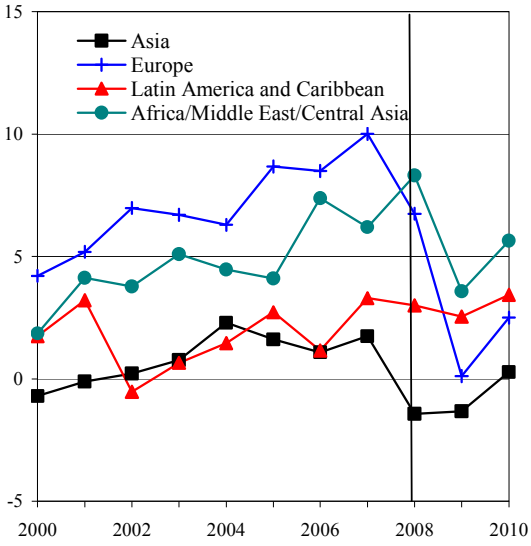
Given the global dimension of the crisis, country policies to attract financing are likely to be less effective: although some EMEs were ripe for crisis, in many cases, money is leaving due to global rather than to country factors. As such, solutions need to involve a global response through liquidity provision and macroeconomic stimulus. A broad range of countries have responded with massive macro policy easing and efforts to restore their financial sectors to health—and as these policies deliver results, global recession and deleveraging should subside, with favorable spillovers to EMEs. In the meantime, global liquidity provision by the International Monetary Fund (IMF) and other international financial institutions (IFIs) is a lifeboat for some EMEs that can reduce the severity of the global shock and allow countries to pursue supportive policies rather than measures destructive to national and international prosperity.

EMEs entered the global slump with different initial conditions. Some were ripe for a homegrown crisis associated with the end of unsustainable credit booms or fiscal policies; others were just bystanders caught up in the storm. In the first group, unsustainable booms have left in their wake debt overhangs (high levels of debt that will likely require restructuring and possibly write-downs), especially unhedged foreign currency (foreign exchange)–denominated debt. Disincentives to engage in unhedged foreign exchange borrowing should be considered to avoid a repeat of this crisis in the future. But the priority now is to pursue policies that are appropriate to solve the debt overhang and bring about recovery. Key elements of an appropriate policy package include (i) greater official financing, which expands the "policy space" available to EMEs to pursue supportive macroeconomic policies (including helping to meet bank recapitalization costs associated with debt restructuring), while instilling confidence that should limit downward pressures on exchange rates and other asset prices; (ii) strengthening bankruptcy procedures to reduce inefficiencies inherent in debt workouts/restructurings in the wake of the crisis; (iii) easing monetary policy to boost activity while guarding against excessive exchange rate depreciation and associated balance sheet repercussions; and (iv) pursuing expansionary fiscal policies without jeopardizing policy credibility and sustainability of the public finances.

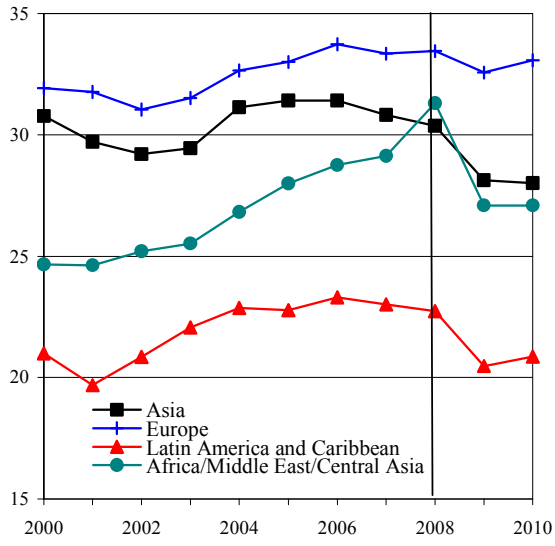
Insolvencies. The financing and external demand shocks have resulted in significant downward pressures on emerging market currencies. Balance sheet effects and recessions are severely straining corporate and household sectors, and leading to the risk of widespread

Figure 1. Shock to Emerging Market Economies

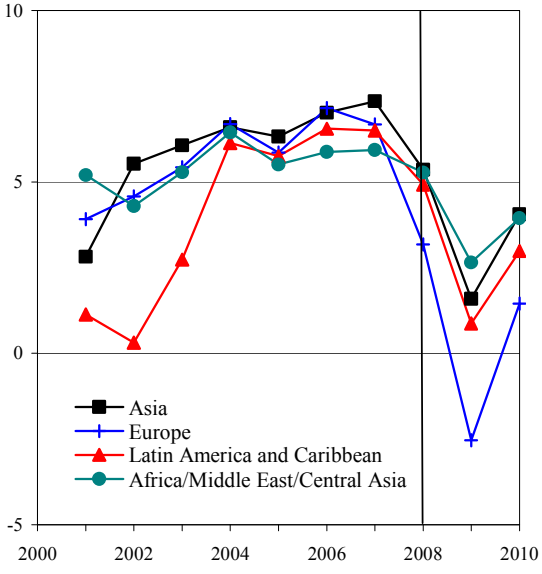
Net Private Capital Flows
(In percent of GDP)



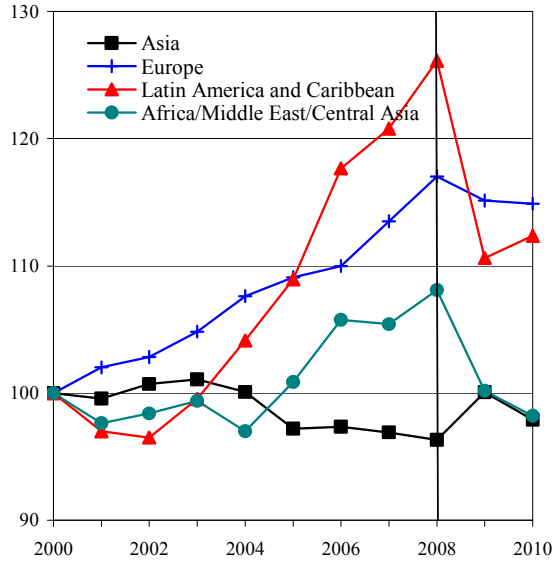
Exports of Goods and Services
(In percent of GDP)



Real GDP Growth
(In percent)



Terms of Trade
(Index, 2000=100)



Source: IMF WEO database. Regional groupings: Asia includes: China, India, Indonesia, Korea, Malaysia, Philippines, Sri Lanka, and Thailand. Europe includes: Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Israel, Latvia, Lithuania, Poland, Romania, Russia, Slovak Republic, Slovenia, Turkey, and Ukraine. Latin America and Caribbean includes: Argentina, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Jamaica, Mexico, Panama, Peru, Uruguay, and Venezuela. Africa/Middle East/Central Asia includes: Algeria, Egypt, Jordan, Kazakhstan, Lebanon, Morocco, Pakistan, South Africa and Tunisia.

insolvencies. Therefore, a critical element of the policy response is to ensure an adequate legal/institutional framework to facilitate rapid debt workouts. This is especially important where the debt overhang is large and—if unaddressed—is likely to extend the duration of recessions in concerned countries long after the global slump abates. Debt restructuring mechanisms need to be appropriate to country circumstances and avoid negative cross-border spillovers (including giving rise to chilling effects on a resumption of foreign capital to EMEs). Such mechanisms can provide greater scope for monetary policy easing by reducing the negative repercussions of exchange rate depreciation on unhedged balance sheets. In principle, they also help free up fiscal space by limiting the duration of the downturn and the cumulative cost of restoring financial sectors to health (which grows as restructuring is delayed). However, in practice, where there are large debt overhangs, there will likely be a need for greater fiscal outlays in the short term to restore solvency in the core financial system, with correspondingly less room for conventional fiscal expansion to support activity.

Monetary policy. As in advanced economies, the basic thrust of monetary policy in EMEs should be toward easing given the evident global deflationary pressures. This provides more room for inflation targeters to absorb depreciations without compromising policy credibility, though for countries with exchange rate pegs, the scope for easing will depend on whether or not the peg is retained. But in easing monetary policy, central banks need to be mindful of the trade-off between the benefits of lower interest rates and a weaker exchange rate for economic activity and exports, and the negative impact of depreciation on unhedged balance sheets. How much to let the exchange rate depreciate depends on a number of factors—including initial overvaluation, the exchange rate regime, and balance sheet effects, as well as possible regional contagion and systemic implications. Lower policy interest rates, foreign exchange intervention, and, in some cases, quantitative measures can be used to achieve the appropriate degree of monetary easing and exchange rate stability.

Fiscal policy. Depending upon the available "fiscal space"—the scope for financing a deficit without undue crowding out of private activity, sharp increases in funding costs, or undermining debt sustainability—expansionary fiscal policy should also be deployed to support economic activity. In cases where there is a large debt overhang, part of the available fiscal space will be needed to help resolve that overhang and to pay the resulting financial recapitalization costs. Depending upon specific circumstances, it may be preferable to do this ex post (recapitalizing banks after they suffer losses), or proactively, for instance, converting foreign currency mortgages to domestic currency and compensating banks for losses (perhaps with a haircut). Although the empirical evidence is not conclusive, conventional fiscal multipliers may be smaller in emerging market countries and the impact of fiscal stimulus on activity is more uncertain. This calls for a variety of fiscal measures that could include some unconventional steps such as providing credit guarantees on domestic borrowing.

The remainder of this note is organized as follows. Section II discusses initial conditions and constraints implied by the loss of external financing. Section III takes up the need to deal

with insolvencies and debt overhangs. Section IV discusses monetary and fiscal policy options in light of these constraints. Section V concludes.

II. Initial Conditions and the External Financing Constraint

In recent years, many emerging market countries have matured, with improved policies, stronger institutions, greater credibility, and, in a number of cases, substantial war chests of foreign exchange reserves. But progress has not been universal, with monetary and fiscal "policy space," and flow imbalances and stock vulnerabilities, varying widely across EMEs (Figure 2). In particular, some countries (especially in Europe) had private credit booms—often fueled by capital inflows—that have left large debt overhangs and foreign currency exposures on domestic balance sheets, whereas others have reduced foreign exchange exposures on public (e.g., Latin America) or private (e.g., Asia) balance sheets.

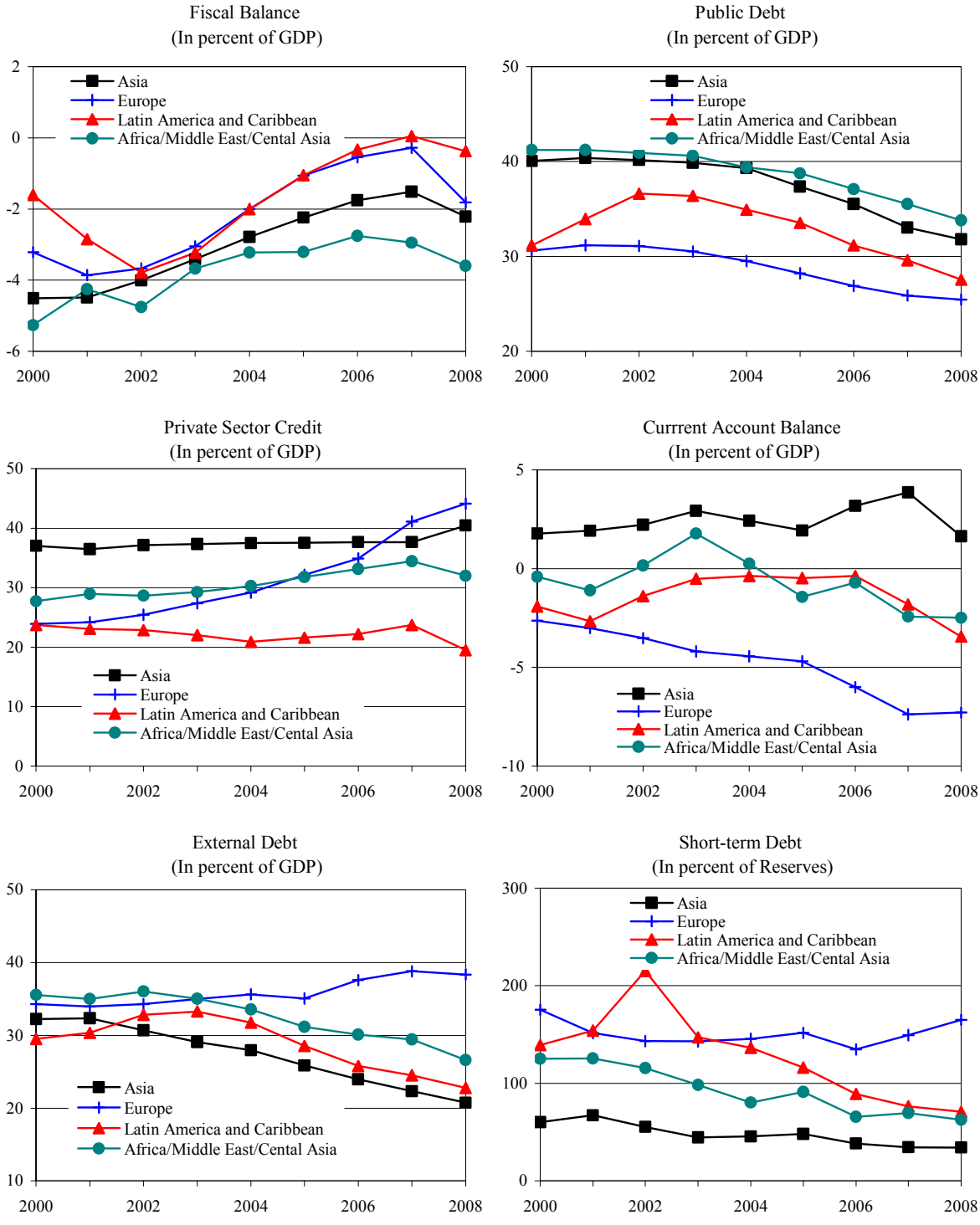
Although these variations imply different impacts of the global crisis across EMEs, nearly all such countries are having to contend—albeit to different degrees—with a loss of external financing that constrains their policy options. With net private capital flows to emerging market (and developing) countries projected to decline from an *inflow* of US$600 billion in 2007 to an *outflow* of US$180 billion in 2009, EMEs are facing a severe credit crunch. Particularly affected are countries with large current account deficits—many of which had asset price and credit booms. Although a slowdown to more sustainable levels was necessary, the abrupt correction implied by the sudden stop of capital inflows is putting severe downward pressure on the exchange rate and harming the real economy; even countries without large external deficits are having to adjust to the falling rollover rates on foreign credit lines.

Restoring normal capital flows will require foremost addressing financial sector problems in advanced economies. In the meantime, EMEs have few options:

- ***Exchange rate depreciation.*** A first response may be to let the exchange rate depreciate. Obviously, not all countries in the world can simultaneously depreciate. But given the collapse in capital flows to emerging market countries and the implied external adjustment, it is reasonable that EMEs (particularly those that have suffered terms of trade losses, and leaving aside EMEs with large current account surpluses) should, on average, see their currencies depreciate against those of advanced economies. Although this can help EMEs cope with weaker global demand, it can also lead to adverse balance sheet effects in the presence of unhedged foreign currency liabilities (discussed in detail in Section IV.A). Floaters need to achieve a delicate balance between avoiding costly overshooting of the exchange rate and allowing the market to settle on a new equilibrium level. Peggers must weigh the cost of sustaining the peg vis-à-vis their long-term goals.

- ***Raising interest rates***. A standard prescription in capital account crises is for the monetary authorities to raise interest rates and tighten credit conditions, which

Figure 2. Emerging Market Economies: Initial Conditions



Source: IMF IFS and WEO Databases. Regional groups are the same as in Figure 1.

increases the cost of speculative attacks, encourages capital inflows by rewarding investors, and restores confidence in the value of the currency.[3] But in this global crisis, net capital outflows mainly reflect creditors' need to deleverage—not a loss of confidence in the EME currency. As such, raising interest rates would tend to have less traction than in a more conventional sudden stop episode.

- ***Official financing***. Greater official resources may be one of the few avenues available to EMEs to ease the external financing constraint. The IMF has recently revamped its lending toolkit for emerging market countries, doubling its access limits and introducing a Flexible Credit Line (FCL), which allows strong performing countries to access IMF resources based on rigorous ex ante qualification criteria. This instrument has no preset cap on access, and the resources can be drawn up front and can be used on a precautionary or drawing basis. Countries that do not qualify for the FCL can benefit from modifications in the modalities for phasing of Stand-By Arrangements (SBAs) to allow for more front-loaded disbursements. Bilateral support, including swap lines among advanced country and EME central banks, as well as support from regional multilateral organizations, can complement the IFIs' support.[4] These instruments should help boost investor confidence in EMEs bumping up against an external financing constraint, though it is unlikely that they can fully substitute for an absence of external private financing (driven by the need and desire to deleverage by mature market financial institutions), given the scale of global flows.

- ***Controls on capital outflows***. A final option may be to impose capital controls. But regardless of possible merits of capital controls in typical capital account crises (where residents and nonresidents have lost confidence in the currency), such measures would appear to be much less appropriate in a global deleveraging scenario where most EMEs are facing a slowdown of capital inflows rather than investors seeking to flee the currency.[5] Controls on outflows would at best de facto "freeze"

[3] Raising interest rates to stem capital outflows and stabilize the currency is not entirely uncontroversial even in more typical capital account crises, however; see Furman and Stiglitz (1998) and Lahiri and Vegh (2002) on theoretical arguments for why raising interest rates could destabilize the currency; Basurto and Ghosh (2001), Kraay (2003), and Goldfajn and Gupta (2003) on the empirical evidence; and Lane and others (1999), Ghosh and others (2002), and IMF IEO (2003) for a discussion of the interest rate vs. exchange rate trade-off in major capital account crisis episodes.

[4] Advanced economies can also take steps to facilitate their banks' continued lending to EMEs, including through moral suasion and avoiding measures that could be construed as "financial protectionism."

[5] Perhaps the most prominent recent example with capital controls on outflows is that of Malaysia in 1998. Kaplan and Rodrik (2002) claim that these controls allowed Malaysia to recover faster than Korea and Thailand, and to experience a smaller decline in employment. However, Dornbusch (2002) and others have argued that by the time capital controls were imposed markets had already settled in Asia. The Malaysian controls likely neither yielded major benefits nor were very costly. For a comprehensive review of countries' experiences with capital controls (and their liberalization), see Ariyoshi and others (2000).

credit lines at their current levels while almost surely leading to a collapse of fresh inflows. For EMEs that are in the midst of a full-blown crisis, where the sovereign or private borrowers cannot meet or roll over external obligations, a standstill on payments could be declared. Ideally, the country would seek a voluntary agreement with creditors, as Korea achieved in 1998 in the context of an IMF-supported program. The private bank debt exchange was successful (with investor participation of 96 percent) due in part to the provision of a government guarantee, and involved no investor "haircut" (Kim and Byeon, 2002).[6] But if such a voluntary agreement is not possible, the country could as a last resort regulate capital transactions[7]—though these carry significant risks and long-term costs.[8]

III. Insolvencies, Debt Overhangs, and Workouts

A second constraint on macroeconomic policy options in EMEs comes from the need to deal with private (corporate, household, and financial) sector insolvencies and related debt workouts. These are obviously more pressing in countries that experienced credit booms and asset price bubbles, but nearly all emerging market countries will need to deal with rising insolvencies to some extent in the wake of the global crisis.[9] Bankruptcies might arise from (i) illiquidity in domestic currency, (ii) illiquidity in foreign currency, (iii) general increases in bad loans over the economic downturn, and (iv) the balance sheet effect of a large depreciation in the presence of foreign exchange exposure. Although it is not always easy to distinguish between illiquidity and insolvency at an early stage, or to identify a priori which loans are bad, it should be possible to gauge the broad impact of balance sheet effects arising from currency depreciation by distinguishing between sectors that are hedged (e.g., exporters) and those that are not (e.g., banks or households).

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[6] The debt exchange offered by Uruguay in 2003 aimed at achieving debt service relief—rather than debt reduction—in an investor-friendly way. As in the Korean case, this exchange also had very high participation (including 89 percent of internationally issued bonds) and a haircut of only 13 percent (Sturzenegger and Zettelmeyer, 2009); nevertheless, it was considered a default.

[7] Article VI, Section 3, of the IMF's Articles allows members to exercise such controls as are necessary to regulate international capital movements, but no member may exercise these controls in a manner that restricts payments for current international transactions or that unduly delays transfers of funds in settlement of commitments. In contrast, Article VIII, Section 2(a) of the IMF's Articles prohibits the imposition, without IMF approval, of restrictions on the payments and transfers for current international transactions as defined in Article XXX(d) of the IMF's Articles (e.g., interest payments and dividends).

[8] Even temporary standstills will have long-lasting legal implications. Creditors may exercise contractual rights to declare all amounts outstanding due and payable once a debt obligation goes into default after a payment is missed. Cross-default and cross-acceleration clauses in other debt obligations of the debtor could also be triggered. Even if the debtor wishes to resume payments on the original terms after the expiration of the standstill, it may no longer be able to do so, and could face litigation.

[9] Insolvencies may reflect negative equity arising from asset price (e.g., house price) declines, and are likely to be particularly prevalent when borrowing is denominated in foreign currency, because depreciating currencies will exacerbate the negative equity problem as well as having a direct and immediate effect on debt service.

Depending on country circumstances, there are four elements to an effective approach:

- ***Provision of domestic currency liquidity.*** A first step is to ensure there is sufficient domestic currency liquidity (within the constraints on expansionary monetary policy discussed below) in order to ensure that liquidity problems do not evolve into solvency concerns. Although lower policy interest rates can help, in an environment of heightened uncertainty and risk aversion, banks may be reluctant to lend, necessitating more direct quantitative measures by the central bank (as discussed in detail in Section IV.A).

- ***Provision of foreign exchange liquidity.*** In some cases, particularly where exchange rate depreciation has negative repercussions for domestic balance sheets, insolvencies can be avoided by the provision of foreign currency liquidity. For example, if the exchange rate is depreciating sharply, and banks have foreign credit lines that are not being renewed, the central bank could use its foreign exchange reserves to extend foreign exchange loans to banks, which in turn could maintain their exposure to the domestic corporate sector.[10] Such liquidity provision helps avert insolvencies by giving the borrower more time to adjust to tighter credit constraints.[11]

- ***Institutional and legal framework.*** A severe and prolonged economic downturn will likely result in a sharp increase in corporate bankruptcies. Efficient debt workout mechanisms help preserve firms that are worth more as a going concern than if sold piecemeal (especially in the midst of "fire sales" of assets). But bankruptcy proceedings are generally inefficient in emerging market countries even in the best of times, and the current crisis is set to make the situation worse, potentially overwhelming judicial systems in countries with widespread insolvencies (Box 1). Legal reforms could enhance the efficiency of bankruptcy proceedings, but in practice they are extremely difficult and time-consuming to implement. Regulatory measures that can facilitate creditor coordination, or Pareto improving debt write-downs, should be considered—including, in extreme cases, government-supported out-of-court mechanisms.

[10] If borrowers have net foreign exchange exposure, their balance sheets would still deteriorate on a mark-to-market basis because the domestic currency value of their liabilities would increase. In the case of banks, this may require forbearance on the part of regulators, which would be appropriate if the exchange rate depreciation represents overshooting that is expected to reverse over the medium term.

[11] Providing liquidity in foreign currency can also assist borrowers whose balance sheets are exposed to rapid exchange rate depreciation to the extent that (at least part of) the depreciation is temporary (which is certainly plausible, given the possible overshooting of the exchange rate). On the other hand, if the exchange rate depreciates further, the continued foreign exchange exposure will worsen balance sheets. If there is significant uncertainty about whether the depreciation will be persistent (as opposed to a temporary overshooting), then outright foreign exchange sales supported by domestic liquidity provision may be preferable.

Box 1. Debt Workouts and Insolvency Proceedings

The global crisis will lead to a sharp rise in bankruptcies across the world. This raises concerns that most judicial systems are not equipped to handle a spike in bankruptcy cases, which can further exacerbate delays and value destruction in bankruptcy proceedings.

Even during tranquil times, bankruptcies are usually not smooth. Djankov and others (2008) conducted a survey among insolvency practitioners from 88 countries to analyze how debt enforcement would proceed in each country against an identical hotel about to default on its debt (there is only one large secured creditor). In the case study, the firm is worth more if preserved as a going concern than if it is sold piecemeal. Only 36 percent of the countries in their sample achieved the efficient outcome of maintaining the firm as a going concern, with the efficiency of the bankruptcy process strongly correlated with per capita income and legal origins. The table below compares the outcome in advanced countries with those in emerging markets.

Efficiency of Bankruptcy in Advanced Countries and Emerging Markets[1]

	Advanced Economies	Emerging Market Economies				
		All	Asia	Europe	Latin America & Caribbean	Africa/Middle East/Central Asia
Firm continues operating[2]	0.73	0.21	0.29	0.24	0.24	0.00
Efficiency[3]	77.6	41.8	46.2	45.0	35.0	41.9

[1]Based on Djankov and others (2008).
[2]Average of a dummy that equals 1 if firm continues operating throughout the bankruptcy process and upon its completion.
[3]Efficiency defined as the present value of the terminal value of the firm after bankruptcy costs, with 100 being the current value of the firm as a going concern.

However inefficient bankruptcy proceedings are in normal times, the inefficiencies are likely to become much worse in this downturn. A wave of defaults can overwhelm the judicial system, exacerbating value-destroying delays (particularly if the firm cannot continue normal operations during the bankruptcy). Clogged courts and lower reputation costs of defaults (e.g., defaulting entrepreneurs will carry less of a stigma) can encourage value-destroying excessive risk taking on the part of distressed firms (gambling for resurrection). Widespread defaults will also put downward pressure on the collateral of other firms (e.g., the price of used machinery or real estate), reducing their creditworthiness. Although substantial improvements in the bankruptcy process may be required to prevent an inefficient destruction of value following a wave of defaults, it is important that any such measures not be biased against creditors, so as not to hinder long-term financial development.

Legal reforms aimed at improving the efficiency of bankruptcy procedures are particularly useful in the current environment. Djankov (2008) reviews some of the reform options during times of financial distress. An important first step is to reform the bankruptcy code to allow fresh capital to take priority over other creditors in countries where that is not the case, because without financing firms may not be able to continue operations. The so-called "London rules" entail guidelines for out-of-court restructuring—used in the Mexican crisis and expanded during the East Asian crisis. The effectiveness of such out-of-court restructuring is enhanced by provision in the insolvency law enabling "prepacked" bankruptcies, whereby an agreement reached among a majority of creditors can be enforced on the remaining creditors.

A more radical approach would be the temporary adoption of a "Super-Chapter 11," suggested by Stiglitz (2002) during the early stages of the East Asian crisis. The key elements include a strong presumption that the current managers should remain in charge of the firm (because the bankruptcy is caused by an external shock, not by their mismanagement), and a debt-to-equity conversion. To facilitate a speedy resolution, a heavier burden would be placed on creditors seeking delays, with the burden of proof being placed on creditors to demonstrate that the management proposal was "grossly inequitable," and a wide set of default/guideline provisions would be specified. Implementation of Stiglitz's proposal would require a high level of sophistication in a country's bankruptcy law and practice and, as it turned out, East Asia recovered quickly from the crisis and few firms appear to have been prematurely liquidated. Because the current crisis is expected to be more prolonged than previous episodes, other novel debt-restructuring mechanisms may need to be considered.

- ***Government support for debt restructuring***. Despite the provision of liquidity, bank losses are likely to mount due to the economic slump and the balance sheet effects of currency depreciation on unhedged borrowers (i.e., those that are insolvent once the exchange rate has settled at its new "equilibrium" level). Rather than letting losses accumulate on bank balance sheets (in the hope that banks will be able to absorb the losses later) the government can take a more proactive approach, which lessens the risk of a crisis if depositors lose confidence in the banking system, and could speed up recovery of the normal credit process.

    - Where recapitalization is required, and additional capital from shareholders is not available, certain principles need to be followed—including ensuring that existing shareholders bear the first burden and that only banks with viable business models are salvaged.[12] Recapitalization of domestic subsidiaries of foreign parent banks raises tricky issues of coordination and burden sharing between the parent bank and host and home country governments; in such cases, regional, cross-border cooperation is key. As part of recapitalization programs or otherwise, in past crises asset management companies (AMCs) have often proven useful for cleansing bank balance sheets while maximizing recovery values by holding assets to maturity (or at least avoiding fire sales).

    - Other more proactive approaches could include the conversion, with the consent of borrowers and creditors, of selected foreign currency banking system assets into local currency, with part of the losses absorbed by the government.[13] Although the country as a whole would still face the exchange rate risk, the redistribution of that risk toward the government could benefit the economy by preventing costly defaults and spillover effects. In its basic form, the government would negotiate with banks to swap their foreign currency loan portfolio for government paper (restructuring bonds) denominated in foreign currency. Foreign exchange-denominated restructuring bonds have been used in past crises, for example, in Bulgaria (1994, 1997, 1999), Korea (1998), Mexico (1995–96), Poland (1991), and Uruguay (1982–84), whereas foreign currency–indexed restructuring bonds have been used in Indonesia (1998–2000) and Nicaragua (2000–01).[14] Because banks would otherwise face a wave of costly

[12] See Hoelscher and Quintyn (2003) on some general principles for managing systemic banking crises.

[13] Wholesale conversion of bank foreign currency assets and liabilities into local currency ("pesification") would *not* be appropriate because it would likely prompt bank runs and capital flight and further destabilize the exchange rate. Forced pesification could also be subject to lengthy and complex legal challenges.

[14] In each case the debt restructuring was part of a wider program of bank rescue and recapitalization; see Andrews (2006) for further details.

foreclosures, they would presumably be willing to absorb some of the cost of marking down the foreign currency value of their assets. However, their loss would be clearly delineated and limited up front, with banks accepting a haircut and the government absorbing the rest of the loss. Box 2 describes some options for the design of such a mechanism.

Box 2. Government Financial Support for Debt Restructuring

Some EMEs are faced with an actual or potential sharp devaluation in the context of a dollarized financial sector. The first best response would see banks provisioning proactively, obtaining additional capital and then restructuring. However, the scale of potential losses may require government intervention. Given sufficient fiscal space, the government can consider a number of possible interventions (there may also be significant recession-related losses that will require more orthodox approaches).

Recapitalization: The government could wait for the devaluation to impact banks' balance sheets (indirectly, if households or firms face the mismatch and default on foreign currency loans from the banks). Then, fiscal resources could be deployed to recapitalize banks (to the extent that additional capital from shareholders is not available), forcing the banks' owners to absorb the first tranche of losses. This option might be relatively low cost, because the banks' existing owners would take a large hit and the government might recover some of the recapitalization costs at a later date. However, foreign ownership of the banks might raise difficulties (the banks might simply walk away, substantially reducing credit availability, at least in the short run). In addition, households and corporations might be left with liabilities that they cannot pay, leading to a steady drip of defaults that continues to weaken bank balance sheets and saps confidence. In response to the current crisis, Romania has attempted to avoid complications that could arise from high foreign ownership of domestic banks by actively seeking support for recapitalization from their parent banks in the context of an IMF-supported program. Meanwhile, Hungary has enacted a bank support law with provisions for capital enhancement by either voluntary or mandatory means.

Temporary subsidy of loan repayments: If the exchange rate were expected to overshoot (so that much of the devaluation were temporary), then the government could negotiate with banks to temporarily reduce debt service in foreign currency terms, with the government making up the difference. This would limit the wave of defaults, protecting the banks' balance sheet. However, this option poses significant risks: if the devaluation were to persist, then the government's exposure could quickly escalate, while continued uncertainty about the eventual outcome could sap confidence in the banks, perhaps depreciating the currency further and precipitating a deposit run, necessitating a full banking sector bailout.

Currency conversion of bank assets: The government could absorb a significant fraction of the foreign currency loss up front (perhaps requiring the banks to take a haircut on the foreign currency value of the loans) by swapping foreign currency–denominated government paper for the troubled assets and converting the latter to local currency–denominated loans (with the consent of the borrower and the lender). These could later be sold on (the government would not want to go into the banking business full time), perhaps at a reduced loss if the exchange rate were to recover. This policy can potentially reallocate foreign currency risk and losses to those able to bear them—assuming that the government has sufficient resources. In comparison to devaluing and recapitalizing the banks afterwards, this up-front conversion has the benefit of avoiding costly defaults and foreclosures and drawn-out uncertainty that could sap confidence and further depreciate the exchange rate (although some recapitalization may still be required). However, currency conversion might prove prohibitively expensive for most governments.

In reality, countries may find it best to adopt heterodox approaches that combine elements of different schemes. For instance, in Hungary the government has reached an agreement with banks to facilitate loan restructuring through various options, including loan maturity extensions, a temporary easing of repayments, and a conversion of foreign exchange loans into domestic currency, while introducing legislation to provide temporary state guarantees for mortgage payments of the unemployed. Because all interventions are likely to incur significant fiscal costs, governments should also bear in mind the redistributive and equity implications of the interventions, which could affect the public support for other difficult crisis mitigation measures.

Though there are no easy answers, the external financing constraint and debt overhangs need to be addressed squarely because they define the contours of feasible monetary and fiscal policies, which are discussed in the following section.

IV. Macroeconomic Policies

Advanced economies have responded to the crisis through unprecedented monetary and fiscal easing. EMEs that are in the midst of a "homegrown" capital account crisis may have to orient their policies toward restoring confidence in the currency, with little scope for easing in either dimension without exacerbating capital outflows. But these countries aside, given the evident global deflationary pressures, EMEs with credible inflation targeting frameworks should have considerable scope for monetary policy easing without compromising their inflation outlooks.[15] Similarly, the collapsing external demand and weakening domestic economic activity would, in general, call for fiscal easing to support demand, provided debt sustainability is not a concern and financing is available. Given a targeted level of aggregate demand/inflation, a more expansionary monetary policy can compensate for a less expansionary fiscal policy—though both may be relatively ineffective if domestic credit markets are frozen. Substituting for monetary easing by fiscal expansion can be constrained by debt sustainability concerns, because both relatively higher interest rates and fiscal spending will worsen the debt dynamics. Overall, there is no one-size-fits-all prescription, and the appropriate policy mix depends on the particular circumstances in each country, including a number of trade-offs described below in detail.

A. Monetary Policy

In contrast to typical capital account crises, where investors have lost confidence in the currency, pullbacks from most EMEs in present circumstances reflect more the impact of capital pressures in countries at the epicenter of the crisis. As such, there is less risk that monetary policy easing will lead to a further loss of confidence, capital outflows, and a collapse of the exchange rate—the elasticity of capital flows to policy interest rates is likely lower than usual.[16] In countries where there is scope for easing monetary policy, central banks will still need to be mindful of the trade-off between the benefits of lower interest rates and a weaker currency for boosting activity and exports against the negative impact of

[15] Of course, for countries with exchange rate pegs, the scope for easing will depend on whether the peg is retained or not (see below).

[16] The low elasticity of capital flows to interest rates in the global deleveraging crisis seems plausible on a priori grounds, though it is still too early to tell whether it holds empirically in the current crisis. The preliminary experience suggests that capital outflows (and depreciations) from EMEs may have been mainly driven either by the depth and liquidity of markets (with investors pulling back from wherever they can) or by concerns about external or fiscal sustainability. The low elasticity also implies, however, that if there is a need to stem capital outflows by raising interest rates—for example, to defend a peg in countries in the midst of crisis—then correspondingly larger increases in interest rates would be required.

currency depreciation on unhedged balance sheets. Even for countries that do not actively target their exchange rate, how much to allow the currency to depreciate will be a key issue.

How much to let the exchange rate depreciate?

Given collapsing capital flows and the required external adjustment, EMEs with floating exchange rates facing large or growing external deficits should in general allow their currencies to depreciate against those of advanced economies. Whether and how much to let the exchange rate depreciate in any individual country will depend on a number of factors, including the extent of initial overvaluation, balance sheet mismatches, and the exchange rate regime.

The contractionary effects of depreciation depend on which sectoral balance sheets in the economy have foreign currency exposure, and the ability of the sectors to absorb the resulting losses. While many EMEs in Asia and Latin America have reduced foreign exchange exposures, especially on public sector balance sheets, in Europe there has been significant foreign exchange borrowing by households and other borrowers that lack natural hedges.[17] As discussed previously, there are several policy options to mitigate the impact of the exchange rate depreciation on unhedged balance sheets, which could tip the balance toward allowing greater depreciation.

Countries with de jure pegged exchange rate regimes face a fundamental decision on whether to abandon the peg or (try to) defend it:

- Balance sheet effects are likely to be more disruptive than under a floating regime because the exchange rate movement is more unexpected—debtors would have borrowed in foreign exchange on the assumption that the exchange rate will be constant; in some countries, foreign exchange exposure against the anchor currency does not count against banks' open foreign exchange limits, and with underdeveloped foreign exchange markets, the domestic banks and corporations may be ill-equipped to deal with floating exchange rates.

- However, relative to partners with more flexible exchange rate regimes, the country will have likely lost competitiveness—on top of any precrisis overvaluation. This creates the prospect that the recession will extend well beyond the period of global slump, given the difficulties of addressing overvaluation without recourse to a change in the nominal exchange rate.

[17] Stress tests can in principle help determine the relative impact of lower interest rates and exchange rate depreciation on the economy—though, in practice, standard balance sheet analysis can identify only large exposures. In particular, the impact on the economy depends on the contribution of the sector in question to aggregate demand, and its ability to withstand a given shock.

- Regional contagion and the country's long-term goals are further considerations. For instance, if the country has a clear exit strategy from the peg (e.g., joining a monetary union), there is a stronger case for exiting to the permanent regime as soon as possible (at the existing parity, if broadly aligned, otherwise at a depreciated level). A coordinated regional policy response could be enormously helpful in achieving a smooth and expedited transition to the permanent exchange rate regime.

Which instruments to use?

The central bank has several instruments for achieving the appropriate degree of monetary easing, with corresponding effects on economic activity and the exchange rate.

Policy interest rates

As argued above, most emerging market countries (except those in the midst of a full-blown crisis and that need to restore confidence in their currency) have scope for lowering policy interest rates to stimulate the economy. Even keeping interest rate differentials constant, policy easing in mature markets gives considerable scope to lower interest rates in EMEs (Figure 3).[18] Obviously, for countries defending a fixed exchange rate, interest rate policy will be subordinate to the need to maintain the peg. And if a peg is abandoned, the experience from previous capital account crises indicates that high interest rates were key in escaping from inflation-depreciation spirals (Ghosh and others, 2002).

Quantitative measures

Lowering the policy interest rate may have a limited effect on credit markets if the standard monetary policy transmission mechanisms are impaired (for example, if the policy interest rate approaches the zero nominal bound, or if greater bank liquidity fails to translate into additional lending).[19] Structural impediments to monetary transmission, such as excessive reserve requirements, should be reduced with prudence. If credit markets remain unresponsive to lower interest rates, or the central bank needs to engage in lender-of-last resort (LOLR) operations in a systemic banking crisis, it could resort to quantitative measures:

- Increasing the range of accepted collateral: The central bank can extend liquidity against collateral assets that would not be considered during normal times. This reduces liquidity pressures but would leave the credit risk with the banks and may not lead to more lending.

[18] Risk premiums may have increased for EME assets, although probably not unduly, compared to other risky asset classes.

[19] One risk with lowering policy interest rates when there is not a corresponding increase in bank lending is that the excess bank liquidity can facilitate capital outflows.

- Credit easing (CE): The central bank purchases (and sells) specific assets with a view to decrease their yields. CE—which may or may not be associated with other quantitative measures—is particularly useful if the credit market is segmented and targeted assets' yields are excessively high. For example, if high interbank interest rates are driven by banks' reluctance to lend to each other, the central bank could lower rates by acting as the counterparty for interbank loans. In this example, the central bank's balance sheet would not expand in aggregate, which would have a smaller impact on the exchange rate.[20]

- Quantitative easing (QE): The central bank expands its balance sheet by purchasing assets such as longer maturity government bonds. QE seems less appropriate for EMEs, where deflationary expectations are unlikely to be present (and even in advanced countries, evidence on its effectiveness is limited). If anything, there is a risk that markets misinterpret QE as a return to inflationary policies—particularly if there is little commercial paper and QE takes the form of purchases of government securities. Therefore, except in extreme situations (e.g., the policy rate is already set to zero), QE should only be attempted by countries with a history of low inflation and macroeconomic stability, with central bank independence and credibility. [21]

Foreign exchange intervention

Just as lowering policy interest rates may be tantamount to "pushing on a string" as far as restoring credit growth is concerned, stabilizing the exchange rate may be possible only through direct sales of central bank reserves in the foreign exchange market (Calvo, 2006).[22] Many EMEs have built up war chests of reserves in recent years—and now is clearly the time to use them. But with enormous uncertainty about how long the global slump and dislocation of cross-border lending will last, there remains the question of how much of the reserves to use and how quickly.

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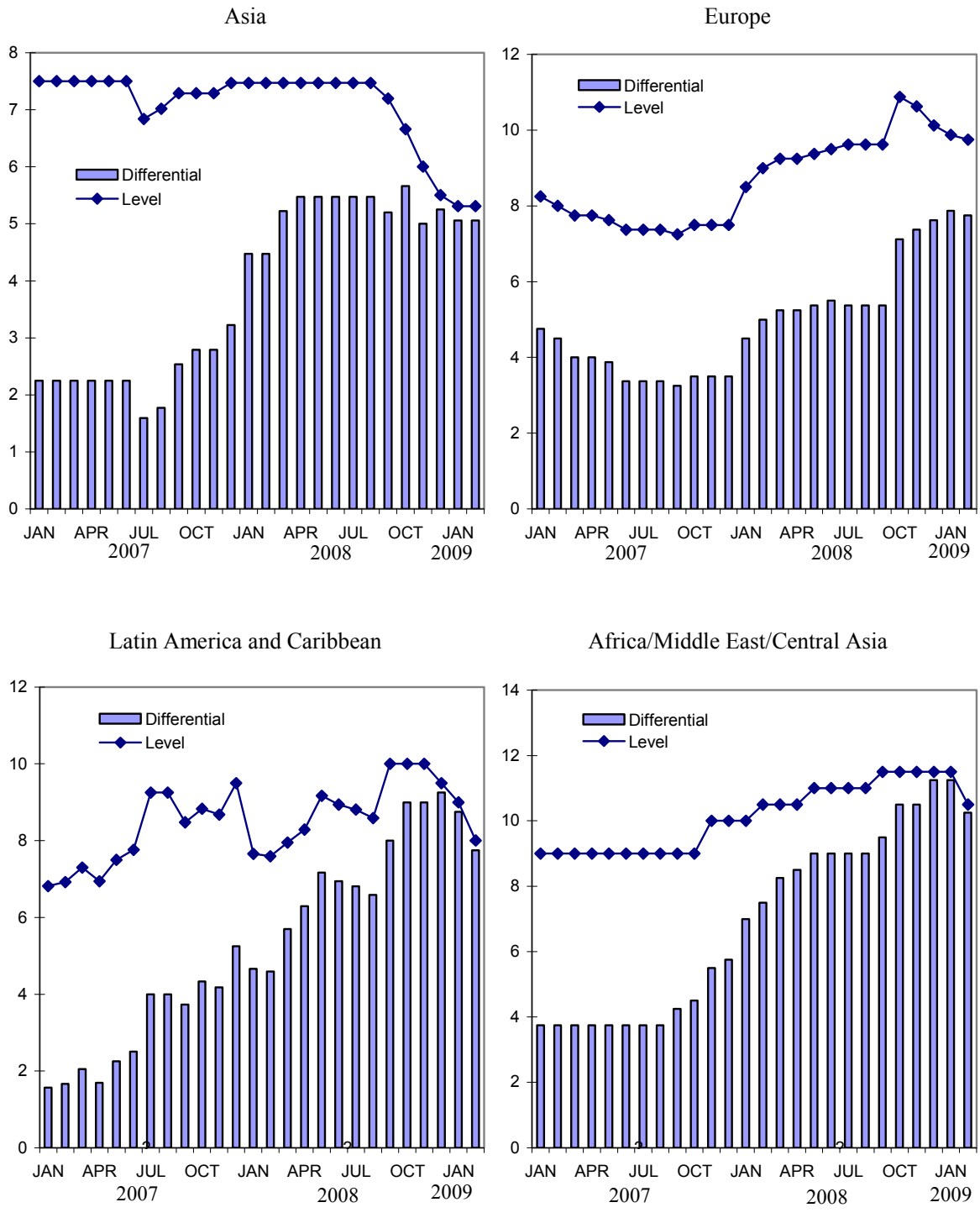
[20] Appropriate safeguards should be used to prevent governance problems that could arise from the government's direct involvement in the allocation of credit.

[21] There may be tensions between the need for QE for LOLR operations and defending a pegged exchange rate regime. How that tension should be resolved depends on the particular circumstances (e.g., the costs of a systemic banking crisis vis-à-vis abandoning the peg). In addition, central banks in some EMEs are legally barred from purchasing government securities. These rules have often helped to guarantee central bank independence, and central banks in these countries seeking to implement QE will therefore need to do so via the purchase of other assets.

[22] If the central bank sells foreign exchange in the market while lowering interest rates, this is equivalent to sterilized intervention, which is a form of CE. Empirical evidence for major currencies suggests little efficacy of sterilized intervention in determining the exchange rate. For emerging market countries, however, the market is much smaller, and direct central bank intervention may have a larger impact, especially when the lower interest rates have less effect on the exchange rate because capital flows are being driven by global deleveraging rather than by a loss of confidence in the currency.

Figure 3. Policy Interest Rates in Emerging Market Economies
(Median; In percentage points)



Source: National Authorities and IMF Staff calculations. Differentials based on the U.S. policy rate for all regions except Europe where it is based on the ECB policy rate. Country coverage based on the sample in Figure 1, subject to data availability on Bloomberg.

Countries with pegged exchange rate regimes that decide to maintain the parity will, of course, have to use reserves for foreign exchange intervention, as necessary. For others, unless reserves appear to be ample even under relatively adverse scenarios regarding the resumption of financing, an effective risk management strategy requires the more limited use of reserves to achieve specific objectives. Policies should therefore include intervention to offset disorderly conditions, counter overshooting of the exchange rate, and provide foreign exchange liquidity to banks (which may otherwise be forced to default), while allowing some depreciation of the exchange rate to bring demand for, and availability of, foreign exchange into line with each other.[23] There are various possible mechanisms for extending foreign exchange liquidity to banks, including collateralized loans or currency swaps. This liquidity can also be used to target particular market segments that are crucial for restoring external sustainability (for example, the Brazilian central bank used its reserves during the 2002 crisis to extend trade credit to exporters through commercial banks). In general, the central bank should auction foreign exchange credit to banks, rather than engage in direct lending to the nonfinancial sector, which would entail greater commercial risk and raise concerns about governance. Alternatively, the central bank could use its reserves to guarantee foreign credit lines, provided credibility can be ensured by a sufficient amount of reserves and public debt sustainability. Although less effective than lending if the capital flows are drying up because of global factors, guarantees allow the central bank to conserve on the use of its foreign assets.[24]

The central bank may also need to keep reserves in case of a systemic banking crisis. In dollarized banking systems, it would need foreign exchange reserves to stem runs on foreign currency deposits. Even if such deposits are limited, the expansion of domestic currency liquidity as the central bank acts as LOLR in a systemic banking crisis may become difficult to sterilize—resulting in inflation and a collapse of the currency. For example, during Indonesia's banking crisis in late 1997, the expansion of domestic liquidity could not be sterilized, contributing to the collapse of the rupiah. In these circumstances, foreign exchange reserves could be important for mopping up liquidity and restoring confidence.

B. Fiscal Policy

The IMF's advice on fiscal policy for advanced economies has called for a timely, large, lasting, diversified, and sustainable fiscal stimulus that is coordinated across countries with a

[23] As evidenced in the previous capital account crises and more recently in Russia, foreign exchange intervention aimed at more than offsetting disorderly conditions or countering overshooting of the exchange rate runs the significant risk of wasting scarce reserves with little effect on the exchange rate beyond the very short run.

[24] If reserves are on-lent to resident borrowers, they cease to be reserves and instead become foreign currency assets; if reserves are used to guarantee foreign loans, they remain as reserves but there is a contingent short-term drain on the central bank's foreign assets.

commitment to do more if the crisis deepens.[25] Most EMEs face far stricter constraints on their fiscal space (i.e., reduced scope for financing a deficit without substantially increased borrowing costs), which limits them to pursuing a smaller (if any) fiscal expansion, while running the risk that adverse developments in capital markets may force them to reverse that stance.

Much of the spending and revenue policy advice for advanced economies remains relevant for EMEs, once scaled down for their smaller fiscal space. For example, stabilizing the financial sector remains a top priority.[26] Investment expenditures and transfers targeting the unemployed or poorer households (which have a higher propensity to spend) are effective in both groups of countries, whereas subsidies to specific industries and hard-to-reverse expenditures, such as increases in the public sector wage bill or the introduction of new entitlement programs, are not recommended.[27] We review in more detail below why specific measures can be more or less effective in EMEs.

Many EMEs face multiple constraints on using fiscal policy to stimulate demand. As discussed in Section III, countries where there have been unsustainable asset booms and there is now a large debt overhang will likely have to devote fiscal resources to debt/financial sector restructuring, leaving correspondingly less space for fiscal expansion to support demand. Relatedly, where bank soundness is in doubt, maintaining sufficient fiscal space to make deposit guarantees credible is of paramount importance.[28] Even countries without debt overhang problems that come into the crisis with excessive fiscal deficits or public debt—or that have current account deficits that can no longer be financed—have little room for maneuver. Likewise, loss of revenues—particularly commodity-related or import-related indirect taxes—may also constrain fiscal space. More generally, given weaker budgetary processes, some EMEs have less scope than advanced countries for fiscal expansion without undermining confidence in debt sustainability. Indeed, in the past, fiscal policy in emerging market countries has typically been procyclical because EME business cycles tend to be

[25] See, for example, Spilimbergo and others (2008).

[26] Calvo, Izquierdo, and Talvi (2006) document that EMEs have recovered from output collapses following systemic sudden stops with virtually no recovery in either domestic or foreign credit ("Phoenix Miracles"). However, such recoveries may be less likely in the current scenario given much less scope for EMEs to export their way out of the crisis than in previous crisis episodes.

[27] For a comprehensive review of the pros and cons of different spending and revenue measures, see Spilimbergo and others (2008); this paper also discusses measures to help maintain medium-term debt sustainability. IMF (2009) summarizes the projected impact of the current crisis on the public finances of G-20 countries.

[28] If the cost of deposit guarantees is expected to be monetized, that would place large pressures on the exchange rate, which could further contribute to a run on domestic currency deposits.

driven by capital flows, and when inflows fall sharply, financing an expansionary fiscal stance becomes impossible.[29]

Experience from past EME capital account crises suggests fiscal consolidation was critical in restoring confidence in the presence of debt sustainability problems (e.g., Brazil and Turkey). But in episodes where debt sustainability was not a major issue (notably the East Asian crisis), fiscal adjustment did not seem to boost confidence. Ghosh and others (2002) review the experience from major capital account crises and conclude that fiscal adjustment that is unnecessary from a medium-term perspective is unlikely to have favorable confidence effects. However, matters become more complicated in the presence of prospective fiscal costs from a banking crisis (unfortunately, many EMEs currently fall into this gray category). But even then, a well-articulated and credible medium-term fiscal framework can be more beneficial than a short-term fiscal tightening. Countries that do have fiscal space face two questions. Would such expansion be effective in stimulating output (beyond the direct impact of higher government expenditure on aggregate demand)? And how best can the available fiscal space be used?

Effectiveness of conventional fiscal policy

Theory suggests that an expansionary fiscal stance—an increase in government spending or a reduction in taxes—is likely to be more effective in stimulating aggregate demand if the economy is relatively closed to trade flows, uses monetary policy to prevent or limit the appreciation of the currency,[30] has substantial spare capacity, has a high proportion of credit-constrained households or firms, and has a sustainable public debt position. Along most dimensions, conditions in EMEs are less conducive to fiscal policy effectiveness.[31] Existing empirical studies appear to broadly support this view (Box 3).

[29] A well-developed domestic securities market can help to deliver increased fiscal space, although achieving meaningful changes in market development over a short time is likely to be difficult.

[30] This result follows from the Mundell-Fleming model and presumes that higher interest rates from the fiscal stimulus will induce an incipient capital inflow and a corresponding monetary expansion. If the fiscal deficit leads to a wider risk premium and capital outflows, then the fiscal expansion will have a smaller effect under pegged exchange rate regimes compared with flexible exchange rate regimes.

[31] One exception is the share of credit-constrained households and firms, which is likely to be greater in EMEs than in advanced economies. On the other hand, depending upon the income distribution, the proportion of aggregate consumption by credit-constrained consumers may not be much larger. The other factors listed generally point to fiscal policy being less effective in EMEs. Perhaps the most critical is debt sustainability, where EMEs tend to be under particular investor scrutiny. When there are doubts about the sustainability of the public finances, fiscal multipliers will be smaller and may even be negative because the fiscal expansion leads to an increase in risk premiums. A final consideration not mentioned in the text is that EMEs have greater need for public infrastructure than advanced economies, making for a more favorable impact on potential growth, provided the financing is available.

Box 3. Evidence on Effectiveness and Procyclicality of Fiscal Policy in EMEs

Empirical evidence supports the view that fiscal policy tends to have smaller and more transient stimulative effects in EMEs than in advanced economies (Spilimbergo and others, 2009). Perhaps as a result, or because of limited fiscal space, the evidence also suggests that EMEs typically pursue less countercyclical policy:

- IMF (2008)—based on dynamic panel estimation—finds that the medium-term impact of a discretionary fiscal expansion on output in EMEs is negative (compared to a small positive effect in advanced economies), although in both cases the immediate impact is positive but small. Ilzetzki and Vegh (2008) employ a quarterly panel VAR) and find that the output response to higher government spending is larger in EMEs at the one-quarter horizon, but at longer horizons the effect in EMEs is much smaller than in advanced economies. Ghosh and Rahman (2008) find small and generally negative (i.e., non-Keynesian) multipliers in both advanced and emerging market economies, particularly when public debt is high.

- Freedman and others (2009) estimate the effect in a simulated macro model and find an immediate positive effect in Asian EMEs of a similar magnitude to that for advanced economies (although this is dependent on the assumption made about the monetary policy response). However, again there is a negative effect in the medium term that is more pronounced than in advanced economies.

Fiscal Policy Regression

	coef.	t-stat.
Advanced economies		
Output gap	-18.92	-2.86 ***
Pegged regimes*output gap	30.69	2.63 ***
Intermediate regimes*output gap	-10.21	-1.38
Number of observations, R^2	300	0.63
Emerging market countries		
Output gap	-7.86	-1.10
Pegged regimes*output gap	30.89 a	2.76 ***
Intermediate regimes*output gap	11.62	1.35
Number of observations, R^2	174	0.50

[a]The combined coefficient on the output gap (including regime interaction) is positive and significant at the 10 percent level; this indicates procyclical fiscal policy.

- However, Ortiz and others (2009) focus on a sample of 22 episodes of "Systemic Sudden Stops," and find that countries with tighter fiscal policy experienced sharper contractions than those with a looser stance (although that partly reflects better fundamentals in the countries that could "afford" a looser fiscal stance). Other authors find the effects of fiscal policy to be context specific. Clements, Flores, and Leigh (2009) apply the Global Integrated Monetary and Fiscal Model (GIMF) to Colombia and find that the stabilizing role of fiscal policy depends critically on financing conditions. Meanwhile, Mendoza and Ostry (2008) and Celasun, Debrun, and Ostry (2006) discuss the constraints on expansionary fiscal policy in EMEs given the nature of shocks they face and debt sustainability concerns.

There is also evidence that policy has tended to be less countercyclical in EMEs, particularly those with a fixed exchange rate, where there is evidence for procyclical fiscal policy (see the accompanying table). [1] A positive coefficient on the output gap implies a procyclical policy. This evidence suggests that EMEs face particular constraints in implementing a countercyclical policy stance, compared with advanced economies.

[1] Regression of fiscal stance on output gap (with regime interactions) and other control variables (inflation, public debt ratio, government expenditure ratio, and domestic interest rate; coefficients not reported). A negative coefficient on the output gap indicates countercyclical fiscal policy under floating regimes (the omitted regime category). Fiscal stance defined as cyclically neutral general government balance minus actual balance; increase in fiscal stance represents a fiscal expansion. Output gap defined as logarithm of actual output relative to potential. A coefficient of 1 implies a .01 percentage point fiscal loosening in response to a 1 percent increase in the output gap.

Using available fiscal space

Automatic stabilizers

Automatic changes in expenditure or tax revenue that are driven by the business cycle are more timely, better targeted (for example, recipients of unemployment benefits are more likely to spend than save), and more credibly reversed (reducing concerns about debt sustainability) than discretionary changes in policy. Therefore, as a first response, the authorities should allow automatic stabilizers to operate fully. This might involve overriding some existing fiscal rules, for instance by providing central government funding to local governments whose programs are hindered by balanced budget rules (or constrained by financing difficulties).[32] However, automatic stabilizers tend to be relatively small in EMEs (reflecting a smaller public sector and less extensive social transfers, as well as less progressive income taxes), so that a discretionary policy response—where feasible—will likely be necessary.

Discretionary measures

Discretionary increases in spending or tax cuts should be targeted to achieve maximum impact. For example, protecting the poor and other vulnerable groups would not only have a stimulative impact (as they have a high marginal propensity to consume), but would also provide a social safety net. Although income tax cuts are likely to be less effective in EMEs, because the tax base tends to be narrow—often consisting largely of the wealthy or middle classes—and tax cuts are therefore unlikely to be spent, cuts to payroll and consumption taxes could have a greater impact on the poor and thus be more effective. Explicitly temporary reductions in consumption tax rates may be more effective in the short run as they provide incentives to bring forward consumption to the current period. Large consumption tax cuts targeted on big-ticket items may be more effective than small cuts on a wide range of goods, by achieving greater salience or visibility (although this strategy may also be more distortionary and pose a greater risk of producer capture).

Increasing government capital expenditure may be easier to achieve in the short term, assuming that "shovel-ready" projects exist and there is institutional capacity within the public sector to rapidly scale up the capital budget. Given the likelihood of a prolonged downturn, there is a greater scope for relying on infrastructure investment despite implementation lags. Moreover, given larger infrastructural needs in emerging market economies, the impact on potential growth could be larger than in advanced economies. (By the same token, however, the import content of investment expenditure—and hence leakage of stimulus—is probably higher.) Because all government spending is spent, whereas some tax cuts are saved, expenditure measures ought to have a greater impact on aggregate

[32] Commodity-exporting countries that derive a large portion of government revenue from royalties related to natural resource extraction that are paid by foreign corporations will tend to experience a significant decline in revenues as a result of the fall in global demand for commodities. This should not be thought of as an automatic stabilizer, however, because the reduced tax liability is experienced by external rather than domestic taxpayers.

demand. However, increases to recurrent expenditure are risky, as they are hard to reverse once the need for additional stimulus has passed and could therefore have negative implications for debt sustainability that more than offset any short-term stimulative effect.

Government guarantees

Government guarantees on (domestic) bank lending could be an effective means of maintaining existing levels of private sector demand under certain circumstances (Box 4).[33] This measure might be preferable to tax cuts or expenditure increases where domestic credit is a key driver of economic activity, not least because functioning credit markets may be a precondition for the success of conventional fiscal policy interventions. If the government

Box 4. Credit Guarantee Schemes: Principles and Design Issues[1]

Government guarantees of bank lending could be a useful form of fiscal stimulus when other (and less distortionary) policy options are constrained and where the shock to demand has come mainly through a sharp reduction in the supply of bank credit due to higher perceived credit risk (as opposed to deleveraging).

Assuming that a credit guarantee scheme could help, what are the principal design issues?

- **Adverse selection** is a key concern: banks may seek to offload credit risk by tapping government guarantees of their worst existing loans. Limiting guarantees to new lending and to sectors where the government can easily verify the quality of the borrower (e.g., because the loan is fully collateralized) is one means of reducing adverse selection.
- **Moral hazard** problems apply more to new lending: banks may take on more risky loans with a government guarantee. Offering only partial guarantees is one means of reducing this problem, although in this case the guarantee may be insufficient to encourage new lending.
- **Additionality** is another worry: banks may not make any additional loans, but merely reduce their risk exposure. Because money is fungible, this is hard to overcome. However, if banks are able to reduce their risk exposure for a given loan portfolio, they ought to be able to expand their balance sheet, even if less than one-for-one with the volume of loans guaranteed.
- **Bank bailouts**: persuading banks to increase their lending while avoiding principal-agent problems (adverse selection and moral hazard) may be easier in the context of broader government intervention in the banking sector. For instance, lending targets could be a condition of government recapitalization of undercapitalized banks, and the government may be able to more easily control and monitor the behavior of banks in which it has an equity stake. However, this raises the risk of political interference, inefficient directed lending, or even outright corruption, particularly in countries with relatively weak governance.
- **Fiscal sustainability** is a key consideration for all fiscal policy interventions. However, because credit guarantees are contingent liabilities, exposure needs to be monitored particularly carefully as a deterioration in external conditions could radically increase the government's overall exposure.

[1]This box draws on insights from a background note prepared by Fletcher, Mati, and van Elkan (2009).

[33] Government guarantees could be offered, for example, in concert with injections of central bank liquidity, as with the Federal Reserve's Term Asset-Backed Loan Facility (TALF).

would not expect to be "on the hook" for the full amount guaranteed (because only a fraction would be likely to default), then each dollar allocated to the guarantee scheme would have a multiplicative impact. However, the contingent liability could balloon in value if conditions were to deteriorate rapidly, perhaps undermining the ability of the government to undertake other necessary fiscal measures. To reduce such risks and protect the government's balance sheet, government guarantees could in practice be provided only for high-quality assets of banks and jointly with government support for recapitalization. There should also be transparency about the full extent of the government's contingent liabilities.[34] Although guarantee schemes already exist in many advanced and some emerging market countries (e.g., for small businesses), any significant expansion would require careful design to minimize moral hazard and adverse selection problems.

V. CONCLUSIONS

The current financial turmoil is confronting emerging market economies with two shocks: a "sudden stop" of capital inflows resulting from the global deleveraging process, and a collapse in export demand associated with the global slump. The deleveraging process has had particularly negative repercussions for countries that had foreign currency credit booms and now face large debt overhangs. This note has outlined measures to ameliorate the debt overhang and macroeconomic policies to bring about recovery. Countries' individual circumstances vary, and this note has therefore highlighted a diverse range of policy options, including policies to address bankruptcies and debt restructuring, conventional and unconventional monetary and exchange rate policies, and fiscal policy options that respect the limited fiscal space that EMEs often face. One conclusion that bears repeating is the crucial importance of putting in place a credible exit strategy. Only with such a strategy can policies be sufficiently bold to restore confidence and help stem the slide in activity in the short run without jeopardizing long-term sustainability or sacrificing EMEs' hard-won gains in policy credibility.

[34] Full disclosure of explicit contingent liabilities is desirable for effective identification and management of fiscal risks. But reporting on implicit guarantees might not be appropriate if it were perceived as a blanket guarantee of financial assistance resulting in moral hazard (Cebotari and others, 2008).

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