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The Global Financial Crisis: Comparisons with the Great Depression and Scenarios for Recovery

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A recent paper by Eichengreen and O'Rourke on "A Tale of Two Depressions" (publicized by Martin Wolf in the *Financial Times*) has highlighted some close correspondences between economic performance during the present world recession and that during the early months of the Great Depression that began in late 1929.[1] World industrial production from April 2008 to April 2009 fell as rapidly as during the first year of the Great Depression, while stock market prices and world trade volumes have fallen more rapidly than in the comparable period.

These comparisons lead Eichengreen and O'Rourke to draw the alarming conclusion that "[I]t's a Depression alright." They note, however, that fiscal and monetary policies are likely to be much more supportive of economic activity in the next 1–2 years than they were during the first few years of the Great Depression. The first part of this note outlines some other important structural differences between the world economy today and in the 1930s that are likely to affect how the present recession plays out relative to the Great Depression. The second part of the note discusses possible recovery paths out of the current crisis.

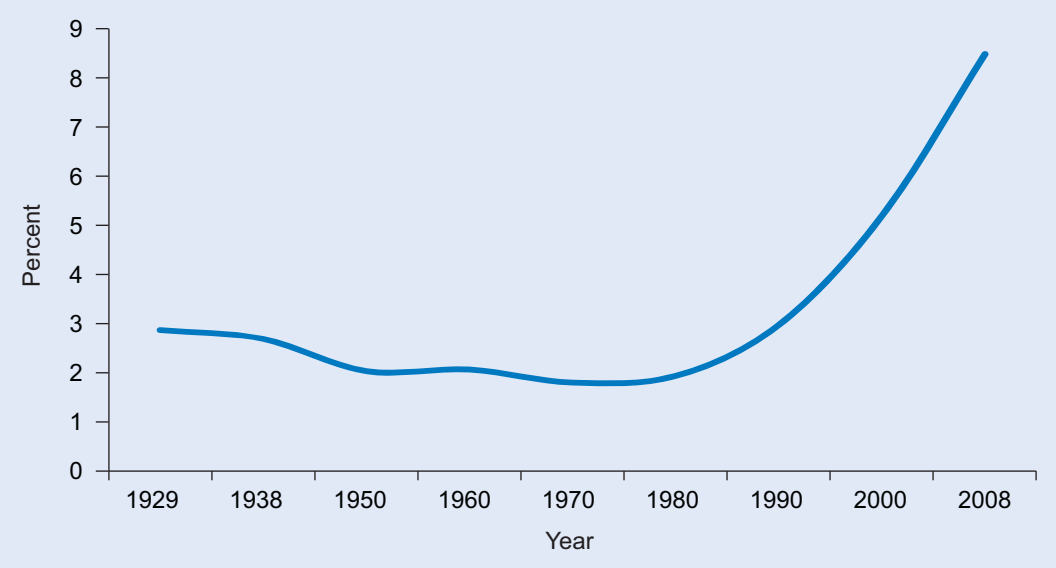
1. Comparing the Great Depression with the Present Global Financial Crisis

Larger role of faster-growing developing countries in the world economy

Developing countries' share in world GDP was about 24 percent in 2008.[2] Estimating the share of the same countries in 1929 is not easy, but a rough calculation suggests around a 13 percent share at that time. China and India's combined share in world GDP was about 8.5 percent in 2008, versus an estimated 2.8 percent in 1929[3] (figure 1). GDP share by itself would not necessarily affect the evolution of the present global recession were it not for evidence that developing countries as a group are now also tending to grow substantially more rapidly than developed countries.

Figure 2 clarifies this statement. The chart suggests that economic cycles in developing countries remain closely correlated with those in developed countries. Developing country growth has fallen sharply in 2009 through a variety of well-known channels, such as declining exports to developed countries, precipitous falls in private

Figure 1. China and India : Share of World GDP (%)
(Constant 2000 Market Prices and Exchange Rates)



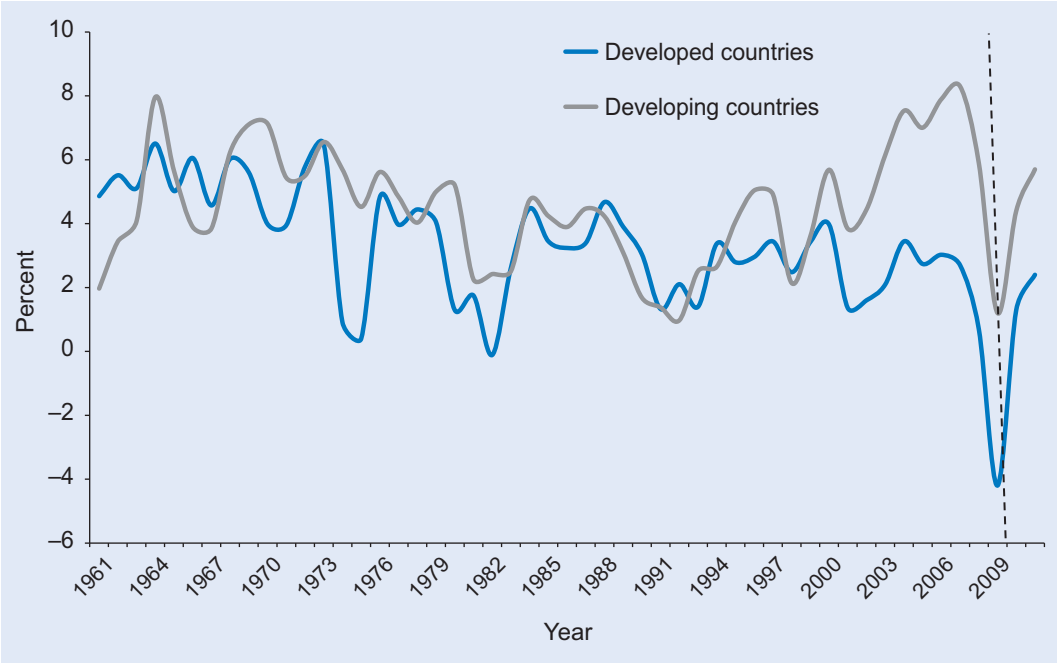
Source: Estimates for 1929 through 1950 are by World Bank staff, drawing on data in Angus Maddison, 2003, *The World Economy, Historical Statistics*, OECD, Paris.

capital flows to developing countries, and weakening remittance flows. In other words there has been no decoupling in the cyclical component of developing country growth. However figure 2 also suggests that, while before the early 2000s the trend rate of growth in developing countries was close to that in developed countries, since then trend growth in developing countries has become substantially higher than in the advanced world. In other words, there has arguably been a decoupling in underlying trend rates of growth. Thus, for example, developing country growth averaged only 0.8 percentage points higher than developed countries in the 1990s, but this growth gap widened to 3.5 percentage points in 2000–08.

One hypothesis is that the rise in developing country trend growth over the last decade is mainly a payoff for the strenuous efforts by many of these countries to improve their macroeconomic, structural, and other policies over the last 2–3 decades, accompanied over the past decade with a marked improvement in country balance sheets. As such it should persist in the medium term, despite the severe negative shock of the present crisis.[4] Another hypothesis is that the growth improvement of recent years mainly reflected the extraordinary but temporary boom or "bubble" conditions in the world economy, including very low international interest rates and huge but unsustainable credit flows to developing countries. In this case we should expect the recent higher growth of developing countries to quickly disappear, along with the bursting of the bubble and the present global recession.

It is doubtless too early to fully judge which if either of these hypotheses is correct. There are, nevertheless, some significant pieces of evidence in favor of the first hypothesis. All major forecasters expect developing countries to continue growing much faster than developed countries even during the depths of the present crisis. For example, World Bank projections are for developed country real GDP to shrink by 4.2 percent in 2009 while developing country growth is expected to hold up at a positive 1.2 percent,

Figure 2. World Output Growth 1961 -2011 (% Change)



Source: World Bank WDI and GDF.

a 5.4 percentage point positive growth gap. If these projections are roughly correct, then the positive growth gap for developing countries and their larger share in world activity together would have helped to reduce the size of the contraction in overall world output in 2009 by a significant amount—by about 1.3 percentage points—from a potential 4.2 percent fall to the smaller 2.9 percent global contraction that is currently projected. Recent data indeed suggest that growth in at least some emerging economies has rebounded with unexpected strength in the second quarter of 2009, averaging around 10 percent at annualized quarter on quarter rates among several emerging East Asian economies, for example.

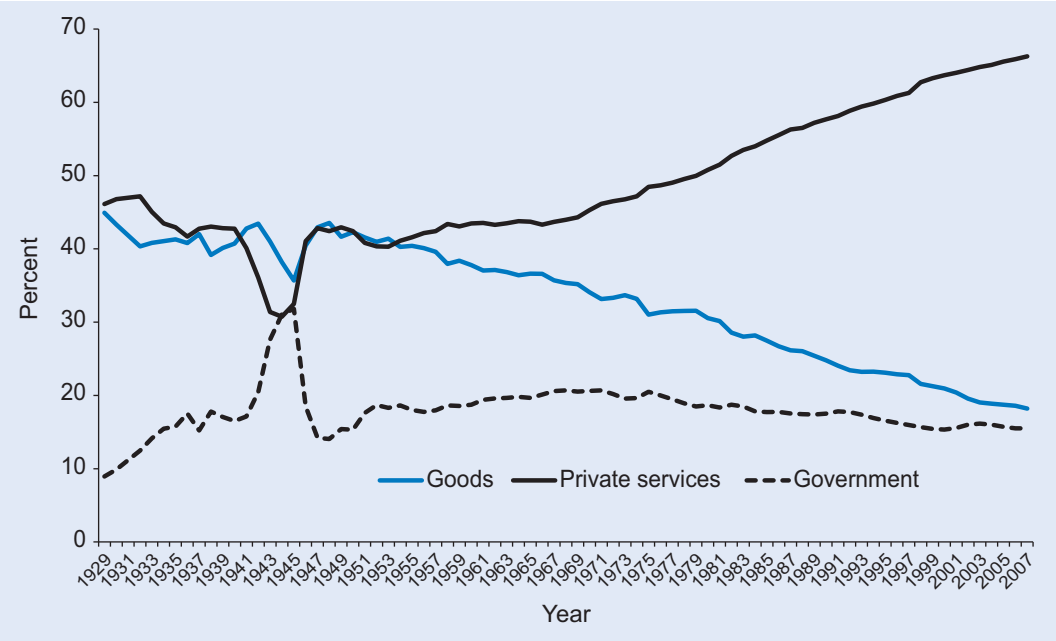
Larger share of less volatile services in global activity

There are other differences in the structure of the global economy between now and 1929 that tend to limit the usefulness of industrial production alone as an index for overall economic activity, in particular the greater importance of the services sector in the major advanced economies today. The simplest way to draw this distinction is to look at the share of services in employment (figure 3). In the United States services rose from 55 percent of total employment in 1929 to 82 percent in 2007 (of which 66 percent is in private sector services and 16 percent in government employment).

Services are also considerably less volatile than goods sectors (figure 4). Employment volatility in the U.S. private services sector averaged only half that in goods production over 1960–2007, while volatility of government employment was only 40 percent as high.[5] This provides a reason to conjecture that aggregate employment volatility today might be a good deal lower than in the 1930s.

Another angle on the lower volatility of services is to look at the behavior of real output in the goods and services sectors during recessions. Table 1 shows the percent change in real output in the four quarters after the start of a recession, for the last six U.S. reces-

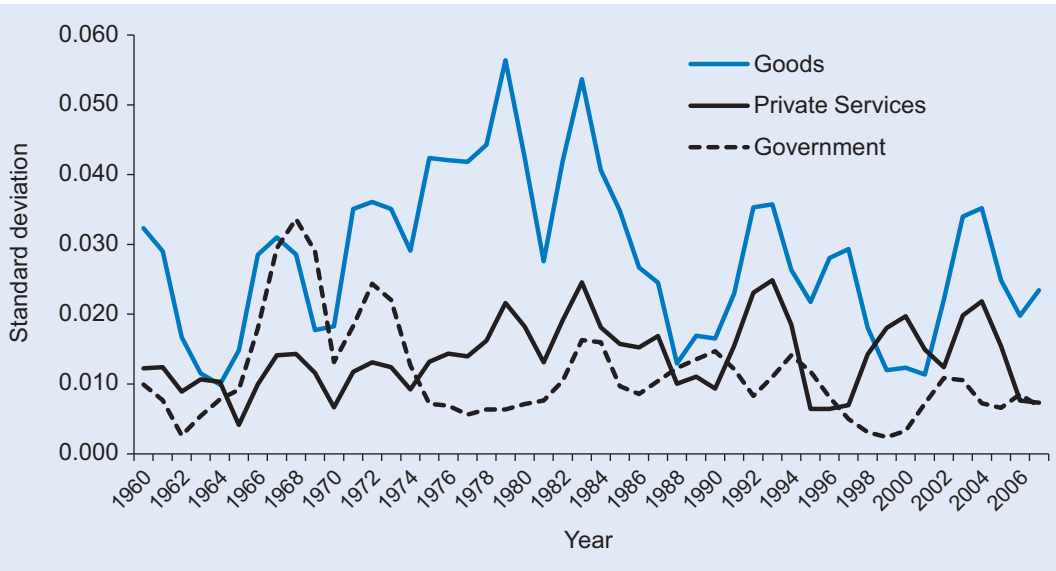
Figure 3. United States—Sector Employment Shares, 1929–2007 (% of total)



Source: U.S. Bureau of Economic Analysis. Tables 6.5A–D. World Bank staff calculations.

sions. The table shows that all of the output contraction in U.S. recessions occurs in the goods and structures sector. The services sector shows positive growth throughout. The table shows how the present recession is already more severe than the previous five studied in Table 1, even though in this case we only consider three quarters through the first quarter of 2009. Nevertheless, one might hope that the greater weight of the more stable services sector will moderate overall output volatility compared to the Great Depression.

Figure 4. United States—Employment Volatility, 1960–2007



Source: U.S. Bureau of Economic Analysis. Tables 6.5A–D. World Bank staff calculations.

Table 1. Percent Change in Output Four Quarters after Preceding Peak in Six U.S. Recessions

Date of preceding peak	1973:4	1980:1	1981:3	1990:3	2000:4	2008:2 *
Goods and structures	–7.0	0.9	–6.9	–2.7	0.8	–8.7
Services	3.0	1.8	1.7	1.8	2.6	0.8

Source: U.S. Bureau of Economic Analysis, Table 1.2.6.
* Change in 3 quarters to the first quarter of 2009.

Changes in the structure of world trade

Another structural difference between "now and then" worth probing relates to world trade volume, which, as Eichengreen and O'Rourke observe, has fallen more in the present recession than during the first year of the Great Depression. However, recent World Bank research suggests that the sharper recent trade decline compared to 1929/30 may to some extent reflect a much greater responsiveness or elasticity of trade with respect to GDP, rather than only a steeper decline in GDP driving a larger fall in trade.[6] This research points to a sharp rise in the elasticity of world trade to GDP from under 2 in the 1960s to over 3.5 now, with even an even sharper responsiveness during downturns than during tranquil times. The reasons for this large increase in trade elasticity are not altogether clear, but one explanation put forward in the cited research is the rise of modern fragmented production processes, which result in vastly increased cross-border flows of intermediate inputs used in the production of any final product. The importance of such processes in the world economy and world trade has increased dramatically in recent decades. Today, declines in trade are likely to reflect much smaller declines in production value added than was in the case in the 1960s and, one could argue, a fortiori, even more than in 1929. The brighter side of the coin is that we should also see a much sharper upswing in world trade when the recovery in world output begins.

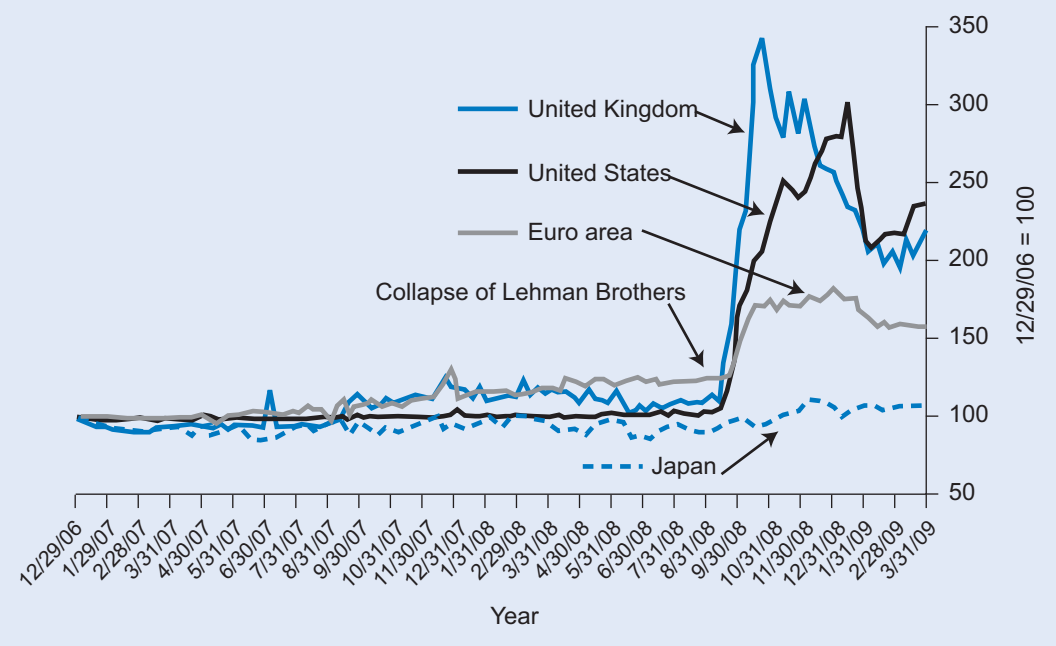
Policy responses: then and now

As noted, Martin Wolf and Eichengreen and O'Rourke both highlight the much stronger counter-cyclical macroeconomic policy response of the present day as a major positive difference with the Great Depression. Here we only supplement their discussion with some additional observations on policy responses.

A key difference between the 1930s and the current crisis is the role of the gold standard as a deflationary force. In the 1930s, most economists and policy makers saw the gold standard as the guarantor of economic stability. However, adherence to the gold standard proved to be quite dysfunctional under the economic conditions of the early 1930s. The U.S. Federal Reserve, for example, dramatically raised its rediscount rate in 1931 in response to Britain's devaluation (in conformity with standard classical theory), fostering a significant reduction in the supply of money and further compromising the health of the banking sector. This, in turn, helped to transform a significant recession into the Great Depression.

The danger of repeating the trajectory of the 1930s because of dysfunctional monetary policy reactions is less today, with the prevalence of flexible exchange rate regimes between major economies (such as between the United States, the euro zone, and Japan), and also for a significant number of developing economies. Policy makers now have greater autonomy to target monetary policy at domestic activity and inflation/deflation

Figure 5. Central Banks' Total Assets (12/29/06 = 100)



Source: IMF World Economic Outlook, April 2009.

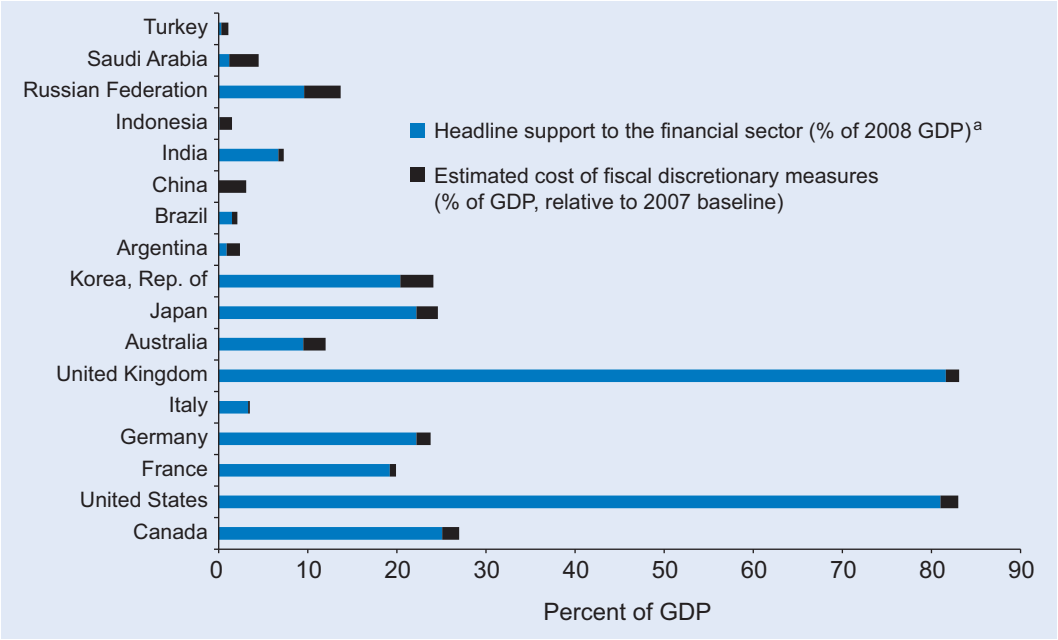
concerns. The rapid and comprehensive intervention by monetary authorities in the present recession is reflected in the dramatic expansion of central bank balance sheets shown in figure 5. Policy makers have used almost every conceivable policy tool to provide support for troubled financial sectors: capital injections, direct purchase of troubled assets and discretionary lending by the Treasury, central bank support with Treasury backing, liquidity provision, guarantees, upfront government financing, and sometimes outright nationalization and liquidation of financial institutions. The volume of such support has been unprecedented, reaching about 50 percent of advanced economy GDP.[7]

In addition to support for the financial sector, policy makers have generally accepted—though some reluctantly—the need for significant fiscal stimulus policy action. In most cases, G20 countries have adopted discretionary fiscal stimulus measures that reached 0.5 percent of their average GDP in 2008, 2 percent in 2009, and a projected 1.5 percent in 2010 (figure 6). Most analysts recognize that policy responses have been effective in avoiding a financial collapse and in at least providing some underpinning for global demand, although there remain vigorous debates over how effective monetary and fiscal stimulus will ultimately prove. In addition, there are significant concerns about how and when to design "exit policies" from the current stimulative monetary and fiscal policy stance and about the potential for longer-term weakening of fiscal positions as a result of current policies.

2. Scenarios for Recovery from the 2008–09 Global Financial Crisis

The potential pace and path of a recovery from the present global recession are now beginning to emerge as important questions. The Great Depression again provides a useful point of reference. In the United States, for example, real GDP fell 8.6 percent in 1930 and continued to fall through 1933, four years in which output fell a cumulative 26.5 percent. The economy bottomed during the course of 1933 with recovery setting

Figure 6. G20—Fiscal Stimulus and Financial Sector Support

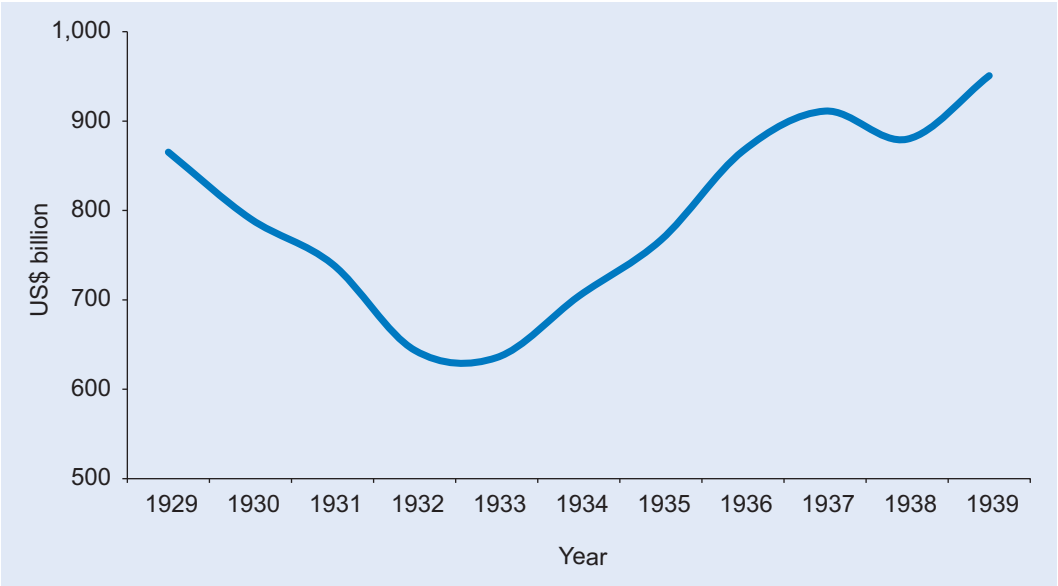


Source: IMF Staff Position Note SPN/09/13, June 9, 2009.
a. Capital injections, purchase of assets and lending by Treasuries, central bank liquidity, and other support and guarantees excluding deposit insurance.

in from 1934 and continuing through 1937, followed by renewed but relatively brief recession in 1938 (figure 7).

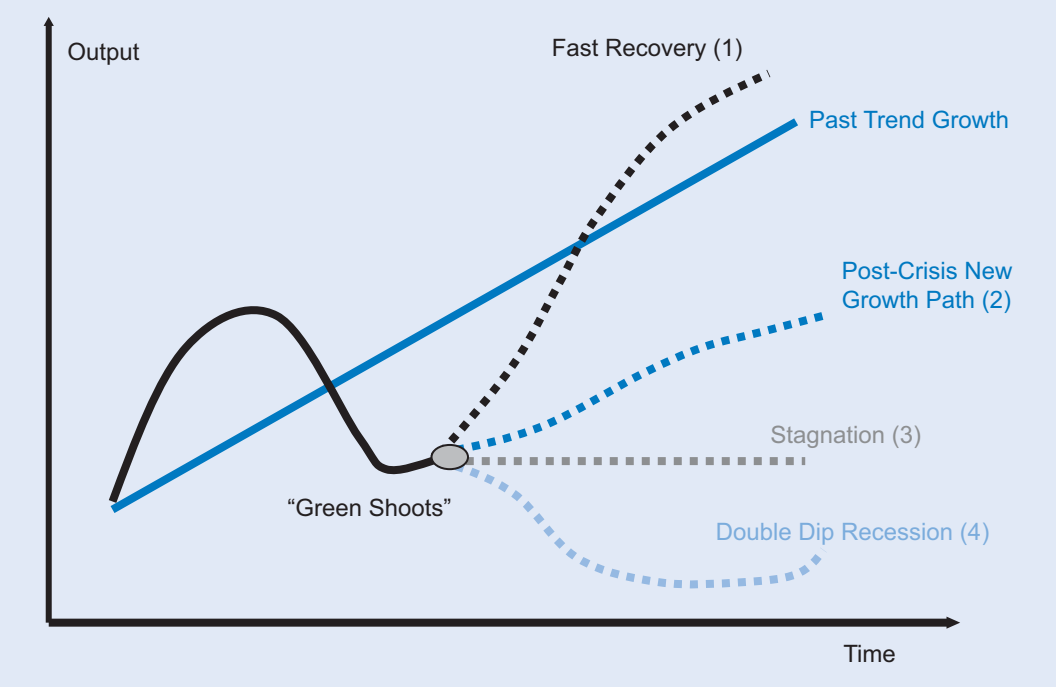
Few expect the path of recovery from the present recession to be as delayed or protracted as during the Great Depression. Nevertheless studies have noted that the characteristics of the present recession—for example that it combines a credit crunch and financial crisis with busts in the hous-

Figure 7. U.S. Real GDP 1929–1939 (billion 2000 dollars)



Source: U.S. Bureau of Economic Analysis.

Figure 8. Stylized Scenarios for the Recovery



ing and equity markets and that it is highly synchronized across countries—are such as to suggest that this recession will be deeper and more protracted than any in the post-war period.[8] However, with high continued uncertainties on many fronts, one can at this stage only lay out some stylized scenarios for potential paths out of the recession, identifying some of the key variables to observe in the months to come that might help identify which (if any) of these scenarios is coming to pass. Figure 8 sketches four possible scenarios for the coming one to two years (and perhaps beyond), with the present (July–August 2009) highlighted as the point where many commentators have noted the emergence of some "green shoots" of incipient recovery.[9]

Fast or "V-shaped" recovery

A fast or "V-shaped" recovery would mean that, after all, most analysts of this crisis would be proven wrong and that, despite the damage to private financial wealth and to bank and corporate balance sheets, growth in private demand and financial sector lending is able to rebound along the lines of past "normal" business cycles. The driving force behind such a scenario would need to be a much faster than expected healing of the financial sector and its capacity to resume lending at more normal levels and conditions (for example through a much more radical restructuring and recapitalization of insolvent institutions using public funds than appears to have been politically feasible in many cases). Consumers and investors would also likely need to have "very short memories," taking a much more confident view of the future than would appear warranted by the dramatic events of 2008, continued uncertainties, and their own depleted net worth positions. There could be specific countries that follow this recovery

pattern, but, given what we are observing in private consumption, investment, and credit markets, coupled with a proposed tightening of prudential and regulatory standards, it seems that this type of a recovery is less likely in general.

Stagnation scenario

A stagnation scenario would be a replica of Japan's Great Recession of the 1990s at a global level. The driving force behind this scenario would be that deleveraging in the financial sector continues, credit markets remain stalled, and economic activity cannot resume at previous levels, given low confidence among consumers and investors, despite recent policy stimulus efforts. Significant fiscal stimulus efforts tend to be ineffective because of offsetting behavior by consumers and firms. As in Japan in the 1990s, debt repayments put a downward pressure on economic activity (irrespective of low borrowing costs) and encourage higher private savings and a lower appetite for new investment.[10]

"Double dip" recession scenario

A "double dip" recession scenario would represent the closest proxy today of the Great Depression. It should be recalled that in the 1930s there were several episodes of stock market recoveries between 1930 and 1932 ("bear market" rallies) that created some illusion of a faster recovery without eventually triggering a real economy response.[11] In addition to the forces operating in the "stagnation" scenario, the driving forces behind this possible replica of the Great Depression could be the combination of a new wave of financial trouble, perhaps in the euro area following banking and currency crises in Eastern Europe, or as a result of a large and disorderly U.S. dollar devaluation. For example, we could see renewed risk aversion and a jarring end of the recent spring and summer rally in the global equity and debt markets; an inability to implement sufficiently strong fiscal stimulus programs, perhaps due to political factionalism and deadlock in some countries; and a strong revival of protectionism.

New post-crisis moderate growth scenario

With all due caveats, a new post-crisis moderate growth scenario is perhaps the most likely, with a recovery beginning in the latter part of 2009 but growth during the recovery failing to reach previous recovery trends. It is also the scenario underlying most mainstream projections, such as those of the IMF, World Bank, and OECD. The main driving forces behind this scenario include a substantial rise in the propensity for private savings as households attempt to pay off debt and build up their net worth, and, concomitantly, a need to rebalance growth in the global economy and reduce excessive current account imbalances. This correction will take many forms (and some time), including changes in private consumption in the United States but also in some surplus countries, movements of relative prices (for energy, minerals, food, and so forth), a higher cost of capital due to deleveraging, and tighter control of the financial sector. These changes will all contribute to lower trend growth for the next cycle.

Another reason this scenario is likely is the need, at some point, for the current monetary and fiscal policy stimulus to be unwound. That will take out some momentum from global growth and will have to be carefully timed to avoid both the dangers of inflationary pressure and premature weakening of aggregate demand. New investment will also be hampered by the large amount of excess capacity in the world economy and the time that will be required to run this capacity down. Lastly, very severe recessions

tend to reduce—at least temporarily—trend growth at the beginning of the new cycle. It might take some time before Schumpeterian "creative destruction" kicks back in to raise total factor productivity, especially if the recession takes a toll on R&D expenditure at the firm level (even if public programs can compensate for part of the losses).

There remain many challenges for policy makers and international financial institutions in this transition period from "green shoots" to the next phase. One of the main post-crisis considerations for developing countries will be the new productivity trend of their economies in the wake of this crisis. Those who have targeted fiscal stimulus well, reduced (infrastructure) bottlenecks, and invested wisely in human and physical capital without exceeding their fiscal room for maneuver will be naturally better off and ready to start a more robust growth cycle, using their (new) comparative advantages in the global economy.

Notes

1. Martin Wolf, 2009, "The Recession Tracks the Great Depression," *Financial Times*, June 16, citing Barry Eichengreen and Kevin O'Rourke, 2009, "A Tale of Two Depressions," June 4, www.voxeu.org.

2. Measured in real terms, at 2000 prices and market exchange rates. The developing country share in 2008 in nominal terms at market exchange rates was a little higher, about 27 percent. *Source*: World Bank World Development Indicators and staff estimates.

3. Estimates for 1929 through 1950 are by World Bank staff, drawing on data in Angus Maddison, 2003, *The World Economy, Historical Statistics*, OECD, Paris.

4. The case for a positive 'trend decoupling' in developing countries' growth is argued in detail by Jonathan Anderson, 2009, *The Real Decoupling*, UBS Investment Research, Emerging Economic Perspectives Number 7 (August).

5. Volatility measured as standard deviation (over a five-year rolling window) of the cyclical component from a Hodrick-Prescott filter, as a ratio of the Hodrick-Prescott trend.

6. Caroline Freund, 2009. "The Trade Response to Global Downturns: Historical Evidence," World Bank DEC Research Group (June), World Bank, Washington, DC.

7. See IMF, 2009, "Fiscal Implications of the Global Economic and Financial Crisis," IMF Staff Position Note SPN/09/13 (June 9), IMF, Washington, DC.

8. Stijn Claessens, M. Ayhan Kose, and Marco Terrones, 2008, "What Happens During Recessions, Crunches and Busts?" IMF Working Paper 08/278. Carmen Reinhart and Kenneth Rogoff, 2008, "The Aftermath of Financial Crises," CEPR Discussion Paper 7209, Center for Economic Policy Research, London, UK.

9. See a similar description by Samuel Brittan, 2009, *Financial Times* (June 24).

10. R. C. Koo, 2008, *The Holy Grail of Macroeconomics, Lessons from Japan's Great Recession*, John Wiley & Sons. Koo stresses that the collapse of the Japanese bubble did not result in a contraction of Japanese output after 1990 thanks to massive fiscal spending. He adds that the crisis triggered a behavioral change in private firms and consumers (for example, deleveraging), affecting the transmission and the role of monetary policy in Japan.

11. See Simon Hunt Strategic Services, 2009, "April Economic Report," Weybridge, Surrey, England.

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