Carolyn Wilkins: (S)low for long and financial stability

Remarks by Ms Carolyn Wilkins, Senior Deputy Governor of the Bank of Canada, at the Official Monetary and Financial Institutions Forum City Lecture, London, United Kingdom, 14 September 2016.

* * *

I would like to thank Stephen Murchison, José Dorich and Grahame Johnson for their help in preparing this speech.

Introduction

Let me first thank the Official Monetary and Financial Institutions Forum for inviting me here today. For policy-makers like me, the Forum's analysis and commentary are invaluable.

Central bankers and fellow policy-makers around the world have dedicated the eight years since the global financial crisis to rebooting their economies and repairing their financial systems. Given the added challenges of a number of sovereign debt crises, an oil price shock and, most recently, the unfolding fallout from Brexit, it is understandable that we have devoted a lot of energy to avoiding another financial meltdown and keeping the recovery on track. It is perhaps not as epic a journey as in Homer's classic, but this odyssey has certainly proven long and perilous.

Eight years into this journey, there is an urgent need for all of us to consult the map to see where we are headed over the longer run, and to take strategic decisions to help us avoid unnecessary trouble ahead. We all know that, cyclical factors aside, demographic trends and other structural factors are acting as a drag on the global economy's potential to grow. This surely worries all of you here, since growth is what ultimately drives the returns on your investments and your job prospects. And with economies expanding more slowly, having growth that is inclusive is more important than ever.

Slow growth worries me as a central banker, not only because it reduces our room to manoeuvre to achieve our inflation target. It also worries me because slower potential growth materially increases risks to financial stability.

To explain these concerns, I will start with a view on the long-term prospects for economic growth and real interest rates. I will then give you some examples of how these prospects could translate into increased financial system vulnerabilities. I do not believe we are powerless, though, so I will end by outlining some promising strategies that could lead us safely to a sustainable and solid growth path.

The long and winding road

Economic growth around the world since the crisis has repeatedly surprised economists on the downside and has led to the term: "serial disappointment." The Bank of Canada's own forecasts overestimated global growth by an average of half a percentage point each year in the past four. Private sector consensus forecasts were off by even more.[1]

The slow and halting recovery is partly the result of a number of cyclical factors that are taking years to sort out, including deleveraging in the private and public sectors. It is also the result of deeper structural trends that are driving down the global economy's potential to grow.

Potential GDP growth at the global level declined from a peak of about 5 per cent in 2005 to just over 3 per cent this year, according to Bank of Canada estimates.[2] This is huge. A 2-percentage-point reduction in global potential growth translates into US$1 1/2 trillion in foregone output

around the world in 2016 alone. If that pace is maintained, foregone output will rise to just under US$9 trillion five years from now. The slowdown has been widespread, although potential growth varies widely across countries. China's potential growth is estimated to be around 6 1/2 per cent, down from just over 10 per cent.[3] In advanced economies, it is much lower—around 1 1/2 per cent in Canada and around 1 3/4 per cent in the United States, for example.[4]

Potential output is made up of two parts—labour supply and labour productivity. Both are contributing to the slowdown in global potential growth. Labour force trends will continue and the numbers are striking: growth in the working-age population will fall at the global level from around 1 per cent to 0.6 per cent over the next two decades.[5]

It is difficult to precisely quantify the impact of demographic factors in terms of growth because a tighter labour market should, over time, drive wages up. Higher wages may persuade some workers to postpone retirement or join the labour force but are unlikely to reverse the tide. So far in Canada, demographic effects have been only partly mitigated by increased participation rates of older workers.[6]

The wild card here is the second component of potential output—labour productivity. Unlike the growth of the workforce, which is mostly driven by demographic trends that are predictable and evolve at a glacial pace, productivity growth can change more quickly. And big technological innovations that fuel sea changes in productivity—such as electricity and the semiconductor—are difficult to foresee.

So far this century, productivity growth has been hardly encouraging. The effects of the information technology revolution on productivity growth are fading and the rate of adoption of new technologies is slowing. An additional source of drag has come more recently from a significant slowdown in business investment which is in large part related to lingering uncertainty and a steep decline in global trade growth.[7]

The medium-term outlook for potential output growth could be more positive if tighter labour markets do eventually lead to wage increases and incite more investment in productive capital, and if there are major advances in technology that we have not yet imagined.[8] Without a meaningful rebound in productivity, population aging will lead to even lower potential growth than in past decades.[9]

Natural by-products of slower potential growth are not only weaker corporate profits and dividends, but also a lower average rate of return on investments. One way to gauge this effect is to estimate the neutral rate of interest; here I am referring to the risk-free real interest rate that would prevail over the medium term if the global economy were operating at its potential, after the effects of all cyclical forces had dissipated. This neutral rate would be just right to balance the full-employment level of savings and investment.[10]

In a lower-growth environment, businesses invest less and therefore have lower financing needs. This drives down the neutral rate, since a lower level of interest rates is required to equate savings with investment.[11] This is one of the key reasons why we have reduced our estimate of the neutral real rate for Canada over the past couple of years. It is about 1 1/4 per cent now, down from about 3 per cent in the early 2000s. Estimates are highly uncertain, so it is best to put a range of +/- 50 basis points around these numbers.

Global potential growth is not the only determinant of the neutral rate. There is also the increase in global savings witnessed over the past decade and a half, the lingering effects of the financial crisis on investment demand and post-crisis financial reforms. And while we often talk about the existence of a "global" neutral rate, an array of factors like country-specific risk premiums push interest rates to different levels across countries.

It is essential to keep an eye on where the neutral rate is, since the stance of monetary policy can be measured as the gap between the level of the policy rate and the neutral rate. Some economists, most prominently Harvard Professor Lawrence Summers, think there is a risk that the neutral rate is so low in some economies that the effective lower bound is preventing central banks from providing sufficient monetary stimulus. They argue that the structural factors that are responsible for the low neutral rate could persist well into the future, contributing to “secular stagnation.”

In Canada, with the target for the overnight interest rate currently set at 0.5 per cent, we judge monetary policy to be quite stimulative, although less so than it would have been a decade ago when the neutral rate was higher. At the same time, as population aging continues, the neutral rate could fall further, unless productivity growth picks up or global savings fall. And the longer weak investment persists, the more important this risk becomes.

The link between slow growth and financial stability

While we typically link financial stability risks to unsustainably high growth, slower growth and lower returns can also add to vulnerabilities in the financial system through a number of channels. Let me talk about three.

The first is a macroeconomic channel that works through households. Years of low interest rates have, by design, encouraged growth in household credit, leaving many highly indebted. In Canada, average household debt is around 165 per cent of disposable income. As average household income growth slows, we can expect that economic shocks—such as foreign demand shocks that reduce demand for exports or changes in commodity prices that adversely affect a country’s terms of trade—will result in more frequent and longer periods of shrinking incomes. This is due to two related factors. The first is just simple arithmetic: the lower the average growth rate of household income, the more likely it is adverse shocks will push it negative.

The second factor is a bit more subtle. A lower neutral rate also makes it more likely that interest rates will be constrained by the effective lower bound, meaning monetary policy will have less scope to support income growth during periods of economic weakness.

To get a better sense of the practical importance of these factors, we ran simulations with the Bank of Canada’s main policy model.[12] They show that, for Canada, the lower neutral rate means that the probability of being at the effective lower bound—which we assume to be –0.5 per cent—has gone up from around 1 1/2 per cent to around 7 per cent.[13]

Our simulations also confirm that there would be more episodes when the income of working-age individuals actually declined. And the median duration of those episodes would increase from three to six months, or perhaps more if low-income households bear the brunt of the growth slowdown. This would make households more vulnerable, particularly if they are already highly indebted. This is because the debt burdens of households, relative to incomes, would rise more frequently than in the past. And this would typically happen when growth is weak and businesses and financial institutions are also relatively more vulnerable.

Of course, how worried we should be about indebtedness is related not only to income but also to the value of debtors’ assets. When it comes to households, the most important asset in many jurisdictions is residential property. In Canada, housing equity represents about one third of total household assets. While demographic forces have been a source of upward pressure on house prices in the past, continued population aging and slower population growth going forward suggest a reversal of this trend. All else being equal, demographics will weigh on the demand for housing.[14] Any price effect would directly impact the net wealth of households, at least in the transition period.

Obtaining a reliable estimate of the impact of demographics on house prices is very difficult. Much will depend on the response of housing supply and the extent to which older households downsize. Other factors will also have an influence on housing markets in Canada and elsewhere, many of which could work in the opposite direction. For instance, it will also depend on how much urbanization and immigration bolster demand. The relative importance of these other factors will differ within and across jurisdictions.[15] Nonetheless, there is no guarantee that relying on housing wealth will yield the expected payoff.

The second channel through which slower growth and lower returns affect financial stability relates to risk taking. As households cope with shifts in the valuation of their main asset, they may also face lower returns on other investments because of the lower neutral interest rate.[16] And since people are living longer, they may need more savings for their retirement years.

Predicting the precise impact of lower interest rates on household savings is difficult because not all households will choose the same strategy. Empirical studies find that household savings will typically decline when interest rates fall.[17]This suggests that workers, instead of saving more, generally choose to invest in riskier assets, work longer or earn lower retirement incomes. But these are not normal times, and with interest rates so low for so long, there may be a point at which we observe higher savings.

Asset and pension fund managers also face increased incentives to take on more risk with a lower neutral rate. Defined-benefit pension plans are in a particularly difficult position: funding and benefit levels were set based on shorter lifespans, a smaller number of retirees relative to the working-age population, higher discount rates and higher expected asset returns. Not surprisingly, the funding status of major defined-benefit pension plans, both public and private, has deteriorated.[18] Defined-contribution plans are also facing pressures—the amount that individuals need to contribute to fund a given level of nominal retirement income has increased substantially.

Although they may turn to increased contributions or lower benefits over time, many pension funds are adopting strategies that include a larger share of alternative assets in an effort to generate higher returns. Some pension funds are also taking on more leverage. Large defined-benefit plans have the scale and expertise to diversify into less-liquid assets and into regions with higher expected returns, including in emerging markets that have relatively higher potential to grow.

They also have a greater ability than many other investors to weather short-term market volatility —and even take advantage of it—because their liabilities are largely long term and their funding is secure. Nonetheless, pension funds are often large participants in the financial system, as they are in Canada, and so risks in this sector merit careful monitoring.

Individual investors face similar challenges. As rates of return available from public bond and equity markets decline, they too are searching for alternative sources of yield. The investment industry has responded by creating fund products based on non-traditional, less-liquid underlying assets that expand the range available to individual investors but also carry risks.[19] Alternative, open-ended mutual funds are an interesting example. They appear to offer daily liquidity for underlying assets that can be very illiquid, such as commercial real estate or commercial bank loans. In reality, this practice could result in redemptions being suspended, as we saw with some UK property funds in the wake of Brexit.

Market participants investing in a wider universe of riskier assets may be desirable if it increases access to funding for productive projects. The crucial question is whether investors can properly price and manage the risks. History is rife with examples of when excessive and prolonged search for yield ended badly.

The third channel relates to bank business models. In most economies, the banking system is integral to the provision of credit to households and businesses and therefore the efficient transmission of monetary policy. However, banks can also be the source of financial instability.

In principle, a key determinant of a bank's level of profitability is net interest margin—the difference between what they charge on loans and what they pay for funding. At first glance, there is no theoretical reason banks could not achieve their desired margins even if the neutral rate is lower. In practice, however, problems arise when policy rates drop to very low levels. This is because banks do not always have the flexibility to reduce their funding costs in line with the declines in their interest income. In particular, banks have proven reluctant to pass lower interest rates—especially negative rates—on to their retail deposit base. In the United States, for example, net interest margins narrowed by about 20 per cent between 2010 and 2015. Without significant adjustments to expectations for returns on equity, these pressures on margins could prompt banks to change their business models and shift activity away from deposit-based lending toward other activities. That said, banks are limited by Basel rules on capital, leverage and liquidity in the amount of additional risk they can take on.

The demographic trends and other factors that have contributed to the decline in the neutral rate will also likely have implications for how banks do business. As aging baby boomers switch from saving to dissaving, the mix of banking products will adapt. Weaker housing demand could reduce the demand for mortgage and consumer credit, including home equity lines of credit. In fact, housing itself is transitioning from being a savings vehicle to a dissaving one, through products such as reverse mortgages, and may even drive innovation in the provision of financial services.[20]

Pressures on bank business models come at a time when banks are also facing increased competition for profitable segments of the value chain, such as payments and data. Clearly, banks are adapting in response to these pressures. At the same time, important financial activities and related risks are migrating to the less-regulated sector. While financial reform has reduced the likelihood of instability coming from banks, these trends merit monitoring.

Taking the long way home

These risks may at times be reminiscent of Odysseus's voyage back to Ithaca. Unlike Odysseus, though, we are not at the mercy of the gods. There are some promising strategies to mitigate the risks ahead.

The first is to promote a sound global financial system. G20 countries have to complete the post-crisis financial reforms they have agreed to, whether those reforms are related to banks, financial market infrastructures or non-bank financial intermediation. We saw some of the benefits of increased bank capital and liquidity in terms of market functioning in the aftermath of the Brexit vote. It is still early days for financial reform, though, and we may not have gotten everything perfectly right. The Financial Stability Board is appropriately focused on measuring the effects of the reforms, including those on financial market functioning and cross-border financial market integration. Another important aspect that should be considered, where possible, is the impact on wealth and income distribution.[21]

A sound financial system also requires macroprudential tools to lean against credit cycles. The effects of downturns in these cycles can be very costly and difficult to clean up. Monetary policy is too blunt an instrument to fine-tune credit cycles. That is why macroprudential measures aimed at specific sectors are a better way to address financial vulnerabilities.[22]

The second strategy is to adopt policies that promote growth. You will not be surprised to hear that, as a central banker, I think that monetary policy best contributes to the overall health of the economy by keeping inflation low and predictable. In pursuit of this goal, monetary policy can at

times ease the financial stability risks associated with negative shocks that reduce households' disposable incomes and their ability to service existing debt. This was the case in Canada when we lowered our policy rate twice in 2015 in response to the oil price shock.

At the same time, the scope for monetary policy to offset negative demand shocks will be more limited as we face a lower neutral rate. As was discussed at length in Jackson Hole last month, central banks have developed other tools, like quantitative easing and productive uses of their balance sheets.[23] The efficacy and long-term effects of unconventional tools will only be known over time.

There is another reason we should not count on monetary policy to solve everything. Monetary policy is not well suited to deal with structural problems, and today's challenges go far beyond temporary shocks. Fiscal policy can be a powerful tool to boost growth, from both the demand and supply sides. Infrastructure spending can be particularly effective if it raises trend labour productivity, since it can help raise potential growth and ease pressures on the neutral rate.[24]

That said, government spending cannot solve everything either. We know that an aging population will put pressure on public finances through pensions and healthcare spending.

When I was at the G20 meeting in Chengdu this summer, we reiterated the urgency of a comprehensive strategy to achieve a stronger trajectory for global growth. In addition to investment in infrastructure, countries agreed to raise potential growth by reforming their product and labour markets, as well as their tax systems, and to develop policies to support innovation and enhance trade.[25]

The last strategy I'll mention is crucial: we have to adapt to the new reality of lower potential growth. That means changing our investment strategies and risk-management practices to reflect lower rates of return for any given level of risk. For households, this may mean saving more before retirement or planning for a lower post-retirement income. It also means acknowledging a reduced capacity to grow out of existing debts. The faster we do this, the safer the financial system will be.

Conclusion

Let me wrap up. At one point in their journey, Odysseus and his men come across an island inhabited by lotus-eaters. The fruit of the lotus makes those who eat it forget about their journey —so much so that Odysseus has to force a couple of his companions back on the ship to continue the trip home with him.

It strikes me that we may be at a similar point: after what we have been through, it is tempting to enjoy some respite from our own long journey. We cannot. If there is one thing we have learned from the past decade, it is that imbalances can take a long time to develop and even longer to resolve.

Investors and market participants have to adapt to lower neutral rates. Countries must continue to work to meet their G20 commitments and take fiscal and structural measures that will improve long-term growth. Authorities have to continue to solidify the global financial system and guard against emerging problems.

It is a long road, but it is the one that will get us safely home.

Content Type(s): Press, Speeches

---

[1] Based on one-year-ahead forecasts. See J.-D. Guénette, N. Labelle St-Pierre, M. Leduc and L. Rennison, "The Case of Serial Disappointment," Bank of Canada Staff Analytical Note No. 2016–10 (July 2016).

[2] Economists call "potential output" the maximum output that an economy can generate without sparking inflationary pressures. Over time, an economy is expected to operate at its potential, with inflation steady. When it does, the growth rate of potential output determines the pace of economic activity.

[3] J. Bailliu, M. Kruger, A. Toktamyssov and W. Welbourn, "How Fast Can China Grow? The Middle Kingdom's Prospects to 2030," Bank of Canada Staff Working Paper No. 2016–15 (April 2016).

[4] A. Agopsowicz, D. Brouillette, S. Cao, N. Kyui and P. St-Amant, "April 2016 Annual Reassessment of Potential Output in Canada," Bank of Canada Staff Analytical Note No. 2016–4 (April 2016).

[5] According to United Nations population projections of the 15–64 age group, as published in the *2015 Revision of World Population Prospects*. For access to the database, go to esa.un.org/unpd/wpp/.

[6] See C. Cheung, D. Granovsky and G. Velasco, "Changing Labour Market Participation Since the Great Recession: A Regional Perspective," Bank of Canada Staff Discussion Paper No. 2015–2 (February 2015).

[7] For a discussion of the linkages between trade and productivity, see S. S. Poloz, "A New Balance Point: Global Trade, Productivity and Economic Growth" (speech to the Investment Industry Association of Canada and Securities Industry and Financial Markets Association, New York, 26 April 2016); C. Constantinescu, A. Mattoo and M. Ruta, "Does the Global Trade Slowdown Matter?" *Journal of Policy Modeling* (forthcoming); and S. Fischer, "Remarks on the U.S. Economy" (speech to The Aspen Institute, Aspen, Colorado, 21 August 2016).

[8] Another key factor going forward will be global migration. If unemployed workers can relocate to where their labour is employed more fully and productively, this could help offset the effects of demographic forces.

[9] According to projections by the Organisation for Economic Co-operation and Development (OECD), after a very brief recovery from the recent crisis, global potential growth will continue to decline until 2060. OECD, "Growth Prospects and Fiscal Requirements over the Long Term," in OECD Economic Outlook, Volume 2013 Issue 1: 193–221.

[10] This should not be confused with the short-term or contemporaneous concept of neutral, which is the interest rate that would be required to equate an economy's output with its potential at a given point in time.

[11] While we expect retirees to transition from saving to dissaving, our research finds this is only a partial offset. R. R. Mendes, "The Neutral Rate of Interest in Canada," Bank of Canada Staff Discussion Paper No. 2014–5 (September 2014).

[12] The Terms-of-Trade Economic Model (ToTEM). The simulation results are based on the same distribution of shocks as observed over the 1995Q1–2015Q2 sample. Canada's potential GDP growth is estimated to have fallen from just under 4 per cent in 2000 to around 1 1/2 per cent today.

[13] The simulations also show that the average time spent at the effective lower bound would increase from about 1.5 to 6.5 quarters.

[14] E. Takáts, "Ageing and Asset Prices," Bank for International Settlements Working Papers No. 318 (August 2010).

[15] In countries such as Canada, Australia and New Zealand, population growth, migration and urbanization have contributed to a rise in house prices since the mid-1990s. See L. Schembri, "The Long-Term Evolution of House Prices: An International Perspective" (speech to the Canadian Association for Business Economics, Kingston, Ontario, 25 August 2015).

[16] When the neutral rate falls, asset prices should rise, all else being equal, because the rate at which future cash flows are discounted declines. The gains in asset prices would help buffer the initial impact on pre-existing holders of assets. Nevertheless, over time, lower returns would be unavoidable.

[17] For surveys of the literature, see R. H. DeFina, "The Link Between Savings and Interest Rates: A Key Element in the Tax Policy Debate," Federal Reserve Bank of Philadelphia *Business Review* (November/December 1984): 15–21; and L. Rachel and T. D. Smith, "Secular Drivers of the Global Real Interest Rate," Bank of England Staff Working Paper No. 571 (December 2015).

[18] According to a 2015 survey conducted by Mercer, the average funding level for pension funds sponsored by S&P 1500 companies is 79 per cent. By comparison, the funds were fully funded before the global financial crisis. See www.mercer.com/newsroom/september-2015-pension-funding.html.

[19] For a discussion of those risks, see S. Ramirez, J. S. Jimenez and J. Witmer, "Canadian Open-End Mutual Funds: An Assessment of Potential Vulnerabilities," Bank of Canada *Financial System Review* (June 2015): 47–55.

[20] A reverse mortgage lets owners borrow against their home equity, allowing them to turn it into cash without having to sell the home or making regular payments. Interest accrues on the value of the loan, which is repaid in full upon the sale of the house. See www.fcac-acfc.gc.ca/eng/resources/publications/mortgages/Pages/Understa-Comprend.aspx.

[21] For an example of this type of analysis, see J. Schroth, "Financial Crisis Interventions," Bank of Canada Staff Working Paper No. 2016–29 (June 2016).

[22] Macroprudential tools are regulatory measures used to promote the safety of the entire financial system. For more on the complementarity of monetary policy and macroprudential measures, see T. Lane, "Monetary Policy and Financial Stability—Looking for the Right Tools" (speech to the HEC Montréal, Montréal, 8 February 2016).

[23] J. L. Yellen, "The Federal Reserve's Monetary Policy Toolkit: Past, Present, and Future" (speech to a symposium sponsored by the Federal Reserve Bank of Kansas City, Jackson Hole, Wyoming, 26 August 2016).

[24] S. Leduc and D. Wilson, "Roads to Prosperity or Bridges to Nowhere? Theory and Evidence on the Impact of Public Infrastructure Investment," National Bureau of Economic Research, NBER Working Paper No. 18042 (May 2012).

[25] These efforts are part of the G20's "2 in 5" ambition that was adopted by the G20 in 2014. At the 2014 Brisbane Summit, G20 Leaders endorsed the comprehensive growth strategies initiative, which was designed to lift GDP by more than 2 per cent above the baseline trajectory over the following five years.