The Impact of the Financial Crisis on Developing Countries

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Throughout this crisis that has so consumed the attention of the world in recent months, we have watched with grave concern as it cascaded outwards from the sectors originally affected. Alan Greenspan recently called it a "once-in-a-century credit tsunami", born of a collapse deep inside the US housing sector. But metaphors from other recent disasters come to mind too, as we have watched this great wave overtop one economic levee after another. Instability has surged from sector to sector, first from housing into banking and other financial markets, and then on into all parts of the real economy. The crisis has surged across the public-private boundary, as the hit to private firms' balance sheets has now imposed heavy new demands on the public sector's finances. It has surged across national borders within the developed world, as the people of Iceland know all too well. And now there are reasons to fear that the crisis will swamp emerging markets and other developing countries, cutting into the considerable economic progress of recent years.

The developing world – what it has recently achieved, how these achievements are now at risk, and what it must now do – is the focus of this paper. Understandably, perhaps, until now the focus of policymakers has mostly been on the actions of the governments at the epicenter of the crisis, as well as those of other developed countries like Japan and Korea. But now we must also focus on the developing world, as it faces the surge of instability. The 1.4 billion people who live in or on the verge of extreme poverty are all in the developing world; given their slim margin for survival, any economic crisis will have its most severe human consequences in the developing countries. So there are altruistic reasons for concern about the developing countries in the crisis. But there are also strong reasons of self-interest. As I will argue, demand from the investment-led booms in developing countries did much to drive the rapid global economic expansion of this decade, and preventing deflation and depression could very well depend on keeping that growth going.

I will begin with a brief discussion of the dynamics of global growth in 2002-07, focusing on the mutually reinforcing booms in the developed and developing world. I then discuss how all this growth began to unravel in 2007-08, starting with the US housing crisis. In the final section, I discuss how we can respond to the crisis to ensure that the costs to the developing world are as small as possible.

Why was the global economy so dynamic in 2002-07?

Developed-country growth fueled by expansionary monetary and fiscal policy

The expansion of 2002-07 began with a bang – the bursting of the US tech-stock bubble in 2000-01, which had a substantial wealth effect on American households. To minimize the duration and depth of the ensuing recession, the Federal Reserve aggressively eased monetary policy. It lowered either the Fed funds rate or the discount rate 27 times between January 2001 and June 2003, with the funds rate falling from 6.5 percent to 1.0 percent over that period. This expansionary monetary policy averted a deeper recession by stimulating a boom in the housing market, which soon turned into a housing bubble.

Because of the large share of the housing stock in household wealth, this bubble overcompensated greatly for the loss of wealth in the stock market decline of 2000-02. Higher housing prices fueled a consumption boom, and the Fed's continued expansionary monetary policy kept the US economy awash in excess liquidity.[1] Another essential ingredient behind the persistently low US (and global) real interest rates was the shift of developing countries toward accumulating large volumes of US assets, motivated by their experience in previous crises and made possible by their current account surpluses. This made it possible for the US to finance its massive current account deficit over a prolonged period without abrupt changes in real interest rates or real exchange rates.

At the same time, there were high levels of financial innovation on Wall Street, driven by a search for higher yields in a low-interest-rate environment. Much of this innovation was carried out by firms whose activities were not regulated, and other new instruments were too complex to be effectively regulated. As a result, policies tended to advocate for deregulation of financial markets and were sometimes accompanied by additional lax supervision.

Other developed economies faced the same adverse impact as when the internet bubble burst and other central banks also lowered rates, although less rapidly than the Fed, and their economies quickly recovered as well. In several other developed economies, apparent housing bubbles inflated, and in some cases they were larger than the US bubble. As a result of this combination of policy and market psychology, the brief global recession

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[1] There were reasons for this monetary policy, even if it seems excessively lax in retrospect. The Fed has never viewed preventing asset price inflation as part of its mandate, and Alan Greenspan publicly expressed doubts about the Fed's ability to deflate bubbles without incurring too much collateral damage. Furthermore, the productivity gains and stagnation of US median real wages during the expansion was taken as a sign that there remained slack in the labor market, so that it wasn't time to "take away the punch bowl" yet.

of 2001-02 was followed by a period of reasonably dynamic growth in the US and in much of the developed world, accompanied by low capital costs.

The investment-led boom in the developing world

Developing economies also thrived during 2002-07, for a combination of reasons. One important set of reasons was domestic. As a group, the developing economies had entered the decade in much better shape (macroeconomically and otherwise) than they had the previous two decades, for example with lower inflation and more sustainable fiscal situations. These conditions would likely have predisposed the developing world to more rapid growth, and they also better equip the developing countries to deal with exogenous shocks in the current crisis.

But because of the developed-country boom, the developing world found its growth stoked further by increased export revenues and higher commodity prices, a surge in foreign direct investment, and increased remittances from abroad. First, growth in the mature economies and elsewhere increased export demand sharply in 2002-07, so that developing-country exports accelerated even beyond their rapid growth pace of the 1990s.[23] At the same time, there were sharp increases in commodity prices, which both resulted from and contributed to growth in many developing countries (see Figure 1). Exports increased as a share of developing countries' GDP from 29 percent in 2000 to 39 percent in 2007. Second, the flow of foreign direct investment to developing countries soared, as investors sought

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[2] Again, in part this reflected better fundamentals: during the first 8 years of this decade, developing countries increased their exports by an average of 10.3 percent per year, even though annual real import growth into developed countries was just 4.4 percent. They achieved this by increasing their market share in developed countries, as well as by increasing south-south trade.

[3] The average annual growth rate in exports of goods and services from developing countries was 4.2 percent in 1980s, 4.8 percent in 1990s, accelerating sharply to 12.3 percent for the period 2002-2007.

higher returns than they could earn domestically in a period of low yields in mature economies. In 2007 alone, net private capital flows to developing countries increased by $269 billion, to a record $1 trillion (see Figure 2). Earlier this year, the *Global Development Finance 2008* noted that "[n]et bank lending and bond flows have increased from virtually zero in 2002 to 3 percent of developing countries' GDP in 2007, while net foreign direct and portfolio equity flows have increased from 2.7 percent of GDP to 4.5 percent" (World Bank 2008) Remittances from workers in foreign countries also increased sharply, to a total of about $240 billion in 2007 (see Figure 3). These transfers were a particularly important source of finance for some labor-abundant, resource-poor countries.

The rapid increase in these three sources of financing led to an investment boom in many developing countries, led by the BRICs (Brazil, Russia, India, and China)[4]. This in turn stimulated their demand for capital goods from the US, Japan, and other developed economies[5], further fueling the growth of their economies. As a result of both the direct effects of investment and this self-reinforcing cycle, the developing world as a whole achieved its highest growth rates in decades. From 2003 to 2007, the collective GDP of developing countries grew more than 5 percent each year; in 2006 the growth rate peaked at nearly 8 percent, with all developing regions close to or exceeding 5 percent growth (see Figure 4). By contrast, average annual growth for 1980-2000 had been just 3.4 percent. In

[4] Gross fixed investment in developing countries grew 10.9 percent on average over the period 2002-2007, up from 2.9 percent in the 1990s and 1.6 percent in the 1980s. This is in large part due to acceleration in investment growth in BRICS, from 2.6 percent in the 1990s to 12.4 percent over the period 2002-2007.

[5] Merchandise export volumes from USA, JPN, and Germany (the largest exporters of capital goods) rose on average by 6.6 percent in the period 2002-2007, compared to 5.8 percent in the 1990s. This refers however to total merchandise exports (to both developing and high income countries).

In nominal terms the exports of machinery and transport equipment from high income countries to low and middle income countries increased by an annual average of 16.7 percent over the period 2002-2007, up from 12 percent in 1990s.

the recent period, investment is estimated to have added about 4 percentage points to annual GDP growth (World Bank 2006).

At the same time, US demand was stimulated by the substantial swing in the US fiscal position, from a small surplus in 2001 to a sizeable deficit in 2003, which resulted from sharply increasing spending on defense and homeland security while cutting central-government taxes. Combined with a low interest rate and low saving rate, the fiscal deficit contributed to large US current account deficits and higher demand for developing-country exports (see Figure 5). This created a feedback loop, by further stimulating developing countries' demand for investment goods and developed countries' capital goods industries.

With rapid growth in developing countries came the emergence of vulnerabilities much like those that were appearing in developed countries. The combination of abundant investment capital and rapid growth helped to inflate real estate prices to bubble-like heights in some emerging markets. Many equity markets surged as well, some to levels that suggested irrational exuberance.

Over the first part of this period of rapid global growth, roughly from 2002 to 2006, the resulting increases in prices for commodities were offset by low costs of production in countries such as China, India, and Vietnam. Inexpensive exports from those countries allowed the world economy to continue to achieve both high growth and moderate (though rising) inflation. But by 2007, years of rapid growth had led many economies to begin to hit capacity constraints. The cost of resources soared, and the US twin deficits – fiscal and current-account – weakened the dollar and led to greater volatility in commodity prices.

Why has that dynamism collapsed in developed countries, and what will be the effect on emerging markets and poorer countries?

The collapse in the United States and other advanced economies

The basic contours of the current financial crisis are by now well known. As the well-known economist Herbert Stein once pointed out, if something cannot go on forever, it won't. Annual double-digit increases in US housing prices proved unsustainable, and the rapidly growing price-rent and price-income ratios clearly had to fall (see Figure 6). The first clear sign that the US housing bubble was bursting, the mid-2007 crisis in the sub-prime mortgage market (stemming from the significant increase in defaults), transmitted losses to a whole set of securitized financial products such as mortgage-backed securities. Many of these new securitized financial products with layers of underlying assets were revealed to be far riskier than their credit ratings indicated. The drop in value of these assets dealt a blow to the balance sheets of many financial institutions. Even worse, the financial innovations of this decade – many of which had been sold on the promise that they would diversify and minimize risk – turned out to be transmission mechanisms for instability. The subprime mortgage crisis thus became a full-fledged financial crisis, which in turn has led to a collapse in equity markets

Although the full-fledged crisis struck first in the United States, the US is not alone in its vulnerability to shocks and collapses in consumer confidence. Many countries, both developed and emerging-market, have recently experienced bubbles in asset markets. Housing prices have risen rapidly for reasons not entirely explained by fundamentals in such countries as Ireland, the UK, and Australia (see Figure7), according to the IMF (2008), while countries like China and Russia saw speculative frenzy drive their equity markets to dizzying heights before the crisis. Financial integration and cross-border holdings of mutual funds, hedge funds, developed-country bank subsidiaries, and insurance companies have transmitted turbulence and helped propagate asset price collapses in European and other countries.

The bursting of a bubble this large, with the financial consequences that we have seen in recent weeks for credit and equity markets, makes a recession inevitable in the United States and likely in other developed economies. Indeed, job losses and other indicators suggest that the US has probably already entered a recession, and the IMF and World Bank are currently projecting 2009 growth in the US of just 0.1 to 0.2 percent (International Monetary Fund 2008; World Bank Forthcoming). Growth in the Euro area and Japan will also decline sharply, with the IMF predicting 2009 GDP growth of just 0.2 and 0.5 percent, respectively, and the latest World Bank projections even more pessimistic. More recent private sector forecasts are at least as gloomy, and in some cases much more so (see, for example, Berner 2008; Martin and Schaffler 2008).

What makes the recession a macroeconomic certainty is that the United States must undergo adjustment to redress the imbalances of the bubble years.[6] Fortunately, when the crisis burst into the open after September 14th and the bankruptcy of Lehman Brothers, policy-makers acted swiftly and pragmatically to avoid the worst consequences—a complete shutdown of the global inter-bank market, a rapid credit crunch, and its eventual consequence, the collapse of the global banking system. Thanks to the comprehensive, decisive, and coordinated intervention by Euro Zone, UK, Japanese, and US authorities in

[6] Indeed, the dangers of a rapid unwinding of global imbalances were a recurring theme of reports from the international financial institutions – the IMF's *World Economic Outlook* and the World Bank's *Global Economic Prospects* and *Global Development Finance* – over the past several years. Prominent academic and other critics also raised these concerns, although there was no unanimity on how damaging the unwinding was likely to be.

the first week of October, there are reasons to hope that the collapse of the banking sector can be prevented. But the catalyst of the banking crisis – the collapse of the US housing bubble – cannot be reversed. The extent of the meltdown goes far beyond the estimated $1.3 trillion in sub-prime mortgages at the start of the crisis. The housing price collapse of 2007-08 and more recent meltdown in equities have dealt US homeowners trillions of dollars in capital losses – an estimated $2.4 trillion in just the nine months through June 2008 (Federal Reserve figures, cited in World Bank Forthcoming), and much more with the recent plunge in stock markets. Losses of this magnitude will likely have significant wealth effects on consumption.[7] Furthermore, and perhaps even more important, many households will be constrained by no longer being able to borrow against their home equity. This will lead to a fall in consumption and increase in saving, as households adjust to their new circumstances. US homeowners will no longer be able to count on rapid price increases that will allow them to downsize homes after retirement and live off the capital gains. Instead, they will need to become more cautious in consumption and to save more of their current income. In addition, losses from 401K pension-schemes and in stocks are likely to increase savings propensity by US households. Predicting the magnitude of these effects is challenging, because they depend in part on consumers' perceptions of the crisis and their psychology. But the concurrence of historically large collapses in multiple asset markets, together with bad economic news on other fronts, makes it hard to be sanguine about consumption growth.

Moreover, the data suggest little reason to hope for a quick rebound in housing prices. Based on historical ratios between housing prices and such variables as rents,

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[7] In the past, collapses in asset prices have not always dampened consumption by as much as feared, perhaps because in many cases households viewed prices at either the peak or the trough as transitory.

income, or the economy's overall price index, it appears that US housing prices could fall another 10 percent or more before reaching their long-run equilibrium level. And if irrational pessimism replaces irrational exuberance, prices could compound the damage by overshooting on the way down. Similar dynamics could play out in other countries that had apparently larger housing price gaps than the United States at the end of 2007 – such as the United Kingdom and France, as well as a number of smaller economies (International Monetary Fund 2008). Large price declines in these other markets would exacerbate the global wealth effects.

The effects on developing countries

What will be the likely effects on developing countries? One effect will be a substantial reduction in their exports, as the rapid pace of trade expansion of this decade decelerates sharply. The IMF recently projected growth in world trade volumes of just 4.1 percent in 2009, down from 9.3 percent as recently as 2006; in our own more recent projections, the deceleration is much more rapid and could in fact lead trade volumes to fall in 2009 (World bank Forthcoming). While the fall in export volume growth is projected to be greater for advanced economies than for developing economies, the latter may also suffer more from declines in the terms of trade – especially in the case of commodity exporters, given that we expect non-oil commodity prices to fall by perhaps one-fifth in 2009.

In addition, the crisis will deal a negative shock to investment in emerging markets. All of the main external sources of funds for investment are likely to drop off sharply in the first round of effects. Portfolio investment will fall, as greater risk aversion keeps capital closer to home. While FDI is historically more resilient to shocks, it too is expected to decline. In addition, developing countries that are able to gain access to capital will pay higher interest rates, because of the flight to safety and greater risk aversion of lenders. As noted above, the global slowdown will reduce demand for commodities and manufactured goods, cutting into export earnings. And as labor markets slacken, foreign workers are likely to suffer disproportionate impacts on their earnings, which will reduce remittances. About half of all developing countries have been running current account deficits of 5 percent of GDP or more, and in some cases the deficits are around 10 percent. These economies will be highly vulnerable to swings in these various sources in external financing. Overall, we now expect investment in middle-income countries in 2009 to grow at less than half the 2007 rate of 13 percent.

Second round effects will likely deepen the slowdown. Because of the investment surge of the past five years, an especially large number of investment projects are already underway. As investment financing drops off, two outcomes are possible, neither of them attractive. In some cases, the projects will not be completed, making them unproductive and saddling banks' balance sheets with non-performing loans. In other cases, when the projects are completed, they will add to the excess production capacity that will result from the global slowdown, and thereby add to the risk of deflation.

As a result of all these factors, we now expect that developing countries' collective GDP growth will decline to less than 5 percent, compared with an average of more than 7 percent in 2004-07. Moreover, the effects on developing countries may not be limited to a drop in investment and export earnings and a slowdown of GDP growth. There is a distinct danger that emerging markets could go through crises of their own, for example if their own domestic asset-market bubbles burst (or even if fair-market values collapse) and weaken their own banking sectors. Sharp drops in stock markets in developing countries have already signaled investors' concerns about the medium-term future, and the decline in portfolio values may also have substantial wealth effects on consumption, exacerbating the effects of the slowdown. Countries with high balance-of-payments and fiscal deficits will be especially vulnerable. What will exacerbate the troubles of developing economies is the simultaneous nature of these shocks. In the past, major crises in developing countries usually had a regional concentration – as in the case of the East Asian financial crisis of 1997-98 or the Latin American tequila crisis of 1995. But the epicenter of the current crisis lies deep inside the developed economies, and therefore we would expect all developing regions to be damaged by the shocks. This simultaneity increases the risks of a serious global downturn.

The global picture

In summary, as these effects reinforce each other, there is a real risk that this global recession could be the most severe since the Great Depression of the 1930s. By the time it released its *World Economic Outlook* a few weeks ago, the IMF had already revised its projections for 2008 and 2009 downward by 0.2 and 0.9 percent, respectively, since July. At 3.0 percent, the projected growth of world output in 2009 is far below the 5.1 and 5.0 percent growth achieved in 2006 and 2007 – even though China is projected to continue to grow strongly at a rate of over 9 percent (International Monetary Fund 2008). At these rates, world output growth would drop back near levels last posted during the most recent global recession, in 2001-02. But the World Bank's upcoming forecasts are now projecting a global growth rate considerably lower still. And if the dramatic moves by the UK, Euro Zone countries, Japan, and US fail to revive lending, the recession will likely be much deeper than currently projected. This is especially true if gloomy consumer psychology leads to overshooting in asset markets on the way down, as it did on the way up.[8]

What policy responses – by developing countries, IFIs, and developed countries – will limit the damage?

Although the crisis has originated in the US and Europe, and the focus of global attention has been on the policy response of those governments, all of the major actors in the international system now need to move quickly to respond. This includes developing countries, who now contribute a large share of the global economy and trade flows, and the international financial institutions (IFIs), who help oil the workings of the international system and promote widely shared development.

Developing countries

Many developing countries enter this crisis with advantages that they lacked during the shocks of the 1980s or 1990s. The strengthening of macroeconomic policies – including fiscal and external positions, in many cases – leaves them less vulnerable. Sovereign debt is better managed in most countries than at the time of the Asian crisis, and the move (in most cases) to flexible exchange rate arrangements makes it easier for countries to partially absorb the shock through exchange-rate adjustment. And the number of people worldwide living in extreme poverty has dropped by more than 300 million since the East Asian crisis (Chen and Ravallion 2008), expanding ever so slightly the narrow margin for survival at the bottom of

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[8] Worst-case scenarios are not inevitable, and the combination of coordinated policy interventions, effective financial-sector workouts, and lower commodity prices could help mitigate the effects of the crisis. But it is essential for the developing world to be as prepared as possible for what is coming, because of the serious downside risks.

the income scale. Finally, the onset of the crisis itself has diminished inflation pressures, dramatically changed expectations, and (for net importers) reduced commodity prices, which should reduce strains on some developing economies.

Developing countries will need all these advantages as they move to limit the damage from this crisis. The first priority is to *prevent financial contagion* from crippling domestic banking and non-banking financial sectors. Because of the high level of interlinkages among the world's financial firms and sectors, these effects have begun to arrive before the real-economy effects in some countries. Stock markets have declined sharply, some currencies have depreciated substantially, and sovereign interest-rate spreads have risen with the "flight to safety" in world markets. At a more micro level, some developing-country exporters are already finding it hard to obtain the trade credits that are their lifeblood, which could cripple export sectors that will soon be hit by the fall in foreign demand.

So just like in the developed countries, it is important that the developing countries take quick, decisive, and systematic measures to ensure that credit crunches and bank collapses are avoided locally. And in extending deposit guarantees, governments need to set adequate floors and coordinate policies to avoid "beggar-thy-neighbor" policies, while guarding against the long-run moral hazard effects that will make the regulators' job harder in the future. [9]

Developing countries that enter the crisis with large balance-of-payments and fiscal deficits will be the most vulnerable to these effects. Such countries will have larger financing

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[9] Governments should consider some of the interventions as temporary measures and find a way to exit from them when economic stability is restored. Governments need to ensure that short-term crisis response do not create longer-term vulnerabilities. Where systematic government recapitalization of banks becomes necessary, it is important to provide the right long-term incentives and recapitalize primarily the sound institutions. Admittedly this is among the most difficult arts in policy-making, but blatantly insolvent institutions need to be recognized and dealt with promptly, rather than being extended liquidity that will exacerbate the problem.

and adjustment needs, if the current account swings sharply from deficit to balance as capital dries up, as occurred in the Asian financial crisis. This will put a deep strain on the balance sheets of domestic firms and banks, potentially leading to a cascade of bankruptcies and bank failures. If their fiscal resources are already strained to the limit, then it may be impossible to mount domestically financed rescues of their financial sectors. These countries will likely have to seek financing for the international financial institutions (discussed below), especially at a time when bilateral donors are already straining to meet domestic crisis needs.

More generally, developing-country governments have two main macroeconomic tools for responding to the negative shock that is coming their way: *monetary policy* and *fiscal policy*. One great risk is that if the credit crisis is not effectively resolved, the global economy could enter a period of deflation like the one that Japan suffered through in the 1990s. In that environment, standard monetary policy will not likely be effective in the developed economies. Firms in these countries are already on or near the global technological frontier, so there is limited room for industrial upgrading, meaning that any credit-financed expansion would primarily be in terms of production capacity. But in the face of low demand and excess capacity, developed country firms are not likely to want or be able to borrow to finance expansion.

In the developing world, by contrast, there is more room for credit-financed industrial upgrading, which may give more room for monetary policy to work in those countries that can afford to use it. Not all countries will be able to; some may find themselves forced to tighten monetary policy and increase interest rates to prevent excessive currency depreciation or capital outflows. But some governments may be able to provide some monetary stimulus by lowering interest rates and encouraging investment in sectors where industrial upgrading is most likely to have payoffs. Specifically, as I argued in my 2007 Marshall Lectures, these sectors are those whose products exploit the country's areas of comparative advantage but that face some barriers to expansion as a result of market failures (Lin 2007).

On the fiscal-policy side, developing-country governments have a variety of tools that they could use to cushion the blow of the shock. Governments with some fiscal space can respond by injecting some well-designed fiscal stimulus into their economies, to generate domestic demand that can offset the expected decline in foreign demand. Developing countries have pressing needs that can be met through public investments. One such need is building of *infrastructure*, especially after a period when private-sector growth has sometimes outstripped the ability of the public sector to provide the infrastructure needed to sustain that growth and rural infrastructure where the infrastructural gap exists between urban and rural areas.

A second area for investment is *social protection and human development*, to ensure that a temporary shock is not converted into severe permanent declines in welfare of poorer households. There are many programs that have been shown in evaluations to be worth investing in; governments should prioritize protection and expansion of those that most effectively buffer the impact of crises on the poorest households. (See Ravallion 2008) for an excellent recent summary.) Examples of the types of programs to consider could include conditional cash transfer programs to keep disadvantaged children in school, like Indonesia's program during the 1997-98 crisis (Cameron 2002), public-works employment (or workfare) programs like India's Employment Guarantee Scheme (Gaiha 2004), and subsidies on the consumption of inferior goods (those that are not consumed by the non-poor). Such programs will be appropriate responses for countries with healthy reserves, current-account surpluses or small deficits, and solid fiscal policies. An obvious example is China, where higher domestic demand could also help cushion the crisis' effects on trading partners. In other countries with less fiscal room for maneuver, programs like these should be a priority for donor support.

In sum, policy-makers in developing countries are likely to be facing dilemmas whose solution will be highly dependent on how they behaved during the boom period (e.g., allowing more lax or tighter macro policies, or building buffers against shocks or not), as well as how the global shocks affect their individual economies. Their ability to respond to the crisis depends on whether emerging markets have room to act in a prudent counter-cyclical way by increasing domestic demand without sacrificing excessively their fundamentals. These fundamentals include the countries' fiscal positions, debt levels, domestic inflation rates, and the health of their domestic banking sector. Some developing countries have scope to do this, while others have less room for fiscal maneuver and still others are already experiencing credibility shocks and capital flight out for higher quality.

International financial institutions

Armed with the lessons of past crises, the International Monetary Fund should be well-placed to help emerging markets make balance-of-payments adjustments to what should be temporary reversals in capital flows. And although the World Bank does not have the resources or instruments to provide major balance-of-payments support (nor is that its primary mandate), it will work closely with the Fund to provide complementary assistance. The Bank can expand its lending and grants substantially, focusing on the structural and social areas that are its mandate. For example, it has recently announced a $1.2 billion rapid financing facility to help countries that have been dealing with high food prices. The recent

$41.6 billion replenishment of its low-income-country window (known as IDA-15) gives it sufficient resources to help many countries with the infrastructure and social investments outlined above. In the case of middle-income countries, it has the financial headroom to double IBRD lending from the FY07 level of about $13.5 billion. The IFC can also help, in case the developing countries want to recapitalize their domestic banks. In summary, the World Bank can help countries to avoid the financial crisis becoming a humanitarian crisis and to navigate the challenges of strengthening and, if necessary, rescuing banking systems and adopting other financial reforms.

Developed countries

In the short time since the financial crisis went global, a great deal has already been written about how developed countries should respond to the global credit crisis. A preponderance of expert opinion soon formed around core recommendations – that governments recapitalize banks and provide further guarantees on bank deposits and loans (see, for example, Eichengreen and Baldwin 2008) – that have already become policy in the European Union and the United States. Given the brainpower that is already devoted to the developed-country response, I have focused my recommendations primarily on developing economies and IFIs.

Nevertheless, development economics may have some additional insights that could be brought to the developed-country discussion, beyond the specific details of recapitalizations and guarantees. So many developing countries have gone through recent financial crises of their own – including the global debt crisis of the 1980s, the "tequila crisis" of the mid-1990s, and the Asian financial crisis of 1997/98 (which quickly spread to other emerging markets) – that the development literature includes some valuable lessons about how to resolve them.

One such lesson concerns the importance of rapidly reaching social consensus on how losses are to be shared.[10] Without such an agreement, the economy can become mired in social conflict and prevented from moving forward with reform. Numerous studies after the crises of the 1980s focused on the question of why stabilizations are delayed (see, for example, Alesina and Drazen 1991) and on the costs of those delays, both fiscally and economically. An argument made at the time of the last major crisis was that democracy and the rule of law had proven to be important mechanisms for reaching agreement on the sharing of losses after negative economic shocks, especially in heterogeneous societies (Rodrik 1999). Applied to the current case, the point is a broader one: that the wealthy countries need to make use of their relatively advantageous institutional structures to come to quick agreement on how to move forward. Early indications are encouraging on this score; since the full-blown crisis hit in September, the EU and US governments have moved faster and further than would have been predicted to adopt dramatically expanded government roles in the financial sector. The test in the coming months will be whether these policies, agreed to by elected representatives and appointed central bank officials, continue to receive the popular support necessary to sustain them over the coming years of financial stabilization and rationalization. This in turn will require that the policies be implemented in ways that minimize social costs and opportunities for corruption in the partially nationalized banking sector.

A second set of recommendations concerns developed-country policies that may directly affect the developing world's ability to respond to crisis. Given the likely economic

[10] This lesson of course applies as much or more to the developing countries this time around too.

costs of the crisis and the certain immediate fiscal costs of the public sector response, governments will likely feel pressure from taxpayers and voters to raise trade barriers and possibly reduce international aid. But giving in to those pressures would exacerbate the pressures on the developing world and risk contributing to a vicious cycle as intense as the virtuous cycle of 2002-07, which I outlined at the beginning of this lecture. Resisting protectionist pressures will be particularly important, after a period during which the developing world sharply expanded its interdependence with the global economy. At a time when the signals and institutions associated with market capitalism are losing much of their luster, developed-country governments must stick to policies reflecting the widely recognized positive role of trade on growth – and by all means avoid recourse to new trade barriers.

Conclusion

Thus despite recent actions to save the banking sector, very serious downside risks remain. The worst-case scenario, a deep global recession, is not absurd to contemplate. With this decade's rapid growth in developing countries having been driven by investment, and with excess investment in housing at the heart of the crisis in developed economies, the global economy will have a great deal of excess capacity to work off. If the sharp declines in asset values have large wealth effects, then the resulting drop in demand could lead to worldwide deflation. Countries in a strong fiscal position have tools such as infrastructure and social investments that they can use to combat deflation, but others will face a much greater problem. Before we confront this worst-case scenario, it is important to begin thinking creatively about more concerted responses that can reignite demand globally.

Some lessons and open questions for economic policy management

Even with the crisis far from over, it is already evident that a number of lessons and questions for economic policy management and crisis response should be placed on the table for discussion. Unlike the policies discussed in the previous section, which focus on the immediate crisis response, these are lessons and questions concerning economic management that can help in avoiding future crises:

Governments should consider carefully whether controlling asset price inflation should be added to the mandate of monetary policy authorities. Throughout the US dot-com and housing price bubbles, the Federal Reserve continued to adhere to its view that its mandate was to pursue price stability and full employment, not to deflate asset price bubbles. But amid the wreckage caused by the second burst bubble in a decade, it is clear that this view needs to be rethought. If the Fed is not able to keep these bubbles from inflating, it will not be able to achieve its other objectives. There are reasonable questions about just how effective monetary authorities will be in preventing asset-price bubbles, but it is no longer reasonable not to rethink the issue carefully. Governments should investigate further the issues of instruments, timing, management of expectations, and explicit or implicit targets that would be needed to reduce asset price volatility.

Financial supervision needs to try its best to keep up with financial innovation. This is by definition challenging. As in other sectors, innovation in the financial sector has the potential to increase productivity and social welfare, but it can also contribute to herd behavior, bubbles and panics, and crashes. The techniques and art of supervision must be able to follow financial-sector innovators into new territory where, by definition, innovation will always have a head start. In the recent past, the dominant philosophy has been to focus on minimizing the potential economy-wide, systemic risks of a deregulated environment in specific sectors of the financial markets. Banking models differ across countries and hence so do regulatory environments, but the absence of a more global model of financial supervision is not tenable in a world where (despite important efforts in Basel) a single firm's miscalculations or risk-taking can produce global negative externalities. The issue is certainly complex, since it is related to the internal system of incentives in the financial sector, in particular the combined pro-cyclicality of financial actors and markets (e.g., credit supply and the behavior of agencies rating the quality of assets). So governments should encourage innovation, but also need the instruments and creativity to ensure that the new instruments can be supervised effectively. Finally, we are now increasingly recognizing that macro supervision need to go hand in hand with financial supervision and that it has to be done globally and in particular with as much attention paid to developing as to developed economies.

Responses to global crises must be systematic, comprehensive, decisive, and coordinated. Given how globalized financial sectors now are, piecemeal and unilateral responses to financial crisis will run the risk of worsening the ripples of negative reactions across borders without addressing fundamental problems. To take one very current example, changing rules on deposit guarantees in the midst of a banking sector confidence crisis is a step that requires adequate coordination not only with monetary partners but also with the interconnected international community. Many other important problems encountered in this crisis proved to require global coordination: recapitalization of global banks, ring-fencing of "toxic assets", facilitating their "re-pricing", guaranteeing inter-bank credit, and reducing central banks' base rates. Only when all major parties in the US, Asia, and the EU announced a systemic and coordinated response could there be any hope of dispelling the fear that a complete collapse of the banking sector was likely.

Global problems may require global multilateral solutions. If indeed the world does find itself in a global recession next year, as we fear is possible, further and more creative multilateral action may be necessary. One possible course of action is a specifically designed fiscal stimulus, not just coordinated but also well-sequenced to complement locally done counter-cyclical policy efforts. As I have argued above, there will be many opportunities for productive fiscal investments in developing countries, in such areas as infrastructure and social investments. A whole range of actors, public and private, could provide financing for a fiscal stimulus in these areas in developing countries. In the same way that exports to Marshall Plan countries provided a stimulus during the US demobilization after World War II, the resulting growth in the developing world could generate demand for developed countries' products and help restart a virtuous cycle of mutually reinforcing growth. Whatever the details of the multilateral effort, the point is that the scale of the problem demands greater creativity and imagination, and that we cannot be constrained by the limits of institutional structures and approaches designed for a world before financial globalization.

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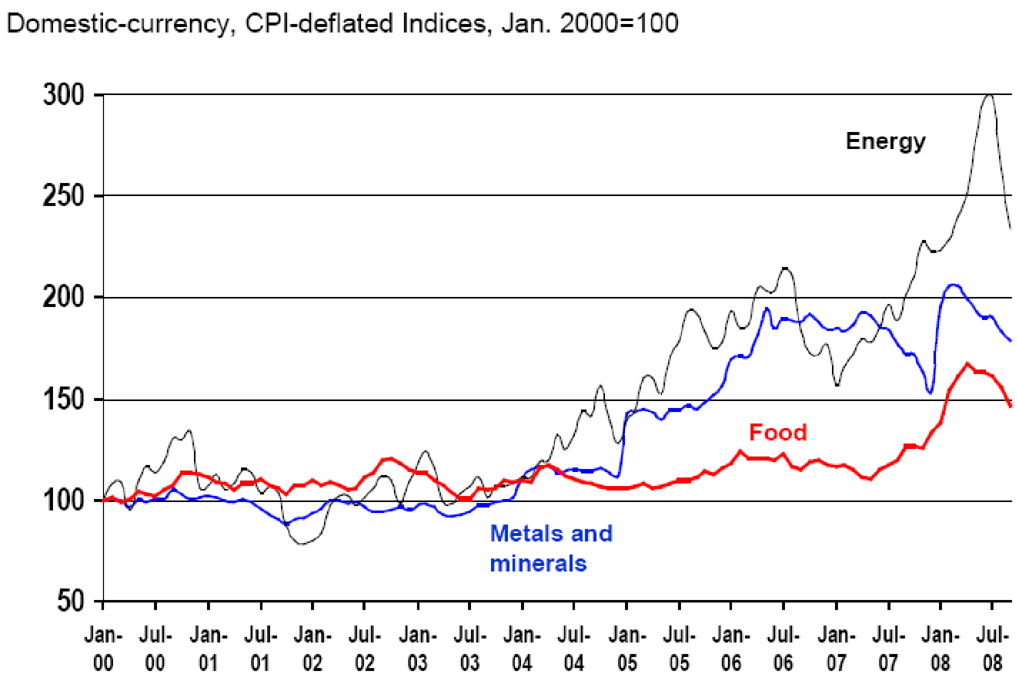
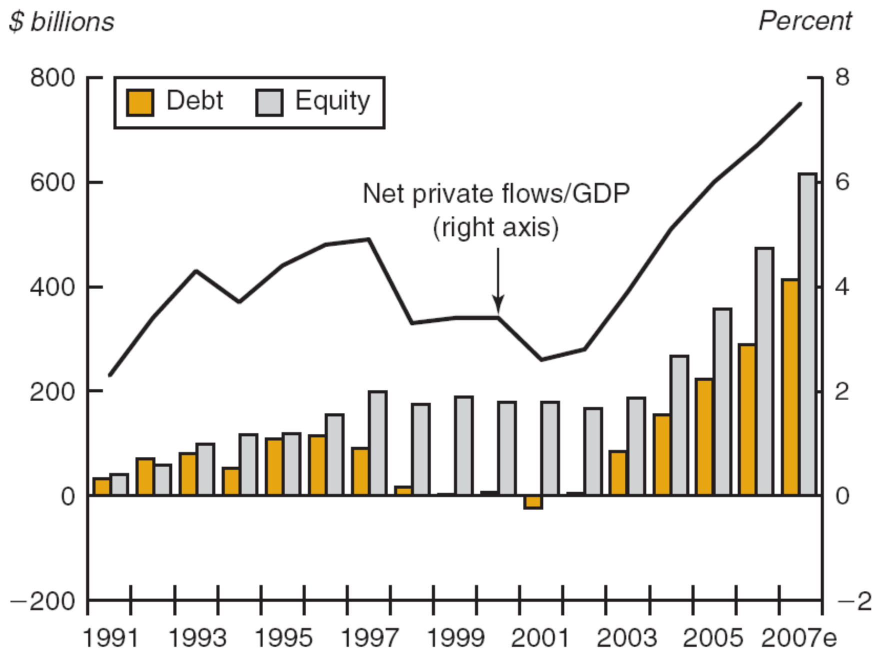
Figure 1: Real commodity price indices, 2000-08



Source: World Bank data

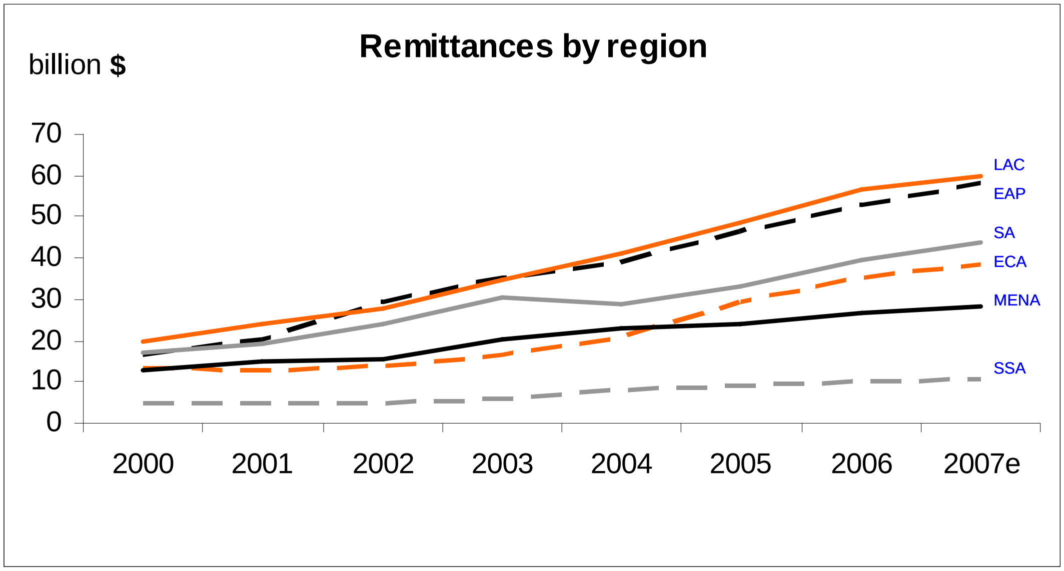
Figure 2: Private capital flows to developing countries, 1990-2007



Note: Equity flows include both foreign direct investment and portfolio investment.

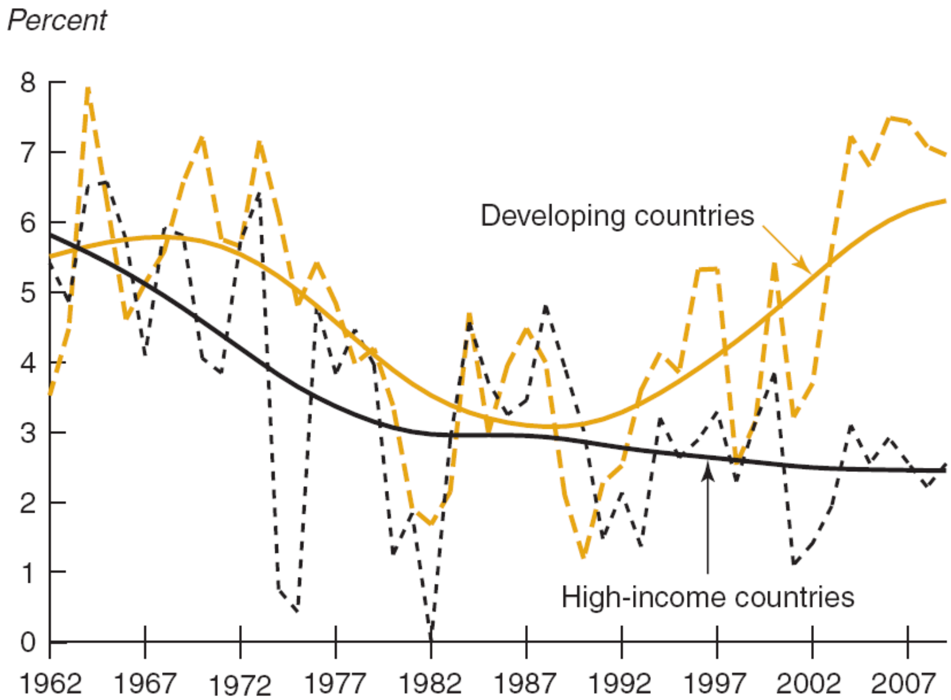
Source: World Bank, *Global Development Finance 2008*

Figure 3: Remittances to developing countries, 2000-2007



Source: World Bank, *Global Development Finance 2008*

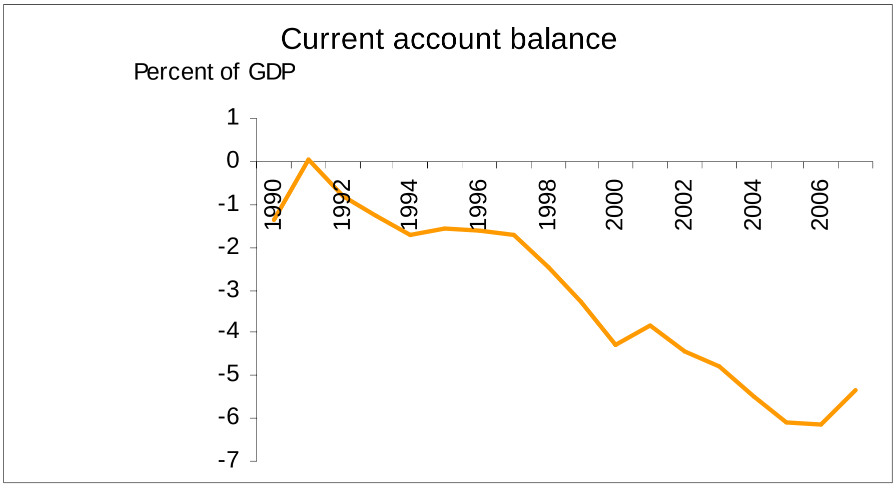
Figure 4: GDP growth in developed and developing countries, 1962-2007



Source: World Bank, *Global Development Finance 2008*

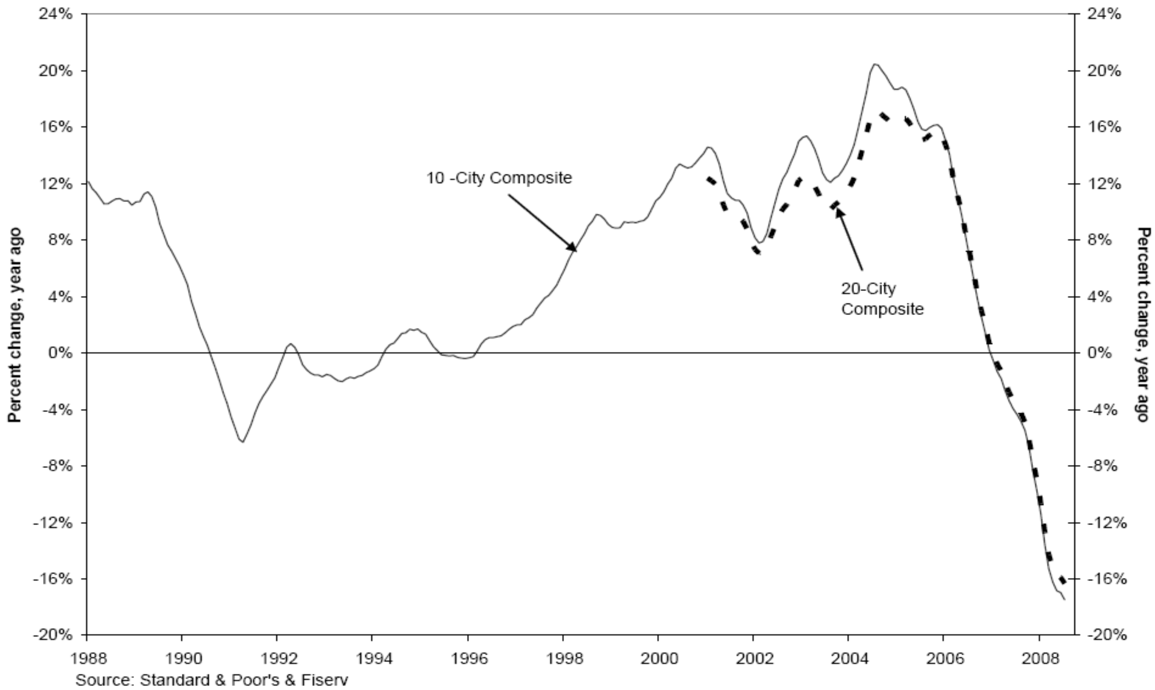
Note: Solid lines show smoothed trend

Figure 5: US current account deficit, 1990-2007



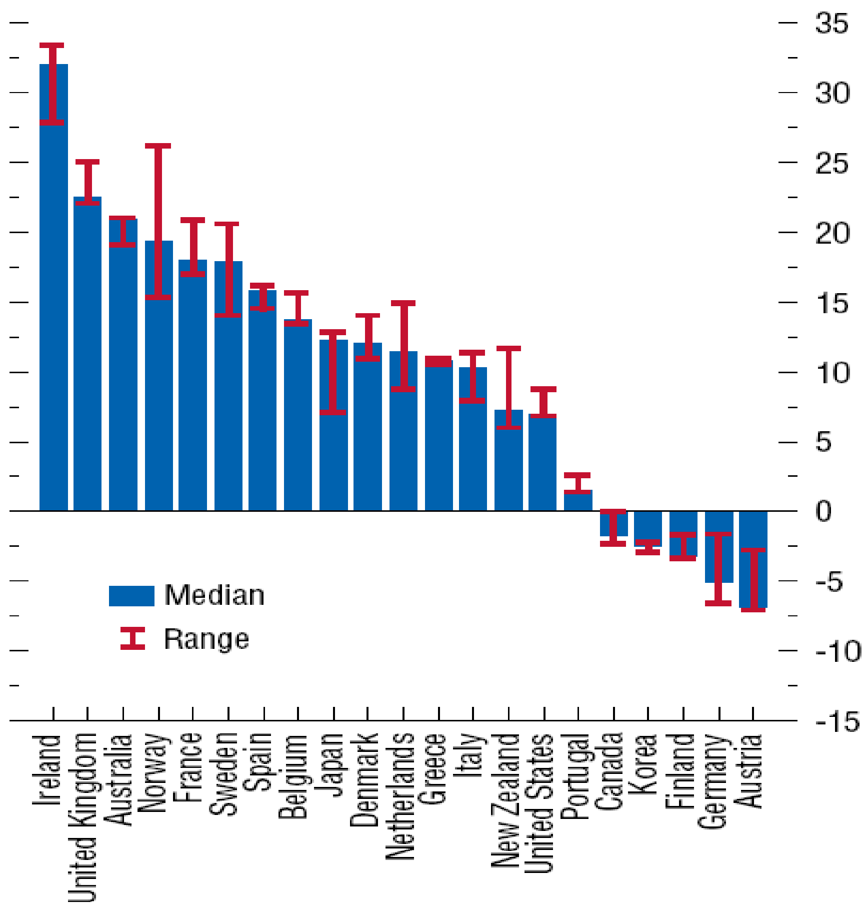
Source: World Bank, World Development Indicators

Figure 6: Changes in US housing prices by the S&P/Case-Shiller Indices, 1988-2008



Note: Data from standardandpoors.com as of September 30, 2008

Figure 7: Housing price gaps in 21 countries as of end-2007 (in percent)



Source: IMF, *World Economic Outlook 2008,* based on IMF staff calculations

Note: Figure shows an estimate of the percentage increase in house prices between 1997 and the end of 2007 that is not accounted for by fundamentals in their model