NATIONAL BANK
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SPECIAL REPORT

Economics and Strategy

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IS IT TIME TO PULL BACK STIMULUS?

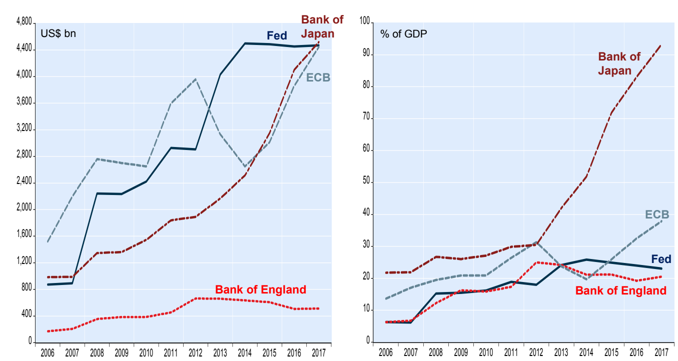
Summary

- *Central bankers have shown over the years that there can indeed be too much of a good thing. Ultra-loose monetary policy stimulus may have been warranted in the aftermath of the 2008-09 financial crisis, but it is arguably not appropriate anymore.*
- *True, consumer price inflation remains low in advanced economies. But could inflation be low in part because of, and not despite, ultra-loose monetary policy? By pushing too much liquidity for too long, central bankers are not only fueling asset price bubbles and raising odds of a new financial crisis surfacing in coming years, but are also giving governments an opportunity to shirk their responsibilities. That explains the lack of fiscal stimulus and a diminished sense of urgency in tackling reforms, which are arguably restraining growth and hence inflation in advanced economies.*
- *Conventional wisdom among central bankers is that potential GDP growth and hence the natural rate of interest (R-star) has declined over time, warranting extraordinary measures such as zero or even negative interest rates and massive asset purchase programmes. But is it possible that such extraordinary monetary policy actions were based on incomplete central bank models which inadequately account for supply shocks and government incentives? Is it possible that, thanks to technological advances, NAIRU is lower and potential GDP growth and hence R-star are higher than what is currently believed? If the answer to any of those questions is yes, then perhaps it's time for central banks to pull back monetary policy stimulus and put the onus of generating growth, and hence inflation, on fiscal policy.*

Years of extraordinary monetary stimulus …

It has now been nine years since the world's major central banks embarked on a mission to rescue the world economy from a financial crisis and avert deflation. In addition to bringing down their target interest rates to all-time lows, central banks in the U.S., the UK, the Eurozone and Japan experimented with quantitative easing, growing their respective balance sheets to unprecedented levels. Some were more aggressive than others — in Japan the central bank's balance sheet is now almost as big as the economy itself — but the common theme was to flood financial markets with liquidity to bring down bond yields and hence the cost of borrowing.

World: Central bank balance sheets are large
Central bank balance sheets

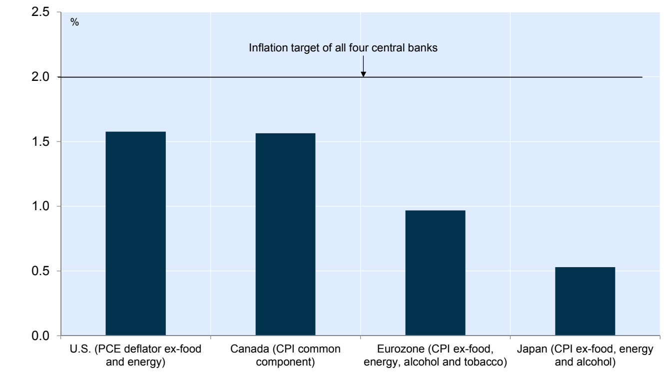


NBF Economics and Strategy (data via Bloomberg, IMF)

… have failed to prop up inflation

While that strategy contributed to pulling the global economy out of the 2009 recession and financial crisis, it hasn't had the desired effects on inflation, the latter remaining below the target of major central banks. In the last five years, the annual core inflation rate has averaged 1.6% in the U.S. and Canada and less than 1% in the Eurozone and Japan.

World: Major central banks have failed miserably on their inflation objectives
Average of last five years for annual core inflation rate (up to and including June 2017)



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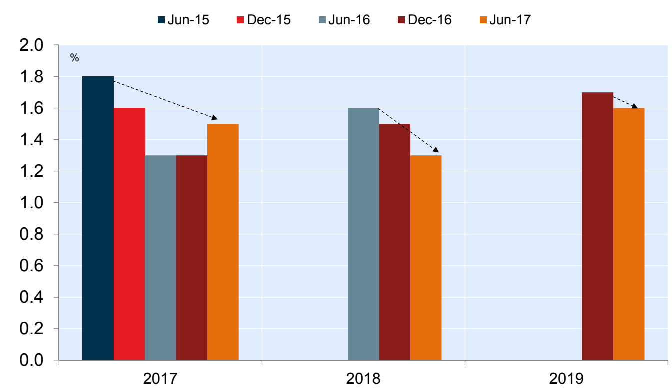
Struggling to generate inflation, central bankers have had to repeatedly revise down their forecasts. The failure to hit their inflation targets did not engender humility among central bankers, the latter instead attributing the miss on inflation to "temporary factors" and remaining adamant in their communications that they are confident of eventually hitting their inflation target. But the fact that inflation has remained below target for so long begs the question about whether central banks can really gauge inflation, let alone control it?

European Central Bank keeps revising down its inflation forecasts
ECB inflation forecasts



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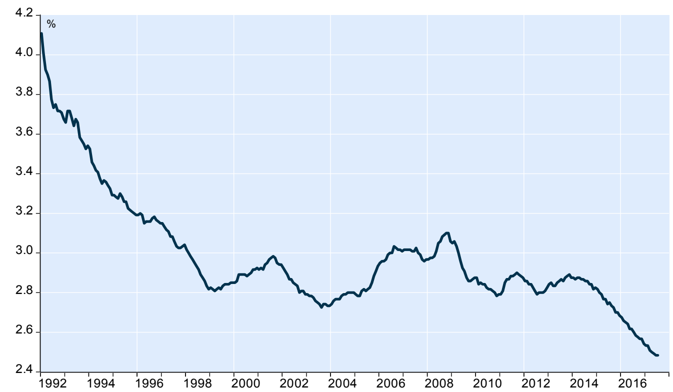
Why are central bankers failing on inflation?

The longer it takes central bankers to achieve their inflation objective, the lower the odds of success. That's because persistently low inflation tends to cause expectations to drift lower over time. In the U.S. for example, the University of Michigan surveys of consumers show that inflation expectations for the next five years have fallen to the lowest on records. Such declining expectations of inflation may have started a vicious cycle by diminishing workers' bargaining power and wages, and keeping production costs and hence inflation low.

U.S.: Inflation expectations have dropped sharply
Expectations for inflation in the next 5 years, 12-month average

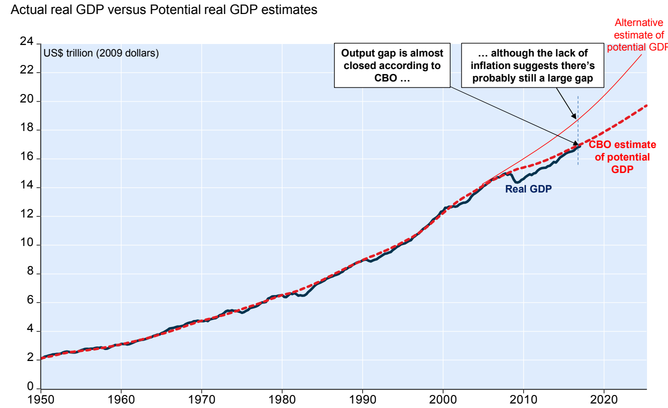


NBF Economics and Strategy (data via University of Michigan surveys of consumers)

Another reason for the repeated downgrades by central banks of their inflation forecasts is the difficulty in estimating potential GDP, the level of output that would be consistent with the full utilization of capacity in the economy. Potential GDP is unobservable, but central banks attempt to measure it by making assumptions about labour and capital inputs as well as productivity. While labour and capital inputs can be estimated with some confidence, productivity on the other hand can be challenging to estimate, particularly in the services sector.

Take the Congressional Budget Office's estimate of U.S. potential GDP. According to the CBO, real GDP in the U.S. is now almost equal to potential which means that economic slack has been fully absorbed — as economists would say, the output gap is now zero.

U.S.: What is the true Potential real GDP?
Actual real GDP versus Potential real GDP estimates



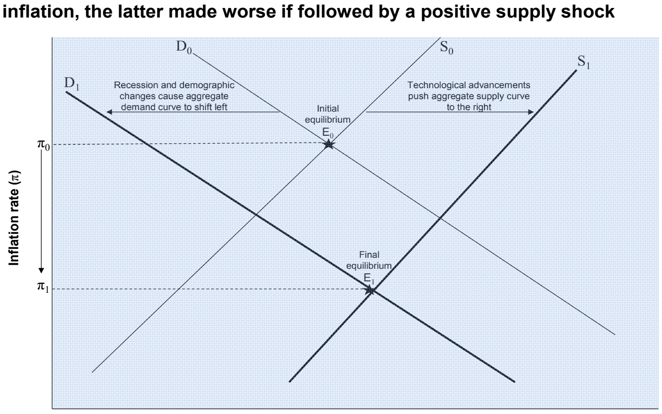
NBF Economics and Strategy (data via Congressional Budget Office and Datastream)

But if that was really the case, wouldn't the annual core PCE inflation rate be higher than the anemic 1.6% print it averaged in the first half of 2017? The persistently low core inflation rate suggests the output gap is probably much larger than what the CBO had estimated. The fact that a highly reputable agency such as the CBO is struggling with the estimation of potential GDP highlights the magnitude of the challenge facing central banks in forecasting the output gap and hence inflation.

And if potential GDP is being understated, then the Non-Accelerating Inflation Rate of Unemployment — NAIRU is also an unobservable variable — has to be lower than what central banks are estimating. That may explain why wage inflation remains weak in places such as the U.S. despite the unemployment rate falling to the lowest in over 15 years.

Granted that demographic challenges have capped labour input and hence trimmed a few ticks from calculations of potential GDP growth. But one could argue this is being more than offset by technological advances such as the internet which have spurred new industries (i.e. a positive supply shock) and hence increased the world economy's potential. Tech companies such as Airbnb and Uber have effectively increased supply of rental accommodation and transportation services respectively, depressing prices accordingly. The "Amazon effect" — brick and mortar retailers being forced to become more efficient to compete against low cost internet-based retailers — has also contributed to pushing out supply and restraining prices.

Revisiting basic economics: A negative demand shock causes a drop in inflation, the latter made worse if followed by a positive supply shock



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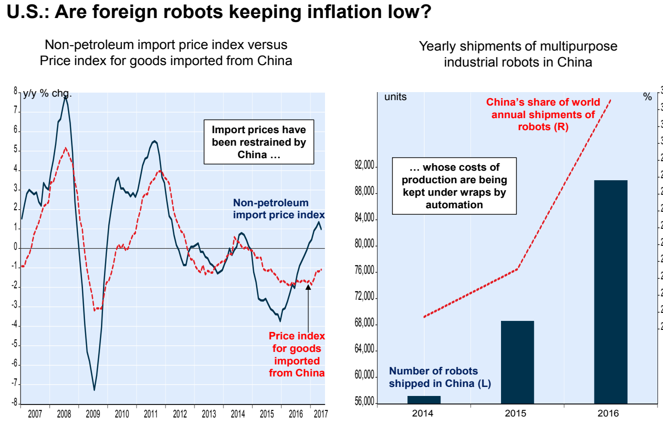
And there's little doubt that globalization has also contributed to low inflation. When China entered the World Trade Organization in late 2001, many expected the ensuing deflationary impact on the world economy to be temporary. The thinking at the time was that rising wages in China would eventually erode the latter's cost advantages, allowing import price inflation (of China's trade partners) to bounce back. While wages have indeed risen in China over the last 16 years, overall costs have, however, been kept under wraps thanks to automation. China has ramped up spending on automation over the years culminating in a record 90,000 robots being purchased in 2016. That's more than 30% of the world's shipments of industrial robots last year. This ability to control costs through automation explains why, to the Fed's chagrin, prices for goods imported from China by the U.S. continue to fall on a year-on-year basis.

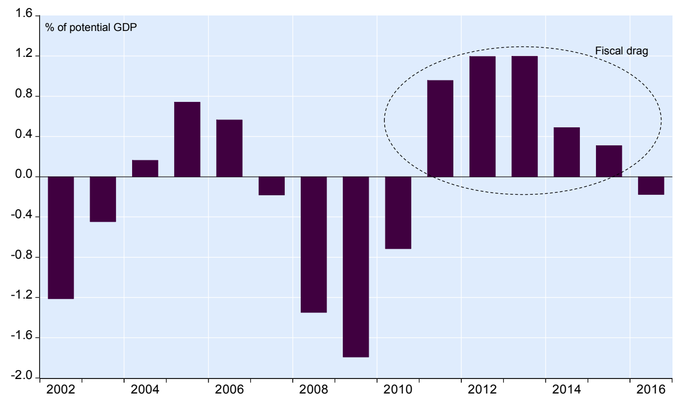
U.S.: Are foreign robots keeping inflation low?



NBF Economics and Strategy (data via Datastream, International Federation of Robotics)

But the inability of central bankers (and economists in general) to gauge inflation isn't just about inadequate macroeconomic models that ignore structural changes such as technology and automation. Uncertainties brought by fiscal policy also present challenges for central bankers in estimating the output gap. The massive amounts of monetary stimulus dispatched since 2008 should have been more effective in propping up growth, closing the output gap and boosting inflation. But the impacts of expansionary monetary policy have been blunted by fiscal tightening as evidenced by a narrowing structural deficit in advanced economies, particularly from 2011 to 2015. In other words, fiscal and monetary policies have been out of phase and cancelling each other out, capping growth and inflation as a result.

World: Fiscal policy hasn't always complemented monetary policy
Structural budget balance for advanced economies, annual change



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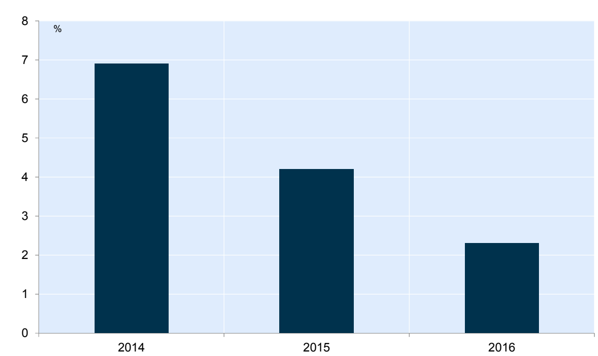
Consequences of low interest rate for too long

But this is where our sympathies for central bankers end. Governments acted the way they did because central bankers let them. Indeed, by ramping up monetary policy stimulus over time central bankers have in effect given governments an opportunity to shirk their responsibilities. That explains not only the narrowing structural budget deficit and lack of fiscal stimulus in advanced economies but also a diminished sense of urgency in tackling reforms. In Europe for example, less than 3% of the recommendations put forward by the European Commission last year — such as reforms to tackle labour market rigidities and boost competitiveness — were implemented by targeted governments.

European Union: Reform efforts have weakened
Share of fully addressed country specific recommendations or those where substantial progress has been made



NBF Economics and Strategy (data via European Commission)

And by delving into extraordinary monetary policy stimulus for too long, central bankers have arguably sown the seeds of the next financial crisis. Cheap credit has fueled prices of assets including bonds, stocks and houses over the last decade, raising alarm bells about a crash in the future.

A change of strategy from central bankers?

With some asset prices arguably in bubble territory, and success remaining elusive on consumer price inflation, perhaps central bankers in major advanced economies may want to consider a change in strategy.

One possibility is to lower the inflation target to reflect structural changes brought by technological advancements, making it easier to warrant rate hikes. Another is to keep the 2% inflation target but apply that target to a new CPI measure which better captures assets purchased by consumers including houses and financial securities. A third option is to be fully transparent and acknowledge that, in light of structural changes and government inaction, central banks cannot possibly achieve their inflation objectives and as such will seek a second best solution of preventing asset price bubbles.

But given how invested central banks are in the current thinking on monetary policy, we seriously doubt there will be any mea culpas. Some, like the Bank of Japan, will continue to hopelessly push stimulus in an attempt at offsetting the impacts of unfavourable demographics. Others, such as the Bank of Canada, concerned about asset price bubbles, could follow the lead of the U.S. Federal Reserve by starting the process of removing monetary stimulus despite inexistent pressures on consumer price inflation while trying to convince markets that they are confident inflation will eventually return to target "over the medium term" (whatever that means).

Conclusion

Conventional wisdom among central bankers is that potential GDP growth and hence the natural rate of interest (R-star) has declined sharply over time. That belief, backed by fancy macroeconomic models, have prompted central bankers in major economies to push stimulus to the extreme. But is it possible that such extraordinary monetary policy actions were based on incomplete models which inadequately account for supply shocks and government incentives? Is it possible that, thanks to technological advances, NAIRU is lower and potential GDP growth and hence R-star are higher than what is currently believed? If the answer to any of those is yes, then perhaps it's time for central banks to pull back monetary policy stimulus and put the onus of generating growth, and hence inflation, on fiscal policy.

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