



# The Role of Macro-Economic Policies in an Era of Global Economic Stagnation

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## Introduction<sup>1</sup>

As Governor of the Bank of Canada, 10 years ago in 2006, I gave a number of speeches in which I focused on global “imbalances” and excess saving in some jurisdictions – China and Germany in particular – and excess consumption (and under investment) in others – the US and peripheral Europe in particular.<sup>2</sup> At the time, I argued that some policy changes were required to deal with mounting financial and current account disequilibria in order to reduce the risk of what I thought might be a currency crisis and a resulting painful economic slowdown.

Of course, I was wrong about the currency crisis – in fact we had a major financial crisis – but unfortunately I was not wrong about the painful economic slowdown. Now 10 years on, growth remains stagnant. The world continues to face a “disequilibrium between spending and saving both within and between most major economies.”<sup>3</sup> We clearly are stuck in a low-growth global economy characterized by excess supply, low and/or falling inflation, a low natural rate of interest, low productivity growth, and current account imbalances.

Why does this situation persist? Persistence can best be understood by seeking answers to four “buckets” of questions:

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- 1 This paper was prepared with great assistance from Richard Dion. A preliminary version was delivered in Toronto on September 19, 2016.
  - 2 See for example “Global Imbalances: Why Worry? What to Do?” Remarks to the New York Association of Business Economics, March 29, 2006.
  - 3 King, M. 2016. *The End of Alchemy: Money, Banking and the Future of the Global Economy*. Norton, p.324.

- a) Do we have low growth mainly because the pre-2007 growth path is unachievable as a result of population aging in advanced economies (and soon in China) and because growth enhancing technological progress is on a slower long-run trajectory than it used to be?<sup>4</sup>
- b) Or is it because poor structural policies of governments – tax transfer, competition, trade, regulatory and distribution policies - are preventing adjustments needed to achieve a higher growth path?<sup>5</sup>
- c) Or is it because national authorities are not pursuing macro-economic policies as vigorously as the communiqué from the G20 summit in Hangzhou, held in September 2016, implies they should?
- d) Or, finally, might it be that our macro-economic policy paradigm, even if vigorously pursued is just not sufficient to bolster aggregate demand enough to get back to the old growth trajectory given the economic and financial expectations of business and households and financial constraints on governments.

I think the explanation for the persistence of low growth is complex and undoubtedly the current low-growth situation persists in part due to all four of these elements.<sup>6</sup>

In order to restore global growth, analysts are going to have to make serious efforts to find answers to each of these four “buckets” of questions. And authorities everywhere are going to have to find policies to address the last three sets of issues. This is politically and economically difficult, some would say impossible, because policies require a high degree of coordination and cooperation between national authorities,

real coordination that goes well beyond fine words in a G20 communiqué. The “Hangzhou consensus,” for instance, touches on each of the four buckets I have just described, but fails to lay out a common timetable for rebalancing or creating symmetric obligations on countries with trade surpluses as well as those with deficits.<sup>7</sup>

Having acknowledged the complexity of finding analytic answers to all these questions and the difficulty of formulating policies in three areas, my discussion will now focus on “Buckets C & D,” the macro-economic policy components.

I will argue that the world has changed so significantly in the last decade that potential growth is now lower than in the two decades to the mid-2000s, and that this change calls for a rethinking of the macro-economic policy paradigm (monetary and fiscal policy) that has essentially prevailed from the early 1980s to today. In other words, I question whether the macro-policy paradigms that I espoused as a senior official at the Department of Finance in the 1980s and 1990s, and the monetary policy we practiced at the Bank of Canada in the first decade of this century, are fully appropriate to deal with the low growth disequilibrium we face today and whether they are being pursued with the appropriate balance and vigour.

### The Paradigm

In the simplest terms, our traditional macro-policy paradigm could be described as “leaning against the wind.”

Monetary policy focused on price stability. If inflation was high, rising, or threatened to rise because of excess demand, the central bank would raise interest rates. This would slow down consumption and investment by incenting households

4 Gordon, Robert. 2016. *The Rise and Fall of American Growth*. Princeton University Press.

5 Ostry et al. conclude that rising inequality does lead to slower growth. See Ostry, J.D., A. Berg, C.G. Tsangerides. 2014. “Redistribution, Inequality and Growth.” IMF. April.

6 For any specific country, additional factors may play an important role: for instance, persistently lower commodity prices would lead to persistently lower real domestic income in commodity-producing economies such as Canada’s.

7 Creating symmetric obligations was advocated by Keynes at the Bretton Woods Conference in 1944, without success. See Conway, Ed. 2014. *The Summit*. Little Brown. It must be said that enforcing symmetric obligations is normally almost impossible to achieve.

and businesses to defer purchases in expectations of eventually lower interest rates, and decrease net exports in response to an appreciation of the exchange rate, with both adjustments relieving the upward pressure on prices. On the other hand, if inflation was low or falling, or threatened to do so because of excess supply, the central bank would lower its policy interest rate to bring forward consumption and investment, and, through its impact on the exchange rate, to increase net exports.

In theory (although not always in practice) fiscal policy was supposed to function in a similar way. During periods of excess demand, taxes would automatically rise and expenditures (especially transfer payments) automatically fall generating “fiscal drag” and reducing excess demand. During periods of excess supply, slower growth generated reduced tax revenues and increased transfer payments (especially employment insurance) resulting in a “fiscal stimulus,” thus reducing excess supply. Of course, in periods of severe excess supply, governments could by discretion sharply increase current spending or reduce current taxes, as governments did in 2009.

This macro-economic policy paradigm was designed to nudge growth back onto its long-term trajectory – a trajectory largely determined by demographic and technological factors on the one hand, and on the other, structural policies of national governments and productivity enhancing investment by the private sector.

This macro-policy paradigm, which we arrived at after the painful inflation problems of the late '60s to early '80s, worked extraordinarily well in stabilizing growth in the last decades of the 20th century. This was the period of the so-called “great moderation.” It appeared to work quite well in the first six years of this century. However, it was giving rise to growing current account imbalances, about which I cautioned in 2005 and 2006, and to financial imbalances about which the Bank for International Settlements (BIS) cautioned.<sup>8</sup> This was also the paradigm which global policymakers

applied vigorously, and in a coordinated way in 2009, to deal successfully with the collapse in global demand.

But since 2011, this policy paradigm has not been successful in restoring growth to its previous long-run path, despite ultra-low policy interest rates and the implementation of unconventional monetary policy. Why?

In large part, changing demographics, slower technological progress, and inadequate structural policies have contributed to lower potential growth. In addition, deleveraging by households and banks in the wake of the financial crisis, the structural debt crisis in the eurozone, and the slowdown of trend growth in China are factors that hampered global growth. In addition to lower potential growth, the “natural rate” of interest is lower today than it was in the decade that ended in 2007.

### The Natural Rate

The natural rate is the interest rate which would elicit the supply of funds (savings) to balance the demand for funds (investment) when the economy is roughly in equilibrium; i.e., neither excess demand and rising inflation nor excess supply and falling inflation. The natural rate depends on real factors such as demography, technological progress, income distribution and relative prices (Buckets A & B), and not on monetary policy. What monetary policy influences is the nominal premium or discount to the natural rate (i.e., inflation or deflation) and hence the timing of periods of excess demand or supply in the economy.

While it is difficult to estimate with precision, the natural real rate of interest has fallen significantly since the late 20<sup>th</sup> century for a variety of reasons. First, the changing demographic structure of the population would have been increasing the “natural” saving rate of households as a bulging babyboom generation has been approaching retirement and as the related age groups typically have a higher saving rate than

8 For example, in the BIS 76<sup>th</sup> Annual Report, June 2006.

average.<sup>9</sup> Increased inequality of incomes within advanced economies and structural imbalances in emerging market economies have further contributed to the global desire to save.<sup>10</sup> Finally, increased uncertainty, a decline in expected returns relative to hurdle rates for profitable investments, and weaker growth prospects (partly caused by adverse demographics) have driven down the demand for investable funds.<sup>11</sup>

This structurally determined increase in supply and decline in demand for funds is estimated to have driven down the real interest rate which “naturally” balances supply and demand for funds from close to 3 percent in North America throughout the 1980s and 1990s to roughly 1 percent today, and even lower in the US according to the most recent estimates from the Federal Reserve.<sup>12</sup>

Lower growth potential and a lower natural rate of interest have major implications for the management of aggregate demand through monetary and fiscal policy. It is to the issue of macro-economic policy I now turn, starting with monetary policy.

## Monetary Policy

Against this background of structurally determined “natural” supply of and demand for funds, monetary policy operates by driving the policy interest rate above or below the natural

or neutral rate.<sup>13</sup> From 1980 to 2000 over a normal business cycle, a change of 4 to 5 percentage points in the policy rate would induce significant behavioral responses from households and firms.<sup>14</sup>

A cut in interest rates worked to induce increased demand in the near term because businesses and consumers viewed that, over time, inflation would increase – hence there was an advantage to bringing forward intended expenditure and take advantage of lower borrowing costs. The reduction in rates would also have an impact on the exchange rate, inducing demand for Canadian output. Symmetrically, a rise in rates would cause people to expect a lower forward trajectory of inflation, and hence have a good reason to delay expenditure and avoid currently higher borrowing costs. A collateral appreciation of the exchange rate would induce a decline in net exports.

In this way, an inflation targeting central bank stabilized aggregate demand over the cycle. It did so against an expectation in the 1980s and 1990s that the long-term “neutral” rate of interest was in the order of 4 to 5 percent nominal (2 to 3 percent real) in the US and Canada. The policy interest rate could thus be moved down about 4 percentage points from its “neutral” level before hitting its “effective lower bound.”<sup>15</sup> This sharp reduction

9 See Fisher, S. 2016. “Why Are Interest Rates So Low: Causes and Implications.” Board of Governors of the Federal Reserve System, October 17.

10 Rachel, L., and T.D. Smith. 2015. “Secular Drivers of the Global Real Interest Rate.” Bank of England Staff Working Paper No. 571, December.

11 Support for the role of uncertainty and growth expectations for output can be found in Leboeuf, M., and B. Foy. 2016. “What is Behind the Weakness in Global Investment.” Bank of Canada Staff Discussion Paper 2016-15, February.

12 Holston, K., T. Laubach and J.C. Williams. 2016. “Measuring the Natural Rate of Interest: International Trends and Determinants.” Federal Reserve Bank of San Francisco. Working Paper 2016-11, June.

13 The “neutral” interest rate is the policy rate consistent with the economy operating at capacity and inflation remaining on target. Movements in the natural rate should translate into similar movements of the neutral rate, provided that the inflation target remains unchanged.

14 The amount of conventional monetary policy easing in the US during three of the four recession episodes from 1980 to 2001 averaged 5 percentage points. See Yellen, J. L. 2016. “The Federal Reserve’s Monetary Policy Toolkit: Past, Present, and Future.” Jackson Hole, August 26.

15 The effective lower bound for nominal interest rates is now thought to be a little below zero, variously estimated to be in the order of -.025 to -0.75%.

happened in 2008-2009 – but it still was not going to be enough to eliminate the massive increase in excess supply (unemployment) that the developed world faced then – and hence central banks resorted to “unconventional policy.”

Unconventional monetary policy has had two main strands in recent years:

- 1) forward guidance – low for long – to induce lower interest rates on longer term debt with the intent of bringing forward expenditure on housing and nonresidential structures, which are normally financed with long-term, fixed-rate borrowing;
- 2) quantitative easing – central banks expand balance sheets to purchase long-dated government debt and in so doing directly drive down longer term rates and raise asset prices and wealth. The rise in wealth stimulates household spending.

All this effort by central banks has changed expectations about future interest rates. It has brought forward some real spending on equipment, commercial structures, consumer durables (autos), and residential housing, although in most countries the main impact until now seems to have been to raise the price of houses rather than to induce significant additional supply. Similarly, low long rates have raised equity prices with apparently only a small impact on the level of real investment in plant and equipment. But now that interest rates are expected to be “low for long,” there is less incentive to pull forward more consumption and investment.

Moreover, with the household debt/disposable income ratio at an all-time high in Canada, and approaching that again in the US and many other economies (including emerging markets), households are reluctant to incur more debt even though the ratio of current debt service costs to disposable income is low, indeed at an all-time low in Canada (6.4 percent vs. 11 percent in 1990).<sup>16</sup>

And most importantly, we live in a world of what Mervyn King has called “radical uncertainty” – uncertainty which understandably induces caution on the part of businesses and households.<sup>17</sup> Most importantly, this radical uncertainty appears to be limiting the efficacy of our traditional tools of macro-economic policy.

The ability of accommodative monetary policy to pull forward in time investment and consumption expenditures during a period of collapse of demand is limited not only by the relative flatness of the yield curve and radical uncertainty about the future, but also by the effective lower bound on nominal interest rates. The greatest problem today is that there is no room to lower rates by 400+bps, before hitting the effective lower bound should there be another dramatic collapse in demand. So not only is a continuation of ultra-low policy rates and unconventional monetary policy generally not providing the boost needed to eliminate excess supply quickly, the capacity of policy to deal with a major negative shock going forward is extremely limited. And a growing understanding that the Federal Reserve and other central banks are “out of ammunition” to deal with a future downturn may well be increasing the unwillingness of businesses to commit to investment today because of increasing uncertainty about the future.

Thus, not only is there almost no practical room to use monetary policy going forward to stabilize growth in the event of a major negative demand shock, there is accumulating anecdotal evidence and increasing concern that today’s ultra-low rates may actually be retarding growth.<sup>18</sup> Low rates available to ordinary savers may actually be serving as a drag on current consumption as current members of the labour force feel they have to save an increasing fraction of their income to provide for future retirement. In addition, low rates are contributing to widening inequality of income and wealth

16 Statistics Canada Cansim 380-0073.

17 King, M, 2016. Op cit.

18 The high saving rate of Japanese households is one indicator of the impact of persistently low rates on the level of household spending.

within many advanced economics and thus potentially to higher saving rates.

So, for the moment, it would seem that central banks are stuck between a rock and a hard place. In countries like the US where aggregate supply and demand are roughly in balance, the policy interest rate (fed funds rate) “ought to be” higher, roughly 2 to 2 ½ percent, if one accepts the Federal Reserve estimate of the real natural rate of about 0.5 percent and estimates of expected inflation of 1½ percent to 2 percent. But if it were to raise the fed funds rate quickly to 2 ½ percent, the Federal Reserve fears that this would be the very shock that would precipitate a sharp retrenchment in domestic demand and sharp appreciation in the exchange rate of the US dollar. Even in the United States, a sharp appreciation of the currency would reduce net exports and hence demand. For countries such as Canada, the exchange rate effect would be much more dramatic and thus clearly circumscribe the ability of the central bank to move alone to normalize rates. On the other hand, the repeated failure to move to a “new normal” policy rate perpetuates the distortions in financial markets, causing uncertainty and leading to a misallocation of real resources.<sup>19</sup>

There is no easy resolution of this problem for central banks. Moving to price-level targeting, which takes into account past over- or undershooting of target, might help in the longer run. While I was attracted to this approach at the time of the last renewal of the Bank of Canada agreement with Finance Canada, it is not clear at all that price-level targeting

would help in the current circumstances where the fear is that rates will stay low for a long time.<sup>20</sup> Similarly it is not clear that raising the inflation target, announcing that the target will be exceeded for some time once reached, or shifting to nominal GDP targeting, as proposed by some, would be of much help.<sup>21</sup> Interest rates are currently expected to stay low for a long period; there seems to be no expectation that any monetary policy action can be taken to cause inflation to actually eventually rise.<sup>22</sup> In such circumstances of expected secular stagnation, it is hard to see how higher inflation expectations could be engineered just by monetary policy pronouncements concerning the target.<sup>23</sup> We are at or near the effective lower bound of interest rates. Moreover, changes in the inflation target would create additional uncertainty, uncertainty which would damage real investment and growth.

Finally, I would note that continuation of the policy of QE – i.e., buying longer term assets in order to flatten the yield curve – may well now be having perverse results. Combined with overly constraining detailed regulation of financial institutions, the flat yield curve is undermining the ability of banks to profitably make investment-enhancing loans to business. In addition, solvency rules are constraining insurers and (smaller) pension funds, rendering them less able to take appropriate risks and hence less able to support real investment. This impact is important here in North America, but really serious for European and Japanese institutions.

19 See James, Tony. 2016. “To revive America’s economy, raise interest rates.” *Financial Times*, October 24.

20 See Bank of Canada. 2016. “Renewal of the Inflation Control Target Background Information.” October.

21 On the merits of raising inflation target, see for instance Ball, L. 2014. “The Case for a Long-Run Target of Four Percent.” IMF Working Paper WP/14/92, June.

22 The current negative term premium on 10-year US Treasury (the difference between the yield on 10-year Treasury and expected risk-free short rates over the next 10 years) suggests that “investors have...been focused on the risk of prolonged lower-than-expected inflation in the context of low growth and underperformance.” See Brainard, L. 2016. “The economic outlook and implications for monetary policy.” Board of Governors of the Federal Reserve System, June 3, p.3.

23 The IMF found that medium-term inflation expectations have become more sensitive to unexpected movements in actual inflation, and therefore could deviate more and more from target in the event of further unexpected declines in inflation. Notwithstanding this finding, they propose that if inflation expectations appear to have shifted down, consideration should be given to a credible commitment to a modest and temporary overshooting of the inflation target. The question is: how to make this commitment credible? See, IMF. 2016. “Global Disinflation in an Era of Constrained Monetary Policy.” *World Economic Outlook*, Chapter 3, October.

A totally different approach to monetary policy would be for the Federal Reserve to abandon for now the current data-dependent paradigm to guide future rates, and simply announce a fixed schedule of rate increases to get the federal funds rate up to 1½ or 2 percent by a fixed future date. Such a policy would facilitate the better functioning of financial markets and, reduce uncertainty. If combined with more expansionary fiscal policy and less restraining financial regulation, it might be helpful in bringing forward investment and consumption. Although such a commitment poses very real dangers (especially for foreign exchange markets) in view of uncertainty about the future, it would provide a degree of policy certainty to US markets and leadership to other central banks. If other central banks committed to follow the Federal Reserve's lead and fiscal authorities pursued expansionary policy, the current monetary policy straightjacket could be ended. Here again, international cooperation is critical to success.

## Fiscal Policy

In the end, it is not going to be modifications to monetary policy alone that offer the greatest chance for macro-economic policy to help facilitate the escape from the current global economic stagnation. Fiscal policy has an extraordinarily important role to play.<sup>24</sup>

Fiscal authorities did play a key role in preventing further contraction in the global economy following the November 2008 G20 summit in Washington. But since 2010, exaggerated concerns over rising public debt/GDP ratios have caused fiscal authorities in most countries to retrench rapidly, leaving it up to central banks alone to provide macro-economic support for growth. I have argued elsewhere that these restrictive

fiscal policies were inappropriate from 2011 onward, particularly for countries such as Canada which did not have high debt/GDP ratios and for which public debt charges as a share of tax revenues were falling rapidly.<sup>25</sup> While central banks pursued (with vigour in Europe and Japan) the well-established paradigm of leaning against the wind, from 2011 to 2015, most fiscal authorities abandoned the previous stabilization paradigm which had served well right through the great financial crisis. Recent statements from the IMF and the communiqué from the G20 meeting in Hangzhou indicate that many authorities now acknowledge the importance of expansionary budgets as a source of aggregate demand growth. Clearly, this was recognized by the Canadian federal government in setting its 2016 Budget.

Recognition that budgetary deficits have a role to play in complementing monetary policy accommodation is very important if macro-economic policy is to play its full potential role in promoting growth during a period of lower potential growth and a lower natural rate of interest ( $r^*$ ). But it is not just change in the size of the deficit that matters for growth; change in the composition of spending and revenues is even more important in the medium term. Appropriate public investment raises the productivity of labour and private capital in structures and equipment. Thus, increasing public investment in productivity-enhancing infrastructure raises the long-term growth trajectory – and hence expected real growth over the longer term.<sup>26</sup>

Globally, many governments have the capacity to increase their borrowing at current interest rates provided that borrowing is used to finance productivity-enhancing physical or human infrastructure – infrastructure which will yield

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- 24 In fact, according to N. Roubini, G7 economies “seem poised to begin – or perhaps have already begun – to rely more on fiscal policy to bolster sagging economic growth.” See Roubini, N. 2016. “The Return of Fiscal Policy.” *Project Syndicate*. September.
- 25 See Dodge, D., and R. Dion. 2016. “Economic performance and policy during the Harper years.” *Policy Options*. October 19. This is an expanded version of a chapter in *The Harper Factor: Assessing a Prime Minister's Policy Legacy*, edited by J. Ditchburn and G. Fox. McGill-Queens University Press. 2016.
- 26 See for instance, IMF. 2014. “Is it Time for an Infrastructure Push? The Macroeconomic Effects of Public Investment.” *World Economic Outlook*, October. See also the report of the Advisory Committee on Economic Growth (October 2016).

future cash flows to governments. Moreover, this infrastructure component of fiscal policy is extremely important in countries like the United States, Canada, Australia and a number of emerging market countries where growth and private investment are likely being held back by the lack of appropriate complementary public investment.

### Policy Mix

While, quite appropriately, monetary policy is the domain of independent central banks and fiscal policy the province of ministries of finance, coordination of these twin instruments of macro-economic policy is essential. It is the appropriate combination of monetary and fiscal policies that is required to achieve the shared goals of price stability, full employment, financial stability and economic growth. While demographic, technological, and structural factors clearly limit the extent to which macro-economic policies alone can promote higher growth, judicious coordination of monetary and fiscal policies can get countries closer to that limit than can disparate efforts of central banks and finance ministries in their respective domains.

At the present time, both price and financial stability would be better served by somewhat higher policy interest rates – rates that would not imply a sacrifice of employment and growth if – and this is a big if – fiscal policy were more expansionary. Similarly, central banks should be prepared to provide fiscal authorities with monetary finance (helicopter money) if and only if finance ministries are prepared to devote that borrowing from the central bank to productivity-enhancing investments that will both increase future supply (and thus contribute to price stability) and generate, preferably directly, increased government revenues (and thus contribute to financial stability). The cooperative effort between treasuries and independent central banks requires that both parties retain mutual trust and the trust of the public but if this can be managed (and in Canada I certainly think

it can), the advantages of coordinated policy are enormous. The recent renewal of the agreement between Finance Canada and the Bank of Canada provides the appropriate flexible anchor for price and financial stability. What is now needed is a similar undertaking by the government of Canada that will provide a similar anchor for fiscal stability, whether that be a debt/GDP corridor as I have proposed before, or a fiscal “golden rule” that has been used by other jurisdictions.<sup>27</sup>

There is no perfect monetary or fiscal policy anchor. But flexible anchors such as the Bank of Canada’s inflation target, which serve to preserve public trust and confidence in the execution of macro-economic policies, allow for the maximum contribution of fiscal and economic policy to growth and the welfare of citizens, subject to the limitations imposed by demographic, technological and structural developments.

### Conclusion

Macroeconomic policies (Buckets C & D) are very important for future global growth. As a former central bank governor and Deputy Minister of Finance, you would expect me to affirm that. But in the longer run, it is the structural policies of governments – trade, education, health, competition, income distribution and taxation – that are most important in determining the potential rate of growth. These policies shape the way that technological progress feeds into economic progress.

Competition and open international trade provide the incentives for the development of new technology. But it is labour, education and income distribution policies that provide reasonable assurance that gains from trade and technological progress will be reasonably shared. Without such assurance, popular resistance to change can grind economic growth to a halt.

Thus, as we look to find ways to come closer to the higher rates of growth experienced in the second half of the last century, it is important to focus on structural policies, and not

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27 The golden rule stipulates that governments can only borrow for the purposes of investing, and not to finance current spending. Therefore, governments must borrow to finance investments that will create positive windfalls for future generations. Current spending will be funded entirely by existing taxes.



just on improving the macro-economic policies. Our current problems of slow growth and global imbalances will not be solved by changed monetary and fiscal policy alone.

That said, a rebalancing of macro-economic policy to place greater emphasis on government investment and somewhat less reliance by central banks on ultra-low interest rates and long-term asset purchases (QE) would be a step towards escaping from the current stagnation of global economic growth.