



**Remarks by Mark Carney  
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**CHECK AGAINST  
DELIVERY**

## **Restoring Faith in the International Monetary System**

### **Introduction**

We are three years into the global financial crisis, and its dynamics still dominate the economic outlook. In particular, broad forces of bank, household, and sovereign deleveraging can be expected to add to the variability and temper the pace of global economic growth in the years ahead. This would be true even if policy were optimal; but globally, this is not the case.

One of the reasons is the functioning of the current international monetary system. It promoted the enormous build-up of debt that preceded the crisis and could complicate the necessary process of balance-sheet repair in its wake. It is fostering deflationary risks in major advanced economies and asset-price inflation in emerging markets. For countries like Canada, the outlook and policy environment remain unusually challenging.

It is in this context that the international monetary system is being re-examined. The question is whether to change the system or to change policies to be consistent with the current system.

I will argue today that there is no miracle cure. Faith is required, but not in a barbarous relic or a utopian global central bank. Rather, countries must restore their faith in the adjustment process under the current system. Both the G-20 framework and its financial reforms are necessary to restore that trust.

### **The International Monetary System and the Crisis**

The international monetary system consists of (i) exchange rate arrangements; (ii) capital flows; and (iii) a collection of institutions, rules, and conventions that governs its operation. These core elements are supplemented in two important ways. Domestic monetary policy frameworks are essential components of the global system. The international monetary system is also closely related to the international financial system, which comprises financial markets and the institutions, rules, and regulations that govern them.

The international monetary system is an increasingly unstable hybrid of fixed and floating regimes. Following the breakdown of Bretton Woods, there was a general move to a more market-based system with an increasing number of countries adopting floating exchange rates and steadily liberalizing their capital accounts. Capital flows exploded, rising three times faster than the rate of growth of trade over the past three decades. In contrast, in the aftermath of the Asian crisis, a range of emerging markets became increasingly active managers of their exchange rates. As a by-product, with foreign

exchange reserves built well beyond prudential levels, these countries have become important players in several key asset markets.

The combination of these official assets and private flows has created huge gross international asset positions, which has important implications for the functioning of the international monetary system.<sup>1</sup> This makes internationally coordinated financial supervision and regulation a pre-requisite for system stability. It also increases the returns to deepening the liquidity of non-reserve currencies.

Well-functioning markets have clear rules of engagement and robust infrastructure. That cannot be said of the current system. Its conventions can be best described as the occasional observance of the Articles of Agreement of the International Monetary Fund (IMF). Its governance is diffuse and ineffective. The IMF is effectively without the power of sanction, and informal governance mechanisms such as the G-7 have increasingly lost legitimacy as global economic power has been transformed.

Moreover, events of the last few years exposed the frailties of the international financial system. A number of global banks were woefully under-capitalised; participants assumed markets would be liquid in all states of the world; and incentive problems led to a dramatic underpricing of risks. It is now clear that, in the run-up to the crisis, financial regulation was neither well-conceived nor well-coordinated. Implementation was uneven and peer review non-existent.

When the crisis hit, liquidity became concentrated in a handful of markets and one currency. In the wake of the large, negative spillovers we have all just experienced, changes are clearly required.

This need is doubly important as unprecedented structural changes in the global economy are straining the international monetary system itself. The integration of one-third of humanity into today's global economy dwarfs the shock experienced when Canada and the United States emerged at the turn of the last century (Chart 1). The global economy is rapidly becoming multi-polar. Emerging-market economies are now the main drivers of commodity prices, they represent almost one-half of the growth in all imports over the past decade, and currently account for about two-thirds of global growth.<sup>2</sup>

Any monetary system would be fragile in the face of these large, positive forces. There is cause for concern that the current system will repeat the failures of its predecessors.

History shows that international systems dominated by fixed exchange rates seldom cope well with major structural change.<sup>3</sup> This failure is the result of two pervasive problems: the downward rigidity of nominal prices and wages and an asymmetric adjustment process. In the short run, it is generally much less costly, economically as well as politically, for countries with balance of payments surpluses to maintain them and accumulate reserves than it is for deficit countries to sustain deficits. Countries with

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<sup>1</sup> M. Obstfeld, "Expanding Gross Asset Position and the International Monetary System," Remarks delivered at the Federal Reserve Bank of Kansas City symposium on "Macroeconomic Challenges: The Decade Ahead," Jackson Hole, Wyoming, 26-28 August 2010.

<sup>2</sup> Bank of Canada calculations.

<sup>3</sup> See M. Carney, "The Evolution of the International Monetary System," Speech to the Foreign Policy Association, New York City, New York, 19 November 2009, available at: <http://www.bankofcanada.ca/en/speeches/2009/sp191109.html>.

deficits must either run down their reserves or deflate their currencies. The only limit on reserve accumulation for surplus countries is its ultimate impact on domestic prices. Depending on the openness of the financial system and the degree of sterilization, this impact can be delayed for a very long time.

Such has been the case in recent years (Table 1). Indeed, given the scale of the economic miracle, it is remarkable that the currencies of the BRICs have only appreciated 5 per cent in real terms against the G-7 over the past decade (Chart 2).

Another lesson from history is that major countries will not pursue policies that they do not perceive to be in their self-interest. Export-oriented growth strategies, supported in part by undervalued currencies, have proven effective catalysts in recent decades. Countries have generally been reluctant to adjust even long after demand needs to be rebalanced and the desire to self-insure has been sated. There are, however, deeper causes of the inertia of today's emerging-market economies (EMEs). Governance problems in the international monetary system have discouraged co-operative solutions; and legitimate concerns over the resiliency of the global financial system have slowed financial liberalisation.

Emerging markets have also been somewhat slow in realising that, as they grow in importance, delayed adjustment is becoming self-defeating. Given the economic importance of emerging markets, their policy decisions are material for the stability of the international monetary system, and therefore for strong, sustainable and balanced global growth. In the end, excessive reserve accumulation represents a fallacy of composition. These efforts to secure the stability of one country are now collectively reducing the stability of the system.<sup>4</sup>

The flip side of large current account surpluses was large current account deficits in several advanced economies, notably the United States. The combination of expansionary U.S. monetary and fiscal policies following the 2001 recession and high savings rates in East Asia generated significant global imbalances, massive capital flows, and the "conundrum" of very low, long-term interest rates. These low, risk-free rates, in turn, fed the search for yield and excessive leverage across the system. The deregulation of housing and consumer finance reinforced a secular decline in private savings.

Vulnerabilities grew from the combination of macro imbalances and micro failings in risk management, supervision, and financial regulation. Policy-makers in advanced economies were too slow to recognise and address the looming risks. The overall result was a period of increasingly unbalanced growth, without the real and financial signals necessary to promote timely and orderly economic adjustment.

Three years ago, the pressures became overwhelming. Financial systems in advanced economies seized up; virtually every financial asset in the world was repriced; and private demand in advanced economies collapsed.

The policy response to the crash has been an unprecedented easing of fiscal and monetary policy. This has bought time for the necessary adjustments. But a durable solution requires a rebalancing of global supply and demand, which will not happen without changes to the functioning of both the international monetary and financial systems.

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<sup>4</sup> Obstfeld, 2010.

## **The Challenges Ahead**

Without the successful completion of G-20 reforms, the current recovery is at risk. Structural changes in the global economy will eventually yield important adjustments in real exchange rates. These would be most effectively achieved through movements in nominal exchange rates, allowing relative wages and prices to adjust quickly and symmetrically to restore external balance.

However, lacking confidence in the international monetary and financial systems, countries are resisting such nominal adjustments. As a result, real exchange rate adjustment is more likely to occur through changes in general wages and prices. The implications for asset prices, output, and employment could be considerable.

Already, inflationary pressures are rising in emerging economies (Chart 3). Given divergent growth and inflation prospects, monetary policy suitable for United States may not be appropriate for most other countries (Chart 4). However, those countries with relatively fixed exchange rates and relatively open capital accounts are acting as though it is. If this divergence in optimal monetary policy stance persists, the existing strains on the system will grow.

In some major advanced economies, deflationary pressures are emerging. Given the fiscal constraints and scale of balance-sheet repair that is necessary, these economies have a diminished ability to expand domestic demand. External competitiveness needs to be rebuilt through changes to nominal exchange rates or, failing that lower domestic wages and prices.

The dynamic is perhaps most stark in peripheral Europe where the first option is not available. The current frustration of adjustment by surplus countries, if perpetuated, risks creating a similar dynamic on a global scale. History suggests that this process could take years, repressing global output and welfare in the interim.

Against these difficult dynamics, the major economies are locked into what Larry Summers once termed “the balance of financial terror.”<sup>5</sup> Reserves are highly concentrated by holder (the top five countries hold roughly 50 per cent) and currency (two-thirds are in U.S. dollars). Reserve accumulators trade exchange rate stability for exposure to large capital losses if the dollar were to depreciate. They confer the exorbitant privilege of lower financing costs to the United States, the principal supplier of reserve currency. The United States faces the risk that this support is suddenly withdrawn, triggering a sharp adjustment.

All are aware that the decisions, actual or perceived, of a few sovereigns can have a disproportionate, disruptive impact on a range of asset prices and, ultimately, global output.

## **What Then Should Be Done?**

First, maintaining an open global financial system is incredibly important. Sovereign borrowing needs and business investment requirements will be considerable. It would be sheer incompetence to move from a world with a savings glut to one that is capital

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<sup>5</sup> L.H. Summers, “The United States and the Global Adjustment Process.” Stavros S. Niarchos lecture, Institute for International Economics, 23 March, 2004, available at: [www.iie.com/publications/papers/summers0304.htm](http://www.iie.com/publications/papers/summers0304.htm).

starved. One of the tail risks at present is the possible repeat of the Great Reversal of globalization in the aftermath of the crash of 1929.<sup>6</sup> Rather than turning our backs on financial globalization, we need to build resilient globalization by changing the design and operation of both the international monetary and financial systems. Buttressing the institutions and rules that support cross-border finance is thus essential.

Second, a new reserve asset is not required. Over the longer term, it is possible to envision a system with other reserve currencies in addition to the U.S. dollar. However, with few alternatives ready to assume the role, the U.S. dollar can be expected to remain the principal reserve currency for the foreseeable future. Despite the exuberant pessimism reflected in the gold price, total gold stocks represent only US\$1 trillion or about 10 per cent of global reserves and a much smaller proportion of global money supply.<sup>7</sup> The renminbi's prospects are moot, absent full convertibility and open capital markets, which would themselves likely do much to reduce pressure for a change.

At first glance, Special Drawing Rights (SDRs) would be an intriguing alternative reserve asset.<sup>8</sup> Using SDRs appeals to a sense of fairness, in that no one country would enjoy the exorbitant privilege of reserve currency status. Like a multiple reserve currency system, it may reduce the aggregate incentives of countries that supply the constituent currencies of the SDR to run deficits. In addition, there appears to be no technical reason why the use of SDRs could not be expanded.

However, merely enhancing the role of the SDR would do little either to increase the flexibility of the system or change the incentives of surplus countries.<sup>9</sup> Changes to reserve currencies would not increase confidence in the global financial system. More generally, alternatives to the dollar as reserve currency would not materially improve the functioning of the system. While reserve alternatives would increase pressures on the United States to adjust, since "artificial" demand for their assets would be shared with others, incentives for the surplus countries that have thwarted adjustment would not change.

The common lesson of the gold standard, the Bretton Woods system, and the current hybrid system is that *it is the adjustment mechanism, not the choice of reserve asset that ultimately matters.*

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<sup>6</sup> For a description of that process, see R. G. Rajan and L. Zingales, "The Great Reversals: The Politics of Financial Development in the Twentieth Century." *Journal of Financial Economics* 69 (2003): 5–50.

<sup>7</sup> Under the gold exchange standard, 40 per cent of money supply was backed by gold.

<sup>8</sup> See X. Zhou, "Reform the International Monetary System," People's Bank of China, Beijing, 24 May. 2009, available at <<http://www.pbc.gov.cn/english/detail.asp?col=6500&id=178>>.

<sup>9</sup> SDRs could catalyze that change by facilitating any desired reserve diversification. Establishing an enhanced substitution account at the IMF, on a temporary basis, would allow large reserve holders to exchange U.S.-dollar reserves for SDR-denominated securities, thereby diversifying their portfolios. With the IMF bearing the risk of changes in the U.S.-dollar exchange rate, an appropriate burden-sharing arrangement among its members would have to be agreed upon.

A substitution account would create considerable moral hazard, since reserve holders would be tempted to engage in further accumulation. In addition, a substitution account would not address the fundamental asymmetry of the adjustment process. Thus, it would appear essential that a substitution account mark the transition from the current hybrid system to an international system characterized by more flexible exchange rates for all systemic countries.

There is no silver bullet; a constellation of policies across major economic areas is required. The answer to the question I posed at the outset is not to change the current system, but rather to change policies to be consistent with it. Changing policies will require countries to change their macro policies and all countries to agree on a series of financial reforms.

### **The G-20 Framework and Globally Coherent Policy**

With the burden squarely on policy dialogue and cooperation, the G-20 has assumed a central role.

The G-20 framework stresses countries' shared responsibility to ensure that their policies support strong, sustainable, and balanced growth. Under the framework, members have agreed to a mutual assessment of their monetary, exchange rate, fiscal, financial, and structural policies.

There are several reasons why this process has the potential to encourage action across a range of countries. There is a clear timetable. A comprehensive set of policies are under consideration. Policy-makers at the highest levels are directly involved, supported by international financial institutions. Finally, discussions are taking place at the G-20, where all major economies are present and where China has assumed a very constructive leadership role.

As is often the case, the first step to solving a problem has been to admit that it exists. With growing recognition of the shared challenges, countries have agreed to do what is necessary to secure the global recovery in the short term and to facilitate adjustment over the medium term.

More tangibly, at the Toronto leaders' summit, advanced economies committed to complete fiscal stimulus programs and implement growth friendly fiscal consolidation. EMEs committed to reduce their reliance on foreign demand and boost internal sources of growth by (i) targeting infrastructure spending; (ii) reducing excessive precautionary saving; and (iii) increasing exchange rate flexibility.

Time will tell whether G-20 nations can better the underwhelming track record of the G-7 in coordinating policies. The area with the best prospects for success is in financial reforms.

Given the scale of international asset positions, progress on financial reforms is essential. These are also proceeding with a focus on three core issues:

- improving the resiliency of institutions (raising the quality and level of capital);
- building robust markets (improving infrastructure and enhancing transparency);
- and,
- reducing interconnectedness between institutions (macroprudential management of systemic risk).

In each regard, interim measures have already been taken. Most notably, China's recent decision to enhance the flexibility of its exchange rate is welcome and its full implementation would contribute to strong, sustainable, and balanced global economic growth. European countries have taken measures to consolidate their fiscal positions and have conducted stress tests on their banks. The oversight board of the Basel Committee has released a broad detailed agreement on new definitions of bank capital and liquidity.

With the macro analysis of tightening standards pointing to large net benefits, the calibration of these proposals will be decided shortly.

Successful implementation of the G-20 financial reform agenda, when combined with the peer review process of the Financial Stability Board (FSB) and external reviews by the IMF, should increase actual and *perceived* systemic stability and thereby reduce incentives for reserve accumulation. This is a necessary condition for a more open, flexible, and resilient international financial system.

The G-20 framework will be buttressed by institutional changes currently underway. The G-20 is now the premier forum for international economic cooperation. IMF governance reforms will further enhance the Fund's legitimacy and effectiveness. Over time, the FSB has the potential to become the fourth pillar of the Bretton Woods system. Its expertise and broad membership should yield comprehensive and integrated global financial regulations. This will be essential to ensure ongoing cross border flows and to limit regulatory arbitrage and associated leverage.

The final piece of the puzzle is the role of the IMF itself. The crisis exposed enormous strains caused by currency mismatches and large international gross asset positions. These are not best addressed by further building international reserve positions concentrated in the same currencies. It is also unrealistic to rely on the Federal Reserve to act permanently as an international lender of last resort.

The IMF can enhance its role as a contingent supplier of liquidity. In recent weeks, it has made tangible and sensible improvements to its lending programs by refining its Flexible Credit Line, and adopting new a crisis-prevention instrument, the Precautionary Credit Line. However, there are limits to this approach. As with lender of last resort to private entities, there can be moral hazard when lending to sovereigns. Why extend credit to countries that have already bought expensive insurance in the form of foreign-exchange reserves that they do not use? How do you "lend freely against good collateral" at the sovereign level?

Countries can do most of the work themselves. Private currency mismatches can be reduced through effective supervision, and measures to enhance the liquidity of local currency funding markets are essential. Ultimately, sound monetary policy, sustainable fiscal policy, and robust financial supervision and regulation are the best defences against crises and contagion.

## **Conclusion**

The world's economic centre of gravity is shifting. The effectiveness of the international monetary and financial systems will determine how rapidly this change will occur and how sustainable it will be.

The current outlook is for continuation of a modest global recovery, balancing stronger activity in emerging market economies with weaker growth in some advanced economies. However, there are non-negligible risks on the downside. In particular, the current functioning of the international monetary and financial systems is beginning to force a wrenching real adjustment across major economies. Renewed weakness in the United States could have important implications for the Canadian outlook. In this environment, the Bank will have to chart a careful course for Canadian monetary policy.

Any further reduction in monetary policy stimulus would need to be carefully considered in light of the unusual uncertainty surrounding the outlook.

A few months ago, the Bank of Canada analysed the potential difference between a co-operative path for the global economy based on the G-20 framework and one in which markets forced fiscal adjustment and little else is changed. We estimated a possible shortfall in global economic output of \$7 trillion by 2015 (Chart 5). Since then, the Toronto Summit secured agreement on many of the right measures to make up this shortfall. However, the only measures that have actually been implemented have been consistent with the deflation path. While the other right promises have been made, conviction is required.

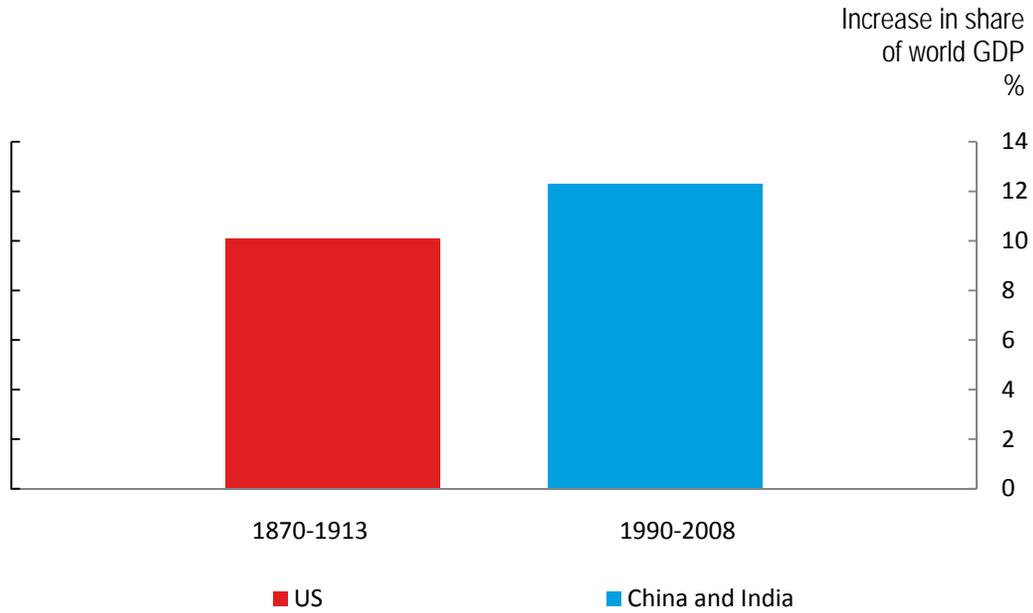
Adjusting to the current forces in the global economy requires finishing financial reforms, implementing greater exchange rate flexibility, and putting in place a series of structural policies.

G-20 nations have started, but completing the job will require renewed faith in an open, flexible, and market-based international monetary system.

## Appendix

### Chart 1: EMEs increasing share of world GDP

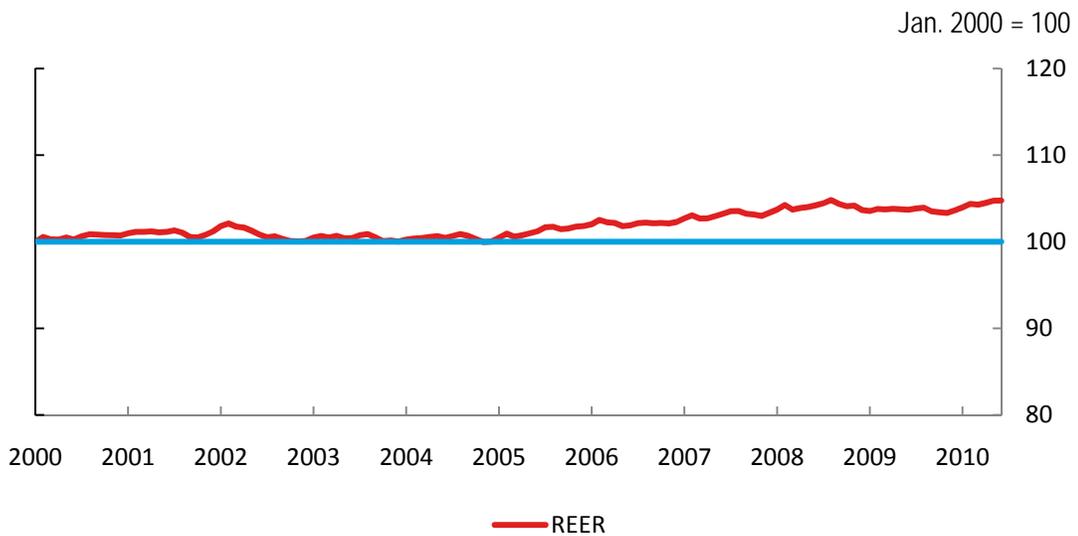
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Source: Maddison

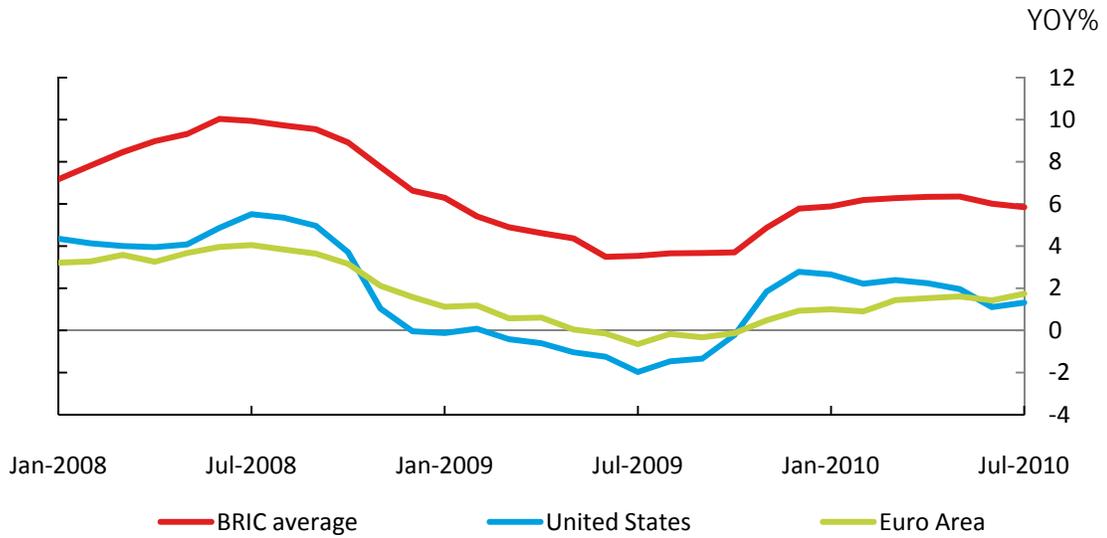
### Chart 2: BRIC REER against the G7

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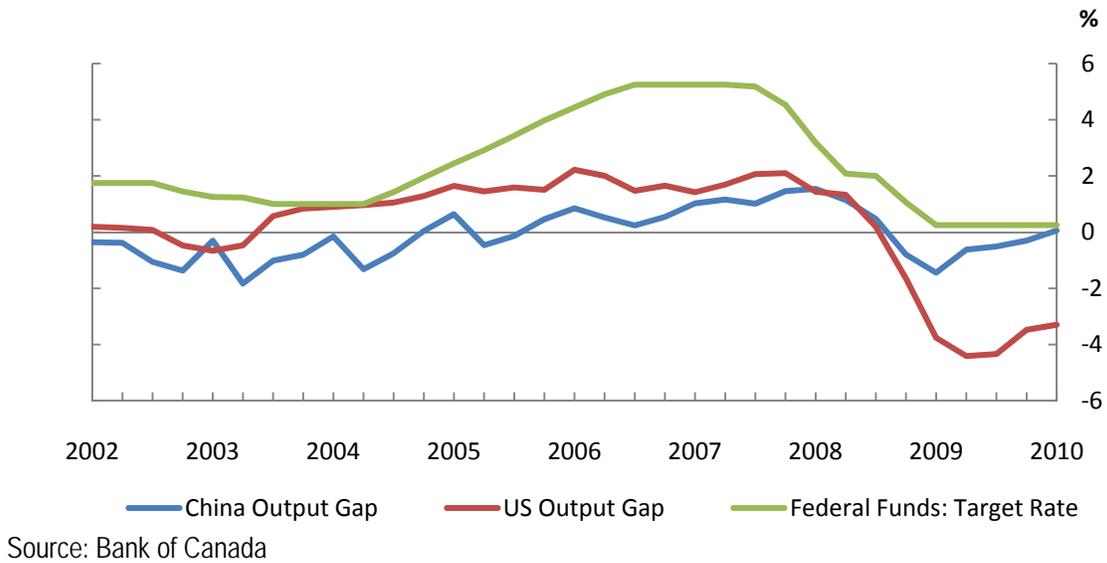


Source: IMF, Bloomberg, National Statistics Agencies

### Chart 3: Inflation in the BRIC economies

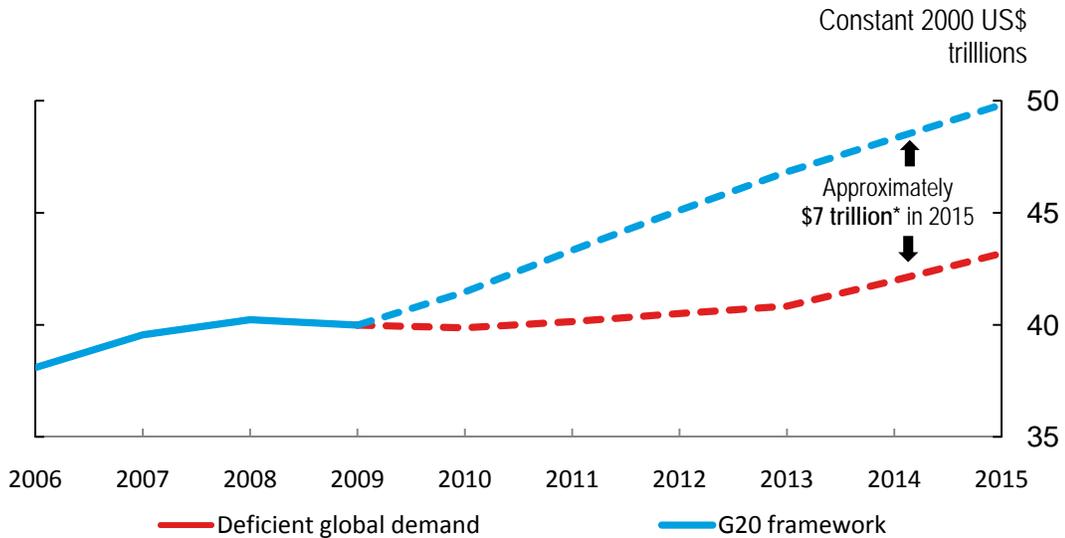


### Chart 4: Is U.S. monetary policy suitable for others?



## Chart 5: \$7 trillion question

### Global Output



\* This estimate is a rough approximation. Depending on the assumptions, it could range from \$6 to \$9 trillion.  
Source: Bank of Canada, World Bank

### Table 1: International reserves of selected countries

	Reserves (US\$ Billions)	Reserves/GDP (%)		Reserves/ Monthly Imports		Reserves/M2 (%)	
		2000	2009	2000	2009	2000	2009
China	2454.3	14.1	49.4	8.1	26.1	10.4	27.3
Russia	461.2	10.8	35.7	5.5	20.8	68.2	84.7
South Korea	274.2	18.0	32.4	6.0	8.2	17.3	20.1
India	273.8	8.7	22.2	6.6	10.2	50.3	96.1
Brazil	257.3	5.1	15.2	5.5	16.4	22.7	35.6
Switzerland	255.5	21.4	27.3	6.0	7.1	22.8	23.7
Thailand	146.8	26.6	52.5	5.5	10.6	24.8	48.8
Malaysia	94.8	30.5	50.5	3.6	8.0	30.5	33.5
Canada	55.4	4.5	4.1	1.4	1.6	9.6	5.9

Source: National Statistical Agencies, IMF, Economist Intelligence Unit  
The first column is most recent data; the rest are calculated using yearly values.