# Rodrigo Vergara: Monetary policy through asset markets – lessons from unconventional measures and implications for an integrated world

Opening remarks by Mr Rodrigo Vergara, Governor of the Central Bank of Chile, at the Central Bank of Chile's Nineteenth Annual Conference, Santiago, 19 November 2015.

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Monetary policy has mostly been about setting the appropriate interest rates to stir the economy towards a path coherent with its fundamentals. In this sense, the developments in most central banks in the last 6 years have not been out of the box, so to speak. But we can probably say, with little risk of overstating reality, that the *ways* of achieving changes in the cost of credit through monetary policy has changed significantly since the global financial crisis.

To fully appreciate the extent of these changes, it's useful to do a quick recap of what traditional monetary policy was prior to 2008. In the vast majority of countries, the name of the game was setting the stance of the short term rates –indeed, the overnight rate at which banks lend to each other. The hope was that, by influencing this very short-term rate, monetary policy actions would feed into the broader economy by affecting longer term rates, as well as spreads of riskier forms of credit which in the end are the channels by which the policy stance affects the cost of borrowing of households and firms. In this context, perhaps the biggest advances of monetary policy of the last 20 years leading to the GFC had to do with the transparency and the overall macroeconomic coherency of interest rate decisions, which led, among other transformations, to the adoption of explicit inflationary objectives in a number of advanced and emerging market economies.

In the aftermath of the global crisis, it soon became clear that traditional MP was simply not going to cut it, especially given the limitations of other policy options, such as fiscal expansion, to reactivate the global economy after the major blow it suffered. Central bankers were forced to be creative and think outside the box of traditional monetary tools in order to make a difference.

A useful framework to understand how policy tools have evolved is to think about interest rates in the following way. The price of a given form of debt, issued at a particular maturity and by a specific counterparty, is the sum of three main components. The first is the expectations of short-term, risk-free debt over the maturity of the instrument. Let's call this component the path of risk-neutral rates. The second is the compensation for risk that must be offered to an investor to account for the fact that longer maturity instruments are more volatile (have higher duration) than short-term rates, let's call it the term premium channel. The third is simply default risk. In essence, all policy actions by the Fed, the ECB, the banks of Japan, England, Canada, and of many small open economies in the last 6 years have been about affecting long-term rates by influencing one, and often times more, of these interest rate components.

Take the case of forward guidance. When nominal rates reached the ZLB, and particularly due to the low inflation environments, traditional monetary policy became very constrained –fully constrained by definition, one might say, given the impossibility of lowering short term rates any further. However, to the extent that one can credibly influence the expected path of future monetary policy actions, risk-neutral rates at different horizons can be lowered, perhaps even significantly so. However, as pointed out by Mike Woodford in an influential paper presented at Jackson Hole a few years ago, to truly make a dent on rates with this strategy, central bankers were likely to run into a temporal-inconsistency problem. This problem is basically that in the event that long-term rates can be reduced enough to jump-start the economy, the ex-post optimal policy stance would be inconsistent with the one promised in the midst of stagnation. Quoting from his paper: "the future policy that one wishes for people to anticipate is one that the central bank will not have a motive to implement later, if it makes its decisions then in a purely forward-looking way, on the basis of its usual stabilization objectives." (end quote) This does seem like a hard conundrum to get away from, and probably limits the traction of this type of tool as a strong driver of longer-term rates.

Partly due to these limitations, Central banks have also directly tackled the term premium by purchasing large quantities of long-term assets. The idea is that by removing some duration from the fixed income markets, private investors' aggregate exposure to interest rate risk is diminished, leading to a lower required compensation for bearing such risk. Of course, this logic relies on some form of imperfections and/or market segmentation, but there is by now significant evidence, including some excellent papers to be presented in this conference, that QE has had a measurable impact on long-term rates through this channel. A similar logic applies to the default risk-premium: to the extent that returns on safer debt are compressed by central bank purchases, investors are tempted to reach for yield into other fixed-income markets, such as mortgages, corporate bonds, and emerging market instruments.

Against this backdrop, it seems appropriate to dedicate this year's conference to taking stock of the transformations that have occurred in monetary policy, if not in the objectives, at least in the tools by which these objectives are achieved. Moreover, such introspection seems crucial to our understanding of how to go forward. Indeed, it is very likely that such measures will become standard practices, with the subtitle "unconventional" eventually scratched off altogether.

In fact, there are several reasons to suspect these exceptional measures are here to stay. On the one hand, it might very well be the case that we are witnessing profound structural changes that imply a new normal of much lower interest rates that we have been accustomed to –I suspect the keynote address by Larry Summers tomorrow may touch upon such issues. If this is so, then it is more likely that we will run into the ZLB in future business cycles, forcing central banks to tap upon these so-called unconventional measures time and again. On the other hand, these measures have apparently worked. Why then should we not embrace them as part of our standard set of instruments?

The structure of this conference follows the logic of addressing three main aspects of the transformation in the practice of Monetary Policy in the last decade. Our first session includes three papers that tackle, from both a theoretical and empirical perspective, the impact of such unconventional measures on interest rates at different horizons and over a wide variety of securities. Here we are fortunate to have among the presenters Dimitri Vayanos, Gautti Eggerston, and Eric Swanson, all accomplished scholars who have dedicated an important part of their research in recent years to delve deeper into the quantitative effects of such policies.

The second session deals with the financial stability considerations of these measures. After all, to date several unconventional policy efforts have begun in Japan, the US, Europe and elsewhere, but none has so far ended –in short, we are not out of the woods yet, and claiming success might still be a bit preliminary. The concern is that while an ambitious program of asset purchases might be welcome by different investor classes as asset prices are pushed upwards, it might prove much more difficult to orchestrate an orderly retreat which inevitably relies on increasing discount rates at which future income streams are priced. This is particular true if some projects were only funded to begin with due to the exceptionally low interest rate environment, and/or if such investments were intermediated by fund managers who care not only about income streams, but also (and mostly) about short-term price fluctuations. Here we will have an interesting discussion including papers by Stephen Morris, Michael Woodford, and Gustavo Suarez, which will enlighten us about the theoretical aspects to keep in mind when evaluating the broader consequences of asset purchase programs, as well as the empirical evidence regarding the effects of the risk-taking channel on the quality of loans originated.

But this is not only a conference about monetary policy in developed economies. Indeed, securities from emerging markets fit naturally into the category of riskier assets that are expected to be affected by investors' search for yield in an environment of low interest rates, as has been documented by a growing and exciting empirical literature. This will be the topic of the third and final session of the conference, and will include presentations by Helene Rey, Simon Gilchrist, and Elias Albagli. This topic is of particular concern for central bankers and policymakers in LATAM and other emerging regions, which have good reasons to be worried with the consequences of US monetary normalization in an environment where further exchange rate pass-through will put increasing pressure on our inflation targets, while at the same time interest rate pass-through puts increased pressure on subpar levels of growth.

Before giving an official start to our nineteenth annual conference, let me end by stressing a related but perhaps less appreciated aspect by which the events of the last few years have changed, I believe in both a fundamental and desirable manner, the way monetary policy is handled and communicated. And if you permit me, I will illustrate the point using the recent Chilean experience.

In Chile, although economic conditions have been far less complex than in developed countries, we have also experimented with unconventional policies ... and frankly, I think the experience has been successful.

First, in response to the Global Financial Crisis of 2008 the Bank increased the supply of liquidity in pesos and dollars – through repos and swaps –, augmented the extensions of the swap program, and broadened the range of eligible collaterals. They were all measures designed to align market rates with the Monetary Policy Rate and to mitigate foreign currency liquidity tensions. Forward guidance was also an important tool. With the Monetary Policy Rate close to zero – we cut the interest rate from 8.25% to 0.5% in less than a year – , communicating that we planned to keep a very low short-term interest rate for an extended period of time. This was essential in keeping medium and long term interest rates low.

These measures – as well as some other more exogenous developments such as the rapid recovery of commodity prices – allowed the economy to rebound quite fast from a mild recession in 2009. Actually, in the post-crisis years GDP growth was above 5% in a context of low inflation.

Over time, these measures were eliminated, but certainly the lessons we learned from the crisis have been incorporated into our policy analysis and toolkit. Among the most significant I would mention two: First, the fact that the central bank must be rapid to respond and use all the available tools if necessary. Second, that a clearer signal about what we believe will be the path of interest rates in the future helps to have a more efficient transmission of the Monetary Policy, particularly in turbulent times. In fact, in the more recent period, marked by a higher than normal level of uncertainty associated with both a grimmer outlook for the Chinese economy and the normalization of monetary policy in the United States, we have made a special effort to signal the financial market what is the likely direction of our monetary policy in our baseline scenario as well as the risks involved. We have done this by increasing the transparency of our analysis and, especially, by being more precise in our communication. Of course it is too soon to make a comprehensive and definite analysis about the costs and benefits of this policy, but in my view this extra amount of forward guidance has been positive in order to achieve a smoother economic adjustment in difficult times.

I thank you for being here, and without further delay, welcome to our nineteenth annual conference: "Monetary policy through asset markets: lessons from unconventional measures and implications for an integrated world."