

**INTERNATIONAL IMPACTS OF THE  
FEDERAL RESERVE'S QUANTITATIVE  
EASING PROGRAM**

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**HEARING**  
BEFORE THE  
SUBCOMMITTEE ON MONETARY  
POLICY AND TRADE  
OF THE  
COMMITTEE ON FINANCIAL SERVICES  
U.S. HOUSE OF REPRESENTATIVES  
ONE HUNDRED THIRTEENTH CONGRESS  
SECOND SESSION

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## **INTERNATIONAL IMPACTS OF THE FEDERAL RESERVE'S QUANTITATIVE EASING PROGRAM**

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**Thursday, January 9, 2014**

U.S. HOUSE OF REPRESENTATIVES,  
SUBCOMMITTEE ON MONETARY  
POLICY AND TRADE,  
COMMITTEE ON FINANCIAL SERVICES,  
*Washington, D.C.*

The subcommittee met, pursuant to notice, at 10:05 a.m., in room 2128, Rayburn House Office Building, Hon. John Campbell [chairman of the subcommittee] presiding.

Members present: Representatives Campbell, Huizenga, Pearce, Posey, Grimm, Fincher, Stutzman, Mulvaney, Pittenger, Cotton; Clay, Peters, Foster, Carney, and Kildee.

Ex officio present: Representatives Hensarling and Waters.

Chairman CAMPBELL. The Subcommittee on Monetary Policy and Trade will come to order.

Without objection, the Chair is authorized to declare a recess of the subcommittee at any time.

The Chair now recognizes himself for 5 minutes for the purpose of an opening statement. I won't use all 5 minutes, but I will simply open to say this is a continuing part of our series of hearings examining the Federal Reserve (Fed) at the 100th anniversary of the Federal Reserve, and examining both the history of the Fed and the current activities of the Fed and what the future of the Fed might look like.

The title of this hearing is, "International Impacts of the Federal Reserve's Quantitative Easing Program." QE, as we have lovingly come to know it, has been the subject of a number of hearings or discussions in hearings in this committee since it was begun several years ago.

My opinion on QE in terms of its domestic policy has been clear. There are benefits, if you will, to QE, and there are clearly risks and negatives to QE. And in my estimation, the risks and negatives of QE are currently outweighing the benefits thereof, which calls for it being wound down and eliminated, in my view. Clearly, the Federal Reserve Board Open Market Committee has not agreed with that assessment in the past, and we will see what they do in the future.

But a lot of those discussions have been based upon an evaluation of the domestic impacts of quantitative easing, of what it is doing for the economy, for interest rates, for the money supply, for

those sorts of things. That is not what this hearing is intended to examine.

U.S. monetary policy does not happen or exist in a vacuum. When the greatest nation on earth makes decisions and makes economic moves or moves in the area of monetary policy, other nations react, and it affects the international markets and it affects international trade and can affect a number of things.

And we have our distinguished panel here this morning to give us their views of what are the international impacts of quantitative easing, and how do the actions or reactions of what is going on in other countries impact the United States? It is another part of quantitative easing that we haven't spent a lot of time on, and that this hearing is intended to try and understand better, as to what those international impacts are that thereby have an impact upon the United States domestically, as well.

So, with that, I believe—okay. The gentleman is recognized for 5 minutes for an opening statement.

Mr. KILDEE. Thank you, Mr. Chairman. I don't have any formal opening statement. I just want to thank the witnesses for their presence.

Obviously, this is a really important issue. Mr. Peters and I both represent the State of Michigan, so we are particularly interested in your observations relative to this policy and its effect on unemployment.

But I appreciate your attendance. Thank you.

I yield back. Thank you.

Chairman CAMPBELL. The gentleman yields back.

The other gentleman from Michigan. I just realized I am completely—

Mr. HUIZENGA. Mr. Chairman, you get—

Chairman CAMPBELL. —surrounded by Michiganders here.

Mr. HUIZENGA. —three of us up here.

Chairman CAMPBELL. Okay. The other gentleman from Michigan is recognized for 5 minutes.

Mr. HUIZENGA. Thank you, Mr. Chairman. And for the record, I believe that the Federal Reserve Open Market Committee ought to have listened to you more often, as well. So, just to get that out of the way.

But, it is interesting, in its 100th year, going back and doing some research—I love history. I love doing some reading on that. And, obviously, you look at the creation of the Fed and why this came about, some of those economic crises in the early 20th Century. Having the Fed founded as an independent agency, deriving its power from Congress, we have seen a certain amount of expansion over the past 100 years, and that has been quite significant expansion. And looking at that as it was originally created to supervise and monitor banking systems here in the United States, it seemed to grow unchecked. I know that nature and government abhor vacuums, and they will fill them, one way or the other.

But we are seeing them being really a lender of last resort for banking institutions that require additional credit to stay afloat, and, obviously, that has an impact on what is happening internationally. But given the interconnectedness of the global financial system, there is no doubt that their policies have significantly im-

pacted international markets and foreign economies. And with the implementation of artificial near-zero interest rates with QE1, -2, -3, Operation Twist, the Fed has made an attempt to stimulate the domestic economy by using an unprecedented level of interventionist policies.

I am curious to get your input as to what you believe that this experiment has caused, as we have seen investors really make different decisions. I saw a statistic this morning that the top 1 percent has seen a, I believe it was a 31 percent increase in their wealth over the last few years, and for the lower tiers of the economy, it has been fractions of a percent.

And I think the key to all of this, the income questions that we are dealing with, distribution and equality and equality of opportunity; it is really about economic activity more than anything. So I think we have a common goal. The question is, how is it really being handled?

These emerging-market economies have caused several foreign currencies to rise in value. However, rumors—it was interesting just seeing the rumors in mid-2013 that the Federal Reserve would begin tapering its purchases of government securities earlier than expected. Investors began to react very quickly. They are not static; they are very dynamic when they are making those decisions. They are selling off their stakes in foreign currencies across the globe. So, we obviously have an impact.

What we learn today shouldn't only inform our understanding of what is happening here domestically, but, increasingly, our global and complex macroeconomy that we have here. And I appreciate your time today, gentlemen, giving us some insight on your take as to what has been happening, as we see this 100th-anniversary milestone.

With that, Mr. Chairman, I yield back. Thank you.

Chairman CAMPBELL. The gentleman yields back.

Again, thank you all for being here.

We will now hear from the people who know more about this than all of us put together.

And we will start with Dr. Benn Steil, who is a senior fellow and director of international economics at the Council on Foreign Relations. He previously served as the non-executive director of the virt-x security exchange, which is now part of the Swiss Exchange, and formerly directed the International Economics Programme at the Royal Institute of International Affairs in London.

Dr. Steil, welcome. Thank you. And you are recognized for 5 minutes.

**STATEMENT OF BENN STEIL, SENIOR FELLOW AND DIRECTOR OF INTERNATIONAL ECONOMICS, THE COUNCIL ON FOREIGN RELATIONS**

Mr. STEIL. Thank you, Mr. Chairman.

Since the financial crisis in 2008, actions taken by the Federal Reserve to increase liquidity in the U.S. financial system have had a major impact outside the borders of the United States. Quantitative easing, through which the Fed increases the monetary base by buying longer-term financial assets with newly conjured dollars, thereby pushing down their yield, was undertaken partly to encour-

age, and indeed has encouraged, investors to shift resources into riskier assets.

Though wholly unintended by the Fed, however, this shift has encompassed securities issued in emerging-market countries. Anticipation of the Fed's withdrawal from QE3, though it will only begin with a modest tapering of monthly asset purchases this month, has already had a substantial impact on the currency and bond markets of a number of important emerging-market economies.

The hardest-hit countries have been those running large current account deficits—in particular, India, Indonesia, Turkey, and Brazil. Economic growth in these countries and the investment returns coming with it, reliant as they have been on short-term capital flows from abroad, have always been the most at risk of a change in the trajectory of Fed policy from accommodation to tightening.

So how can emerging markets protect themselves in advance of a tightening of Fed policy? A recent IMF study found that countries with a lower share of foreign ownership of domestic assets, a trade surplus, and large foreign exchange reserves have been more resilient. This has policy implications. In good times, developing countries should apply a firm hand to keep their imports and currency down and their exports and dollar reserves up.

Unfortunately, such policies are apt to constitute what many observers in this country would call “currency manipulation.” Economists Jared Bernstein and Dean Baker recently called for the United States to impose taxes on foreign holdings of Treasuries and tariffs on imports precisely to counteract them. This is, in my view, a misguided recipe for raising global trade tensions and political conflict. But the very fact that prominent commentators are calling for such action illustrates the importance of considering how the functioning or malfunctioning of the global monetary system can encourage a spiral of damaging policy actions.

China's agreements with Brazil, Russia, Turkey, and Japan to move away from dollar-based trade, for example, have the potential to undermine the multilateral trading system, as countries that don't want to stockpile each other's currency will use trade discrimination to prevent trade imbalances emerging.

So what can be done? International central bank cooperation can help at the margins by mitigating short-term liquidity problems, most notably through currency swap arrangements. The Fed extended swap lines to Brazil, Mexico, and South Korea in October of 2008, although these arrangements were allowed to expire in 2010.

Regarding Federal Reserve monetary policy actions, anything that makes them more predictable will, all else being equal, attenuate market volatility globally. Over the past 15 months, the Fed has tried to do this through the formal use of so-called forward guidance. Initially, this was implemented through the setting of date-based markers for the raising of interest rate targets. These were quickly abandoned, however, in favor of data-based markers for both the raising of interest rate targets and the tapering of monthly asset purchases.

Both approaches are challenging to carry out in practice. Date-based guidance is problematic in that date markers are ultimately justified by the Fed's expectations of economic conditions years into the future. And, as I have documented elsewhere, the Fed's forecasting record over the past quarter-century has been poor. Data-based guidance can also create, rather than reduce, market turbulence when the data markers themselves are volatile, such as monthly employment figures. Asset purchases, in particular, are not a precision tool, so trying to calibrate them continuously to volatile economic data is fraught with difficulties.

It is worth recalling that Chairman Bernanke had in June suggested that asset purchases would end with the unemployment rate at around 7 percent. In fact, tapering is only now just starting with unemployment at this level. Assuming the Fed had good reason to abandon the Chairman's June guidance, it would have been advisable not to issue it in the first place.

In short, rules, targets, and forward guidance for U.S. monetary policy action will not significantly mitigate the challenges that emerging markets will face going forward in adapting to market perturbations triggered by such action or inaction. Broadly speaking, the inevitable inconsistency that will open up between the Fed's rules, targets, and guidance on the one hand, and unexpected economic developments on the other, will lead either to inappropriate policy stances or a falling away of the credibility of such rules, targets, and guidance as they are abandoned or amended.

It is therefore in our national interest to accept openly that emerging-market governments be able to implement prudent controls on short-term portfolio inflows in order to shield their economies from sudden, extreme, and unpredictable shocks, some of which may be triggered by the decisions of our own Federal Reserve, taken in good faith pursuant to the mandates assigned to it by Congress.

Chile, which has been a model of prudent macroeconomic management over many years, used modest 1-year unremunerated reserve requirements on capital inflows with some apparent success during the crisis-marked 1990s. As major serial foreign financial crises over the past 4 decades have illustrated, we here in the United States also bear real costs when overexposed and underprotected banks and governments find themselves, in the face of rapid and large-scale shifts in the flows of capital internationally, quite suddenly unable to pay their bills.

I thank you again for the opportunity to participate in these important discussions.

[The prepared statement of Dr. Steil can be found on page 55 of the appendix.]

Chairman CAMPBELL. Thank you very much, Dr. Steil.

Dr. Allan Meltzer is professor of political economy at Carnegie Mellon University. Dr. Meltzer chaired the International Financial Institution Advisory Commission, also known as the Meltzer Commission, and was a founding member of the Shadow Open Market Committee. Dr. Meltzer served on the President's Economic Policy Advisory Board and the Council of Economic Advisors.

And, of course, Dr. Meltzer's main claim to fame is that he has a degree from the same university from which I graduated, UCLA. He has a doctorate, I had a B.A.—an insignificant difference.

But thank you so much for being here, Dr. Meltzer. And you are recognized for 5 minutes.

**STATEMENT OF ALLAN H. MELTZER, THE ALLAN H. MELTZER  
PROFESSOR OF POLITICAL ECONOMY, TEPPER SCHOOL OF  
BUSINESS, CARNEGIE MELLON UNIVERSITY**

Mr. MELTZER. Chairman Campbell, thank you. It is always a pleasure to be here, and I thank you and the members of the committee for inviting me.

I am going to talk about what I think gets lost almost all the time in these discussions. That is, how do we get the world back to long-term stability? That is really what the major objective should be: to find a way, a path that will take us back to long-term stability.

Central banks have two major monetary responsibilities: domestic and; international. Most central banks ignore the international responsibility and achieve domestic price stability, if they do it at all, by acting unilaterally. Having made that choice, international stability, enhanced stability of exchange rates and capital movements requires some form of collective agreement.

I have long advocated a program that both achieves domestic stability and increases exchange rate stability. My proposal does not require international conferences, foreign intervention in domestic policy, or enforcement by international supervisors. It is entirely voluntary and is enforced by markets, much as the international gold standard was enforced by markets.

It has a few simple rules.

First, the United States, the European Central Bank, the Bank of Japan, and if China ends its exchange controls, the Bank of China, agree to maintain domestic inflation between 0 and 2 percent a year.

Second, any other country that chooses to import low inflation and maintain a fixed exchange rate can peg at its own choice to one or a basket of the major currencies. They gain a benefit, price and exchange rate stability, that no country can achieve acting alone. The country that chooses this policy is responsible for maintaining its exchange rate.

Third, the major countries benefit by gaining exchange rate stability with all countries that peg to one or more of their currencies. The major currencies float to permit changes in productivity and possibly taste.

Fourth, no country is required to join the system. It remains voluntary. The public good that the system provides gives an incentive to join.

Fifth, the system would introduce discipline that has been lacking since the breakdown of the Bretton Woods system. Like the old international gold standard, markets would do the enforcement. If a country ran large budget deficits, markets would devalue the currency and increase expected inflation, forcing the country to adjust.

Sixth, countries could suspend operation of the system, as they did under the gold standard. Not permitting temporary suspension

is a major flaw in the European monetary arrangements that prolongs, indeed forever perhaps, crisis.

I do not claim this proposal would achieve some ideal result. I do not believe that is possible for modern democratic governments. It offers improvement of increased stability. An ideal, like zero instability, is not achievable in an uncertain world. If adopted, my proposal would limit the damage that governments do, particularly the damage that the Federal Reserve System does.

A current example is the excessive expansion of bank reserves that spill over to other countries. Some, like Japan, respond by depreciating their currency. Others experience an unwanted inflation. Still others, Turkey for example, have difficulty adjusting.

The number of problems that have occurred is small so far because the amount of reserves that the Fed has produced are almost entirely idle reserves. More than 95 percent of QE2 and QE3 have the first round of expansion and then are idle and held by the banks.

It is a question to which I do not find a sensible answer if you ask, with \$2.5 trillion sitting idle on banks' balance sheets, and \$2 trillion sitting idle on corporate balance sheets, what in the name of goodness can the Federal Reserve do that the banks and the corporations can't do by themselves?

I make two additional—governments do not limit damage or prevent it—proposals. First, I would close the World Bank. There is little reason for it in the world of economic capital flows of the magnitudes that we experience.

And second, I would put prudential restrictions on International Monetary Fund lending, because the International Monetary Fund lends to countries such as Ukraine and Romania, which will have extreme difficulty in paying back those loans. We pay a substantial part of those loans. We should put some restrictions on how they are used.

Thank you.

[The prepared statement of Dr. Meltzer can be found on page 53 of the appendix.]

Chairman CAMPBELL. Thank you, Dr. Meltzer.

Next, Dr. Desmond Lachman is a resident fellow at the American Enterprise Institute. He served as the deputy director of policy development review at the aforementioned IMF. He worked as managing director and chief emerging-market economic strategist at Salomon Smith Barney. And he has previously taught at Georgetown and Johns Hopkins Universities.

Welcome, Dr. Lachman. You are recognized for 5 minutes.

**STATEMENT OF DESMOND LACHMAN, RESIDENT FELLOW,  
THE AMERICAN ENTERPRISE INSTITUTE**

Mr. LACHMAN. Thank you, Mr. Chairman. Thank you for inviting me to testify before this committee today.

Let me start by saying that U.S. monetary policy typically has significant spillover effects on the rest of the world economy. It does so both through the way in which it affects the state of the U.S. domestic economy as well as the manner in which it influences capital flows from the United States to the rest of the world.

The unusually large degree of U.S. monetary policy loosening over the past 5 years has been no exception to the rule. Indeed, there is every reason to believe that the very large scale and the form of the most recent episode of U.S. monetary policy easing has had more than the usual degree of spillover to the rest of the world economy.

Since the end of 2008, the massive easing in monetary policy by the Federal Reserve and by the central banks of other major advanced countries has resulted in substantial capital flows into the emerging markets. According to International Monetary Fund estimates, foreign portfolio investments in emerging-market country bonds has risen by a cumulative \$1.1 trillion through 2013, and this has amounted to as much as 2 percent of the recipient countries' gross domestic products.

These capital flows have compromised the economic fundamentals of a number of key emerging-market countries by undermining market discipline, and in many cases they have resulted in excessive currency appreciation. In particular, emerging-market borrowing rates have been reduced to levels below those that would be justified by those countries' economic fundamentals.

In a number of notable cases, including Brazil, Indonesia, India, South Africa, and Turkey, easy financing has led to the postponement of much-needed structural reforms and budget adjustment. It has also led to excessive credit expansion and to the buildup of financial leverage, making these countries vulnerable to any sudden stop in capital flows.

Of even greater concern for the global economic outlook than the emerging markets is the complacency presently characterizing European policymakers concerning the European sovereign debt crisis. Lower borrowing costs in Europe, which has been facilitated in large part by Federal Reserve easing, have lulled European policymakers into a false sense of security. This has substantially reduced the impetus for much-needed policy reform and adjustment in the European economic periphery, and it has delayed Europe's move towards banking and fiscal union, which would be necessary for the survival of the euro.

In determining the pace at which it unwinds its quantitative easing program, the Federal Reserve will need to be very mindful of the international spillovers of its policies. This would particularly appear to be the case given the large impact that the massive expansion of its balance sheet over the past several years has had on the economic fundamentals of a number of key emerging-market economies and on those countries in the European economic periphery. In recent years, the emerging-market economies have accounted for more than half of world economic growth, which means that any significant slowing in those economies could have a material bearing on the U.S. economic outlook.

The key challenge for the Federal Reserve will be to find the right balance in the pace at which it exits quantitative easing. Too slow a pace of exit could further contribute to the undermining of market discipline in emerging-market economies and in the eurozone. At the same time, too fast a pace of exit runs the risk of a sudden stop in capital flows to the emerging-market economies and Europe, which could be disruptive to the global economy.

An indication of the downside risk to the global economy that could be posed by an unwinding of quantitative easing was provided by the sharp selloff of emerging-market assets in the aftermath of Chairman Ben Bernanke's intimation last May that the Fed had under consideration the unwinding of its third round of quantitative easing.

In the 6 months following that testimony, the currencies and bonds of those emerging-market countries which had experienced high rates of credit expansion and had wide external current account deficits, including notably Brazil, India, Indonesia, South Africa, and Turkey, all came under considerable pressure. This pressure has forced those countries to substantially tighten their macroeconomic policies, which has resulted in a marked slowing in their economic growth and which has forced the IMF to downgrade its economic growth outlook.

Thank you, Mr. Chairman.

[The prepared statement of Dr. Lachman can be found on page 42 of the appendix.]

Chairman CAMPBELL. Thank you, Dr. Lachman.

Next, Dr. Arvind Subramanian—did I get that right?

Mr. SUBRAMANIAN. Perfect.

Chairman CAMPBELL. Dr. Subramanian told me before the hearing here that when he was younger, people just called him "Superman." So I may just call him—we can all just call him "Dr. Superman" if you have trouble with "Subramanian."

Dr. Subramanian is a senior fellow with the Peterson Institute for International Economics, and a senior fellow with the Center for Global Development, and has been assistant director for research of the aforementioned IMF, the International Monetary Fund, and staff of the General Agreement on Tariffs and Trade.

Welcome, Dr. Superman. You are recognized for 5 minutes.

**STATEMENT OF ARVIND SUBRAMANIAN, DENNIS WEATHERSTONE SENIOR FELLOW, THE PETERSON INSTITUTE FOR INTERNATIONAL ECONOMICS, AND SENIOR FELLOW, THE CENTER FOR GLOBAL DEVELOPMENT**

Mr. SUBRAMANIAN. Thank you, Chairman Campbell, and members of the subcommittee for giving me this opportunity to testify. I want to use this opportunity to look back in order to look forward. And, in particular, I want to look back on the Fed's role over these last few years in order to draw policy lessons for the broader and vital issue of American global economic leadership. That is a topic dear to my heart, as perhaps one of the few non-Americans testifying before you. So, to that end, I want to offer three reflections and perhaps two, maybe two and a half, policy suggestions.

So, reflection number one: As the world's largest economy, its financial epicenter and the issuer of the prime reserve currency, the dollar, actions by the Fed will unavoidably affect other countries via trade and exchange rates, capital flows, and overall financial conditions. That is unavoidable.

Reflection number two: Against that background, QE has generally and on balance had a positive effect on emerging markets and the global economy. To be sure, in some instances they have added to pressures and volatilities, complicating macro-manage-

ment, but the broad impact has really depended on what the global macroeconomic situation is and the situation in individual countries.

Let me give two examples. QE1 was positive and universally seen as so because it saved the world economy from collapse. So that was good for the United States and good for the world economy.

Second example: Take QE3 or, actually, the talk of withdrawal that Chairman Bernanke started in May of last year. Many EMs did face serious problems, as my colleagues have noted, but the pressures were not uniform and were felt acutely in some countries that were more vulnerable than others.

To lay all the blame on the Fed is to forget that being exposed to U.S. policies is part of the deal of financial globalization that emerging markets and others, as consenting adults, have voluntarily signed on to. They could have chosen to be less financially globalized like China, or they could have made their economies more resilient by adopting better policies. I am a Hindu and not a Christian, but let me invoke scripture: The Fed is not thy brother's keeper.

That being said, it leads to reflection number three: The Fed has been broadly mindful of its international responsibilities and, quietly but effectively, has shown remarkable international economic leadership. It provided dollar swap lines to central banks in emerging markets, and it has provided liquidity to Europe and the Bank of Japan. And these actions did contribute to calming conditions in these crisis-ridden years.

There is something remarkable that needs to be noted here, Mr. Chairman. These emerging-market countries during the crisis chose not to go to the IMF, even though the IMF after the Asian financial crisis was seen as an instrument of American hegemony. Instead, they chose to come straight to the United States and deal with the Fed.

Point number two: It is remarkable because when the Fed helped Europe through these swap lines, at that time the rest of the U.S. Government was a bystander because of its own problems, able to offer counsel but little cash to these economies in crisis.

So, in some ways, what I want to stay is that in some ways the Fed has played a very constructive global role, so the question is, what can the rest of the U.S. Government, and this subcommittee, in particular, do by way of global economic leadership?

So that leads me to policy recommendation number one. Mr. Chairman, you are close to this. I think the U.S. Congress should work with the Administration to ensure the necessary legislation to augment the IMF's resources, to include it in the omnibus appropriation bill.

Why do I say that? As positive as the Fed's role has been in relation to crises, I think that job should not be that of the Fed; it should be that of the IMF. Congressional passage of IMF legislation would be relatively cheap, if not costless. It would protect the United States and the world against crises. And, above all, it would allow the United States to share the burden that, in some ways, it is exclusively taking on via the Fed. To me, this would be a sign of reversing U.S. enfeebled economic leadership. And it is awkward

for me to say this, but the United States is the only major country which stands in the way of this legislation.

Which leads me to policy recommendation number two, because this subcommittee also deals with trade. And, Mr. Chairman, you talked about the feedback effect of QE policies back on the system.

There is some uncertainty now whether U.S. bilateral investment and free-trade negotiations limit the ability of partner countries to deal with financial stresses. I think the negotiations on the TPP offer an excellent opportunity for clarifying that the United States does not aim to circumscribe or eliminate legitimate policy instruments by its trading partners—for example, prudential controls on inflows and broader controls on balance-of-payments grounds—to respond to the pressures from financial globalization and crises. This clarification would also be consistent with the IMF's new thinking on capital controls.

Finally, my half-recommendation: I have argued in my testimony that QE has not led to greater manipulation by the emerging-market countries. In fact, the era of QE has coincided with a reduction in foreign exchange intervention and imbalances. But independently of QE, currency manipulation is a problem for the world system because it is a trade distortion. However, I feel that the best way to address it would be multilaterally in the World Trade Organization.

An alternative, of course, would be to address it in the TPP, but this should be done carefully, making sure that the issue is not captured by a few constituencies in the United States and derails the prospects of broader trade liberalization under the TPP.

Thank you, Mr. Chairman.

[The prepared statement of Dr. Subramanian can be found on page 61 of the appendix.]

Chairman CAMPBELL. Thank you, Dr. Subramanian.

The Chair now recognizes himself for 5 minutes for the purpose of questioning.

Thank you all for your testimony.

I think I heard a resounding agreement, at least, that QE does have an impact—QE and the United States has an impact on foreign markets and on the international economy generally. I heard from a bunch of you things like currency manipulation, trade barriers, disruption, current account deficits, capital flows, all kinds of different things like that. And Dr. Subramanian has a different view as to the efficacy of this world impact than the other three of you do.

What I want to try and do is have you each respond to each other's points, if you will. But, also, if we can make this sort of at a first-grade level rather than all of the "economic-speak." Let's try and say, what is the impact, what is the basic fundamental impact?

So Dr. Steil, Dr. Meltzer, or Dr. Lachman, any of you whom I think do not agree with Dr. Subramanian that the impact has been positive—Dr. Lachman, you look like you are ready for your button—give me the greatest negative impact of QE on international economics. And refute, if you believe you can, Dr. Subramanian's point.

Mr. LACHMAN. I guess if you are looking internationally, what one is really wanting to do is to distinguish between the short-run

impact and the longer-run impact. So while the short-run impact might be beneficial as the capital is flowing into these countries—it lowers interest rates, it boosts growth, and all the rest—what it does is it produces market discipline and allows these countries to establish imbalances, so when the music stops, when the process is unwound, those countries are extremely vulnerable to the slowing of the capital.

So what I am saying is that, as the capital flows in, it drives growth up, everything is okay, but it increases vulnerabilities so what we will see now and what we are seeing right now is the key countries, known as the “fragile five,” are experiencing great difficulties as this capital is withdrawn because they have allowed their currencies to get overvalued and they have very large imbalances.

So that is really the adverse cost. The cost of QE is not seen immediately; it is, rather, seen when the process is unwound. And that has yet to be seen.

Chairman CAMPBELL. And what are the risks to the United States from those vulnerabilities?

Mr. LACHMAN. The risks to the United States are rather large, as we have seen in previous crises, the Asian crisis, for instance, in 1998, both in terms of, if you have those economies slowing, they are an important part of the global economy, it means that United States exports get hit, but the greater risk is to the global financial system, that if these countries run into any kind of payment difficulties, that can cause difficulty on the banking system.

I am not concerned so much about that in terms of the Asian countries, but I certainly am concerned about that in terms of the European economic periphery.

Chairman CAMPBELL. And what are the fragile five?

Mr. LACHMAN. The fragile five are Brazil, India, Indonesia, South Africa, and Turkey. And these fragile five are fairly sizeable economies. You just have to think of Brazil and India, two of the bricks. And these economies have been accounting for most of the global growth over the last 10 years.

Chairman CAMPBELL. Dr. Subramanian, your response?

Mr. SUBRAMANIAN. Yes, Mr. Chairman, I think the point here is that, as Dr. Lachman said, there is a short-term and there is a long-term impact, but there are two key points to note.

One is that the capital inflows that go to developing countries because of QE, their effect on these countries depends very much on how they manage it. If they do things right, it is a huge benefit. Similarly, if they have followed sound macroeconomic policies, when the capital flows out, the risks are minimal.

And, therefore, the key point here is that—and one example of this is that the impact is, in fact, varied. When, in fact, the capital started moving out in May after taper talk, the fragile five were affected, but they were affected because they were very macroeconomically vulnerable. For example, India, my own country, was one of the worst hit because it had high inflation, fiscal deficits of 10 percent, and current account deficits of 4 percent. China, Singapore, and South Korea were less affected.

Chairman CAMPBELL. Okay. My time has expired, so thank you. I am sure you will both have plenty more opportunities.

I will now recognize the gentleman from Illinois, Mr. Foster, for 5 minutes.

Mr. FOSTER. Thank you all for appearing on this very complicated subject. I think after I had a voter-enforced vacation a couple of years ago, I spent a while downloading various macroeconomic models and playing with them, and being frustrated by the difficulty with the multi-country models and the number of parameters that you had to deal with. And as a physicist, I dream that there might be an actual analysis tool here, but I don't think we are anywhere near that.

But I would like to—in a recent speech, Ben Bernanke talked about using mortgage loan-to-value limits as a macroeconomic tool. Because one of the themes that is coming out here is the fact that actions by the Federal Reserve amplify leverage cycles in developing countries.

And so that one of the lessons from biology is that if you want a stable system, you need a number of distributed feedback loops. And so that if each country independently would insulate itself—again, as many countries have by hand; when they see an assert bubble, they turn up, for example, mortgage underwriting requirements in order to cool down their real estate markets. This is also something that could be unwound when the Fed unwinds its own policies.

I was wondering if you have any comments on the concept that individual economies can do a lot to insulate themselves from Fed policy? Anyone who has thoughts on that?

Yes?

Mr. STEIL. I think the data bear that out very strongly, that countries can do things to insulate themselves from the impact of Federal Reserve policy.

It has been pointed out that the effect of QE on emerging-market economies has not been uniform. The countries that were hit the hardest, countries like India, Indonesia, Brazil, and Turkey, had certain features—in particular, very large current account deficits. Countries that were not hit, say, Singapore, China, and South Korea did not have such deficits and also tended to have very large foreign exchange reserves.

My concern is this: If you try to extract policy lessons from this experience, they should be a little bit disturbing to us, because if everybody in the emerging-market world behaves like South Korea, global imbalances are only going to get much worse. The lesson we have taught these emerging markets is that in the good times, they should apply a firm hand to keep their imports and their currency down and their exports and their foreign exchange reserves up. As I emphasized in my testimony, broadly speaking, that is what many observers in these countries refer to as currency manipulation. And so these—

Mr. FOSTER. Not all countries can run current accounts surpluses simultaneously. There is a—

Mr. STEIL. That is right, but often, as you know, Mr. Foster, we wind up being the market of last resort for countries around the world that are insistent on pursuing policies that result in current account surpluses.

So I am concerned that the experience of quantitative easing in the emerging-market world will lead to the adoption of policies that will increase global trade tensions rather than reduce them.

Mr. FOSTER. Okay.

Any other comments?

Mr. MELTZER. Mr. Foster, I like the way you organized your thinking about this problem. I want to add a dimension that has been not been here heretofore.

We have seen 98 percent of QE2, QE3 go into idle reserves. So, there is a tidal wave there. We don't know how it is going to break. But what we are describing so far is the effect of a small amount of the QE spilling over into the rest of the world. What is going to happen when that other 95 percent comes out? Is it going to come out in an orderly way, or is it going to come out in a bang? Is it going to create havoc in the rest of the world? I don't think anybody can confidently say anything about that, but those are the risks which are involved here.

And we can talk about things that countries can do, but if we have a tidal wave of this money coming out, \$2.5 trillion in idle reserves, or more, and growing, and \$2 trillion on corporate balance sheets, that is a lot of money, and it can create a lot of problems. We may be fortunate; we may not.

The idea that the United States will buffer those problems is wrong. We did that because we had a huge import excess because of energy. That is going away. The world of the future is going to be very different than the world of the past because we are going to be in—

Mr. FOSTER. I think I am running out of time here, so if you could wrap up.

Chairman CAMPBELL. The gentleman's time has expired.

And we will now move to Michigan for the next two questioners. First, the vice chairman of the subcommittee, Mr. Huizenga, is recognized for 5 minutes.

Mr. HUIZENGA. Thank you, Mr. Chairman. Again, you are bookended by Wolverines on this.

But I feel like I am honestly drinking—you know the old phrase of drinking out of a firehose. I am trying to drink out of four Ph.D. firehoses coming at us with information right now. So, I appreciate your patience as we are doing this.

Dr. Subramanian seemed to be indicating and quoting the good book as far as should the United States be its brother's keeper, and I am hearing various views on that. I am concerned a bit about that. If everyone should be basically on their own, and as my friend from Illinois was sort of talking about is, basically are we going to have every country sort of insulating itself?

I am from Michigan. Right? There is a tremendous amount of criticism of the TPP coming out of the automotive industry when we are talking about Japan. It seems to me that if we are in QE-infinity and maybe see an edge to that cliff here if we are starting to dial it back, but we are into these loose money policies, how in the world can we be critical of any other country that is going to be taking the same defensive actions that we have taken?

And I am not a Ph.D. I was a poli-sci major, not a hard science major. I did take some courses in economics and a concentration in

that. But one of the first laws of economics that I ever learned about was the law of diminishing returns. And it seems to me, as we are going from QE1 to QE3, I would assume that there is, as Dr. Meltzer is pointing out, this huge, massive buildup in reserves that has happened in the banking system here. Are we really hitting our goals and objectives?

So if you could maybe address those two things. One, how can we be critical of any country? Specifically, I think it was Dr. Lachman who talked about the Bank of Japan. And then, two, what is going to be the effect of these reserves that have been built up?

So, Dr. Meltzer, go ahead.

Mr. MELTZER. Yes, I like the brother's keeper. The brothers don't necessarily want a keeper and are probably not going to want that. I have had the experience of the Secretary of the Treasury going over to Europe and telling them that they need to do fiscal expansion and they laugh at him. That is, they think, take care of your own problems; don't try to tell us how to take care of ours. When the United States has much better policies, it could give advice. It is in a very poor position to give advice these days on fiscal and monetary policy.

I would like to make a slightly different short point. I am concerned about the problem that the Congress has in performing its oversight duties. The only way I believe that you can perform oversight duties effectively is to have a rule, require the Federal Reserve to follow a rule, and then if they don't follow it, you have a question. It is just not possible for members of this committee, however diligent they may be, to come and tango, rhetorically, with the Chairman of the Federal Reserve. It has never worked.

Mr. HUIZENGA. Dr. Meltzer, I know you have brought that point up about the rule previously. And I am curious, are we in danger of the world dismissing or, worse yet, maybe not even believing what we are doing or what we are saying we are going to be doing if we are not tapering when we said we would taper and some of those dates?

But, Dr. Subramanian, I wanted you to quickly address that, too.

Mr. SUBRAMANIAN. Let me first try and address the first of your questions, how can we be critical of others when we are doing the same thing.

I think it is important to remember that this tidal wave that has gone out, first, is not tidal when compared to what happened before QE, and second, it is not all due to QE. A lot, in fact a majority of the flows to emerging markets have happened because they have grown much faster than the United States.

Mr. HUIZENGA. Economic activity?

Mr. SUBRAMANIAN. Exactly. And so, for investors, it is much more attractive to invest in those countries than 2 percent or 0 percent in the United States.

Mr. HUIZENGA. I would love to talk about regulatory reform and tax reform to help us get that economic activity, but let's move on.

Mr. SUBRAMANIAN. But I think the question here is that the United States followed QE policies largely to stave off the financial collapse and to provide policy support for the recession. The impact on the U.S. exchange rate has been relatively modest. In fact, be-

cause the United States is a reserve currency, in the immediate aftermath of the crisis, money came pouring into the United States because it was a safe haven.

And, therefore, I think one shouldn't fall into the trap of thinking that U.S. QE is equivalent to Japanese QE.

Mr. HUIZENGA. Sure, but isn't it fair to say that we are—

Chairman CAMPBELL. Time has expired.

Mr. HUIZENGA. Gulliver among the Lilliputians is my observation, so—and, with that, Mr. Chairman, thank you.

Chairman CAMPBELL. All right. The gentleman's time has expired.

Perhaps if the other Wolverine wants to let him answer that question—that is up to you. By the way, how did that ball game go against Kansas State?

Mr. KILDEE is recognized for 5 minutes.

Mr. KILDEE. I am a functional Spartan right now.

Chairman CAMPBELL. Oh, yes. Okay.

Mr. KILDEE. Thank you.

Sticking with the Michigan theme, I would like to take the conversation sort of down to more of a Main Street, local economic level, at least from my point of view. I represent Flint, Michigan, but a lot of the district that I represent is part of an older industrial corridor that has struggled mightily in making the transition to the new economy. Michigan unemployment currently stands at 8.8 percent, the second or third highest, I think, in the country, and it has been a condition that we have struggled with mightily.

And so the question that I have is—and if Dr. Subramanian would respond and perhaps others might comment—as many Americans continue to struggle with unemployment, and given the Fed's mandate, even yet, Congress has failed to extend emergency unemployment benefits that could affect—is affecting 1.3 million, could go up to 2 million people sometime in March. And, of course, the effect on many States is disproportionate, in my State particularly.

And I am just curious, if you would comment on—because it seems the Fed's use of QE has been critical to help the economy recover and put people back to work. And in the context of that policy, can you talk about ways that we can balance our domestic obligations to grow the economy and create jobs, which is absolutely critical in my district and in other parts of the State, while still mitigating the negative aspects of policies on emerging markets as the Fed decreases its use of QE?

Mr. SUBRAMANIAN. That is a great question, and my response would be the following: that, as you said, the Fed's primary responsibility is to the U.S. economy. And, generally, I think it is accepted that certainly early bouts of QE have provided very vital policy support for the economy. Now, I would not necessarily buy into the view that this has come at the expense of other countries, because, as I said, other countries have had the policy instruments to deal with that.

But the Fed has, in fact, addressed the international dimension, to the extent it can, by providing this liquidity to countries in trouble. Brazil, Mexico, Singapore, and South Korea came to the U.S. Fed for help, and that helped calm conditions.

So I would take this one step forward and say the way to reconcile the domestic and the international responsibilities would be for the Fed to do what it needs to do for the U.S. economy, but for the rest of the U.S. Government to ensure that other things can be done for other economies.

And I come back to, the best that Congress can do now is, in fact, to support to increase the IMF so that in the future, if there are crises, which it is true will come back to the United States and haunt the United States, but the way to address that is to fund the IMF and provide it with the resources to deal with international crises so that the effects on the United States is minimized.

Mr. KILDEE. Any other—Dr. Lachman?

Mr. MELTZER. Let me comment on that.

Mr. KILDEE. I'm sorry. Or Dr. Meltzer, either one.

Mr. MELTZER. You might want to explain to your constituents in Flint why it is in the interests of the United States for the United States to finance the IMF to lend money to France, Germany, and so on, but especially to France, which refuses to make serious adjustments in its policy, why that is a good policy for the United States.

Why don't we just say to the French, "Look, you have a serious problem—and they do—and you have to deal with it. It is not our problem, it is your problem." Why should the United States be lending to Ukraine through the IMF? Ukraine is a basket case, in most cases, and is making decisions which are not in our interest. Why should we do that?

Why should the United States be lending money—and I will stop there—to Iran through the IMF? It doesn't seem to me to be consistent with anything that we could call sensible U.S. policy.

Mr. KILDEE. Dr. Lachman?

Mr. LACHMAN. If one is talking about the IMF, a point that is really very important to bear in mind is that most of the IMF lending of the last few years has been to the European countries. It is something like 70 or 80 percent of their lending.

The European Central Bank has now set up a mechanism, the Outright Monetary Transaction mechanism, that can provide an unlimited amount of funding, which really raises questions as to does the IMF actually need the amount of money that we thought they needed 2 or 3 years ago, when you have the ECB that is able to take care of most of those European countries?

Chairman CAMPBELL. The gentleman's time has expired.

We will move from Wolverines to Hoosiers. The gentleman from Indiana, Mr. Stutzman, is recognized for 5 minutes.

Mr. STUTZMAN. Thank you, Mr. Chairman. Unfortunately, I can't brag about any big football games this past couple of weeks. But, anyway, thank you.

I appreciate the testimony. This has been a fascinating discussion, and obviously one that the United States plays a huge role in, in the global economy.

And I appreciated, Dr. Steil, your comments, and they do seem to be—it was a lot of common sense when you said, in good times, that developing countries should apply a firm hand to keep their imports and currency down and their exports and dollars reserves up. But, unfortunately, not many of us follow that advice.

Could you comment on—many of us in Congress have been critical of capital controls and some of the other restrictions. Experts have suggested using tariffs and other countervailing measures to shelter U.S. firms from their effects. Doesn't this lead us into a race to the bottom or a currency war morphing into a potential trade war?

Dr. Steil, could you comment on that?

Mr. STEIL. Specifically with regard to the use of capital control?

Mr. STUTZMAN. Yes, sir.

Mr. STEIL. Yes. I think we should be concerned with the, say, arbitrary use of capital control, say, in the midst of some sort of domestic crisis when governments take actions that are targeted, for example, at certain firms, certain investors, to prevent the repatriation of capital. I think these rules have to be clearly laid out in advance. They must not be arbitrary and be directed at specific individuals or firms or interests; they must have general applicability. And the purpose must be set out.

As I emphasized at the end of my presentation, I think emerging-market governments should be free to use restrictions on short-term portfolio inflows clearly laid down in advance as a means of ensuring that they don't, after absorbing such inflows, have to face the problem of arbitrary restrictions in order to stop the outflows.

And I use Chile as an example of a country that did, in fact, use such modest restrictions very prudently in the 1990s and appears to have done so quite successfully.

Mr. STUTZMAN. Is there any other country today that you would point to that is doing something similar to what Chile did back in the 1990s? Is there anyone?

Mr. SUBRAMANIAN. Brazil did it in 2009. Not exactly the same, but they imposed taxes on certain inflows from abroad.

Mr. STUTZMAN. Okay. Thank you.

Mr. STEIL. The difference between Brazil and Chile is that Chile implemented this policy during the good times, not arbitrarily in order to prevent an imminent crisis from unfurling. Brazil has been much more reactionary, and I think that is the problem there.

Mr. STUTZMAN. Thank you.

Dr. Meltzer, if you could comment a little bit, you mentioned long-term stability, that is what we are all looking for. But you also mentioned, go back to your testimony, in a couple of different places regarding the international gold standard. You mentioned it in your point number five. Like the old international gold standards, markets would do the enforcement. Could you touch on that a little bit more? Should we look back at the ways that we used to do things and maybe reconsider how we do support our currencies?

Mr. MELTZER. Thank you. Way back in the 1970s, I used to debate occasionally with a former member of this committee whom you all remember, Mr. Paul, and I usually ended up by saying to him that the reason we don't have the gold standard is not because we don't know about the gold standard; it is because we do. So we would like to get some of the benefits of the gold standard without getting the costs of the gold standard. And the costs of the gold standard are it puts attention on something that none of your constituents would really want. That is, it says they are going to give

priority to maintaining the exchange rate. That is not what they want. They want the priority to be maintaining good economic conditions at home.

So I have tried to come up with a system that says, let's try to get the virtues of the gold standard, which was market enforcement, not meetings of central bankers, but markets deciding whether you are doing the right thing or not, that sort of thing, to get an enforcement mechanism and to capture the public good which has been lost since the breakdown of the Bretton Woods system, which is to have countries get the benefits of price stability, which is of great virtue, and exchange rate stability to the extent possible that we do that with price stability. That is the idea.

Mr. STUTZMAN. Thank you. I would love to have a longer conversation with you about that. But thank you.

Mr. MELTZER. I would be happy to do so, any time.

Mr. STUTZMAN. I will yield back.

Chairman CAMPBELL. Thank you. The gentleman's time has expired.

The gentleman from Delaware, Mr. Carney, is recognized for 5 minutes.

Mr. CARNEY. Thank you, Mr. Chairman. I didn't think you would know who the mascot for the University of Delaware team is; it is the Fighting Blue Hens. So you go from the Hoosiers to the Fighting Blue Hens over here for future reference.

Chairman CAMPBELL. I am so pleased that you have filled that bit of ignorance in my—

Mr. CARNEY. And thank you to the panelists for coming. This has been a very interesting, if not difficult, esoteric and difficult to understand conversation. My Ph.D. physicist colleague, Mr. Foster, I think tried to simplify it a little bit, as he looks at the world through biological systems, which didn't help me at all. And I would kind of like to go back a little bit to have you comment not maybe on a first grade level, as the Chair requested, but kind of on the basic level that I try to communicate with my constituents, to just answer the basic question, why does it matter? Why does it matter to the people in my State of Delaware, is really the first question I have.

Dr. Meltzer, you have been kind of touching on that.

Anybody else? Dr. Subramanian?

Mr. MELTZER. Your constituents want stability.

Mr. CARNEY. Right.

Mr. MELTZER. One of our major problems is we don't have it. And we haven't had it. We have had a lot of ups and downs. In the history of the Fed, to go there, in the 100 years, the best period, the only long period of relative stability with good growth, low inflation, and short and mild recessions was when they more or less followed something called the Taylor Rule.

Now, why did that work well? Because unlike most of what they do, the aim was on a longer-term objective. They are crowded and pushed by the markets, by the Congress, perhaps by economists to do things which are mostly short run in nature.

Mr. CARNEY. But my constituents obviously are focused more on the unemployment rate in the State, which in Delaware is a little bit better than the rest of the country. But they are still focused

on that as opposed to what the Fed is doing with QE1, 2, or 3, or what-have-you. That is the major focus in the bulk of the feedback that I get.

Mr. MELTZER. Yes. I will quote Paul Volcker, whom this committee certainly remembers. Mr. Volcker said the way to get low unemployment was to have low expected inflation. That is, depend on the markets. Don't try to get the unemployment rate down by raising the inflation rate and then trying to get the inflation rate down by raising the unemployment rate. That just gives you a lot of noise and variance in the system. So what Mr. Volcker said was what I would call the anti-Phillips curve approach, get the expected inflation rate down and anchor it down as best as you can. And then, the markets will provide jobs and prosperity.

Mr. CARNEY. Dr. Subramanian, you had a—

Mr. SUBRAMANIAN. I think it is a great question, why it matters. I think the way I would think about it is to say that if we do something in the United States that affects other countries, it can come back to haunt us, because then they buy less goods and services from us—

Mr. CARNEY. Right.

Mr. SUBRAMANIAN. —which contributes to unemployment. Or in the case of Delaware they may say, well, we don't want foreign financial service providers in our country because they try and impose capital controls, and that is going to hurt Delaware.

So I think that is the reason why one has to impress upon our own constituents that we have to make sure what we do doesn't negatively impact others, because it could come back to haunt us in a globalized, interconnected world.

Mr. CARNEY. One last quick question. I have about a minute left. We are talking about international impacts here with respect to Fed policy. What about if Congress did not raise the debt ceiling, what should we be concerned about there? Dr. Meltzer, would you like to—

Mr. MELTZER. That is not a sensible policy. You have to raise the debt ceiling. I agree with those who say you have incurred the responsibilities. You don't want to concentrate on raising or not raising the debt ceiling. You want to concentrate on a longer-term policy which says we won't have to raise the debt ceiling again in the future, next year or the year after. Do that. That is an effective policy. That is something you can do.

Mr. CARNEY. Any sense of what the negative impacts might be if that happened?

Mr. MELTZER. Yes. It would say that the U.S. debt is highly risky. Because you don't know—

Mr. CARNEY. Would it endanger our position as having the reserve currency?

Mr. MELTZER. Yes.

Mr. CARNEY. So maybe at another time we can have a conversation about what impact that would have.

Mr. MELTZER. Let me amend that by saying if you don't raise the debt ceiling for a week or a month, that would be bad, but it wouldn't destroy the value of the dollar.

Mr. CARNEY. Fair enough. My time is up. Thanks very much. I appreciate your time today.

Chairman CAMPBELL. Thank you. The gentleman's time has expired. And I have waded into the battle between Gamecocks and Tigers before, so I won't do it. I will just recognize the gentleman from South Carolina, Mr. Mulvaney, for 5 minutes.

Mr. MULVANEY. Thank you, Mr. Chairman.

And thank you, gentlemen, for doing this today.

I want to touch on what I think is a related but a little bit different topic. We had Dr. Bernanke come not before this committee several years ago, but a different committee that I was on at the time, to explain to us at that time not a new policy, but something the Fed was expanding at the time called U.S. dollar liquidity swaps. This is another way that the Fed policy involves other countries, other central banks. It was a temporary program from its inception. And then I think in late October of this year, without much fanfare, it was made permanent. And this facility is now a permanent facility between the Federal Reserve and three or four other central banks. The bank explained why it was doing that. The bank said that it wanted to bring some stability and a known quantity or a known facility into play. And I understand that.

Here is my question to you: Should we be concerned about this? It got very little attention. When they initially put the temporary program into place in 2007 and extended it again in 2010, it got a lot of attention, it seemed like it did. The Fed Chairman came to a committee to tell us about it. But when it was made permanent in October of last year, it got very little press. There was actually only one commentator I could find who raised a red flag. He said permanent liquidity swap agreements will subject national monetary policies even more strictly and unrelentingly to the dominance of the Fed. Central banks around the world will increasingly emulate the Fed's monetary policy.

So as we sit here and talk about the impact of Fed policy on other nations, should we be concerned or not about the fact that this swap facility is now permanent? And I will throw that open to anybody who wants to talk about it.

Dr. Steil?

Mr. STEIL. I should emphasize that this facility was only made permanent with the five developed market central banks.

Mr. MULVANEY. True.

Mr. STEIL. The credit risk to the Federal Reserve in the United States on these transactions is literally infinitesimal. I think it is very—

Mr. MULVANEY. The credit risk or the interest rate risk? I understand the interest rate risk is actually zero. But you think the credit risk is zero as well?

Mr. STEIL. Absolutely.

Mr. MULVANEY. Okay.

Mr. STEIL. We are effectively getting valid collateral for these swaps that is not going to collapse in value overnight. I want to emphasize that we have only made these facilities permanent with five of the most credible central banks in the world.

Mr. MULVANEY. Japan and Canada, the Europeans. Okay. Right.

Mr. STEIL. The Swiss Central Bank, the Bank of England. I think it is important that we make it permanent because in a crisis, when banks in developed markets are struggling to ensure dol-

lar liquidity, you can have a contagion effect where, for example, U.S. banks are reluctant to deal with European banks because they think that they would have a shortage of dollar liquidity. So I think it is very important that the developed central banks of the world do cooperate to ensure that we don't get into that situation.

Mr. MULVANEY. Is that the consensus? Dr. Subramanian?

Mr. SUBRAMANIAN. I would go one step further. My first point is that this has been one of the resounding successes of Fed policy, not just in Europe, but also after the Lehman crisis when, as I said, emerging market countries wouldn't go to the IMF, but came to the Fed because they needed that liquidity.

Point two, it is a technical point that now these swaps are two-way swaps. It can happen both ways. It is not just everyone coming to the Fed. It is technical, but I think it is important to note.

But what I think the third and most important point is that because of the success of this policy, many commentators now are saying that this in fact should be generalized, and in fact the IMF should become the coordinator of these facilities more broadly because it had such a positive impact. And I think that shows the Fed has played a very important leadership role in this regard.

Mr. MULVANEY. Okay. And that concerns me just a little bit because that would effectively reduce competition, I would think, between the various countries.

Dr. Meltzer, do you want to check in on this?

Mr. MELTZER. We started this policy way back in 1962, and it lasted until sometime in the 1980s, and then it has been reinitiated. It was, generally speaking, a two-way policy. Mostly we lent to others, but on occasion they lent to us. It did good, not much harm. I don't have any particular concern about it.

Mr. MULVANEY. Thank you, gentlemen. I had another question, but I only have 20 seconds left, so I will yield back.

Thank you, Mr. Chairman.

Chairman CAMPBELL. The gentleman yields back.

The gentleman from North Carolina, Mr. Pittenger, is recognized for 5 minutes.

Mr. PITTENGER. Thank you, Mr. Chairman.

And thank you, gentlemen, for your service and your input today.

Dr. Meltzer, I have very much appreciated your views regarding the long-term stability of the markets and the economies. And that needs to be the focus for our solutions. But I would say that as Chair of the International Financial Institution Advisory Commission, the Meltzer Commission, you have taken a hard look, an in-depth look at the international financial system. And as such, I guess I would like to have just more analysis for my understanding of your view of the world economy that is flooded by the U.S. dollars and how that impacts the world economies, and as well what happens when the Federal Reserve needs to unwind on its balance sheet.

Mr. MELTZER. That is a tall order, sir.

Mr. PITTENGER. You can handle it.

Mr. MELTZER. Let me just say, to be brief, I think the danger that I see is that we could have a very rough time in the future because we have so much liquidity in the system, and we don't know where it is going to go, or when it is going to go, or if it is

going to go. We just don't know. And that is a huge uncertainty hanging over the system. We need to rein that in. As I said before, we have QE with \$2.5 trillion on the Fed's balance sheet, on the banks' balance sheet, and \$2 trillion on the corporate balance sheets or more.

What can adding more liquidity do? Nothing that the banks and the others can't do by themselves. So the best thing we could do would be to end QE now and have the Fed come up with a detailed, clear plan of how, over time, they are going to reduce that \$2.5 trillion. One of the most foolish things that I have seen happen is to say we are going to tie the end of QE to the current unemployment rate. First, that is a noisy number. Second, it gets revised substantially, as you know. Third, it came down mainly because people dropped out of the labor force. That is bad, not good, because we are losing a lot of skilled labor. So why is that a reason why you want to either do or not do QE?

What you need is to say, look, this is a problem that is going to take years to solve. So what we need is a conditional strategy. And they should come in here and tell you, this is how we plan to do it, and this is the conditional strategy we have that is going to last over the next 3 or 4 years.

Mr. PITTENGER. Thank you.

Would any of the rest of you care to comment on this?

Mr. LACHMAN. I think when you are looking at the unwinding of QE, you have to look at what is its likely impact going to be on long-term bond yields. Basically, what we have seen during the period of QE is long-term interest rates in the United States were brought down to the lowest level that they have been in the post-war period. We were down to something like 1.6 percent on 10-year bonds. As the Fed unwinds, the expectation is that those yields would rise. We are already at 3 percent on 10-year yields. And that would have a huge impact on capital flows back to the United States. And that is really what puts pressure on the rest of the world, these emerging markets that didn't use the good times to strengthen their buffers against such an eventuality. So when the money comes back to the United States, you would expect to see disruption in a number of key emerging market economies.

Mr. PITTENGER. Dr. Steil?

Mr. STEIL. Two very, very brief points. With regard to the unwinding of QE, I am very concerned about the composition of the Fed's balance sheet much more than I am with the size of it, in particular the \$1.5 trillion in mortgage-backed securities. Chairman Bernanke has made it clear that he doesn't wish to sell these securities, so he is going to have to use unconventional means of tightening policy when the time comes. Among the tools that he has mentioned are term deposit auctions. These have been used in Europe, and they have been used unsuccessfully. We have had many failed auctions in Europe. And I am concerned about using them here in the United States.

The second concern I have is that the Fed has been sending conflicting messages through its forward guidance about when it intends to tighten policy. In November of 2012, it laid out a date marker. It said that it wouldn't tighten policy, raise interest rates until the middle of 2015. One month later it changed that guidance

and said that it would use a data-based marker. It said it wouldn't do so until the unemployment rate hit 6.5 percent. It said that those two policies were consistent at the time, but they are now inconsistent because the Fed is expecting unemployment to hit 6.5 percent this year.

The market, interestingly enough, is still hanging on the Fed's original guidance and believes that the tightening is not going to come until the middle of 2015. So, there is a potential train wreck here.

Mr. PITTENGER. Thank you.

Chairman CAMPBELL. The gentleman's time has expired.

The gentleman from New Mexico, Mr. Pearce, is recognized for 5 minutes. And following that, with the panel's indulgence, we will do a quick second round of questions. Some of our Members have some follow-up questions.

So, Mr. Pearce is recognized for 5 minutes.

Mr. PEARCE. Thank you, Mr. Chairman.

I appreciate each of you being here today.

Dr. Subramanian, in Dr. Steil's testimony he said that one of the effects of quantitative easing was encouraging investors to shift resources into riskier assets. Is that a problem? In other words, you are pretty high on the positive effects of the QE. So, if you would address that question.

Mr. SUBRAMANIAN. Yes, it does have that effect. Both domestically, money becomes very cheap, lower yielding assets, so you are moving to higher risking assets. But in some ways that is the point of QE, to encourage the private sector to move into riskier assets because they are unwilling to take on risks otherwise.

And then on the international front, of course, when QE happens, investors also shift into assets in India, Brazil, China, et cetera, et cetera. Now, whether you would view that as riskier or not, I think all investors make this tradeoff between returns and risk. So in that sense, it is a difficult evaluation to make. Yes, they go into riskier assets, but these are also higher return assets. And that is the way QE works.

Mr. PEARCE. As we take this all the way down to the individual level, seniors are the most likely to have unsophisticated assets, not risky. All they are wanting to do is clip coupons. My mom is 87. She doesn't want to invest in a riskier asset in India. Yet, the bank account which she and dad took years to set aside is getting one-quarter of 1 percent. And so many of those seniors were driven into riskier assets without the sophistication or the desire. Can you address that possible downside effect?

Mr. SUBRAMANIAN. One effect of QE is a kind of implicit tax on savers, especially savers of safe assets. But the theory and the expectation is that because that encourages more investment, consumption, economic activity picks up, and so that is broadly on balance therefore whatever costs are inflicted to savers are offset by the higher growth, the higher employment that would otherwise be the case.

Mr. MELTZER. Sir, good for you raising the question about seniors. If history is any guide, those decisions are going to end in tears.

Mr. PEARCE. Those decisions are what?

Mr. MELTZER. Going to end in tears.

Mr. PEARCE. Yes, they are ending in tears right now, because my constituents are telling me, I lived my life correctly, meaning I cannot go back and live my life again, and you in Washington, meaning I think the Federal Reserve, are taking away those things that made it possible for us to live in retirement. It is ending in tears. And yet to me the Federal Reserve is looking at the effect on our seniors as collateral damage. That is an acceptable collateral damage to the Federal Reserve. And I just think that to overlook that is really hard.

I think in the last minute I would like to talk about, if quantitative easing is a good policy and has positive effects, then all countries should engage in it, which in fact if Japan is looked at, they are quantitative easing at double the rate percentage-wise we are. And so could you address the question, if it is good for one country, is it good for all countries? And what effect is Japan's quantitative easing policy going to have?

Dr. Meltzer, if you would take a short stab and it, and then I would like Dr. Subramanian to get a chance at it, too.

Mr. MELTZER. I think that is a definition of disaster.

Mr. PEARCE. Okay. That is close enough. We only have 29 seconds.

Mr. SUBRAMANIAN. I think QE policies are things that people have to do—countries have to do because they are in extremely dire circumstances. Japan has had deflation for 15 years. So it is one of the policy instruments that they are using in order to get out of 2 decades of deflation. Now, are there going to be collateral costs on outsiders? Yes, there are going to be. But that is the calculation that the Bank of Japan makes, just as the U.S. Fed makes its own calculation.

Mr. PEARCE. All right. Thank you very much. I yield back, Mr. Chairman.

Mr. MELTZER. Let me say that QE1, I was in favor of QE1, that prevented the crisis in 2008. They should have ended the policy in 2009.

Mr. PEARCE. Thank you, Mr. Chairman.

Chairman CAMPBELL. Okay. The gentleman's time has expired.

Round two, we will go straight to the gentleman from Michigan, Mr. Huizenga, for 5 minutes.

Mr. HUIZENGA. Thank you, Mr. Chairman.

Dr. Steil, I touched on this in my first round, and I think that you get at it on, I am not sure which page of your testimony here, but you are talking about it now, and I think it is worth recalling that Chairman Bernanke had in June suggested that asset purchases would end with the unemployment rate at around 7 percent. In fact, tapering is only now just starting with unemployment at this level. And just unpack for me a little bit about, my question, are we in danger of the world dismissing any of this without Dr. Meltzer's rule that he often brings up, whether it is the Taylor Rule or some other rule. Unpack that a little bit for me.

Mr. STEIL. Chairman Bernanke, perhaps surprisingly, I would agree with Dr. Meltzer that we need to move towards a more rule-based environment. He wants there to be targets, for example, and forward guidance. The problem is that the Fed has been throwing

out too many of them. Some of them are conflicting. In some cases, the Fed has backtracked from them. For example, this 7 percent target that Chairman Bernanke had—

Mr. HUIZENGA. Do you believe that is for economic reasons or political reasons? Or why are they doing that?

Mr. STEIL. I believe that at the time they set their guidance, they believe it is the best thing to do. Then they revisit the data, they have more discussions, they hear criticism in the market, and then decide that policy can be improved upon.

I was rather struck by the rapidity with which they abandoned their original date-based forward guidance. You remember in November of 2012 we were told that interest rates would not be tightened until the middle of 2015. We were given an explicit date. One month later, we were told that we were not going to deal with dates anymore, we were going to deal with data markers, and that the particular one that the Fed was going to rely on was unemployment. There are two problems with this. First, too many unemployment targets have been laid out for the markets in terms of, for example, when tapering will start, when tapering will end.

Mr. HUIZENGA. Back to your notion of no predictability and stability.

Mr. STEIL. Precisely. Second, the monthly employment figures themselves are very volatile. And the Federal Reserve, in my view, is encouraging the markets to watch those numbers and predictions of the numbers and rumors of the numbers and react to them immediately. So this sort of policy of saying we are going, for example, to calibrate asset purchases to monthly employment figures could very well unintentionally produce more volatility in the market rather than less.

Mr. HUIZENGA. Okay.

Dr. Lachman?

Mr. LACHMAN. I would just make two points. I thought that the Fed was very clear when it mentioned the employment figures, the unemployment figures, that these were thresholds rather than strict guidelines that would automatically, a rule that would guide policy. But I think the second, more important point is that one really has to consider from the Fed's point of view that they are in totally uncharted territory both in terms of the economic conditions that they are dealing with and the scale of the policies that they have embarked on. So I don't think that you can do anything but guide your policies by the economic conditions as they evolve. And there is a great deal of uncertainty in the way in which you are running this policy.

Mr. HUIZENGA. All right. In a minute, how do we untangle whether we should eliminate the IMF, as Dr. Meltzer was saying, or further utilize the IMF with Dr. Subramanian. Anybody care to comment on either IMF or—

Mr. MELTZER. Let me say that I don't want to eliminate the IMF. I want to rein it in. That is our money, to a large extent, which is going to the IMF. We are bailing out countries in Europe. The countries in Europe are perfectly capable of bailing themselves out. Who is going to bail us out? The IMF? Hardly likely.

Mr. HUIZENGA. I am afraid it is future generations, Dr. Meltzer. Dr. Subramanian?

Mr. MELTZER. Yes, future generations, if they are unlucky enough.

Mr. HUIZENGA. Yes.

Mr. SUBRAMANIAN. I think that the U.S. investment in the IMF is probably a better return than the bull market of 2013. Of very little cost, very safe investment. The dirty secret of course which I should bring out is that if you are worried about your investment in the IMF, as some are, it is senior creditor status always gets repaid regardless of—almost never been not repaid. And it has gold backing its credit lines. So there is absolutely no prospect that the United States would never get its money back. And it is the best insurance against future crises for the United States and the rest of the world.

Chairman CAMPBELL. Even though your time is up, Mr. Huizenga, I am going to do chairman's prerogative because Dr. Lachman is just about coming out of his chair.

Mr. HUIZENGA. I thought his head was going to come off.

Mr. LACHMAN. I think that what is being overlooked is to whom is the IMF lending money. The IMF has never lent money on the scale that it has done to as few countries with as bad of credit ratings as the IMF has done. So the exposure of the IMF is to countries like Greece, Portugal, Ireland, and Spain, countries that are hugely indebted and that are very likely to need official debt restructuring. So I don't think that one can take much comfort from the fact that in the past the IMF has always been repaid. The IMF had never in the past loaned on the scale to countries with as bad credit ratings as it has done in the past 5 years.

Mr. SUBRAMANIAN. Mr. Chairman—

Mr. HUIZENGA. Gold-backed or not, it doesn't matter. This is the chairman's territory here.

Chairman CAMPBELL. Okay. Go ahead.

Mr. SUBRAMANIAN. I just find it a bit amusing that today, in this day and age, Greece and Spain and Portugal and Italy are considered higher risks than in the past Zimbabwe, all of these what we call the Third World. The notion that those were somehow better risks than—

Mr. HUIZENGA. I am assuming some of that is scale, though, too.

Mr. SUBRAMANIAN. But no, Russia, we lent a lot in the Asian financial crisis.

Chairman CAMPBELL. Here is what I am going to do so this doesn't—I am going to terminate your long past time, Mr. Huizenga, and move to Mr. Stutzman. And perhaps Mr. Stutzman would like to at least open and see what Dr. Lachman has to say on this.

Mr. Stutzman, You have 5 minutes.

Mr. STUTZMAN. Thank you, Mr. Chairman. I would like to follow up on that. But first I would like to say we did have exciting football in Indiana when the Colts came back. Second greatest comeback to beat the Chiefs on Saturday.

Chairman CAMPBELL. Since I am a Chiefs fan, you had to bring that up.

Mr. STUTZMAN. Sorry. I should have done my background.

Chairman CAMPBELL. Your time has been shortened to 30 seconds.

Mr. STUTZMAN. But, Dr. Lachman, looking at your testimony, and you talked about European policy complacency, I would like for you to talk a little bit more about that. In one of the statements towards the bottom of the one page, you say, "Meanwhile, the stepped-up pace of quantitative easing by both the Federal Reserve and the BOJ since September 2012 has contributed to further spread narrowing in Europe as investors stretch for yield." Could you elaborate on that a little bit more?

Mr. LACHMAN. Right. Basically, what we have seen over the past year is we have seen a marked deterioration in the economic and political fundamentals of a bunch of countries in the European periphery. Mainly, I am thinking of countries like Greece, Portugal, Italy, and Spain. Yet you have seen enormous amount of interest rate reductions, so that these countries now are borrowing at very low rates. The way in which you explain that is the activity by the ECB through its outright monetary transaction program, saying that it would buy the bonds of these countries in the eventuality that they came under great stress, but there was also the printing of money in the United States and in Japan has led to a lot of purchases of that money.

My concern is that these low interest rates now are lulling these countries into a false sense of security because what we are seeing is as their debt levels continue to rise, the budget deficits aren't coming down as programmed. These countries now could be going into a deflationary period. So when the music stops, when the money isn't being printed in the United States and Japan, those countries are going to be very vulnerable because they are not doing the kind of things that they should to ensure that the euro survives.

Mr. STUTZMAN. In your chart here, in figure 5, you have the eurozone 10-year government bond yields, and Greece obviously spikes dramatically.

Mr. LACHMAN. Correct.

Mr. STUTZMAN. Explain to us, why did that happen when you have Spain's and Italy's remaining relatively flat.

Mr. LACHMAN. I am not sure exactly what year are you referring to?

Mr. STUTZMAN. Is the spike for Greece—

Mr. LACHMAN. Basically, what occurred in Greece is that Greece eventually defaulted on its debt, it defaulted on its private sector debt. The write-down of that debt, the present value was written down by as much as 75 percent. So once the country goes through a debt structuring it looks a better credit to the private markets. That is supportive of the bond yield going forward. But prior to that, what this was reflecting was that there was going to be a very big debt restructuring, which is in fact what occurred.

Mr. STUTZMAN. I can't remember which gentleman it was who was talking with Mr. Carney about the debt ceiling. And I don't think there is anyone that I have discussed here in Congress who doesn't want to take the responsibility for our liabilities, short term and long term. But what do you suggest, when the conversations here—maybe this is just our problem to deal with—but the conversations never seem to be what I think Dr. Steil said about not necessarily concerned about the debt ceiling, but the long-term li-

ability that this country has will then take care of our current debt problems. And we have tried to explain that through restructuring of long-term liabilities.

Any advice? We obviously have political arguments to make, and also responsibilities that we have to fulfill. But I get very frustrated when we only seem to look short term around here rather than looking long term. Any comments? Would all of you agree with that?

Mr. STEIL. This Congress, broadly speaking, I think is very good at dealing with crises, as we saw back in 2008. But the long-term debt trajectory in this country is not yet seen in Washington as being a crisis precisely because we are able to borrow at such low interest rates. There are many reasons for that. Obviously, the Federal Reserve buying up Treasury debt is one way in which those interest rates are held down. Foreigners such as China buying up U.S. debt voraciously is another way.

Now, I would very much hope that we would be able to address our long-term challenges well in advance, without having to have the discussion triggered by a crisis caused by a spike in interest rates.

Mr. STUTZMAN. Is QE, though, exacerbating that?

Chairman CAMPBELL. The gentleman's time has expired. I have to move on to the gentleman from South Carolina, Mr. Mulvaney, who can ask that question or whatever questions he would like.

Mr. MULVANEY. I do want to continue, because you mentioned something that Mr. Stutzman and I were talking about during the questioning, which is that other countries—folks are willing to lend to us at fairly low rates, but we have a Federal Reserve that is effectively printing about \$75 billion a month. That is, if my math is right, \$900 billion a year. That is actually going to be more than the deficit this year. So is anybody actually lending us any money or are we just printing it all?

Dr. Steil?

Mr. STEIL. This money, as Dr. Meltzer has emphasized, has been to a great degree locked up in excess reserves.

Mr. MULVANEY. I understand where it is going. The question is where it is coming from. If the Federal Reserve is printing \$900 billion a year and our debt is—

Mr. STEIL. Literally being conjured as computer blips.

Mr. MULVANEY. Correct.

Mr. STEIL. That is the way money is printed in the modern economy.

Mr. MULVANEY. I am glad that Dr. Bernanke, before he left, decided to back down from his comment that they don't print money, because I think everybody recognizes that is not being entirely straightforward.

Here is the question I had before that I didn't get a chance to ask. A couple of you, I can't remember who it was at this point, mentioned currency manipulation during your opening statements. But my question is this. If I were—and if it makes a difference between being a developed country and an emerging market, let me know—but if I was a country that was interested in manipulating my currency, I assume you would do that mostly to lower the value of the currency. I guess there could be circumstances where you

would manipulate it the other way. But generally we talk about lowering the value. Dr. Subramanian, how I would go about doing that? What are the traditional tools that a country can use to manipulate its currency downward?

Mr. SUBRAMANIAN. I think China is the best example, because it uses three ways, reinforcing ways of doing it. First, it keeps its country relatively closed to capital inflows. So the pressure that comes from dollars flooding the market and putting upward pressure on the currency, that is mitigated because China is relatively closed.

Second, what it does is, when the money does come in, and in the case of China only some of it comes in via capital, most of it comes in because of the current account surplus, what they do is the central bank goes in and buys dollars to prevent the currency from going up. That is the second way in which they do it.

Third, that is a problem because when you buy dollars you inject domestic currency back into the market and that can create inflation. So to prevent that, they do a third thing, which is to buy back some of the renminbi they have injected into the market by issuing interest-bearing assets.

Now, the reason why they get away with it is that normally when you do that interest rates would tend to rise and impose some costs either on the budget or on the central bank. But because their financial system is repressed, interest rates are very low. So often in fact the Chinese central bank makes a profit on these activities which would generally be loss making because it has to pay very low interest rates.

Mr. MULVANEY. And let me cut you off because I think you are right, in fact I know that you are right, I believe that you are right, but you have used China, which is an example that I am a little concerned about because of what you have just mentioned, which is it is a controlled economy or semi-closed economy. Now, when Japan was going through what they went through when Prime Minister Abe was put in place, they didn't do anybody of those things, right? Dr. Lachman, you looked like you were getting ready to go down that road.

Mr. LACHMAN. No, precisely, Japan is the prime case that I would take of a country that is deliberately cheapening its currency through printing a huge amount of money. What we have seen since they started this process at the beginning of 2013, is we have seen a 20 percent depreciation of the yen, which is the way in which they are getting inflation to reemerge in Japan, and they are getting the economy to grow through increasing their exports. So this is a country that is deliberately using monetary policy; they are not going to say that is the objective, but that is basically what they are doing.

Mr. MULVANEY. Okay. Then let me ask this—

Mr. MELTZER. Let me defend the Japanese for just a moment.

Mr. MULVANEY. Yes, sir.

Mr. MELTZER. I spent 17 years as something called the honorary adviser to the Bank of Japan, so I learned a little bit about their economy. When I went there originally, there were 360 yen to the dollar. Eventually, because of the U.S. policy in recent years, it floated down to 70 yen to the dollar. At that point, because of U.S.

policy, the Japanese yen appreciated to 70 yen to the dollar. They couldn't continue to exist at that point. That is why they adopted this policy. That was a direct reaction to what we were doing.

Mr. MULVANEY. I understand that. And that ties in because along with my opening questions to Dr. Steil about what we are doing in terms of printing money—

Mr. MELTZER. Absolutely.

Mr. MULVANEY. —Dr. Lachman, if one of the ways that you manipulate your currency down in a developed economy is to print a bunch of money, aren't we doing that in this country?

Mr. MELTZER. Yes.

Mr. LACHMAN. Absolutely. And what this is doing is it is inducing other countries to emulate us. I would totally agree with Dr. Meltzer that the United States, by cheapening its country, makes Japan's life impossible, so the Japanese respond by printing their currency. The one central bank that is not printing its currency that should be printing its currency to respond to all of that is the European Central Bank, which has the weakest economy in the globe right now.

Mr. MULVANEY. And I would love to give Dr. Subramanian the opportunity, but it is now the chairman's prerogative.

Chairman CAMPBELL. Yes. Again, if Mr. Pittenger would like to let you jump in, I will let him do that. But it will be his time starting now.

Mr. PITTENGER. Sure. Please continue.

Mr. SUBRAMANIAN. No. I think with Japan we have to get the facts a little bit right. The depreciation of the yen began well before the announcement of the implementation of QE by Japan. Almost all the depreciation happened before Abenomics was actually implemented. That is I think very important to remember.

Mr. MELTZER. When it was announced.

Mr. SUBRAMANIAN. When it was announced, yes, but a lot else was going on. The Japanese current account deficit was actually—the surplus was declining rapidly, and that also contributed after the Fukushima disaster.

I am not saying that QE has not helped lower the Japanese currency. But I think we have to be a little bit careful because the truth is the movement in the Japanese yen is a bit of a puzzle for most analysts.

Mr. PITTENGER. Thank you. I would like to just get your thoughts regarding Chair Janet Yellen, who was confirmed this week, and if you believe that the tapering process will continue or will the Fed have other policies? And, frankly, your views on what the Fed will be doing over the next year.

If you would like to begin, Mr. Steil, and go down the row very quickly.

Mr. STEIL. The FOMC minutes would appear to indicate that there is a general consensus to move forward with the tapering process and that she is not about to make any sort of a sudden change in that process. As long as circumstances remain roughly what they are today, we can expect the process to continue throughout this year.

Mr. PITTENGER. Thank you. And if you want to recommend any additional advice for Ms. Yellen, that would be welcome.

Dr. Meltzer?

Mr. MELTZER. My advice would be to stop it now and come up with a plan for getting rid of the excess before it does damage.

Mr. PITTENGER. Yes, sir. Thank you.

Dr. Lachman?

Mr. LACHMAN. I would agree with Mr. Steil that basically we will get continuation of the policies that we have already seen. I think that it has to be condition-based. I am not sure that I would agree with Dr. Meltzer that one really wants to unwind too abruptly. I think one really has to be doing this by seeing what are the effects, how does this impact the economy. One really has to be conditioning one's policy on the way in which the financial markets evolve and the way in which the economy works. And I think that being in totally uncharted waters, we really don't know what the impact of the unwinding is going to be.

Mr. PITTENGER. Dr. Subramanian?

Mr. SUBRAMANIAN. I have nothing to add. She knows far more about monetary policy than I do.

Mr. PITTENGER. Thank you. I yield back my time.

Chairman CAMPBELL. All right. The gentleman yields back.

And so now onto the gentleman from New Mexico, Mr. Pearce, for 5 minutes.

Mr. PEARCE. Thank you, Mr. Chairman.

Dr. Lachman, you got into a little bit of a discussion some time ago about the long-term interest rates. And so my question has to do with, I may be mixing the concepts, I am not that articulate on it, but the maturity extension program has been driving down the long-term interest. And that long-term interest is going to go up as our economy improves. And so the Federal Reserve at that time is going to be faced with increasing costs because they pay banks. So their costs are going up at a time that their yields are going down because the bond prices are ultimately going to go up. And so this program of exchanging long-term for short term and driving long-term rates down looks like it has the potential to create great havoc in the Federal Reserve. In 2012, we got \$88 billion in profits in exchanges and sale of assets and all that junk they did back in 2008. So what potential do we have for absolute disruption of the Federal Reserve's balance sheet as the economy improves?

Mr. LACHMAN. I think that if the Federal Reserve balance sheet is marked to market, the Federal Reserve would have an enormous negative position. The Federal Reserve is holding \$4 trillion of long-dated assets that they bought at very low interest rates. Obviously, as the interest rate goes up, the value of their bonds goes down. They only have something like \$50 billion in capital. So they are going to really be in a hole were they were to mark to market. But as Dr. Meltzer is telling me right now, they are very unlikely to mark it to market.

Mr. MELTZER. They have already said that the mortgage portfolio is going to be held as if it were going to be held to maturity. So they don't have to mark it to market under the rules, and that way they won't. Now, there is a slippery question there. The markets will mark it to market whether the Federal Reserve does it on its balance sheet or not.

Mr. PEARCE. Any observation, Mr. Subramanian? You don't want to touch that? You have no time for anything like that? Okay.

I think one of the questions that comes to me, and I am again not sure there is a relationship, but we saw significant collapses in Iceland and Ireland. And it appeared to be because cheap money was coming in, and they were lending far more money than they could pay from a fish economy. And so both experienced tremendous difficulties, even to the point that Ireland took on the debt of the banks who were all in the process of failing. So now they owe 9 times their GDP and will never be able to pay that off. And that appears to be a result of loose money policy, easy money policies. And Mr. Subramanian has said that is one of the great benefits of QE3, that emerging economies can get access to capital pretty freely. Is that a correct observation or am I linking things that shouldn't be linked here?

Mr. Steil, would you care to—

Mr. STEIL. In the case of Ireland, they experienced a major property and housing boom.

Mr. PEARCE. Which was caused by easy money, wasn't it?

Mr. STEIL. Sure. Nobody questions the fact that monetary policy in Ireland, which is set in Frankfurt by the ECB, was too loose. But the ECB sets monetary policy for the entire eurozone. So the Irish Government was going to have to use other tools to prevent overleveraging.

Mr. PEARCE. Which might cause those days of tears that Mr. Meltzer was talking about. Those other tools always strike fear into my heart because the people in the know are going to benefit from those other tools and the poor schmucks out there on the street who save money and put it in the banks hoping that the stability that Mr. Meltzer has talked about would actually be there, and as we use those other tools I worry about what the effect on the consumers is going to be.

Mr. Lachman, do you have any comments on any of this?

Mr. LACHMAN. I just think that the two examples that you used, Iceland and Ireland, are the most egregious cases of market discipline breaking down because there was easy money.

Mr. PEARCE. Yes, unless we use the example of Zimbabwe, which began to print their own money and took one of the most stable economies in Africa, and now they print trillion dollar notes there. So the end result of printing money is not always a good outcome. I question whether it is ever a good outcome.

Thank you, Mr. Chairman. I yield back.

Chairman CAMPBELL. The gentleman's time has expired. So I will yield myself 5 minutes just for kind of a wrap-up thing here. Although the IMF was not the specific purpose directly of this hearing, the interchange between two alumnae of the IMF there I thought was most—sorry?

Mr. SUBRAMANIAN. A loyal one and a disloyal one.

Chairman CAMPBELL. A loyal? Okay. I thought it was rather fascinating. And given that this is a topic of some very much current import, I thought I would let the two of you continue this. So where we left off, I believe Dr. Lachman's head was coming off at one of Dr. Subramanian's comments rather than the other way around,

and saying that what have we come to where money to Greece is less stable than Zimbabwe.

By the way, and Mr. Pearce was talking about it, I do have \$20 billion here from the Reserve Bank of Zimbabwe. So I do have a \$30 trillion note as well, but it is not with me at the moment because I don't want to carry that much cash around. I figure carrying \$20 billion should be enough. But anyway, since we brought up Zimbabwe, I always have this. And by the way, people always wonder why. I have used this in speeches many times to point out back during the financial crisis in 2008 that our financial system, the value of money is all based on trust and what stands behind it. And when that trust goes away, the value goes away, and that as it happened with this, it can happen with any currency if not properly managed.

So with that, Dr. Lachman?

Mr. LACHMAN. I think where I would agree with Dr. Subramanian is that the IMF in the past has loaned to countries with as bad a credit standing as the countries in the European economic periphery. Where I disagree is that the IMF, in the case of Russia or Argentina or all the other countries that they might have lent to in the past, they never lent to those countries on the scale that they are lending now to the European countries.

So if you look, for instance, at Greece right now, Greece has debt that is 175 percent of its gross domestic product. That is huge. Most of that debt is owed to the official sector. And the chances are is that debt is going to have to be written down.

Somebody is going to have to take a hit. It is going to be either the ECB or the IMF or the European Commission. But that debt in the end is not going to be repaid, or it is going to be termed out or very low interest rate. So the basic point that I am making is that the lending that we have seen to the European periphery has never been on that scale before either in terms of the IMF's quotas, in terms of the amount of GDP this represents, or in terms of the amount of fiscal revenues. So the IMF is really taking very high risks that it hasn't taken before.

Chairman CAMPBELL. Dr. Subramanian?

Mr. SUBRAMANIAN. I agree with Dr. Lachman that the scale is different now. But I am far more sanguine about the prospects of this being repaid, one. And two, even in the extreme case were it not to be paid, it would not make a dent in the IMF because, for example, I think the IMF has senior creditor status. It would be paid off first before anyone else. And second, again, if things go really bad, the IMF has \$130 billion of gold against which it can fill any hole of any magnitude that we can currently imagine. So, investing in the IMF is not a risky proposition.

Mr. MELTZER. May I add to that? One of the things that the IMF did, was famous for, was it imposed very strict conditions on the countries to which it lent. It isn't doing that anymore. The so-called austerity which creates such excitement in the European press is a farce. There hasn't been any big expenditure cuts. The expenditure cuts have almost all been investment, which is a short-run strategy, or tax increases, which is a very bad strategy in a recession. They haven't cut spending.

Chairman CAMPBELL. If I can cut you off, Doctor, because Dr. Steil wanted to jump in, and I want to give him the last 30 seconds.

Mr. STEIL. Historically countries have tended to default right as they begin to achieve what is called a primary budget surplus. That is when they no longer need to borrow money from the markets in order to fund current expenditure. Greece is precisely entering into that position this year. They will achieve a primary budget surplus, at which point they have every incentive to default because they no longer need the markets to fund their current expenditures. So you can expect more conflict this year between Greece and its official sector lenders.

Chairman CAMPBELL. Thank you. My time has expired. And we have been joined by the ranking member of the full committee, the gentlelady from California, Ms. Waters. And Ms. Waters is recognized for 5 minutes.

Ms. WATERS. Thank you very much, Mr. Campbell, for sitting here and doing this work without the help of this side of the aisle this morning.

I, unfortunately, could not be here early to join with my colleagues and Mr. Clay, who is our ranking member, but this is a most important subject matter, and I certainly wanted to see if I could catch up.

I certainly have an opening statement that I would like to present for the record, so if you would accept that.

Chairman CAMPBELL. Without objection, it is so ordered.

Ms. WATERS. Let me raise a question. This is for Dr. Subramanian. Is that your name?

Mr. SUBRAMANIAN. That is my name, yes.

Ms. WATERS. Okay. Given the unique role of the dollar as the world's reserve currency and the fact that the United States is the world's largest economy, how much responsibility does the Fed have to consider the spillover effects associated with these policies? How should we reconcile or rationalize actions that create benefits to the United States but risks abroad?

Mr. SUBRAMANIAN. I think, as the world's biggest economy, the financial epicenter and the issuer of the dollar, it has to be mindful of its international consequences. Its primary responsibility is to the U.S. economy, but it has to be mindful of its international consequences.

And, in fact, the Fed has tried to do precisely that, as I said in my written testimony. And the way it has tried to do that is of course by following policies which it considers important for its own economy but taking actions, for example, like providing these dollar liquidity swaps to countries in trouble to forestall the risks associated with crises. For example, it has lent money to the central bank swap lines for emerging-market countries and most recently in Europe, as well. And this lending, in fact, has had a positive impact on the economy.

So it is a delicate task because no one will say the Fed is responsible for running the economies or creating incentives for good behavior elsewhere, but, equally, it has to be mindful. And I think it has done a pretty good job of balancing these twin responsibilities.

Ms. WATERS. Thank you very much.

Upon entering here today, my staff was anxious to share with me Mr. Meltzer's recommendation to close the World Bank. And I guess the reason that was given is there is little reason for it in a world of enormous capital flows. Is that correct?

Mr. MELTZER. Correct.

Ms. WATERS. This brings up an important question with regard to the legitimacy of development finance as distinct from commercial finance.

In our view, development finance has not been rendered obsolete by the emergence of the financial markets. In fact, it is just the opposite. We have had over 30 years of experience with the financial markets which has given us the debt crisis of the 1980s in Latin America, the 1997 East Asia crisis, the 1998 Brazil and Russian crisis, and the 2008 financial crisis.

The accessibility of countries to private capital can be cut off very, very rapidly. As soon as a crisis arises, the money dries up.

So can you expound a little bit, or can any of the other witnesses share their views on the role of development finance as distinct?

Mr. MELTZER. Yes. You just described why it is that I wanted to end the World Bank but not the IMF. If there is a crisis, that is the responsibility of the IMF. Long-term lending, that is the responsibility of the World Bank.

We don't need the World Bank to do long-term lending. We did back in 1945 when we started because there was very little international capital, practically none. But we now have trillions of dollars floating from country to country, so it is just—so we have succeeded with the policy that we had. It is time to say that, in terms of our domestic policy, we have many, many more urgent problems at home than we do in Argentina or Zimbabwe.

Ms. WATERS. Of course, we would all agree that what we do domestically must come first. But we also must agree that we live in a world where it is very connected and we have to be concerned about what goes on around the world, and we are considered the leaders, and that we cannot absence ourselves from that leadership role.

And so, do you see us absolutely not being involved at all with the World Bank?

Mr. MELTZER. I think the World Bank has succeeded in doing a lot of things around the world, many of them very good—

Ms. WATERS. Will it help to avoid crises?

Mr. MELTZER. They are not supposed to be involved in avoiding crises. The Congress appointed me the chairman of a commission to look into what they do. They don't work on crises; they work on longer-term development. Longer-term development is financed by longer-term capital, and we have lots of that around. So we just—we should declare success.

Mr. SUBRAMANIAN. Can I say—

Ms. WATERS. Mr. Chairman?

Chairman CAMPBELL. Yes. Without objection, I will yield the gentlelady from California another 5 minutes, since she just got here.

Ms. WATERS. Thank you.

Chairman CAMPBELL. Please proceed.

Ms. WATERS. Yes. Let me just say to Mr. Meltzer that when I referred to the avoidance of crises, I was not talking about a crisis occurring and then jumping in. I was talking about long-term development helps to avoid crises.

I want to now go to Mr. Subramanian.

Mr. SUBRAMANIAN. Thank you.

I think one way to think about development finance and to kind of bring the two of you closer together, between outright abolition and continuation with the status quo is to think of it in the following way: that I think where Professor Meltzer is correct is that, as countries have grown, as commercial finance has become more important, the reliance on development finance should naturally—

Ms. WATERS. Sure.

Mr. SUBRAMANIAN. —decline over time. It hasn't disappeared altogether because there are still places in the world which require development finance, so you need the World Bank for that.

But I think the other very important point that we have to remember, where I disagree with Professor Meltzer, is that there are some forms of development finance, especially which go towards global public goods, which markets will never finance. So the World Bank still will have to finance a lot of global public goods: one, research and development on diseases, on climate change, and on agriculture, one.

And so, there are lots of global public goods that still need to be funded, and development finance has an important role to play there.

Ms. WATERS. That is interesting.

Would Mr. Meltzer agree with that?

Mr. MELTZER. They don't do it. That is not what they do.

We had malaria. Malaria is a wonderful example, because for years—and there is a lot of literature on this—they wouldn't even provide bed nets. Now, how did we finally make some progress against malaria? The Gates Foundation and various other entities supplied the public goods, spent money to do drug research on malaria drugs. That is private-sector work, which is much more effective. The World Bank didn't do that. Unfortunately, it didn't do that.

The World Bank has—our ideal should be to try to improve the allocation of capital. As I look at the United States, it needs a lot more capital.

Ms. WATERS. Since we have such a good debate going on, we should just continue it.

Mr. Subramanian just made a good case for the private sector's involvement and what they have been able to do in areas that were not done by the World Bank.

Mr. SUBRAMANIAN. I heard Professor Meltzer saying that the problem was not that the objective of financing public goods was unimportant, in fact he stressed importance, just that the World Bank should be doing more of that.

Ms. WATERS. Yes.

Mr. SUBRAMANIAN. And I think that is where we need reforms of the World Bank to push the World Bank much more in that direction and do perhaps a little less of the old-style, conventional development financing and do more of the global public good. But

that is something that Congress and other countries around the world should push the World Bank in that direction.

Ms. WATERS. So what you are basically saying is, rather than getting rid of the World Bank and thinking that we don't need it anymore, we should be using whatever public policy influence we have to direct it toward doing the kinds of things that make good sense at this point in time.

Mr. SUBRAMANIAN. Exactly.

Ms. WATERS. I am not going to ask Mr. Meltzer if he agrees with that. I am simply going to thank both of you for your insight and your wisdom.

And I yield back the balance of my time.

Chairman CAMPBELL. I thank the ranking member.

And I would like to thank all of the witnesses for your testimony today. I hope everyone found this as valuable as I did.

Without objection, your written statements will be made a part of the record.

The Chair notes that some Members may have additional questions for this panel, which they may wish to submit in writing. Without objection, the hearing record will remain open for 5 legislative days for Members to submit written questions to these witnesses and to place their responses in the record. Also, without objection, Members will have 5 legislative days to submit extraneous materials to the Chair for inclusion in the record.

And, with that, without objection, this hearing is now adjourned. Thank you.

[Whereupon, at 12:10 p.m., the hearing was adjourned.]

# **A P P E N D I X**

January 9, 2014

**CMW OPENING STATEMENT - MPT HEARING  
"INTERNATIONAL IMPACTS OF THE FEDERAL RESERVE'S  
QUANTITATIVE EASING PROGRAM"  
THURSDAY, JANUARY 9, 2014  
2128 RAYBURN**

Thank you Chairman Campbell for calling today's hearing to discuss the international impacts of the Federal Reserve's quantitative easing program. And of course, a special thanks to the esteemed panel of witnesses who have taken the time to be here with us today.

The Federal Reserve deserves a great deal of credit for responding quickly and forcefully to the Financial Crisis of 2008. Under the stewardship of Chairman Bernanke, the Federal Reserve has continued to be one of the main drivers of the U.S. economy over the past four years. And as Chairman Bernanke's term comes to an end, I want to thank him for his service and recognize how fortunate the country has been to have him at the helm of the Federal Reserve during such an extraordinarily difficult period.

We are also extremely fortunate to have such a qualified and capable Chair succeed him in that role. Incoming Chair Janet Yellen understands the importance of both aspects of the Fed's dual mandate, and she will continue to bring her considerable experience, intellect, and sound judgment to bear at the Fed as it begins to dial back the unprecedented monetary stimulus program that pulled the global economy away from the brink of a depression and has put us on a path towards a more full recovery.

As the Fed weighs decisions to further taper its asset purchase program, I would urge members of the Federal Open Market Committee to carefully calibrate future reductions in asset purchases to improvements in reducing unemployment.

Over the past few years the benefits, costs, and risks of the Fed's quantitative easing program have been thoroughly discussed in this committee and elsewhere, but the international aspects of this policy has received less attention.

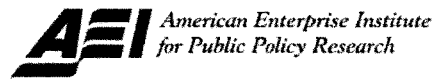
Although the initial phase of quantitative easing had clear benefits for both developed and developing countries, later stages of the Fed's stimulus program have pushed huge capital flows into emerging markets, creating a unique set of challenges, particularly for countries that

lack strong regulatory frameworks and prudential supervision, deep bond and capital markets, and foreign currency reserves.

While our economy's success is inextricably linked to the rest of the world, the Fed is a domestic institution and it cannot be expected to base policy decisions on economic conditions abroad. Emerging markets must be responsible for mitigating the effects of spillovers and we, the Congress, should make a concerted effort ensure that US policy clearly supports the use of the full range of policy tools to do this.

But we shouldn't stop there—in order to help prevent and resolve future crises, Congress should finally approve the IMF quota package that enhances the voice and vote of emerging economies and unlocks the resources needed to mitigate future episodes of financial instability.

I look forward to hearing the range of views expressed in the witnesses' testimony, and yield back the balance of my time.



Statement before the House Financial Service Committee's Subcommittee  
on Monetary Policy and Trade

## International Impact of the Federal Reserve's Quantitative Easing Program

Desmond Lachman

Resident Fellow  
American Enterprise Institute

January 9, 2014

*The views expressed in this testimony are those of the author alone and do not  
necessarily represent those of the American Enterprise Institute*

## International Impact of the Federal Reserve's Quantitative Easing Program

Testimony for the House Financial Service Committee's Subcommittee on  
Monetary Policy and Trade

**Desmond Lachman**

**Resident Fellow  
American Enterprise Institute**

**January 9, 2014**

Thank you Chairman Campbell, Ranking Member Clay, and members of the Subcommittee for affording me the great honor of testifying before you today. My name is Desmond Lachman and I am a Resident Fellow at the American Enterprise Institute. I am here in my personal capacity and I am not here to represent the AEI's view.

### **Introduction**

In a highly integrated global economy, US monetary policy typically has significant spillover effects on the rest of the world economy. It does so both through the way in which it affects the state of the US domestic economy as well as by the manner in which it influences capital flows from the United States to the rest of the world economy. The unusually large degree of US monetary policy loosening over the past five years has been no exception to the rule. Indeed, there is reason to believe that both the very scale and the form of the most recent episode of US monetary policy easing has had more than the usual degree of spillover to the rest of the world economy.

While the initial spillover effects from US monetary policy loosening appear to have been beneficial to the global economy, it could pose a significant challenge for the global economy as the US Federal Reserve begins the process of exiting from its aggressive policy of quantitative easing. This challenge could be particularly pronounced for a group of important emerging market economies as well as for a number of countries in the Eurozone's economic periphery. Since many of those countries have been lulled into a false sense of security by easy global liquidity conditions and have allowed large external and domestic imbalances to develop. This makes those countries especially vulnerable to a any abrupt reversal of US capital flows that might be prompted by the Federal Reserve's prospective exit from quantitative easing.

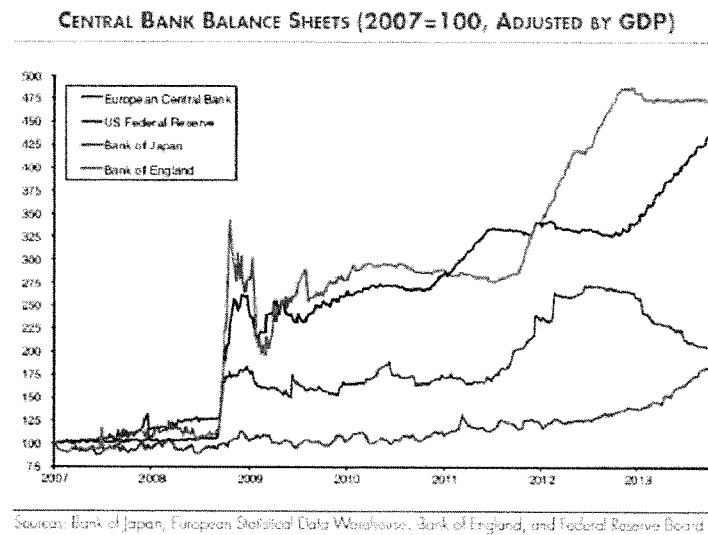
### **Monetary Policy Spillover Channels**

There are a variety of ways that US monetary policy action might affect the rest of the global economy. First, to the extent that US monetary policy might contribute to a better state of the US economy than would have otherwise have been the case, it provides the rest of the world with better export prospects to the United States. Second, to the extent that US monetary policy affects both short and long-term US interest rates, it influences capital movements to and from the United States. Those capital movements in turn have important effects on the recipient countries' interest rate and exchange rate levels as well as on their pace of domestic credit expansion. Third, by encouraging risk taking, US monetary policy can have an important positive effect on global equity prices and on global property values.

In assessing the most recent round episode of US monetary policy easing over the past few years, it is well to recall how aggressive that easing has been. The Federal Reserve's policy interest rates were quickly reduced to their zero bound, while through forward guidance the Federal Reserve has committed itself to hold policy rates at that zero bound at least until 2015. At the same time, through successive rounds of quantitative easing, the Federal Reserve's balance sheet has

more than quadrupled in size to its present level of close to US\$4 trillion. Until the issue of tapering was broached by Mr. Bernanke in May 2013, those policies had the effect of reducing US long-term rates to their lowest level in the post-war period. They have also had the effect of contributing to a strong increase in US equity and housing market prices that have been supportive of the US economic recovery.

Figure 1



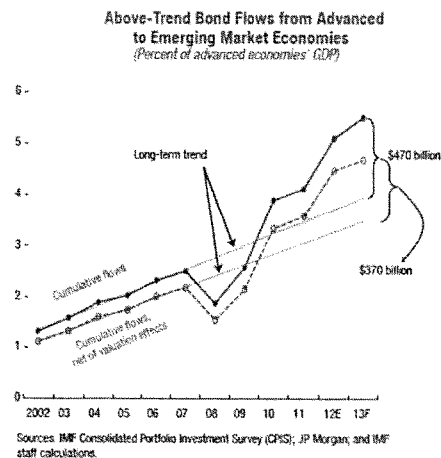
The aggressive US monetary policy loosening of the past five years has not occurred in isolation. Rather it has contributed to major monetary policy loosening in the world's other major advanced economies, motivated in part by concerns of the central banks of those countries about an undue appreciation of their currencies against the US dollar. Of particular note, has been the easing of Japanese monetary policy since early 2013 when the Bank of Japan (BOJ) committed itself to doubling Japanese base money by end-2014. It did so with the explicit objective of extricating Japan from deflation and of increasing Japan's inflation rate to around 2

percent by end-2014. The BOJ's policies have contributed to a depreciation of the Japanese yen by around 20 percent over the past year.

### Capital Flows to the Emerging Markets

Since end-2008, the substantial easing in monetary policy by the Federal Reserve and by the other major advanced countries has resulted in substantial capital inflows into the emerging markets. According to estimates by the International Monetary Fund, foreign portfolio investment in emerging market country bonds has risen by a cumulative US\$1.1 trillion through 2013. These inflows have averaged more than 2 percentage points of recipient country GDP a year during the past four years. They have also resulted in capital inflows into the emerging markets that were an estimated US\$470 billion above the long term structural trend.

Figure 2

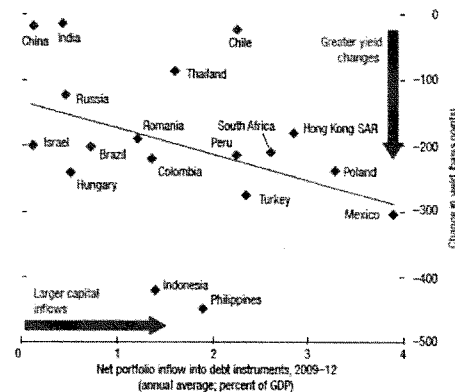


Large capital inflows into the emerging market countries have resulted in a

general appreciation of those countries' currencies. They have done so despite efforts by those countries to limit the impact of those flows on their currency markets. In addition, the large capital inflows have contributed to substantial yield compression in the recipient countries' capital markets. That compression has been most pronounced in those countries like Mexico, Poland, South Africa, and Turkey that have received relatively large capital inflows. In a number of emerging market countries, the easing of global liquidity conditions has also contributed to significant increases in property prices and to increased leverage in the banking system.

Figure 3

Figure 1.17. Impact of Portfolio Flows on Local Currency Bond Yields



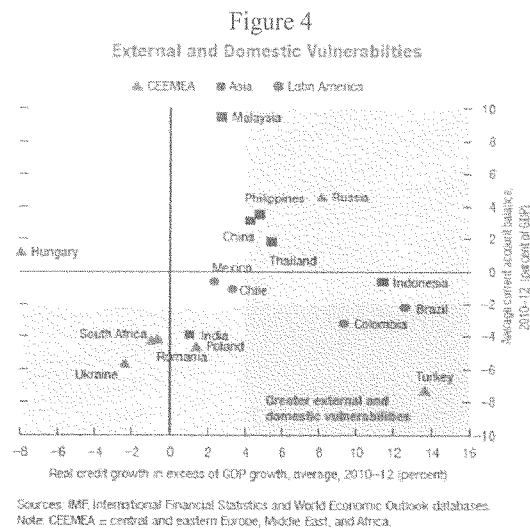
Sources: Bloomberg, L.P.; CEIC Data; Haver Analytics; IMF International Financial Statistics database; and IMF staff calculations.

### Emerging Market Vulnerability

Over the past decade, the emerging market economies have grown at a considerably faster pace than the industrialized economies and have been responsible for more than half of world economic growth. They have done so in the context of a considerable improvement in their economic fundamentals, the resort to more flexible exchange rate policies, and the building up of their international reserve positions. Given their increased importance to the health of

the global economy, one has to be concerned about the possible adverse impact that the considerable easing in global liquidity conditions might have had on the emerging markets' longer term growth prospects. In particular, one has to be concerned about their increased vulnerability to any significant reversal in global capital flows.

An important way in which increased global liquidity might have compromised the economic fundamentals of a number of emerging market countries is that it has tended to undermine market discipline. It has done so by reducing borrowing rates of emerging market countries to levels below those that would be justified by those countries' economic fundamentals. It has also done so by allowing countries that would normally not have had access to market financing to finance themselves. In a number of notable cases, including Brazil, India, Indonesia, South Africa, and Turkey (the so called Fragile Five), easy financing has led to the postponement of needed structural reforms and budget adjustment. It has also led to excessive credit expansion and to the buildup of financial leverage that makes these countries vulnerable to any abrupt unwinding of quantitative easing by the Federal Reserve or by the BOJ.



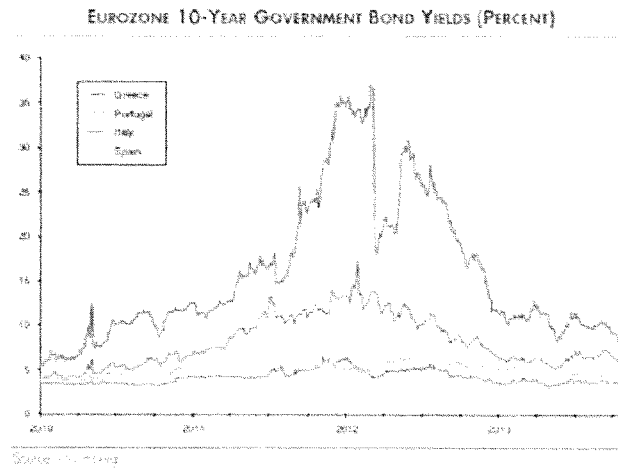
The very scale of the unorthodox monetary policies of the world's major central banks has also compromised the external positions of a number of emerging market countries. In thin markets, large-scale capital inflows have in many cases resulted in excessive currency appreciation despite the efforts of the recipient countries to limit such appreciation. This has had the effect of compromising those countries' export sectors and has increased those countries' external vulnerability by causing their external current account deficits to widen. Large currency swings have the potential for complicating those countries' efforts to promote domestic economic growth in the context of a non-inflationary domestic economic environment.

### **European Policy Complacency**

Perhaps of even greater concern for the global economic outlook than is the increased vulnerability of a number of important emerging market economies is the complacency presently characterizing European policymaking circles concerning the European sovereign debt crisis. This is of particular concern considering the marked deterioration of the economic and political fundamentals of key European countries like France, Italy, and Spain.

Fueling European policy complacency has been the considerable reduction in sovereign borrowing costs of countries in Europe's troubled economic periphery that was induced by the unorthodox monetary policies of the European Central Bank (ECB), the Federal Reserve, and the BOJ. The ECB's announcement in mid-2012 to do whatever it takes to save the Euro through its Outright Monetary Transaction Program appears to have eliminated the market's perception of any tail risk that the Euro might come asunder. Meanwhile the stepped up pace of quantitative easing by both the Federal Reserve and the BOJ since September 2012 has contributed to further spread narrowing in Europe as investors stretched for yield.

Figure 5



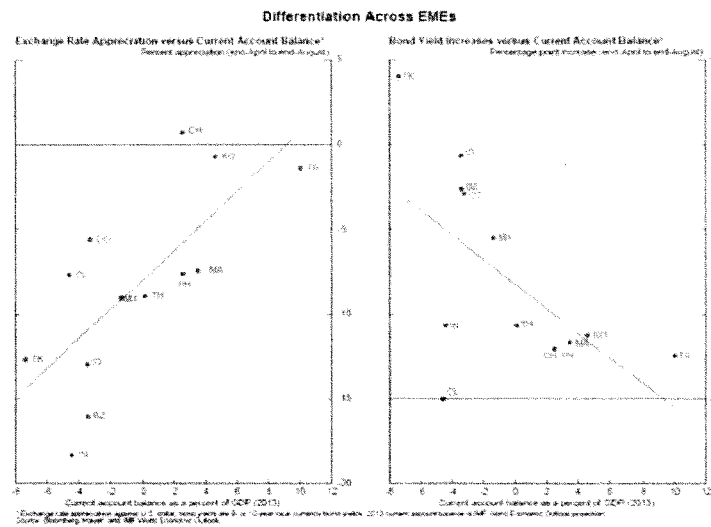
Lower borrowing costs in Europe have substantially reduced the impetus for much needed policy reform and adjustment. Countries in the European periphery like Greece, Italy, Portugal, and Spain are increasingly resisting calls on them to further reduce their budget deficits and to persevere with painful structural economic reform. Meanwhile, the present calm in the European bond markets is reducing the sense of urgency of European policymakers to proceed with a move towards a European banking union and towards a European fiscal union. Such moves would seem to be so necessary to the Euro's long-term survival. This could expose Europe to a renewed intensification of its ongoing debt crisis should Europe be faced with a less benign global international liquidity environment than was the case in 2013.

#### **Initial Experience with Fed Tapering**

An indication of the downside risks to the global economy that could be posed by an unwinding of quantitative easing was provided by the sharp sell off in emerging market assets in the aftermath of Chairman Ben Bernanke's May 2013 congressional testimony. In that testimony, Mr. Bernanke intimated that the Fed had under consideration the unwinding of its third-round of quantitative easing. In

the three months following that testimony, the currencies and bonds of those emerging market countries that had experienced high rates of credit expansion and that had wide external current account deficits, including notably Brazil, India, Indonesia, South Africa, and Turkey, came under considerable market pressure. This pressure was seen in an 8 percent drop in assets under management for emerging market fixed-income investment. It was also seen in as sharp a rise in emerging market local currency bond yields as occurred in the initial phase of the September 2008 Lehman crisis.

Figure 6



assets in the third quarter of 2013, the IMF revised down its economic forecast for emerging markets for 2014 by around 2 percentage points. Reflecting the increased importance of the emerging markets in the world economy, this lower forecast occasioned a significant downward revision in the IMF's global economic forecast.

### **Implications for Fed Policy**

In determining the pace at which it unwinds its quantitative easing program, the Federal Reserve will need to be very mindful of the international spillovers of its exit policy. This would particularly appear to be the case given the large impact that the massive expansion over the past several years of its balance sheet has had on the economic fundamentals of a number of key emerging market economies and on those countries in the European economic periphery. Those economies constitute an increasingly important part of the global economy and their performance could have a very significant bearing on the US economic outlook.

The key challenge for the Federal Reserve will be to find the right balance in the pace at which it exits quantitative easing. Too slow a pace of exit could further contribute to the undermining of market discipline in the emerging market economies and in the Euro-zone. At the same time, too fast a pace of exit runs the risk of a sudden stop in capital flows to the emerging market economies and Europe, which could prove to be disruptive to the global economy.

Increasing International Financial Stability

By: Allan H. Meltzer

The Allan H. Meltzer University Professor of Political Economy, Carnegie Mellon University and Distinguished Visiting Fellow, The Hoover Institution

Testimony January 9, 2014, House Financial Services Committee

Central banks have two major monetary responsibilities, domestic and international. Most central banks can achieve domestic price stability acting alone, and many choose to do so. Having made that choice, international stability—enhanced stability of exchange rates and capital movements—requires collective agreement.

I have long advocated a program that both achieves domestic price stability and increases exchange rate stability. My proposal does not require international conferences, foreign intervention in domestic policy, or enforcement by international supervisors. It is entirely voluntary and is enforced by markets, much as the international gold standard was enforced by markets.

(1) The United States, The European Central Bank, the Bank of Japan, and if China ends its exchange controls, the Bank of China agree to maintain domestic inflation between 0 and 2 percent a year.

(2) Any other country that chooses to import low inflation and maintain a fixed exchange rate can peg to one or a basket of the major currencies. They gain a benefit – price and exchange rate stability—that no country can achieve acting alone. The country that chooses this policy is responsible for maintaining its exchange rate.

(3) The major countries benefit by gaining exchange rate stability with all countries that peg to one or more of their currencies. The major currencies float to permit changes in productivity and possibly tastes.

(4) No country is required to join the system. It remains voluntary. The public good that the system provides gives an incentive to join.

(5) The system would introduce discipline that has been lacking since the breakdown of the Bretton Woods System. Like the old international gold standard, markets would do the enforcement. If a country ran large budget deficits, markets would devalue the currency and increase expected inflation.

(6) Countries could suspend operation of the system, as they did under the gold standard. Not permitting temporary suspension is a flaw in the European monetary arrangement that prolongs crises.

I do not claim this proposal would achieve ideal results. I do not believe that is possible for modern democratic governments. It offers the improvement of increased stability.

An ideal like zero stability is not achievable in an uncertain world. If adopted, the proposal would limit the damage that governments do, particularly the United States. A current example is the excessive expansion of bank reserves that spill over to other countries. Some, like Japan, respond by depreciating their currency. Others experience an unwanted inflation. Still others, Turkey for example, have difficulty adjusting.

Governments do not limit the damage or prevent it.

Two additional proposals. I would close the World Bank. There is little reason for it in a world of enormous capital flows. And I would put prudential restrictions on International Monetary Fund lending.

## **Federal Reserve Policy and Emerging Markets**

Prepared statement by

**Dr. Benn Steil**

*Senior Fellow and Director of International Economics, Council on Foreign Relations;*

*Author of The Battle of Bretton Woods: John Maynard Keynes, Harry Dexter White, and the Making of a New World Order*

Before the

**Committee on Financial Services; Subcommittee on Monetary Policy and Trade**

*United States House of Representatives*

2nd Session, 113th Congress

Thank you Chairman Campbell, Ranking Member Clay, and members of the Subcommittee for the opportunity to present to you this morning my views on the effect of U.S. monetary policy actions on emerging markets.

The U.S. dollar plays a unique role in the global economy. Though the United States accounts for only 23% of global output, the dollar accounts for over 60% of global foreign exchange reserves and 75% of global imports from countries other than the United States. For emerging markets in particular, economic interaction with the wider world takes place overwhelmingly in dollars. Changes in the stance of U.S. monetary policy can have a significant impact on emerging-market capital inflows and outflows, and the resulting exchange rate movements against the dollar can have large and rapid effects on the level of inflation and exports. Monetary sovereignty in such countries is therefore often more symbolic than real. Ecuador and El Salvador, recognizing this reality, went so far as to eliminate their national currencies entirely in 2000 and 2001, and now use the U.S. dollar domestically in the same way that we do here in the United States.

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Since the financial crisis in 2008, actions taken by the Federal Reserve to increase liquidity in the U.S. financial system have had a major impact outside the borders of the United States. Quantitative easing, through which the Fed increases the monetary base by buying longer-term financial assets with newly conjured dollars, thereby pushing down their yield, was undertaken partly to encourage, and indeed has encouraged, investors to shift resources into riskier assets. Though wholly unintended by the Fed, however, this shift has at times encompassed the bonds and stocks of emerging-market countries.

A recent International Monetary Fund study found that the Fed's first round of quantitative easing from January 2009 to March 2010 resulted in \$250 billion being withdrawn from emerging-market bond markets (under the logic that QE would drive the U.S. out of recession), while QE3 had the opposite effect, causing \$91 billion to flow in (as U.S. asset prices had turned frothy). The net effect of so-called "Unconventional Monetary Policy" in the U.S., U.K., Japan, and Europe on emerging-market bond flows since 2008 has been trivial: a mere 0.22% of GDP.<sup>1</sup> The volatility of such flows, however, with its attendant effects on currency, trade, and investment, has been considerable.

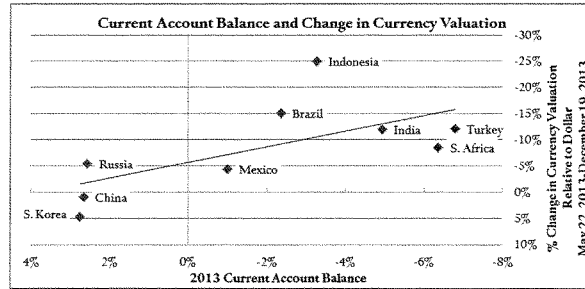
Anticipation of the Fed's withdrawal from QE3, though it will only begin with a modest tapering of monthly asset purchases this month, has already had a substantial impact on the currency and bond markets of a number of important emerging-market economies – in particular, India, Indonesia, Turkey, and Brazil. My own analysis with Dinah Walker has found that the hardest-hit countries have been those running large current account deficits – countries which had been comfortably financing excesses of consumption over production for several years with dollars scouring the globe in search of return.<sup>2</sup> Economic growth in such countries and the investment returns coming with it, reliant as they have been on short-term capital flows from abroad, have always been the most at risk of a change in the trajectory of Fed policy from accommodation to tightening.

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<sup>1</sup> "Global Impact and Challenges of Unconventional Monetary Policies," IMF Policy Paper, October 7, 2013.

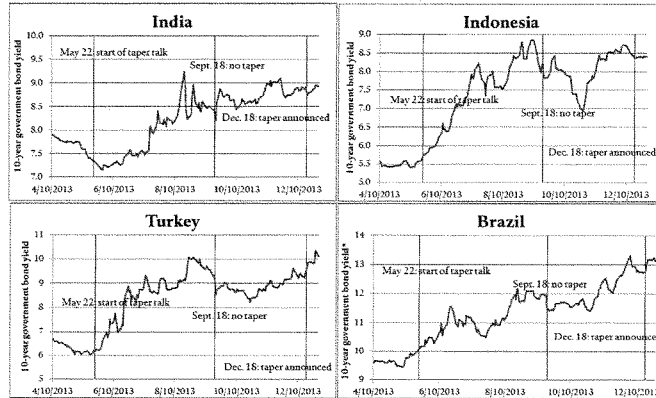
<sup>2</sup> <http://online.wsj.com/news/articles/SB10001424052702303914304579193901796521312?KEYWORDS=benn+steil>

Figure 1: Countries with large current account deficits have experienced the largest currency depreciations since the start of taper talk in May



Data sources: International Monetary Fund and Bloomberg

Figure 2: Bond yields have also climbed in countries with large current account deficits



Data source: Bloomberg

\*Because of missing data, Brazil chart shows 10-year bond yield through July 2, 2013 and 9-year bond yield thereafter.

Fed Chairman Ben Bernanke's carefully worded statement on the future of the Fed's asset purchase program last May, widely interpreted in the markets as an indication that a taper might begin as early as September, unleashed a wave of selling in these countries' bonds and currencies. Taper talk was particularly traumatic for India, where the central bank was obliged to raise interest rates to counter capital outflows and imported inflation from a plummeting rupee, despite the country's slowing growth.

So how can emerging markets protect themselves in advance of a tightening of Fed policy? The IMF study found that countries with a lower share of foreign ownership of domestic assets, a trade surplus, and large foreign-exchange reserves have been more resilient; they have experienced far less volatility in their currency and domestic asset markets.

This has policy implications: In good times, developing countries should apply a firm hand to keep their imports and currency down, and their exports and dollar reserves up.

Unfortunately, such policies are apt to constitute what many observers in this country would call “currency manipulation.” Economists Jared Bernstein and Dean Baker recently called for the United States to impose taxes on foreign holdings of Treasuries and tariffs on imports precisely to counteract them.<sup>3</sup> This is, in my view, a misguided recipe for raising global trade tensions and political conflict. But the very fact that prominent commentators are calling for such action illustrates the importance of considering how the functioning, or malfunctioning, of the global monetary system can encourage a spiral of damaging policy actions. China’s agreements with Brazil, Russia, Turkey, and Japan to move away from dollar-based trade, for example, have the potential to undermine the multilateral trading system, as countries that don’t want to stockpile each other’s currencies will use trade discrimination to prevent trade imbalances.

So what can be done?

International central bank cooperation can help at the margins by mitigating short-term liquidity problems, most notably through currency swap arrangements. The Federal Reserve recently made permanent the previously ad hoc arrangements with the European Central Bank, the Bank of Japan, the Bank of England, the Bank of Canada, and the Swiss National Bank. (The Fed extended swap lines to Brazil, Mexico, South Korea, and Singapore in October 2008, but these arrangements were allowed to expire in 2010.) Initiatives within the Asia-Pacific region have received much attention, but to date have been more for public display than for actual sharing of reserves or lending of local currency.<sup>4</sup> Not surprisingly, governments in the region are hesitant to extend credit to each other in a crisis, which is the only time it is actually needed.

Regarding Federal Reserve monetary policy actions, anything that makes them more predictable will, all else being equal, attenuate market volatility globally. Over the past fifteen months, the Fed has tried to do this through the formal use of so-called forward guidance. Initially, this was implemented through the setting of date-based markers for the raising of interest rate targets. These were quickly abandoned, however, in favor of data-based markers for both the raising of interest rate targets and the tapering of monthly asset

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<sup>3</sup> <http://www.nytimes.com/2013/11/07/opinion/taking-aim-at-the-wrong-deficit.html>

<sup>4</sup> <http://www.voxeu.org/article/chiang-mai-initiative-designed-not-be-used>

purchases.

Both approaches are challenging to carry out in practice.

Date-based guidance is problematic in that date markers are ultimately justified by the Fed's expectations of economic conditions years into the future, and, as I have documented elsewhere, the Fed's forecasting record over the past quarter century has been poor.<sup>5</sup>

Data-based guidance can also create rather than reduce market turbulence when the data markers themselves are volatile, such as monthly employment figures. Asset purchases in particular are not a precision tool, so trying to calibrate them continuously to volatile economic data is fraught with difficulties.<sup>6</sup> It is worth recalling that Chairman Bernanke had in June suggested that asset purchases would *end* with the unemployment rate at around 7 percent; in fact, tapering is only now just *starting* with unemployment at this level.<sup>7</sup> Assuming the Fed had good reason to abandon the chairman's June guidance, it would have been advisable not to issue it in the first place. Finally, it should be noted that the Fed has been unsuccessful in persuading markets that a tapering of asset purchases would not in itself merit materially higher Treasury bond and mortgage rates – the latter of which rocketed in June to levels a full percentage point above those prevailing when QE3 was initiated in September of 2012 with the aim of reducing them.

New ideas for Fed data-targeting abound. Since 2009, there has been a notable coalescing of economic commentators on the left and right of the spectrum around the belief that both U.S. and global economic stability would be well served by a new rules-based approach to monetary-policy making that would commit the Federal Reserve to targeting the level of nominal spending, or NGDP (nominal gross domestic product), rather than, say, inflation. The technical merits of such a regime notwithstanding, it is my belief that the consensus supporting it will melt away the moment a future NGDP reading suggests that policy should be tightened in an environment of contained inflation and/or elevated unemployment, which it invariably will at some point.<sup>8</sup>

In short, rules, targets, and forward guidance for U.S. monetary-policy action will not significantly mitigate the challenges that emerging markets will face going forward in adapting to market perturbations triggered by such action, or inaction. Broadly speaking, the inevitable inconsistency that will open up between the Fed's rules, targets, and guidance, on the one hand, and unexpected economic developments, on the other, will lead either to inappropriate policy stances or a falling away of the credibility of such rules, targets, and guidance as they are abandoned or amended.

<sup>5</sup> <http://www.cfr.org/monetary-policy/why-we-cant-believe-fed/p27425>

<sup>6</sup> <http://www.cfr.org/monetary-policy/bernanke-calibrating-markets-into-fits/p31040>

<sup>7</sup> <http://www.federalreserve.gov/mediacenter/files/FOMCpresconf20130619.pdf>

<sup>8</sup> <http://www.cfr.org/monetary-policy/facts-change-change-my-target-you-sir/p30584>

It is therefore in our national interest to accept, openly, that emerging-market governments be able to implement prudent controls on short-term portfolio inflows in order to shield their economies from sudden, extreme, and unpredictable shocks, some of which may be triggered by decisions of our own Federal Reserve, taken in good-faith pursuit of the mandates assigned to it by Congress. Chile, which has been a model of prudent macroeconomic management over many years, used modest one-year unremunerated reserve requirements on capital inflows with some apparent success during the crisis-marked 1990s.<sup>9</sup> As major serial foreign financial crises over the past four decades have illustrated, we here in the United States also bear real costs when overexposed and underprotected banks and governments find themselves, in the face of rapid and large-scale shifts in the flows of capital internationally, quite suddenly unable to pay their bills.

I thank you again for the opportunity to participate in these important discussions here today.

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<sup>9</sup> <http://www.voxeu.org/article/do-capital-controls-work>

## Congressional Testimony

### *International Impacts of the Federal Reserve's Quantitative Easing Program*

Arvind Subramanian

*Dennis Weatherstone Senior Fellow, Peterson Institute for International Economics, and Senior Fellow, Center for Global Development*

### *Written Testimony before the House Committee on Financial Services Sub-Committee on Monetary Policy and Trade*

January 9, 2014

## Summary and Policy Conclusions

**Impact of QE:** As the world's largest economy, its financial epi-center, and the issuer of the primary reserve currency, actions by the US Federal Reserve ("Fed") will inevitably affect other countries via trade and exchange rates, capital flows, and overall financial conditions. The Fed's monetary easing policies, including QE, have contributed to greater capital flows and exchange market pressures in the emerging markets (EMs). But other pull factors, notably growth in the EMs themselves, have been at least as important.

QE has generally, and on balance, had a positive impact on emerging markets (EMs) and the global economy. But in some instances they have added to pressures and volatility for EMs, complicating macro-economic management, and the impact has depended significantly on the global macroeconomic situation as well as the situation in particular countries.

QE1, for example, was unambiguously positive for the world and the EMs because it minimized, even eliminated, the tail risk of the near-collapse of the world economy in the aftermath of the Lehman crisis. QE2, on the other hand, occurred when the global macro-financial context was less dire and at a time of macro-economic heating in many EMs, provoking complaints from Brazil in particular. Moreover, monetary easing and economic weakness characterized other industrial economies too, contributing to capital flows to the EMs. The threatened withdrawal of QE3 in May 2013 created the opposite types of pressures in EMs, namely capital outflows and sharp currency adjustments. But pressures were not uniform, and were felt acutely in the macro-economically vulnerable economies.

**Fed's international role of liquidity provision:** The Fed has focused on its exclusively domestic responsibilities while also cooperating with partner countries. It provided dollar liquidity (via swap lines) to the central banks of Brazil, Mexico, Singapore, and South Korea in the aftermath of the Lehman crisis. It provided large amounts of similar liquidity to central banks in Europe and the Bank of Japan. These actions contributed to calming conditions during the recent global financial crises.

**QE and currency manipulation:** In the aftermath of the Asian Financial Crisis in the late 1990s, a number of countries, especially in East Asia, ran up large current account surpluses and accumulated foreign exchange reserves often supported by heavy foreign exchange intervention. QE policies have not re-inforced these tendencies. In fact, the QE era has co-incided with a reduction in imbalances and reserve accumulation.

QE policies will affect asset prices and exchange rates in other countries. But these policies should not generally be viewed as equivalent to currency manipulation. They are primarily aimed at, and have their most important effects, on domestic asset prices and the domestic economy. QE policies thus qualify as predominantly domestic policies. The overall effect of QE policies will typically be to enhance demand for domestically produced goods and services without necessarily reducing demand for foreign goods. Currency manipulation, on the other hand, will tend to have a zero sum aspect, switching demand rather than enhancing total global demand.

**QE, trade, and capital controls:** It is now well accepted—including by the IMF which has re-evaluated its earlier stance—that capital account management policies can legitimately be part of the policy arsenal for countries struggling to maximize the gains from, and minimizing the costs of, financial globalization. However, there is some difference of views on the extent to which US bilateral investment treaties (BITs) and free trade agreements (FTAs)—particularly those with Chile, Singapore, and Korea—circumscribe the ability of partner countries to use such policies.

#### **Policy conclusions**

**1. The onus of dealing with the impact of the Fed's actions lies preponderantly with the EMs themselves.** They can insulate themselves from Fed actions by being less financially integrated as China has chosen to do. They can also insulate themselves by following sound macro-economic policies which would allow them to reap the benefits of, and appropriately respond to, capital inflows when the Fed eases monetary policy. And, they can cope with the consequences of sharp outflows when the Fed tightens through a combination of macro-economic (South Korea), reserve (India) and capital account management (Brazil) policies.

**2. The US Congress should work with the administration to ensure that the necessary legislation to augment the IMF's resources—pending since 2010—is included in the upcoming omnibus appropriations bill.** Financial crises will always happen, and the magnitude of such crises could well be larger in the future, implying the perennial need for international mechanisms to provide financing for both preventing and responding to crises. The Fed cannot be the main instrument for providing such financing: that job will, and should, be that of the IMF either as direct financier or as coordinator of other financial mechanisms. Congressional passage of the IMF legislation would contribute to making the IMF stronger and more legitimate and the world better protected against crises while also reducing the burden on the Fed.

**3. Greater clarity in US bilateral investment and free trade negotiations with partner countries would help them deal better with capital flows and complement the Fed's constructive international role.** The negotiations on the Trans-Pacific Partnership (TPP) offer an excellent opportunity for clarifying that the US does not aim to circumscribe or eliminate legitimate policy instruments by its trading partners—macro-prudential controls on inflows and broader controls on balance-of-payments grounds--to respond to the pressures from financial globalization and to crises.

## **Introduction**

This testimony will address four issues relating to the Fed's policies: the impact of QE on emerging markets; the Fed's international role of liquidity provision; QE policies and currency manipulation; and QE policies, trade, and capital controls. In each case, a factual discussion of each of these issues will be followed by the policy lessons that might be drawn.

### **I. Impact of Quantitative Easing (QE) policies on Emerging Markets**

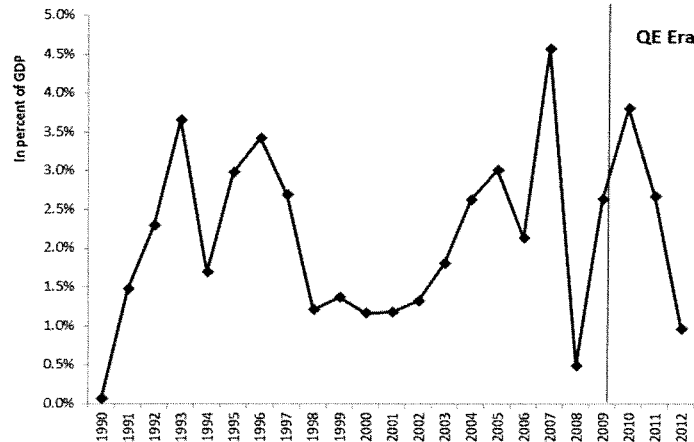
The period since late 2008 has been characterized by central bank hyperactivity, especially in the industrial economies. In order to provide policy support to stave off a financial collapse and then to shore depressed levels of activity, central banks moved to slash rates at or close to the zero bound, and then to expand their balance sheets through policies that have been called quantitative easing (QE). At the center of this has been the U.S. Federal Reserve (hereafter referred to as "the Fed"), which has seen policy rates at 0-0.25 percent since December 2008, and has witnessed an explosion (near-quadrupling) of its balance sheet from US\$ 900 billion prior to the Lehman crisis to about US\$ 4 trillion today.

The domestic consequences of the Fed's actions have been extensively analyzed and scrutinized. The focus today is on its external consequences. The US is the world's largest economy (in market exchange rates), the financial epi-center of the world, and the dollar is the world's primary reserve currency. As such, the Fed's actions will necessarily have consequences (or "spillovers") for the rest of the world via three channels: trade and exchange rates (a healthy US economy will absorb exports from the rest of the world; a lower dollar will increase US exports to the rest of the world), capital flows (lower short and long term interest rates will push capital flows to the rest of the world and vice versa), and global risk-taking and stability (a stable US economy reduces risk-premia around the world and encourages investment).

*What has been the impact of the Fed's actions on capital flows and exchange rates in the EMs?*

The early part of the QE era (QE1 and QE2) witnessed large net flows of capital to EMs (as a share of EMs' GDP; Chart 1). But flows have declined since and did so well before the threatened withdrawal of QE in May 2013.

**Chart 1. Net Capital Flows to Emerging Markets, 1990-2013**  
(in percent of EMs' GDP)

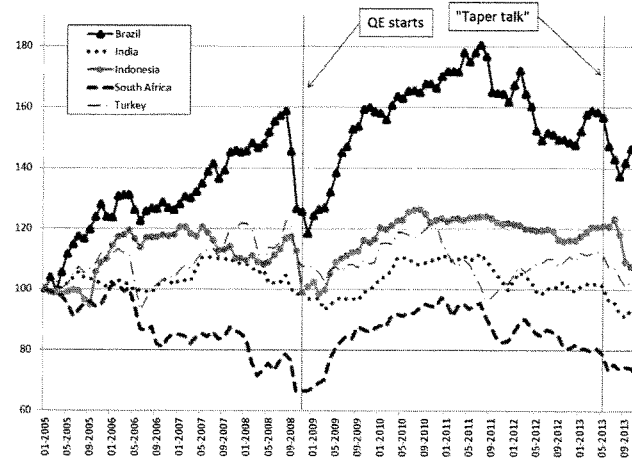


Sources: International Monetary Fund, International Financial Statistics and World Economic Outlook

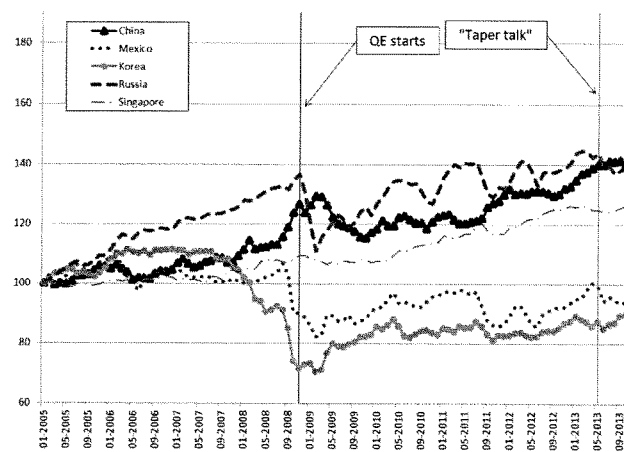
The same pattern applies to the evolution in most EM currencies (Charts 2A and 2B), with sharp appreciations (of the real effective exchange rates, which more accurately reflects the economy's competitiveness) until the middle of 2011 followed by declines well before May 2013.

Three points bear emphasis: net capital flows to EMs were smaller than in the run-up to the Lehman crisis; they started declining well before the exit from QE; flows were not all caused by US QE. According to research by the IMF, reductions in bond yields in the US and in global risk-aversion (another consequence of QE policies) do "push" capital out to selected EMs. But the share of total inflows that is attributable to such QE policies is "not preponderant" and the "correlation between capital flow surges and US QE rounds is loose." (p. 9, IMF, 2013a). Put differently, "pull factors" operating in the EMs themselves, most notably rapid growth has an even larger impact on capital flows. As chart 3 illustrates, the growth differential between emerging markets in Asia and that in the US before the Lehman crisis and during the first two QE periods were about the same. Both the pre-2007 experience, when capital flows to EMs peaked even without any QE, and the decline in flows during the late QE era, are both suggestive of the powerful role of pull factors. Finally, it must be remembered that the push factors were operating not just from US QE policies. Monetary easing and economic weakness characterized other industrial economies too, contributing to capital flows to the EMs,

**Chart 2A: Real Effective Exchange Rates of the “Fragile Five,” Jan. 2005– Sep. 2013**  
*(index; increase denotes appreciation)*

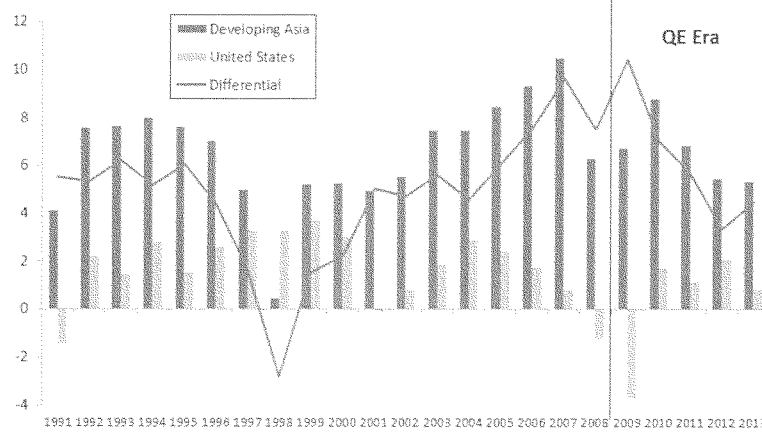


**Chart 2B: Real Effective Exchange Rates of Other EMs,” Jan. 2005– Sep. 2013**  
*(index; increase denotes appreciation)*



Source: Bank of International Settlements

**Chart 3: GDP Growth of Developing Asia and the United States, 1991-2013**  
(in percent)



Source: IMF, *World Economic Outlook*

*What has been the broader impact of the Fed's actions?* On balance, it has been positive. But occasionally it has complicated management for emerging market and other economies, and the impact has depended significantly on the global macroeconomic situation as well as the situation in particular countries. Three examples illustrate these points.

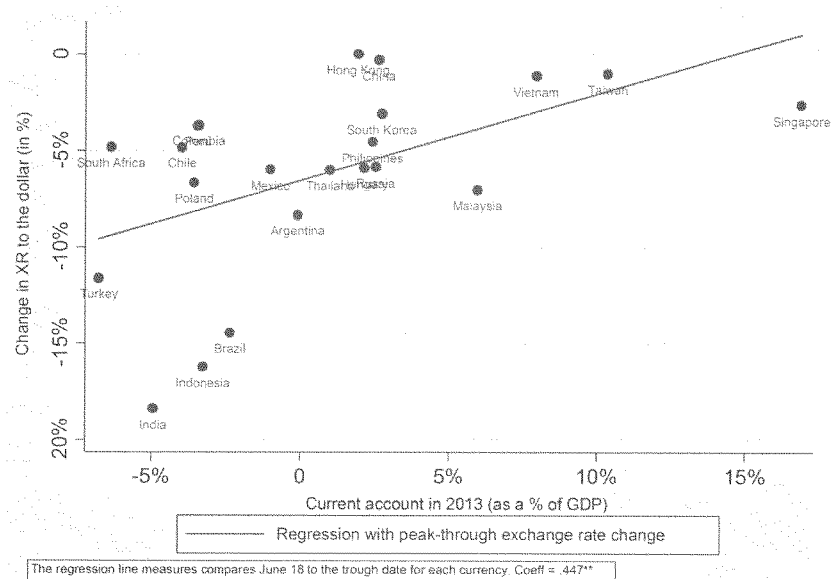
QE1, for example, was unambiguously positive for the world and the EMs because it minimized, even eliminated, the tail risk of the near-collapse of the world economy in the aftermath of the Lehman crisis. As the IMF's 2012 Spillover Report says: "Few countries complain about the Fed's QE1 action in 2008-09 or about the ECB's LTRO operations in 2011-12 because these occurred at times of near-collapse, when the global benefits of the action were unquestionable." (IMF, 2012).

QE2—and to some extent QE3—on the other hand occurred when the global macro-financial context was less dire and at a time of macro-economic heating in many EMs. From the third quarter of 2009 until the summer/fall of 2011, economic growth was high and currencies appreciated substantially (Charts 2A and 2B.) However, it is worth pointing out that the most vociferous complaints about Fed policies were expressed by Brazil, which had seen perhaps the most significant over-heating. As Chart 2A shows, the Brazilian real had become about 14 percent more appreciated in real effective terms in late 2011 relative even to the pre-Lehman peak in August 2008. For most other emerging market economies, on the other hand, the depreciation seen after the Lehman crisis was either not fully reversed (Korea, Mexico, and

South Africa) or reversed only marginally (India, Indonesia and Turkey). Brazil and Russia, however, witnessed significant appreciations, reversing substantially the post-Lehman depreciation.

The third example relates not to QE but to its threatened withdrawal (of QE3) in May 2013. Chairman Bernanke's statement triggered the opposite types of pressures in EMs, namely capital outflows and sharp currency adjustments. But the effects of the "taper talk" were not uniform across emerging markets. Acute pressures were felt especially by the macro-economically vulnerable economies: Brazil, Indonesia, South Africa, India and Turkey. These so-called Fragile Five all faced high current account deficits, rendering them vulnerable to reversals of foreign flows, and in many cases also faced a sharp deceleration in economic growth (Chart 4).

**Chart 4: Taper Talk, Exchange Rate Pressures, and Current Account Deficits**



Sources: Datastream, *World Economic Outlook*

Eichengreen and Gupta (2013) show that countries that had the largest currency appreciations and increases in the current account deficit in the period leading up to the Taper Talk,

experienced the largest declines in currency and stock prices. China and Singapore, which had healthy reserves and a current account surplus, saw their currencies appreciate.

Policy implications: The onus of dealing with the impact of the Fed's actions lies preponderantly with the EMs themselves. They can insulate themselves from Fed actions by being less financially integrated as China has chosen to do. They can also insulate themselves by following sound macro-economic policies which would allow them to reap the benefits of, and appropriately respond to, capital inflows when the Fed eases monetary policy. And, they can cope with the consequences of sharp outflows when the Fed tightens through a combination of macro-economic (South Korea), reserve (India) and capital account management (Brazil) policies. The Fed cannot be expected to calibrate its actions according to the needs of individual emerging market economies.

As the IMF's 2013 Spillover Report concludes: "Significant as spillovers are, there is much that spillover recipients can do to position themselves in such a way as to minimize the risks. e. In particular, they need to fully use macroeconomic and macroprudential levers (including capital flow measures (CFMs), both on inflows and outflows, as necessary, though not as a substitute for other needed policy adjustments) to reduce any vulnerabilities that may have emerged, build buffers, and continue to undertake reforms that will raise potential output and thereby maximize the strength of the pull factors. Only thus will they be able to face the potential stress of the upcoming monetary policy normalization in a position of strength and resilience."

Emerging markets themselves have drawn these lessons and worked toward building their resilience to changes in future Fed policies. For example, the start of tapering in December 2013 had a relatively muted impact on many emerging markets, including the so-called Fragile Five.

## **II. The Fed's quiet international role: Swap Lines**

The Fed's mandates are exclusively domestic but its actions have international consequences as discussed above, so that the Fed cannot be unmindful of the consequences of its actions on the rest of the world.

*How has the Fed straddled these two considerations?* Effectively. In the immediate aftermath of the Lehman crisis, the Fed provided dollar liquidity (via swap lines up to a limit of US\$30 billion) to the central banks of Brazil, Mexico, Singapore, and South Korea which faced an outflow of dollars and hence feared a financial meltdown (Table 1). The swap lines contributed significantly to calming conditions in late 2008 and 2009.

For example, my colleague Olivier Jeanne (2010) argues that the experience of Korea with US swap lines was very favorable: "South Korea entered the crisis with about \$270 billion of foreign exchange reserves (amounting to approximately 30 percent of its GDP). The level of reserves started to decrease (and the won to depreciate) in early 2008, a trend that took a sharp turn for the worse after Lehman Brothers' failure in September. Reserves then fell abruptly to about \$200

billion while the currency sharply depreciated, and Korean banks started to encounter difficulties in rolling over their short-term foreign debt. It is only after Korea entered a \$30 billion swap arrangement with the US Federal Reserve in October 2008 that the exchange rate and reserves stabilized. The Korean central bank was then able to reconstitute its stock of reserves (returning to the pre-crisis level by the end of 2009). The real economy was relatively spared throughout, with an unemployment rate that never exceeded 4 percent.”

Central bank counterparty	Line size {US\$ bns}	Total amount extended {US\$ bns}*	Average interest rate {%}	Foreign currency	Average exchange rate	Total foreign currency amount received {bns}	Number of transactions
ECB	Unlimited	8,011.00	1.54	Euro	1.35	5,942.00	271
Bank of England	Unlimited	918.00	1.78	British pound	1.65	540.00	81
Swiss National Bank	Unlimited	465.00	1.49	Swiss franc	1.13	521.00	114
Bank of Japan	Unlimited	387.00	1.41	Japanese yen	94.56	37,494.00	35
Danmarks Nationalbank	15	72.00	1.25	Danish krone	5.58	409.00	18
Sveriges Riksbank	30	67.00	1.09	Swedish krona	7.93	535.00	10
Reserve Bank of Australia	30	53.00	1.56	Australian dollar	0.68	77.00	10
Bank of Korea	30	41.00	1.72	South Korean won	1333	56,852.00	19
Norges Bank	15	29.00	1.37	Norwegian krone	6.64	198.00	8
Banco de Mexico	30	10.00	0.73	Mexican peso	13.28	128.00	3
Bank of Canada	30	N/A	N/A	Canadian dollar	N/A	N/A	N/A

Source: Papadia (2013)

Similarly during the euro-crisis, the Fed offered swap lines to a number of central banks in Europe, including the ECB, as well as the Bank of Japan. In many cases, these banks could draw unlimited amounts. Papadia (2013) estimates that the ECB, for example, drew up to half a trillion dollars. The main reason for the swaps granted by the Fed was “the unprecedented illiquidity in the foreign exchange swap market, combined with the substantial gap between lending and stable liabilities of non-US banks, in particular European ones.” Non-US banks could previously obtain funding in the swap market but this dried during the euro-crisis, necessitating the injection of dollar liquidity.

Policy Implications: The success of the Fed’s international liquidity provision has prompted my colleague Ted Truman (2013) to argue that such mechanisms need to be institutionalized, with the IMF playing the key coordinating role: “Global financial crises are not a thing of the past. They are often caused by buildups of excessive domestic and foreign debt. But successfully

addressing such crises and limiting negative spillovers often requires coordinated actions to prevent a contraction in global liquidity. Establishment of a more robust global financial safety net centred on central banks – because that is where the money is – would be a useful tool for addressing the inevitable future crises.”

But this in turn suggests that strengthening the IMF to make it more effective and legitimate should be a top priority for the international community and the United States. U.S. support for the IMF is critical to preserving U.S. global economic leadership. The IMF also provides the much-needed insurance against the next financial crisis. As my CGD colleagues Nancy Birdsall and Clay Lowery (2013) recently argued Congress should “approve at little budgetary cost to U.S. taxpayers an increase in resources at the International Monetary Fund (IMF) that will help protect Americans from the costs of the next global financial crisis... The hard work has already been done. As part of the G-20 coordinated response to the 2008-09 crisis, the United States led a negotiation with the other 187 IMF members to increase IMF resources and to make modest changes in the allocation of the shares across country members. All other major economies, including key U.S. allies, have long since endorsed the agreement in their legislatures. Embarrassingly, this straightforward and sensible deal is now being held up by the failure of Congress to act.”

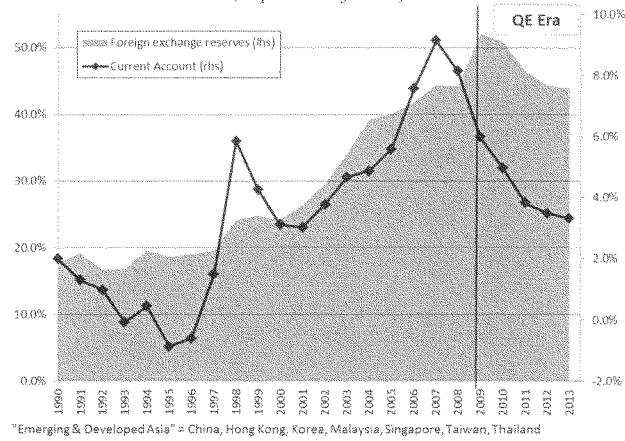
### III. QE and currency manipulation

Two questions merit consideration.

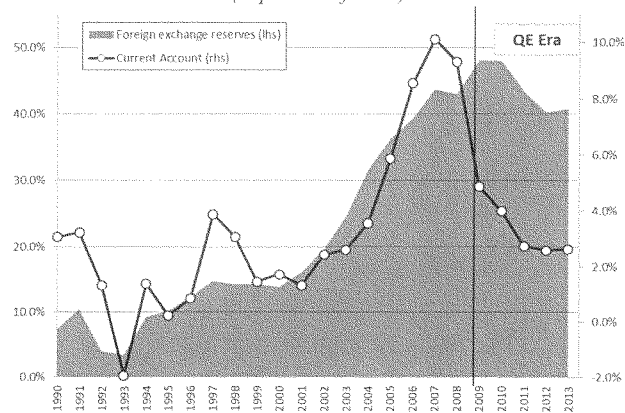
*First, has QE provoked reserve accumulation and currency manipulation with detrimental effects for the US and the global economy?* No, it has not. Large external imbalances in the form of current account surpluses, sustained by currency intervention and reserve accumulation, began in the early 2000s in the aftermath of the Asian Financial Crisis. Initially, countries, largely in emerging Asia, chose to build-up foreign exchange reserves as a form of insurance against financial crises. Thereafter, running surpluses, most notably in the case of China, became part of a mercantilist growth strategy aimed at boosting exports. China’s policy has had an adverse impact on the exports of other developing countries in particular. Aaditya Mattoo, Prachi Mishra and I (2012) estimated that a 10 percent undervaluation of China’s real exchange rate reduces a typical developing country’s exports on average by about 1.5-2 percent.

But these imbalances peaked in 2007. The era of QE has co-incided with a sharp reduction in current account surpluses, an appreciation of currencies in Asia, especially China, and sharply reduced currency intervention, although there has been some pick-up in currency intervention by China in 2013 (see Charts 5A and 5B). The Fed’s QE policies have thus not resulted in more currency manipulation.

**Chart 5a. Current Account Balances and Reserve Accumulation in Selected Asian Countries**  
(in percent of GDP)



**Chart 5b. Current Account Balances and Reserve Accumulation in China**  
(in percent of GDP)



Sources: International Financial Statistics, World Economic Outlook

Second, is QE itself a form of currency manipulation as some EM officials have on occasion suggested? Not really. In response to US complaints about currency manipulation by China and other Asian economies, a number of emerging market countries, notably Brazil and to a lesser

extent China, argued that QE policies were themselves a form of currency manipulation. QE affects asset prices in general, and by lowering US interest rates, it also tends to lower the value of the dollar in particular.

Given the size of the US economy and its central role in the international financial system, Fed policies will affect other economies via asset and currency movements. But QE policies are primarily aimed at, and have their most important effects on domestic asset prices, and through them on the domestic economy. QE policies thus qualify as predominantly domestic policies in that they operate through domestic markets and domestic assets. The external effects of QE policies are usually by-products of their effects on domestic prices, and hence have smaller effects on other countries. Currency intervention is an external policy (one that operates in foreign assets) that is aimed primarily at increasing foreign demand for domestically produced goods and services.

The overall effect of QE policies will typically be to enhance demand for domestically produced goods and services without necessarily reducing demand for foreign goods. QE increases global demand for goods and services. Currency manipulation, on the other hand, will tend to have a zero sum aspect, switching demand rather than enhancing total global demand.

Policy implications: Currency manipulation may or may not be an important issue for the US and the world to address. If it is, it should be addressed as part of the post-Doha agenda in the World Trade Organization (WTO) as Aaditya Mattoo and I (2009) have argued. Alternatively, it could be addressed very carefully in the context of the TPP as my colleagues (Bergsten and Gagnon (2012), Bergsten (forthcoming)) have argued. One of the strong reasons to favor the former approach is that China's currency practices have affected other developing countries very significantly and not just the United States. But attempts to address currency manipulation should be independent of QE policies.

#### **IV. The Fed, US trade policy, and capital flows**

The Fed has been mindful of its international role, helping countries to deal with crises by extending dollar liquidity.

*But is there a need for additional actions on the trade side?* Yes, in particular, greater clarity in US bilateral investment and free trade negotiations with partner countries would help them deal better with capital flows and complement the Fed's constructive international role.

My colleagues, Olivier Jeanne and John Williamson, and I (2012) argued in our book that capital account management policies can legitimately be part of the policy arsenal for countries struggling to maximize the gains from, and minimizing the costs of, financial globalization. The IMF in a series of recent papers has reversed its earlier position and has endorsed the use of such policies in certain circumstances (IMF, 2011a, 2013b). The United States government has also

exhibited greater flexibility in this regard, reflected in its attitude to the measures imposed by Brazil.

However, there is some difference of views on the extent to which US bilateral investment treaties (BITs) and free trade agreements (FTAs)--particularly those with Chile, Singapore, and Korea--circumscribe the ability of partner countries to use such policies. This difference is captured in a letter from Congressmen Barney Frank and Sander Levin of May 23, 2012 to then US Treasury Secretary Tim Geithner. The issues relate to whether the language in BITs and FTAs permit the use of macro-prudential controls on capital inflows and whether they would permit controls on outflows such as those used by Malaysia and Iceland in the event of a serious crisis. Clearly, these policies should be used with the utmost care and in exceptional circumstances. But equally their use should not be entirely precluded.

Policy implications: The negotiations on the Trans-Pacific Partnership (TPP) offer an excellent opportunity for clarifying that the US does not aim to circumscribe or eliminate legitimate policy instruments by its trading partners--macro-prudential controls on inflows and broader controls on balance-of-payments grounds--to respond to the pressures from financial globalization and to crises.

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