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Summary

- 1) The world is heading into a severe slump, with declining output in the near term and no clear turnaround in sight. We forecast a contraction of minus 1 percent in the world economy in 2009 (on a Q4-to-Q4 basis), making this by far the worst year for the global economy since the Great Depression. We further project no recovery on the horizon, so worldwide 2010 will be "flat" relative to 2009.
- 2) Consumers in the US and the nonfinancial corporate sector everywhere are trying to "rebuild their balance sheets," which means they want to save more and spend less.
- 3) Governments have only a limited ability to offset this increase in desired private sector savings through dissaving (i.e., increased budget deficits that result from fiscal stimulus). Even the most prudent governments in industrialized countries did not run sufficiently countercyclical fiscal policy during the boom and now face balance sheet constraints.
- 4) Compounding these problems is a serious test for the Eurozone: financial market pressure on Greece, Ireland and Italy is mounting; Portugal and Spain are also likely to be affected. The global financial sector weakness has become a potential fiscal issue of the first order in these countries. This will lead to another round of bailouts in Europe, this time for weaker sovereigns in the Eurozone. As a result, fiscal policy will be even less countercyclical, i.e., governments will feel the need to attempt precautionary austerity, which amounts to a further increase in savings.
- 5) At the same time, the situation in emerging markets is moving sharply towards near-crisis, particularly as global trade contracts and there are immediate effects on both corporates and the financial system. Currency collapse and debt default will be averted only by fiscal austerity. The current IMF strategy most clearly evident in East-Central Europe is to protect creditors fully with programs that do not allow for nominal exchange rate depreciation. This approach increases the degree of contraction and social costs faced by domestic residents, while also making economic recovery more difficult. These programs will likely prove more unpopular and less successful than were similar programs in Latin America in the 1980s and in Asia in the 1990s. As East-Central Europe slips into deeper recession, there are severe negative consequences for West European banks with a high exposure to the region (including Austria, Sweden and Greece).
- 6) The global situation is analogous to the problem of Japan in the 1990s, in which corporates attempted to repair their balance sheets while consumers continued to save as before and fiscal stimulus repeatedly proved insufficient. The difference, of course, is that exports were able to grow and Japan could run a current account surplus; this does not work at a global level. Global growth prospects are therefore no better than for Japan in the 1990s.
- 7) A rapid return to growth requires more expansionary monetary policy, and in all likelihood this needs to be led by the United States. But the Federal Reserve is still some distance from fully recognizing deflation and, by the time it takes that view and can implement appropriate actions, declining wages and prices will be built into expectations, thus making it much harder to stabilize the housing market and restart growth. The European Central Bank still

- fails to recognize the seriousness of the economic situation. The Bank of England is embarked on a full-fledged anti-deflation policy, but economic prospects in the UK still remain dire.
- 8) The push to re-regulate, which is the focus of the G20 intergovernmental process (with the next summit set for April 2), could lead to a potentially dangerous procyclical set of policies that can exacerbate the downturn and prolong the recovery. There is currently nothing on the G20 agenda that will help slow the global decline and start a recovery. The Obama Administration will have a hard time bringing its G20 partners to a more pro-recovery policy stance.
- 9) The most likely outcome is not a V-shaped recovery (which is the current official consensus) or a U-shaped recovery (which is closer to the private sector consensus), but rather an L, in which there is a steep fall and then a struggle to recover. A "lost decade" for the world economy is quite possible. There will be some episodes of incipient recovery, as there were in Japan during the 1990s, but this will prove very hard to sustain.

Background

The current official consensus view (e.g., as seen in the World Bank's Global Economic Prospects, the OECD's <u>leading indicators</u>, or the latest IMF <u>World Economic Outlook</u>) is that we are having a serious downturn, with annualized growth for the fourth quarter in the US at around minus 5%. But the consensus is that a recovery will be underway by late-2009 in the US and shortly thereafter in the Eurozone. This will help bring up growth in emerging markets and developing countries, so by 2010 global growth will be moving back towards its 2006-2007 rates.

Our baseline view is considerably more negative. While we agree that a rapid fall is underway and the speed of this is unusual, we do not yet see the mechanisms through which a turnaround occurs. In fact, in our baseline view, there is considerably more decline in global output already in the works and, once the situation stabilizes, it is hard to see how a recovery can easily be sustained.

The consensus view focuses on disruptions to the supply of credit and recognizes official attempts to support this supply. In contrast, we emphasize that the crisis of confidence from mid-September has now had profound effects on the demand for credit and its counterpart, desired savings, everywhere in the world.

To explain our position, we first briefly review the background to today's situation. (Readers who would like more detail on what happened in and since mid-September should refer to the November 10 edition of our baseline scenario.) We then review both the current situation and the likely prognosis for policy in major economies and for key categories of countries. While a great deal remains uncertain about economic outcomes, after the US presidential election much of the likely policy mix around the world has become clearer. We conclude by reviewing the prospects for sustained growth and linking the likely vulnerabilities to structural weaknesses in the global system, including both the role played by the financial sector almost everywhere and the way in which countries' financial sectors interact. In the end we come full circle - tomorrow's dangers can be linked directly back to the underlying causes of today's crisis.

Understanding the Crisis

The precipitating cause of today's global recession was a severe "credit crisis," but one that is frequently misunderstood in several ways.

- 1. While the US housing bubble played a role in the formation of the crisis and continued housing problems remain an issue, the boom was and the bust is much broader. This was a synchronized debt-financed global boom, facilitated by flows of capital around the world.
- 2. In particular, while the US boom was at the epicenter of the crisis, regulated European financial institutions played a critical role in facilitating the boom and spreading the adverse consequences worldwide. And, like the US, some European governments ran relatively irresponsible fiscal policies during the boom, making them now unable to bail out their financial systems without creating concerns about sovereign solvency.
- 3. The boom exacerbated financial system vulnerability everywhere. But the crisis in the current form was not inevitable. The severity of today's crisis is a direct result of the failure to bail out Lehman and the way in which AIG was "saved" so that senior creditors took large losses and confidence in the credit system was shaken much more broadly.
- 4. The initial problem, from mid-September 2008, was a fall in the supply of credit. But this does not mean that the current and likely pending official support for credit supply will turn the situation around. Now the crisis has affected the demand side people and firms want to pay down their debts and increase their precautionary savings.
- 5. There is no "right" level of debt, so we don't know where "deleveraging" (i.e., the fall in demand for and supply of credit) will end. Debt could stabilize where we are now or it could be much lower. Leverage levels are very hard for policy to affect directly, as they result from millions of decentralized decisions about how much people borrow. Anyone with high levels of debt in any market economy is now re-evaluating how much debt is reasonable for the medium-term.
- 6. As a result, while attempts to clean up the US and European financial systems make sense and are needed to support any eventual recovery this will not immediately stop the process of financial contraction and economic decline.
- 7. Fiscal stimulus, similarly, can soften the blow of the recession, but will not directly address the underlying problems. And many countries already face binding constraints on what their governments can do in this regard.
- 8. A dramatic shift in the stance of monetary policy is required in almost all industrialized countries and emerging markets. Unfortunately, the need for this shift is not currently recognized by official orthodoxy and it is not yet clear when this will change.

The Global Situation Today

Western Europe

Major Western European countries, beginning with the UK, have been severely affected by the global recession. The composite of forecasts tracked by Bloomberg predicts a contraction of 3% in GDP not only for the UK, whose housing bubble and degree of dependence on the financial sector were arguably greater than in the US, but even in Germany, whose exports are under severe pressure; their cars, machinery, and similar durables have a great reputation, but how

many of them do customers really need to buy this quarter? The Eurozone as a whole is expected to contract by over 2%.

In the UK, the prospect of further bank nationalization now looms. The UK is a AAA-rated sovereign with its housing market in a nose dive, overextended (and apparently mismanaged) major banks, and a government on its way to guaranteeing all financial liabilities and directing the flow of credit moving forward. The emerging strategy is based more on depreciating the pound - which is contributing to tensions with other European countries - and surprising people with inflation than on fully-funded bank recapitalization. Additional fiscal stimulus increasingly looks irrelevant and perhaps even destabilizing. The yield on 10-year government bonds is, of course rising - now over 3.5%.

Pressures on individual governments are even greater in some parts of the Eurozone, where individual countries do not have control over monetary policy. Greece faces the most immediate problems, as demonstrated both by widening credit default swap spreads and increasing spreads of Greek bonds over German government bonds. The cost of servicing Greek government debt is thus rising at the same time as Greece has to roll over debt worth around 20 percent of GDP in the coming year. Greece has a debt-to-GDP ratio that is close to 100 percent, so there is real risk of default. Recognizing that credit ratings are a lagging but not meaningless indicator, Greece's downgrade was not unexpected, but Spain's downgrade from AAA is a significant milestone. Further European downgrades are in the air.

What do all these situations have in common? Markets are repricing the risk (or coming to their senses) on the dangers of lending to a wide range of governments. And this is not just about emerging markets (East-Central Europe) or industrialized countries that sustained a boom based on euro convergence (Portugal, Ireland, Italy, Greece and Spain are now known collectively in the financial markets as the PIIGS). The markets are potentially rethinking the risk of any government's obligations.

The reaction that one hears from senior European officials and richer Eurozone countries is that Greece (and Spain and Italy and others) should deal with their fiscal problems themselves. There is very little sympathy. However, we expect that in the end Greece will receive a bailout from other Eurozone countries (and probably from the EU). This, however, does not come early enough to prevent problems from spreading to Ireland and other smaller countries (which then also need to implement fiscal austerity or to receive support). Italy is also likely to come under pressure, due to its high debt levels, and here there will be no way other than austerity. With or without a bailout, Greece and other weaker euro sovereigns will need to implement fiscal austerity. The net result is less fiscal stimulus than would otherwise be possible, and in fact there is a move to austerity among stronger euro sovereigns as a signal. Governments will therefore struggle to dissave enough to offset the increase in private sector savings.

What are the implications for German debt? There is no question that Germany will do whatever it takes to maintain a reputation for fiscal prudence. Despite the severe downturn, the German government recently struggled to pass a stimulus package of only 2.5% of GDP over two years, and the pressure now is to balance the budget. But problems in the Eurozone are putting pressure on the European Central Bank (ECB) to loosen its policies (and there are murmurs

already about easing repo-rules as credit ratings fall - basically, supporting euro sovereigns during their downward spiral), and this has implications for currency risk. Despite the pressure to relax monetary policy, the ECB will continue to be slow to respond. The ECB's decision-making process seeks consensus and some key members are still more worried about inflation down the road than deflation today. The ECB's benchmark rate is still at 2%. Eventually the ECB will catch up, but not before there has been considerable further slowing in the Eurozone.

The current consensus forecast is that the Eurozone will start to recover in mid-2009 and be well on its way to achieving potential growth rates again by early 2010. This seems quite implausible as a baseline view.

Japan

The yen has appreciated as carry trades have unwound, so people no longer borrow in yen to invest elsewhere. This, in addition to the global recession, has had a crippling effect on exports, which fell by 35% from December 2007 to December 2008. Corporates are likely to want to strengthen their balance sheets further and households with already-high savings rates are unlikely to go on a spending spree. As a result of these factors, the Bank of Japan recently predicted that the country will suffer two years of economic contraction and deflation.

The government's balance sheet is weak, but it is funded domestically (in yen, willingly bought by households), so there is room for further fiscal expansion. However, this is unlikely to come quickly.

The ability of the Japanese central bank to create inflation has proved limited. Once deflationary expectations are established, these are hard to break. In the inflation swap market, the average annual rate of inflation expected over five years is minus 2.4%, and an astonishing minus 1.0% over 30 years. This difficulty in creating positive inflation expectations will make it harder for any fiscal stimulus to be successful in restarting the economy.

China

The current crisis has shown that China's economy is far from invulnerable. The 6.8% year-over-year growth rate in Q4 may have implied that the quarter-over-quarter growth rate was around zero, and forecasts for 2009 are in the 6-8% range - below the level commonly understood as the minimum to avoid growth in unemployment.

The major increase in savings by China over the past 10 years was primarily due to high profits in the corporate sector. Chinese growth now seems likely to slow sharply, and this will likely reduce savings and the current account. China still does have long-standing scope for a fiscal stimulus. But the Chinese economy is only about 6% of world GDP and their effective additional stimulus per year is likely to be around 3% of GDP. 3% of 6% is essentially a rounding error in the world's economy, and will have little noticeable effect globally - although it might just keep oil prices higher than they would be otherwise.

India

There are striking similarities between the current policy debate in India and in the Eurozone. In both places, there is little or no concern that inflation will rebound any time soon. At least for people based in Delhi, there is as a result confidence that aggressive monetary policy can cushion the blows coming from the global economy. As in the Eurozone, all eyes are on monetary policy because of fears that fiscal policy cannot do much more than it is already doing, given that government debt levels are already on the high side.

The discordant note comes from the business community. They feel that Delhi does not fully understand that the real economy is already in bad shape. Sectors such as real estate and autos are hurting badly. Small businesses, in particular, are bearing the brunt of the blow. The banking picture seems more murky, but is surely not good. And of course the Satyam accounting scandal could not come at a worse time.

Overall, official growth forecasts need to be marked down for India, although the monsoon was good and the agricultural sector is not highly leveraged. India will likely cut interest rates further quite soon (and has space for additional cuts), but we should not expect much more from the fiscal side.

East-Central Europe

Pressure on other emerging markets continues to intensify. East-Central Europe (including Turkey), which spent the last several years borrowing heavily from Western European banks, has been especially hard hit by the contraction of credit as those banks turn to hoarding cash. The IMF is projecting contraction for both East-Central Europe and Russia; in the latter case, this is a Corporates and governments have major debt rollover problems, and most of the region is a severe turnaround from estimated growth of 6.2% in 2008.

The European Union's strategy for East-Central Europe is coming apart at the seams. Supporting exchange rates at overvalued levels does not make sense and actually adds to adjustment costs. Consequently, social tension is mounting in <u>Latvia</u> and elsewhere. The Latvian government is struggling to reduce nominal wages; this is an almost impossible task anywhere. The government in Iceland has fallen. Fresh waves of financial market pressure are likely to move throughout the region, probably triggered by the timing of external debt rollover needs.

Worldwide, many emerging market countries will need to borrow from the IMF. Some countries will be willing to go early to the IMF, but for most the fear of a potential stigma (and desire to do well in upcoming elections) will lead them to prefer fiscal austerity (and perhaps even contractionary monetary policy) without IMF involvement. The IMF will be more engaged in smaller emerging markets, such as in East-Central Europe. But it doesn't have enough funding to make a difference for large emerging markets, whose problems are due to their own policy mix, particularly allowing the private sector to take on large debts in dollars. We should expect the IMF to lend another \$100bn over the next six months (worldwide), and the G20 needs to keep talking about providing the Fund with more resources.

Larger emerging markets will not suffer collapse, but will increase (attempted) savings and, as a result, will experience slowdowns. The temptation for competitive devaluation will grow over time. But emerging markets cannot grow out of the recession through exports unless there is a strong recovery in the US or the Eurozone or both, which is unlikely. Many emerging markets are particularly hard hit by the fall in commodity prices. While some commodity prices may have reached their floors, a return to the levels of early 2008 will not happen until significant global growth has resumed, which could take years.

Political risks in China and other emerging markets create further downside risks. In our baseline, we assume no serious domestic or international disruptions in this regard.

United States

Perhaps the most fundamental barrier to economic recovery in the US is the weakness of balance sheets in the private sector. Households did not save much since the mid-1990s and reduced their savings further this decade, in part because of the increase in house prices; this was the counterpart of the large increase in the US current account deficit. Desired household saving is now increasing. The main dynamic is a fall in credit demand rather than constraints on credit supply in the US. The US corporate sector is in better shape but, faced with the disruptions of the last three months, is also seeking to pay down debt and conserve cash. Even entities with deep pockets, strong balance sheets and long investment horizons (e.g., universities, private equity) are cutting back on spending and trying to strengthen their balance sheets. This desire to save is causing major reductions in both consumption and private investment, creating the economic contraction we see all around us.

There are three major categories of potential policy responses: fiscal, financial, and monetary. However, each of them faces real constraints.

First, a substantial fiscal stimulus is already in train. The constraint on further action along this dimension, of course, is the US balance sheet. The US balance sheet is strong relative to most other industrialized countries - private sector holdings of government debt are around 40% of GDP. But the US authorities also have to worry about increasing Social Security and Medicare payments in the medium term, and so are reluctant to accumulate too much debt. The underlying problem is that fiscal policy was not sufficiently counter-cyclical during the boom. The federal fiscal stimulus will be helpful, but it will not be enough to prevent a substantial decline or quickly turn around the economy.

One view is that US government debt remains the ultimate safe haven, and this is surely true in general terms - particularly in moments of high stress. But this <u>excellent recent presentation</u> by John Campbell should give us pause (technical <u>paper here</u>). His point is that while US long bonds go through episodes when they are good hedges against prevalent risks (e.g., now and in the recent past), this is not always true. In particular, if inflation becomes an issue - think 1970s - then long bonds are really quite risky, in both popular and technical meanings of risk. You may think your bond holdings are a great hedge, but in fact they are a fairly substantial gamble that inflation will not jump upwards.

I'm supportive of the fiscal stimulus, at the currently proposed level, and I also strongly support the view that cleaning up the banking system properly will add further to our national debt - probably in the region of 10-20% of GDP, when all is said and done. (While this seems like a lot, Linda Bilmes and Nobel Laureate Joseph Stiglitz have estimated the long-term cost of the Iraq War at \$3 trillion which, although this may be on the high end, is over 20% of GDP.) And I further agree that some form of housing refinance program will help slow foreclosures, and this should further increase the chances that the financial system stabilizes.

But all of this adds up. US government debt held by the private sector will probably rise, as a percent of GDP, from around 41% to somewhere above 70%. This is still manageable, but it should concentrate our minds. The net effect of our financial fiasco is to push us towards European-style government debt levels, and this obviously presses us further to reform (i.e., spend less on) Social Security and Medicare. And we really need to make sure we don't have another fiasco of similar magnitude any time in the near future.

Second, financial sector policy has not been encouraging. Despite a series of efforts that were both heroic and chaotic, the banking sector today is roughly in the same state it was in after the collapse of Lehman in September: investors do not trust bank balance sheets, further writedowns are expected, and stock prices are above zero mainly because of the option value of a successful government rescue.

Looking at the banks more directly, there are no easy answers. Dramatic bank recapitalization are controversial because this would imply effective nationalization, which is not appealing to Wall Street (and to many on Main Street). The original TARP terms from mid-October are no longer available, as they were very generous to banks and there is widespread backlash against bailouts. Also, the latest Citigroup bailout (from mid-November), recently repeated for Bank of America, is not appealing as an approach for the entire financial system as this was an even worse deal for the taxpayer. A clever financial engineering-type approach of ring-fencing bad assets, with some sort of government guarantee, is unlikely to provide a decisive breakthrough.

Let's say the government launches a comprehensive bank recapitalization and balance sheet clean-up scheme, with broad support on Capitol Hill. This bolsters confidence in the US banking system, causing a rise in equity prices and - most important - a strengthening of debt, both for banks and perhaps for leading nonbank corporates. Three international consequences seem likely.

- 1) This move forces the rest of the G7/G10 and the Eurozone to do the same, or something very similar. If we have very strong (and government-backed) banks in the US and somewhat more dubious banks anywhere in other industrialized countries, money will flow into the stronger US banks. Think back to the consequences of the original infectious blanket guarantees in Ireland in October; the effects now would be similar. You can think of the UK's upcoming moves either as a smart way to get ahead of this, or as something that will further a destabilizing wave of competitive recapitalizations the policy is good, but doing it without coordination across countries can trigger Iceland-type situations.
- 2) If all major economies need to back the balance sheets of their banks, then we have converted our myriad banking sector problems into a single (per country) fiscal issue. Who

has sufficient resources to fully back their banks? This obviously depends on (a) initial government debt, (b) size of banks (and their problem loans, global and local), and (c) underlying budget deficit. Ireland and Greece will be in the line of fire, but other weaker Eurozone countries will also face renewed pressure. Officials are currently trying to work through this predictive analysis, and there is some thinking about preemptive preparations, but events are moving too fast - and the international policy community again can't keep up.

3) In some countries - particularly emerging markets but also perhaps some richer countries - the foreign exchange exposure of banks will matter. Here the issue will be whether the government has enough reserves to back (or buy out) these liabilities; the <u>problems of Russia</u> since September foreshadow this for a wide range of countries. The absolute scale of reserves does not matter as much as whether they fully cover bank debt in foreign currency. Most emerging markets face significant difficulties and need some form of external support in this scenario, particularly as both commodity and manufactured exports from these countries will continue to fall.

If, by good fortune, the US and global recession is already at its deepest - as some in the private sector now hold - then we face a tough situation but the difficulties are manageable. However, our baseline view remains that the real economy is not yet stabilized, and hence we will see worse outcomes in Q1 and Q2 of 2009 than currently expected by the consensus. Such outcomes are not yet reflected in asset prices, and the problems for banks - and the implications for fiscal sustainability - around the world will mount.

Third, monetary policy can still make a difference. In particular, we risk entering a deflationary spiral with falling prices and downward pressure on nominal wages. In mid-December, the inflation swap market implied minus 0.5% average annual inflation for the next five years (although this expectation has increased somewhat since then). Deflation is not yet completely entrenched, so it is still possible to turn the situation around. However, the Fed has not yet settled on the view that deflation is the main issue, and there is no internal consensus in favor of printing money (or focusing on increasing the monetary base).

Generating positive inflation in this environment is not easy. One way would be to talk down the dollar. The fact that this would feed into inflation is not a danger but a help in this context. Unfortunately, this would be seen as too much of a break from the tradition of a "strong dollar" and it would likely upset both Wall Street and US allies. Ultimately, probably later in 2009 (and definitely by early 2010), the US will move to a more expansionary monetary policy and manage to generate inflation. This will weaken the dollar and put pressure on other countries to follow suit - expansionary monetary policy is infectious in a way that expansionary fiscal policy is not.

Global Policy Implications

One leading anti-recession idea for the moment is a <u>global fiscal stimulus</u> amounting to 2% of the planet's GDP. The precise math behind this calculation is still forthcoming, but it obviously assumes a big stimulus in the US and also needs to include a pretty big fiscal expansion in Europe. (Emerging markets will barely be able to make a contribution that registers on the global scale.)

This global policy strategy is already running out of steam.

- Very few countries now find room for a fiscal stimulus; debt levels are too high and fiscal capacity is hard pressed by contingent liabilities in the banking system particularly with an increasing probability of quasi-nationalization. As a result, the idea of a 2% of GDP global fiscal stimulus seems quite far-fetched at this point.
- Further monetary easing is therefore in the cards, especially as fears of deflation take hold, both for developed countries and emerging markets. There may now be some catching up by central banks in that regard, see the latest <u>Turkish move</u> as a foreshadowing.
- Commodity prices will likely decline further as the global economic situation turns out to be worst than current consensus forecasts. As a result, official growth forecasts for most low income countries seem far too high.
- The worldwide reduction in credit continues, largely driven by lower demand for credit as households and firms try to strengthen their balance sheets by saving rather than spending.

The crisis and associated slowdown started in the US, but the recession is now global. The US economy is no more than 1/4 of the world economy, so even the largest US fiscal stimulus (say 3% of U.S. GDP per annum) cannot be not large enough to move the world at this stage. If we stabilize our financial system fully and restore consumer credit, this will help. But remember that we are subject to shocks from outside and the outlook there is worse than in the US in many ways. Outside the US the tasks look much harder.

One key principle, stated repeatedly by both the G20 and the IMF, is that policy responses need to be coordinated. This is a basic lesson of the Great Depression, when protectionist trade policies reduced exports across the board without benefiting any nation. The current crisis has not seen a widespread outbreak of higher trade barriers - although some of the bailout programs national governments have offered to domestic industries could amount to protectionist subsidies. Instead, however, we are seeing friction over currency valuations, as countries (who can afford to) try to boost their exports. In terms of recent developments, Switzerland threatened to intervene on foreign exchange markets to suppress the value of the Swiss franc. And the French finance minister criticized the U.K. for letting the pound depreciate.

In addition, fiscal constraints give national governments an incentive to reduce the size of their stimulus packages and attempt to free-ride off of other countries instead. Many countries are probably looking to the United States and hoping that our reasonably large stimulus - 6% of GDP, spread roughly over two years - will help turn around the global economy as a whole.

Looking Forward

The first order of business is clearly to revive the US and global economies. However, it is also imperative that we understand the nature of the global economic order that we live in, with the goal of minimizing the chances of a similar economic crisis in the future and the severity of such a crisis should it occur. As mentioned above, while the government balance sheet can absorb the

cost of restoring the economy this time, it is not clear how many times we can add 20% of GDP to the national debt.

We also need to recognize that financial crises, just like bubbles, will recur. Government regulators, no matter how motivated and skilled, are no match for the collective ingenuity of billions of human beings doing things that no regulator envisioned. The only real way to protect a national economy in the face of systemic financial problems is with a sufficiently strong government balance sheet (i.e., low debt relative to the government's ability to raise taxes). This requires counter-cyclical fiscal policy during a boom, which is always politically difficult. However, this implies less room for fiscal stimulus now, or alternatively the need to put in place measures that will compensate for the stimulus once the economy has recovered.

In order to create the conditions for long-term economic health, we need to identify the real structural problem that created the current situation. The underlying problem was that, after the 1980s, the "Great Moderation" of volatility in industrialized countries created the conditions under which finance became larger relative to GDP and credit could grow rapidly in any boom. In addition, globalization allowed banks to become big relative to the countries in which they are based (with Iceland as an extreme example). Financial development, while often beneficial, brings risks as well.

The global economic growth of the last several years was in reality a global, debt-financed boom, with self-fulfilling characteristics - i.e., it could have gone on for many years or it could have collapsed earlier. The US housing bubble was inflated by global capital flows, but bubbles can occur in a closed economy. The European financial bubble, including massive lending to Eastern Europe and Latin America, occurred with zero net capital flows (the Eurozone had a current account roughly in balance). China's export-driven manufacturing sector had a bubble of its own, in its case with net capital outflow (a current account surplus).

But these regional bubbles were amplified and connected by a global financial system that allowed capital to flow easily around the world. Ordinarily, by delivering capital to the places where it is most useful, global capital flows promote economic growth, in particular in the developing world. But the global system also allows bubbles to feed on money raised from anywhere in the world, exacerbating systemic risks. When billions of dollars are flowing from the richest countries in the world to Iceland, a country of 320,000 people, chasing high rates of interest, the risks of a downturn are magnified, for the people of Iceland in particular.

Ideally, global economic growth requires a rebalancing away from the financial sector and toward non-financial industries such as manufacturing, retail, and health care (for an expansion of this argument, see this op-ed). Especially in advanced economies such as the US and the UK, the financial sector has accounted for an unsustainable share of corporate profits and profit growth. The only solution is to invest in the basic ingredients of productivity growth - education, infrastructure, research and development, sound regulatory policy, and so on - so that our economy can develop new engines of growth.

Further coverage of the crisis and policy proposals

Background material

Previous editions of Baseline Scenario:

November: http://baselinescenario.com/2008/11/10/baseline-scenario-111008/
December: http://baselinescenario.com/2008/12/15/baseline-scenario-121508/

Financial Crisis for Beginners primer, includes recent material on "bad banks" and the Swedish approach to cleaning up the banking system: http://baselinescenario.com/financial-crisis-for-beginners/

Deeper causes of the crisis, an ongoing series: http://baselinescenario.com/category/causes/

More details on current topics

Strategies for bank recapitalization

- Economic ideas: http://baselinescenario.com/2009/01/27/to-save-the-banks-we-must-stand-up-to-the-bankers/
- Political developments: http://baselinescenario.com/2009/01/25/the-emerging-political-strategy-for-bank-recapitalization/

Global fiscal stimulus: http://baselinescenario.com/2009/01/21/global-fiscal-stimulus-should-it-be-an-obama-priority/

Citigroup bailout (the second round): http://baselinescenario.com/2008/11/27/international-implications-of-the-citigroup-bailout/ and http://baselinescenario.com/2008/11/24/citigroup-bailout-weak-arbitrary-incomprehensible/

As it happened

First edition of Baseline Scenario (September 29, 2008):

http://baselinescenario.com/2008/09/29/the-baseline-scenario-first-edition/

"The Next World War? It Could Be Financial" (October 11, 2008): http://baselinescenario.com/2008/10/12/next-up-emerging-markets/

Pressure on emerging markets (October 12, 2008): http://baselinescenario.com/2008/10/12/next-up-emerging-markets/

Pressure on the eurozone (October 24, 2008): http://baselinescenario.com/2008/10/24/eurozone-default-risk/

Testimony to Joint Economic Committee (October 30, 2008):

http://baselinescenario.com/2008/10/30/testimony-before-joint-economic-committee-today/

Bank recapitalization options (November 25, 2008):

http://baselinescenario.com/2008/11/25/bank-recapitalization-options-and-recommendation-after-citigroup-bailout/