EVENING KEYNOTE ADDRESS

The World Economy after the Global Financial Crisis

Maurice Obstfeld

It's a pleasure to return to this conference. As John Williams said in his introduction, my links to it go way back to the beginning, even to before the beginning. I gave a paper, with Ken Rogoff as coauthor, at the first of these conferences. And I'm now going to embarrass Mark Spiegel with an anecdote that shows how far back my involvement really goes. Sometime in the spring of 2008, when Mark and Reuven Glick were planning the first conference, Mark and I were having dinner in Oakland. It was around the time of Bear Stearns, and Mark and Reuven were kicking around possible topics for the commissioned papers. Mark asked my opinion. "The conference will be in the fall of 2009," he helpfully pointed out. "All of this turbulence will be over by then, so we'll be able to focus on other things." Needless to say, the focus of the first conference soon became all too evident.

My topic tonight is related to that long introduction. The theme of the present conference is "policy challenges in a diverging global economy." In line with that, I propose to focus on asking where we are in the extended aftermath of the global financial crisis that erupted decisively about six months after my dinner with Mark. I will take up the multiple forces that have given rise to this protracted, slow, uneven recovery. Some of these are legacies of the crisis itself. Some of these are trends that began before the crisis. And then, there are some more recent phenomena. The one I'll stress is also one that we discussed quite a bit today, macroeconomic slowdown and rebalancing in China. I will make an obvious point: It's not easy to see how we restore, if we even could restore, the kind of growth we saw before the global financial crisis. And at the very end, I'll talk about some of the International Monetary Fund's (IMF's) recommendations, which will probably come as no surprise to you.

The crisis of course caused a synchronized global contraction, and the recovery has been uneven, not only across advanced economies but also across emerging economies. The United Kingdom and especially the United States

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Author's note: *I acknowledge with thanks dedicated assistance from Eugenio Cerutti.*

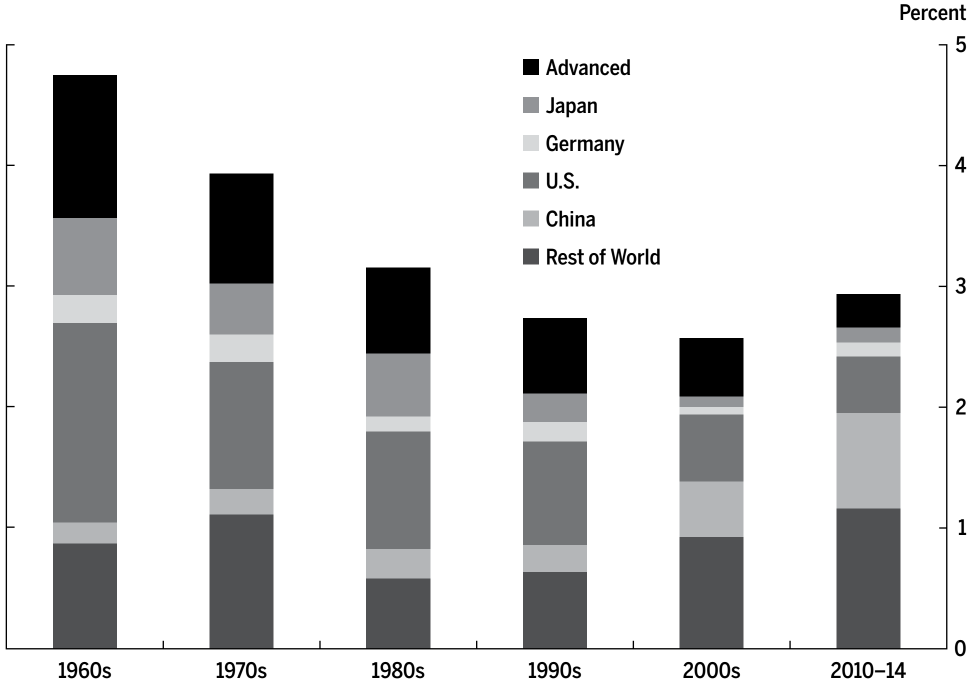
have recently been growing at fairly reasonable rates, but growth in the euro area and Japan remains too low. In emerging and lower-income economies, we also see a pattern of uneven growth. China is growing more slowly than its torrid rates of before the crisis and immediately afterward. But it is still growing at somewhere between 6 and 7 percent, in our estimation. India is growing as well—it is the fastest growing big country in the world. But countries like Russia and Brazil—those that are challenged by geopolitical factors or domestic political turmoil, as well as by external factors—are having an especially hard time. Commodity price declines, related to changing Chinese growth patterns as well as developments in oil markets, are battering exporters.

Moreover, looking forward and thinking about where we were before the financial crisis, growth expectations have been scaled back dramatically, not only in advanced economies but in emerging markets as well. Looking at the most recent data, prospects are looking pretty unfavorable compared with how they looked about a decade ago.

To even imagine getting the world economy back where it was, we must rely on emerging markets, including China. How far we have traveled from the world of the 1960s and 1970s, in which many of us went to school and started learning economics! Look at Figure 1. Not only has the pace of global growth declined since then, but the main regional contributors to global growth have changed dramatically over the decades, from a global economy where most growth was explained by advanced economies (the United States in particular) to one in which it's now explained by emerging and developing economies, especially China. This is both because the growth rates of those economies tend to be higher than in the advanced economies and because they represent an ever-increasing share of global output. While spillbacks from the emerging markets to the advanced economies were limited in the '60s and '70s, now they're a huge deal and must inform the way we think about global macroeconomic policies.

What are some of the forces that are determining where we are now, in terms of recovery and in terms of growth prospects? There are many factors: legacies of the crisis, developments that began before the crisis, and rather new developments. One legacy is very broad-based debt overhang. Globally, there is some deleveraging progress compared with the post-2006 peaks, but not a lot. And progress is uneven across countries. On the whole, private debt levels still remain high. Public debt levels remain very high. There has been quite a bit of fiscal adjustment in terms of government deficits, but even with that, government debt levels, relative to GDP, are not all that different from the post-2006 peaks. So, there is a lot of debt out there, including, in many economies, nonperforming loans that haven't been adequately addressed—think about Italy.

FIGURE 1
Contribution to Global Real GDP Growth, Time-Varying GDP Weights

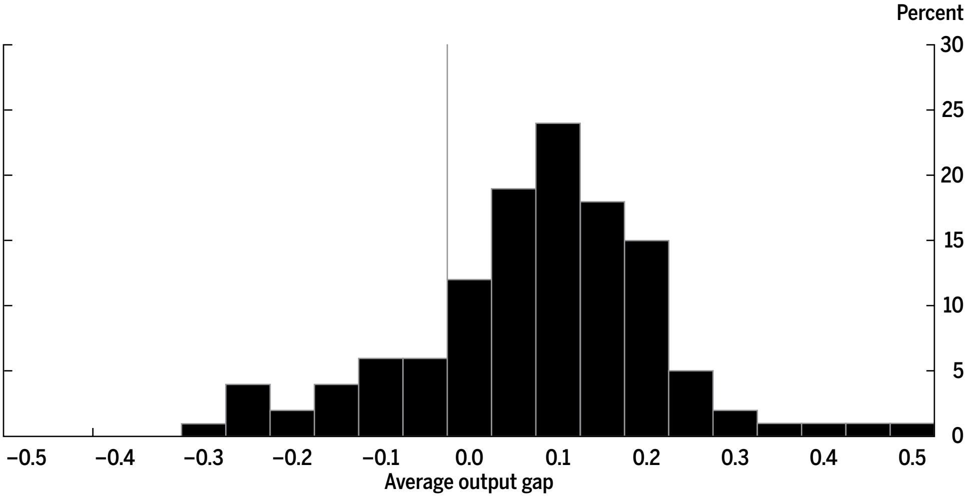


Source: IMF *World Economic Outlook*.

Another crisis legacy—and Barry Eichengreen referred to this in his summing-up of the conference—is the possibility of hysteresis, not only in potential output but also in potential output growth. Barry cited the work of Olivier Blanchard, Eugenio Cerutti, and Larry Summers (2015). Figure 2 illustrates the output gap effect; it comes from their paper. The distribution on the right-hand side shows where output gaps are three to seven years after a recession, relative to before the recession, using a sample of 122 recession episodes in advanced economies. You can see that the distribution is very much skewed to the right, to bigger output gaps. So, there is a lot of persistence of business cycles, and it is not surprising that we see that particularly in the latest experience. These effects also seem to affect growth rates and potential output. Is this something real? Is it just a figment of the observation that growth is trending down cyclically since the early postwar period? It is not entirely clear: there are multiple explanations. But these data are a fact that we need to contend with.

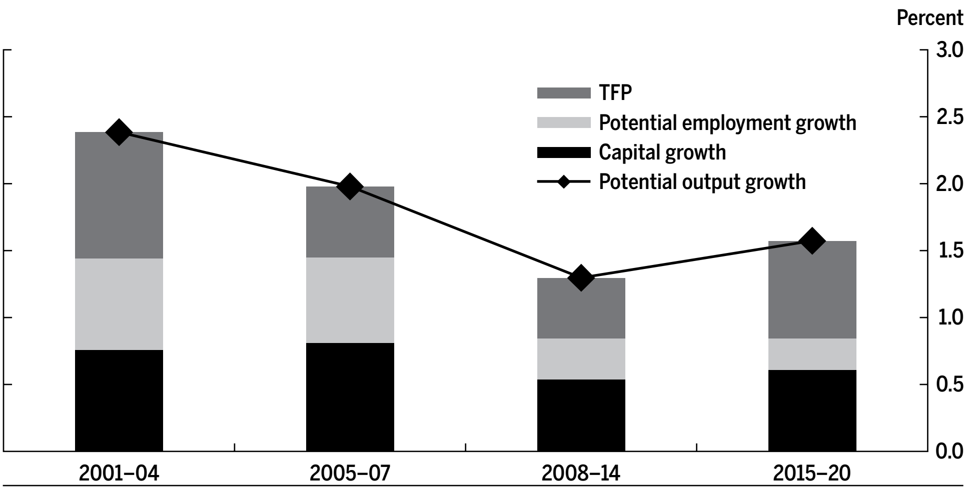
Declining productivity is another big factor driving current experience and our forecasts. The decomposition in Figure 3 illustrates the trend. It breaks

FIGURE 2
Output Gap Three to Seven Years after a Recession



Source: Blanchard, Cerutti, and Summers (2015).
Note: Sample is 122 recession episodes in advanced economies.

FIGURE 3
Declining Productivity in Advanced Economies*

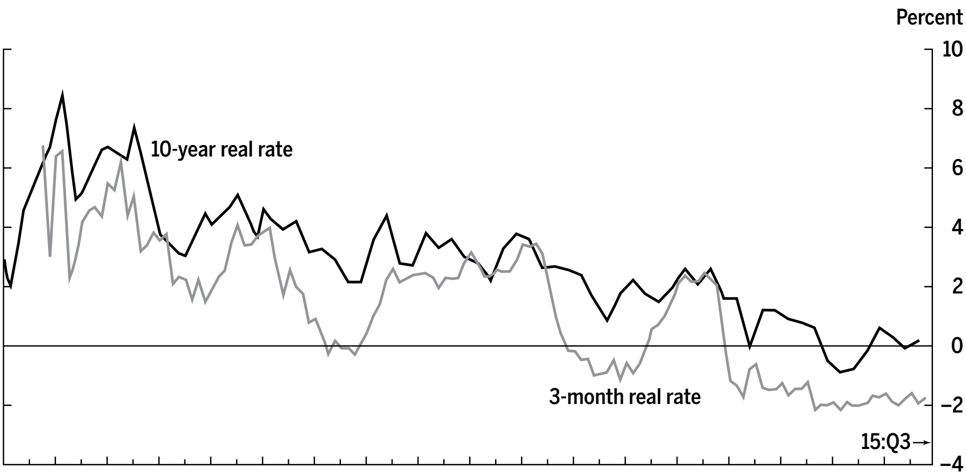


*Consists of Australia, Canada, France, Germany, Italy, Japan, Korea, Spain, United Kingdom, and United States.
Source: IMF (2015).

down output growth into labor, including the efficiency of labor, capital deepening, and total factor productivity (TFP). Since the early 2000s, the trend is strongly downward. Also driving what has been going on, in terms of potential growth, is a declining demographic trend—lower population growth, aging populations—even in emerging markets, including strongly in China.

What other trends are in play? One that has been very important, and has been the subject of public debate between Ben Bernanke and Larry Summers in their blogs (Bernanke 2015 and Summers 2015) as well as also covered by other research (e.g., IMF 2014, Council of Economic Advisors 2015, and Rachel and Smith 2015), is the decline in global real interest rates. For the United States, this process has been going on at least since the Volcker disinflation (see Figure 4); arguably, it has been going on much longer than that, perhaps since the 19th century, depending on whom you read. But what we can see in these data, which include both long-term and short-term nominal rates corrected for survey forecasts of inflation, is very low, even negative, real interest rates. Strikingly, short-term real rates have remained negative since 2008–09. In previous cycles, they recovered more quickly. In the current experience, they've remained very low. Again, there's much debate over the causes.

FIGURE 4
U.S. Real Interest Rates



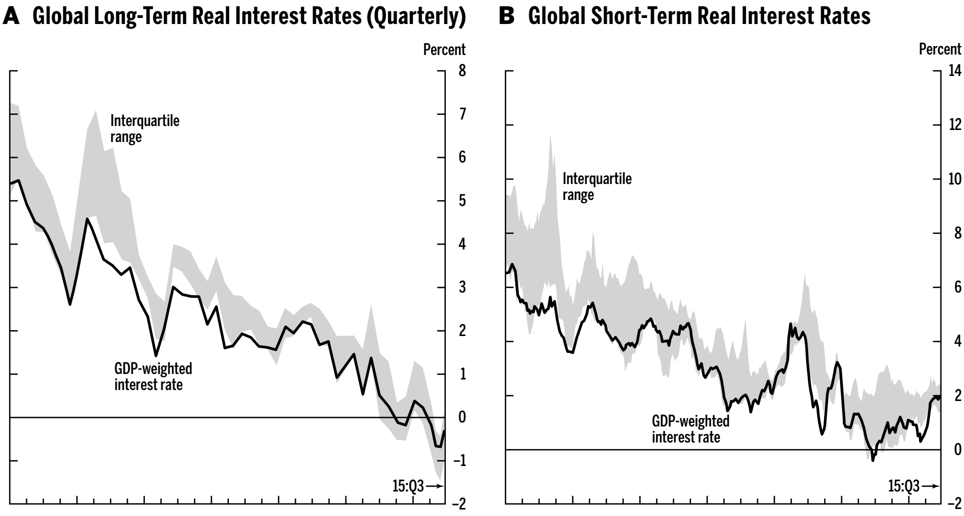
Sources: Bloomberg L.P. and Federal Reserve Bank of Philadelphia.

Note: Real rates are calculated based on nominal government bond yields minus Survey of Professional Forecasters CPI inflation expectations.

Is this a harbinger of future growth? Does it reflect other factors? We don't know, but one thing we do know is that it has been a global phenomenon. Figure 5 tracks the coherence of international long-term and short-term real rates across advanced economies. As you can see, the dispersion is fairly limited, and if we were to add some of the more open emerging markets to the sample, we would see broadly similar trends for many of those.

Alongside trends that pre-date the global financial crisis, some more recent phenomena weigh on global growth. The central one has been the rebalancing and slowing of China, which has had multiple spillover effects throughout the world. One trend change has been the ongoing shift of China's economy toward the service sector and "new economy" sectors. This dynamic has clearly impacted the rate of growth overall, but it has also had a big effect on China's trade—a surprisingly big effect. China's trading partners have suffered as Chinese imports have slowed dramatically, and why imports have slowed this dramatically, with output still growing somewhere between 6 and 7 percent a year, is a puzzle. The apparently sharp shift in the economy toward services is clearly involved. Will services keep growing enough to take up the slack released by relative shrinkage in the traditional "old economy"? It is hard to say. Worth noting is that much recent growth in services in China was financial services, some

FIGURE 5
Global Real Interest Rates



Sources: Global Data Source and Consensus Forecasts.

Note: Sample includes Australia, Canada, France, Germany, Italy, Japan, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, United Kingdom, and United States.

of it connected with the stock market boom and collapse, especially in 2015, and that component of growth seems poised to slow.

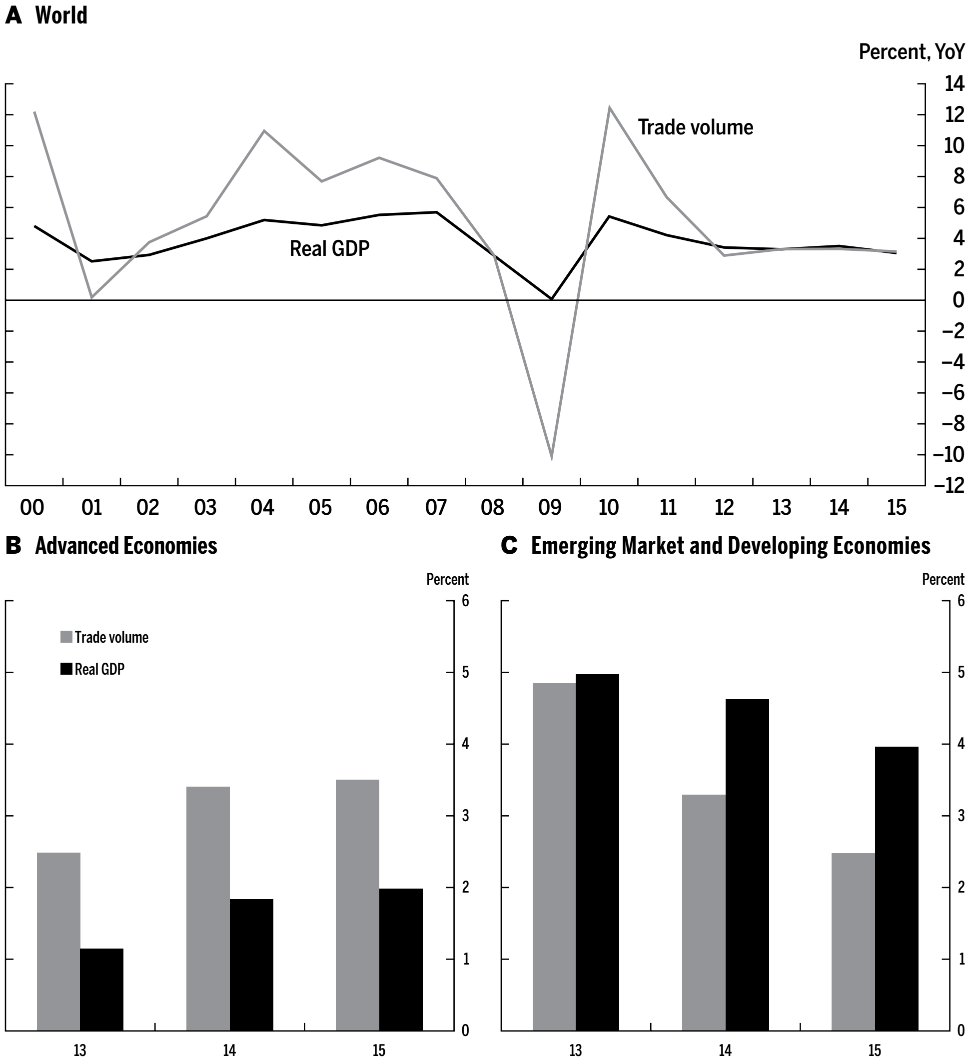
Closely related to what is happening in China is the slowdown in global trade. We all know that global trade has been growing more slowly than GDP recently, whereas in the recent past it grew more quickly. It is less appreciated that this slowdown is really concentrated in emerging markets, circumstantial evidence that what is going on in China is a very big factor. Figure 6 shows recent patterns in world trade-volume growth.

A key mechanism through which China's rebalancing—its move away from investment, toward consumption and services—has spilled over to the world economy is through world commodity markets. Commodities have been declining for a while. The decline in oil began in earnest in mid-to-late 2014, but other commodities began falling much earlier, around 2011, when China stepped back from its model of heavy construction-based growth. The declines in prices of base metals have been particularly striking, because China is the world's leading consumer of those goods. China consumes 50 percent or more of the world's copper, iron, and nickel, and those commodities have taken a huge hit. (We've also seen falls in prices of agricultural commodities.) Chinese demand led a lot of emerging markets to invest heavily in mining capacity, so that now they have excess capacity—in many cases in a main export, the price of which is very low. Adjusting to this new normal will be painful and slow. And commodity prices are not likely to bounce back anytime soon.

One reflection of this can be seen in capital flows. In some cases, emerging markets have intervened to prevent excessive or disorderly currency depreciation, and some countries' reserves have gone down as a result, the most notable case being China's loss of reserves between summer of 2014 and recently. For countries that do not intervene in the foreign exchange market, measured net capital outflows (aside from errors and omissions) cannot exceed the current account surplus, yet we can still see incipient capital account pressures in exchange rates (which have depreciated) and sovereign spreads (which have risen, notably in Latin America and Africa).

What am I most worried about? There are many things one could worry about, but one of several concerns is deflation. The U.S. situation seems fairly healthy, but if we look around the world, the number of countries experiencing low inflation—either below 2 percent, below 1 percent, or below 0 percent—has crept up, whether you look at headline inflation or, to a lesser extent, core inflation or inflation expectations (Figure 7). At the zero lower bound, our ability to address inflation by standard monetary policies is compromised. If you have a roaring inflation, you can always raise interest rates. If you're at the zero lower

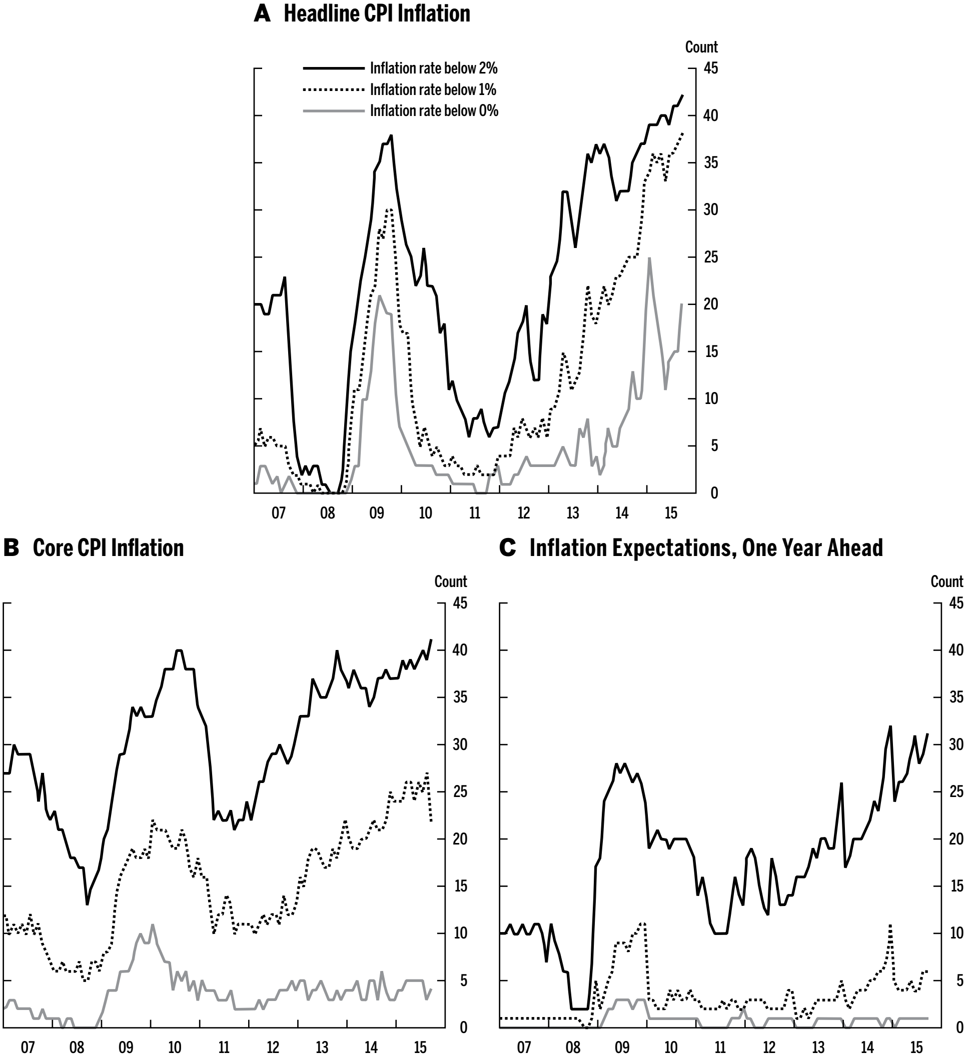
FIGURE 6
Trade Volumes and Output Growth*
(percent, year-over-year)



*Trade is measured by the volume of total imports and exports of goods and services (in real U.S. dollars).
Sources: IMF *World Economic Outlook* and IMF staff calculations.

bound, you can do quantitative easing. You can think about negative interest rates, which can only go so far. But the tools are much less powerful. And so, there really is a risk that expectations become unmoored and anchorless. Is this going to happen broadly in the world economy? I think some economies could be at risk. The overall trend is worrisome.

FIGURE 7
Number of Countries with Low Inflation Rates
(out of 55 countries)



Sources: Global Data Source and IMF staff calculations.

Despite earlier speakers' desire to ban these clichés, I am still compelled to warn that there are no panaceas, no silver bullets. But the IMF's job is to give advice, so we do have some prescriptions. All of these things are easier said than done, but they do need to be done if we hope to return closer to previous growth rates. Deal with the legacies, including nonperforming loans. Where inflation is below target, where deflation is a threat, where expectations need to be restored to appropriately anchored levels, monetary accommodation should continue, and in the euro area and Japan in particular. And in the United States, a smooth normalization of monetary policy, with clear communications, will be a good thing. Macroprudential policy is also important. A number of concerns arise from the period of low interest rates: Have there been excessive risk-taking, asset bubbles, too much borrowing in dollars by emerging market corporates? And in some countries, there remains scope to utilize fiscal space: I can think of some candidates in Europe with very large current account surpluses, whose residents are not earning much on their foreign investments but could possibly earn more on needed domestic infrastructure.

What about emerging markets and developing economies? Many of them could improve their business climates, stimulating investment. Many of them will now have to work very hard at diversifying their export bases, because China is not going to be there for them in the same way that it was over the past 15 years. One likely success story is the reliance on exchange rate flexibility (Obstfeld 2015). We've seen fairly large depreciations without huge knock-on effects in financial markets so far, and that is very different from the Asian crisis of the late 1990s. Of course, there is still the potential for unpleasant surprises. But for now, the shock-absorbing properties of flexible exchange rates seem to be confirmed. Again, as in advanced markets, macroprudential supervision frameworks need to continue to be elaborated; we heard in the panel earlier today that, indeed, that work is continuing.

For all countries, there are some common tasks. There is a huge payoff, short run as well as long run, to increasing potential output and potential growth. The big question is, how? Infrastructure investment certainly is part of the picture. At the IMF, we're also working hard on understanding structural policies, and we're learning that what works differs from country to country. We already knew that the political obstacles can be very big, so the dynamics of the impacts are important. But what structural reforms could we and should we go for, and in what settings? Figuring that out is a work in progress, but it is necessary in order to escape the environment of subdued and uneven growth that persists years after the global financial crisis.

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GENERAL DISCUSSION
The World Economy after the Global Financial Crisis

Mr. Williams: On your last slide you listed a set of policy concerns. Your list included deflation risk from the lower bound and the need for structural reforms to increase potential output. These are all very reasonable. But Gauti Eggertson has written a number of papers that say that when you're at the zero lower bound, increasing supply through structural reforms actually creates bigger output gaps and more deflationary pressure. So at the zero lower bound, a lot of our conventional wisdom is reversed. What is your view on that?

Mr. Obstfeld: Well, I think Gauti's models are special, but I think it's a mistake to think about doing different policies one at a time. So if you're considering doing growth-enhancing reforms that have a short-run deflationary effect, you also should be thinking about what other policies you should do at the same time to offset the latter effect. Can you use fiscal policy? Can you use monetary policy? Coming up with the right policy package is the way we should be thinking about this, particularly a package that works to increase potential output.

Mr. Hutchison: Maury, I'm wondering about your point that some advanced economies should utilize their available fiscal space. I can imagine the countries you're thinking of there, which have very solid fiscal positions. But given Jeff Frankel's talk earlier today about the difficulties with policy coordination, it seems to me you're suggesting the policymakers in these countries should utilize fiscal space in order to help others, even if the political dynamics and the economics of their own country suggests otherwise. So, are you suggesting that countries should go against what they view is in their national policy interest? That is, to help the world economy, they should start pursuing much more expansionary policies?

Mr. Obstfeld: Consider a random economy with high national saving, call it Germany. Now, from the point of view of maximizing national income, if you can borrow at a very low interest rate and invest in productive domestic infrastructure rather than in lower-yield foreign assets, there's a net gain for the country. It's a winner. It raises national output. So, I would contest the point that it's not in their interest. They may not view it as in their interest, but I think it's our job as economists to make the case that it is. But I wouldn't say that we're arguing on the basis that this will help the world economy. Now, of course it will help the world economy. And there's a legitimate case to be made that excessive external surpluses are a bad thing. But I think on purely domestic grounds, you can make the case that greater fiscal spending would be good. Now, people will argue that it increases the debt. But I view that more as a figment of the way we do fiscal accounting. If you have a capital account and recognize that you're using debt to fund a productive investment that yields more than the debt costs you, economic theory would say it's a net gain. So, that's the argument that I would make to the Germans. Now, would they listen? No. We know that. But it's our job to keep saying it.

Mr. Prasad: Before September, your boss, Christine Lagarde, and your now colleagues at the International Monetary Fund (IMF, or the Fund) suggested that a Federal Reserve rate hike in September (2015) is too soon. What is the official Fund view now about whether December is the right time? And even if the Fed's normalization process starts smoothly in December in the United States, do you think the effects will be tough for the rest of the world to deal with?

Mr. Obstfeld: Well, I'm not the repository of the Fund's official position on your question, as hard as that may be to believe. I think the original statements that were made by IMF officials over the past summer were based on an assessment about where the U.S. economy and world economy would be in the latter half of 2015. And in their view the state of world economy would not be conducive to normalization. It will be interesting to see what the Fund says in December if the Fed actually does increase rates. So, I'm basically going to dodge that question. It has been interesting that a number of emerging market central bankers have said to the Fed, just do it already—begin raising rates. I think that reflects their view that this will eliminate uncertainty in financial markets. But I feel that it will not eliminate the uncertainty, because after the Fed first raises its target interest rates by, say, 25 basis points, we likely still won't know what is the future path of U.S. monetary policy. I feel that these emerging market central bankers want to establish that they can withstand the first jolt. And then once they've done that, any subsequent developments will be easier to withstand. This has been built up into such a big thing that they want to get it over with. But I would add that there has been some signaling from the Fed, that the ultimate interest rate level will be reached more slowly and that it may not be as high as some expect. And I think that has had a stabilizing influence. So, my sense is that at this point financial markets have pretty well factored in the prospect of a Fed hike. Expectations have been managed. It's hard to imagine that a December liftoff would be a surprise. But that's just one person's view.

Mr. Claessens: I want to follow up a little bit with a combination of both Eswar's (Prasad) and Michael's (Hutchison) comments. You haven't said anything about the role of the IMF. You've said advanced countries should do this and emerging markets should do that. But what can the IMF do to help this process, particularly on the coordination side? More specifically, what are your views on what we need to do better to coordinate on monetary policies going forward?

Mr. Obstfeld: Well, I think the best thing we can do is try to promote policies that would lead to more balanced growth in the world economy. We've seen incredibly uneven growth since the global financial crisis. First the U.S. was recovering slowly, while emerging markets and China were growing more quickly. Then we went into the euro crisis. Now we're in a situation where the emerging markets, feeling the spillover from China and experiencing some domestic problems, are growing very slowly. And whenever that happens, we have very big exchange rate adjustments and discussions of currency wars or competitive depreciations, and spillover effects. So, I think the best thing that we can do is to promote a more balanced growth path. If we can't do that, I think we should promote resilience-building measures that allow the world to tolerate big exchange rate changes, because currency changes ultimately are the shock absorbers that help reconcile different countries' policies. It's not within the Fund's mandate to actually ask countries to take into account international spillovers when setting their policies. So we try to make their effects evident and we try to talk to about them. But ultimately, we recognize that countries will follow their domestic mandates. So, the question is, how do you make the world safer for central banks and governments to do that?

Mr. Hoshi: On the issue of the IMF's role, I want to comment on the useful function that the IMF can play in facilitating structural reforms. As an example, I want to point out what the IMF did in its Article 4 consultation with Japan this year. The IMF not only listed the individual potential structural reform measures that Japan could undertake but also estimated how much each reform would increase potential output. So I think that this helped the policy discussion in Japan very much.

Mr. Obstfeld: Yes, the structural changes that might help raise potential output differ from country to country. Japan has a number of issues, which you went through very nicely in your paper with Anil (Kashyap) and which I heard in July. Among these are labor force participation. That's also a big factor in the United States. If you look at emerging markets, as I mentioned in my remarks, the business and investment climate are a big issue. Investment is low everywhere, and anything we can do to jump-start it would be welcome. In many countries there are supply bottlenecks. There are labor market rigidities. There are product market distortions. So, there's a long laundry list. But there is no one-size-fits-all prescription.

Mr. Choi: I have a question about the relationship between demand and supply. In normal times, demand moves in tandem with the supply side. But in recent years, I'm wondering whether the fall in demand could be having an influence on supply. Potential GDP could be affected by many factors, such as population aging and heightened uncertainty, which discourage investment. But in addition many countries, including advanced economies, are very concerned about a widening gap between their wages and productivity, as real wage growth undershoots productivity growth.

If such a gap continues, it could be a constraint on consumption and aggregate demand. If this downward pressure on demand persists, there could be consequences on the supply side as well. So, what is your view about this?

Mr. Obstfeld: You raised a number of very important questions. I think it's absolutely true that demand influences growth and possibly potential growth. You see this in the histogram that I showed in the Blanchard et al. work. It was also a major theme of the IMF's *World Economic Outlook* last spring, which was basically about the investment accelerator and the role of low demand in creating low investment. But I believe there's also a feedback in the other direction as lower potential growth acts as a drag on demand and leads to even lower potential growth. So, you can get into a trap. The wage issue is a very interesting one, particularly as the trend shift of income away from labor toward capital actually dampens aggregate demand. And this is a trend that we've seen throughout the world, including in emerging markets, that is, the labor share has gone down as the capital share has risen. So, I think that's a relationship we have to understand better so we know what type of policies can be used that would help rather than hurt. But there's no question that that's a big puzzle. Is it due to globalization? Is it due to technology? Is it something more related to rents in the economy and the way they're shared, which might be more amenable to policy measures? We don't really know, and it definitely warrants more research.