REMARKS BY JAVIER GUZMÁN CALAFELL, DEPUTY GOVERNOR AT THE BANCO DE MÉXICO, DURING THE SESSION "INFLATION TARGETING". CONFERENCE IN HONOR OF JOHN D. MURRAY, Bank of Canada, 25-26 August 2014.[1]

First of all, I wish to thank the organizers for their kind invitation to participate in this Conference in honor of John Murray. I met John at the Banco de México nearly thirty years ago. Since then, I have had the privilege of enjoying his friendship and his professional wit. Nobody in this room will be surprised if I say that I always admired John's capacity to analyze all sorts of complex subjects and put them in what appeared to be a rather simple and interesting way. But I confess I have learned at least as much from his always humble, open and enthusiastic attitude towards life and friendship. Both from a personal and a professional perspective, the space that is being left by John at the Bank of Canada and at international fora is going to be very hard to fill.

I am truly delighted to share this panel with such distinguished members, and to have the possibility to express some views on monetary policy under inflation targeting, a subject to which John has contributed a lot. I will focus my remarks on some of the challenges faced by inflation targeting at the current juncture, and on the Mexican experience with this regime.

More than twenty years after inflation targeting (IT) was first adopted by the Reserve Bank of New Zealand in 1990, the global financial crisis has given rise to a heated debate

[1] The views expressed in this document are strictly personal and do not necessarily coincide with those of Banco de México´s Board.

about the merits of using this framework for the conduct of monetary policy.[2] It has been claimed that adherence to an inflation targeting regime may have prevented central banks from setting a monetary policy accommodative enough to accelerate the pace and strength of recovery from the crisis.[3] In addition, some have claimed that inflation targeting is at least partly responsible for the current problems in the world economy, while others have concluded that this regime can increase the likelihood of a crisis.[4] The main argument is that by placing an excessive emphasis on price stability, central banks under inflation targeting regimes have not paid enough attention to financial system vulnerabilities.

In my opinion, the recent criticisms to inflation targeting are quite feeble. To start with, it is essential to recall that one of the main objectives of inflation targeting is the anchoring of medium- and long-term inflation expectations, as a means to achieve price stability at a lower cost in terms of economic activity. The results of the last years in this regard represent a source of praise and not of criticism for these frameworks. The empirical evidence available before the financial crisis supports the view that inflation expectations are more firmly anchored in economies using inflation targeting regimes, and in general that inflation and growth performance under IT compares favorably with that linked to

[2] See Reichlin, Lucrezia and Richard Baldwin (2013): "Is inflation targeting dead? Central Banking After the Crisis", *Centre for Economic Policy and Research;* and Woodford, Michael (2012): "Inflation Targeting and Financial Stability", *Sveriges Riksbank Economic Review* Vol. 2012(1):7-32.
[3] See Frankel, Jeffrey (2012): "The Death of Inflation Targeting", www.voxEU.org, posted June 19; and Beckworth, David (2014): "Inflation Targeting: A Monetary Policy Regime Whose Time Has Come and Gone", *Mercatus Center Research Paper*, July.
[4] See, for instance: DeGrauwe, Paul (2007): "There is More to Central Banking than Inflation Targeting," www.voxEU.com, posted November 14; Leijonhufvud, Axel (2008): "Central Banking Doctrine in Light of the Crisis," www.voxEU.org, posted May 13; and Giavazzi, Francesco and Alberto Giovannini (2010): "The Low-Interest-Rate Trap," www.voxEU.com, posted July 19.

alternative frameworks.[5] Other research carried out subsequently to assess the effects of the crisis, suggests a lower sensitivity of inflation to changes in demand in IT countries, and more aggressive interest rate cuts, a lower probability of deflation and sharp real depreciations not associated with a greater perception of risk by markets, in countries whose monetary policy was implemented under these regimes.[6] It has also been noted that in countries such as the UK, the credibility of the inflation target has been vital in allowing the authorities to adopt unconventional monetary policies.[7] In other words, it is highly likely that adjustment to the global financial crisis would have been much slower and more painful in the absence of IT regimes in many advanced and emerging market economies.

The above conclusions are reinforced by the fact that up to date Iceland is the only country that has been forced to suspend inflation targeting as a result of a financial crisis. A few other countries have left this regime, but only to join a monetary union. It is also worth noting that some of the largest central banks in the world, namely the U.S. Federal

[5] See Roger, Scott (2010): "Inflation Targeting at Twenty: Achievements and Challenges", in *Twenty Years of Inflation Targeting: Lessons Learned and Future Prospects*, pp. 25-56; and Gürkaynak, Refet et al., (2010): "Does Inflation Targeting Anchor Long-Run Inflation Expectations? Evidence from Long-Term Bond Yields in the U.S., U.K., and Sweden", *Journal of the European Economic Association* 8(6):1208-1242, December.

[6] See Lavigne, Robert et al. (2012): "Inflation Targeting: The Recent International Experience", *Bank of Canada Review*, Spring; and de Carvalho, Irineu (2010): "Inflation Targeting and the Crisis: An Empirical Assessment", *IMF Working Paper* No. 10/45.

[7] See Dale, Spencer (2013): "Inflation targeting and the MPC's forward guidance", remarks made at the International Journal of Central Banking Annual Conference "Inflation targeting and its discontents", September.

Reserve and the Bank of Japan, adopted numerical inflation objectives, the centerpiece of inflation targeting regimes, in the aftermath of the global financial crisis.[8]

It is true, as some have argued, that the attention paid to financial stability under inflation targeting regimes was insufficient. But the fair question here is whether the situation was different under alternative regimes. The answer is obvious. The widespread view before the crisis was that price stability combined with adequate microprudential regulation would suffice to achieve financial stability, irrespective of the specific monetary policy framework in place. Even today, debate on the proper role of monetary policy in achieving financial stability continues.

The Mexican experience provides an illustrative example of the advantages of inflation targeting. The implementation of prudent monetary and fiscal policies, combined with a favorable external environment, resulted in a sharp decrease of inflation and its volatility in Mexico since the mid-nineties. These efforts were substantially reinforced following the adoption of an inflation targeting framework in the early 2000s, the design of which benefited a lot from discussions with the Board and staff of the Bank of Canada, among them John Murray.

On the one hand, inflation targeting has allowed an additional decline in the level and volatility of inflation. Since the beginning of this century, both headline and underlying

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[8] Other major central banks, such as the European Central Bank and the Swiss National Bank, have frequently been considered as *de facto* inflation targeters since before the crisis, even though they have never formally adopted this regime.

inflation have fluctuated around their lowest levels since records exist, and the expectation is that headline inflation will converge to the 3 percent target in 2015.

On the other hand, the inflation targeting regime has led to a major structural adjustment in the process of price formation in Mexico. I would underline two developments in this respect. First, the empirical evidence shows a significant reduction in the pass through from the exchange rate to prices following the adoption of IT, thus supporting the view that this regime has contributed to anchor expectations and to foster an environment of low and stable inflation.[9] Second, the persistence of inflation sharply declined around the time IT was introduced in 2001, as it became more resilient to disruptions.[10] Moreover, both econometric work and the recent experience lead to the conclusion that the response of inflation expectations to supply shocks has been increasingly dampened since inflation targeting was adopted.[11]

The above progress in the fight against inflation, coupled with a strong macroeconomic framework and closer communication with the public within the context of the IT regime, have allowed the Banco de México to implement countercyclical policies in different episodes of weak economic activity, without adversely affecting medium and long term inflation expectations. This would have been simply unthinkable a few years ago.

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[9] See Capistrán, Carlos, Raúl Ibarra and Manuel Ramos-Francia (2011): "El Traspaso de Movimientos del Tipo de Cambio a los Precios: Un Análisis para la Economía Mexicana", *Banco de México Working Paper* No. 2011-12.

[10] See Chiquiar, Daniel, Antonio Noriega and Manuel Ramos-Francia (2010): "A Time Series Approach to Test a Change in Inflation Persistence: The Mexican Experience", *Applied Economics* Vol. 42:3067-3075.

[11] See Banco de México (2013): "Anclaje de las Expectativas de Inflación de Mediano y Largo Plazo ante Choques de Oferta Adversos", in Box 3 of the *Quarterly Inflation Report* for January-March.

While the case for inflation targeting has in my view strengthened after the crisis, it is evident that there are important issues highlighted by the latter, whose implications for IT regimes have to be carefully assessed. I would like to refer briefly to two of them: the role these regimes should play in the achievement and preservation of financial stability, and some of the communication challenges that have emerged in recent years.

The global financial crisis has served as a reminder of the crucial importance of financial stability for central banks. Dysfunctional financial markets impair the effectiveness with which monetary policy is transmitted to the rest of economy. Furthermore, financial crises often force central banks to intervene as lenders of last resort, and the magnitude of the shock they imply makes it more difficult or even altogether impossible for these institutions to achieve their targets.

As the recent experience has shown, price stability is a necessary but not a sufficient condition for financial stability. Therefore, the need to look for adequate instruments to preserve financial stability has become imperative after the crisis. Given the far reaching effects that the main monetary policy tool, i.e. the reference interest rate, may have on the broader economy, the use of more targeted measures specifically designed and implemented for this purpose is required. Macroprudential policy is clearly a natural candidate for this task.

Unfortunately, the use, as well as the scope and effectiveness, of such policies are still, to a great extent, unchartered territory, highly in need of further research and institutional adjustment. I would underline in particular the need for enhancing the theoretical

foundations for macroprudential policy, and more specifically the relationship of the financial system with the macro-economy; for a better understanding of the interactions between macroprudential and other policies, particularly in the monetary field; for further empirical work on the effectiveness of macroprudential tools; and for establishing adequate institutional mechanisms for the design and implementation of these policies.

It is important to bear in mind that the complexity of financial stability, and the uncertainties that surround the use of macroprudential tools, imply the adoption of a complementary focus that includes, in addition to the latter, traditional monetary, fiscal, and microprudential instruments. As a consequence, central banks will often have to participate actively in the design and implementation of macroprudential tools. In addition, although normally this will not be the first line of defense, there may well be instances in which monetary policy will need to respond directly to financial sector imbalances and vulnerabilities.

Let me turn now to the issue of communication. Following the global financial crisis, achieving an effective interplay with the public has become even more challenging for central banks operating under IT regimes.

On the one hand, the prevalence of a low economic growth environment in some countries has raised concerns that by adhering to a target for inflation, these central banks are not attaching sufficient relevance to the evolution of economic activity. Forward guidance has been used by some monetary authorities as a means to signal more clearly the intention to maintain a highly stimulatory stance until economic activity returns to

normality.[12] More generally, I have the impression that it would also be useful for central bank communication to place a renewed emphasis on the fundamental premise that, irrespective of the crisis, a low, stable, and predictable rate of inflation is the most important contribution that monetary policy can make to achieve sustained rates of economic growth over the long run.

On the other hand, the greater prominence that the central banking community has assigned to financial stability after the crisis raises difficult communication issues. To start with, in sharp contrast with a numerical target for inflation, financial stability is a rather complex concept to define, gauge, and, therefore, explain to the public. Furthermore, we are still far away from fully understanding what the appropriate response of monetary policy should be to address financial stability concerns. The recommendation that policymakers should clearly and consistently communicate their views on the stability of the financial system and how those views are influencing monetary policy seems quite sensible in this respect.[13] All in all, central banks under an inflation targeting regime enjoy an advantage in overcoming these challenges, as the building blocks for an effective communication strategy are readily imbedded in the foundations of the IT framework.

Naturally, the recent debate on inflation targeting has stimulated discussion on possible alternatives to enhance the functioning or even substitute these regimes. Let me comment on the one that proposes to increase the level of inflation under the target to ease the zero-lower-bound problem, i.e. the constraint on monetary policy arising from

[12] See Dale, Spencer (2013), Op. Cit.

[13] See Yellen, Janet (2014): "Monetary Policy and Financial Stability", Remarks at the 2014 Michel Camdessus Central Banking Lecture at the International Monetary Fund, July.

the fact that nominal interest rates are around zero. For instance, it has been argued that the inflation target for advanced economies could be increased from the 2 percent figure used by many of them to 4 percent.[14] According to this line of reasoning, a higher inflation target would raise the long run level of nominal interest rates, allowing larger decreases in rates before the zero bound becomes binding. This would make it easier for a central bank to restore full employment when an economic slump occurs.

The determination of an optimal target for inflation is a rather difficult endeavor which depends on the particular circumstances of each country. In my opinion, the adoption of an approach whereby the target is increased simply to ease the zero bound constraint on rates carries disadvantages that outweigh by far the possible merits. An increase of the target based on these grounds would imply not only higher levels of actual inflation, but also the potential undermining of hard-earned central bank credibility, and the resulting higher inflation volatility, greater difficulty to stabilize expectations and increases in risk premia. In addition, it is important to bear in mind that the zero bound problem is likely to emerge only under rare circumstances, while the inflation costs would be immediate. Furthermore, recent research based on parameter values consistent with US data has shown that increasing the target from 2 to 4 percent would result in net welfare costs, even after taking into account the reduced likelihood of monetary policy being constrained by the zero lower bound on nominal interest rates.[15]

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[14] See Blanchard, Olivier, Giovanni Dell'Ariccia, and Paolo Mauro (2010): “Rethinking Macro Policy”, *IMF Staff Position Note* No. 10/03; and Ball, Laurence (2014): “The Case for a Long-Run Inflation Target of Four Percent”, *IMF Working Paper* No. 14/92.

[15] See, Yehoue, Etienne B. (2012): “On Price Stability and Welfare”, *IMF Working Paper* No. 12/189.

To sum up, while it is true that inflation targeting should be further adapted to take into account the lessons from the global financial crisis, it is also clear that this does not imply neither a substantial modification of its fundamental structure nor a question mark on the merits of this approach for anchoring inflation expectations.

Let me conclude by quoting two phrases from a couple of John Murray's articles on IT, which in my view provide a splendid closing to what I have just said: "Perhaps inflation targeting will be supplanted by a new, and even more promising alternative. At the present time, however, there does not seem to be any obvious contender. For those who desire monetary policy independence, most of the other policy options have already been tried and found wanting".[16] "One thing is certain, no matter what is decided. The most important contribution that a central bank can make to economic well-being of households and businesses is the achievement and maintenance of price stability. …The only question, as always, is whether it can be delivered in an even more effective and reliable manner".[17]

Thank you.

[16] See Murray, John (2006): "Future Trends in Inflation Targeting: A Canadian Perspective", Presented at the conference co-sponsored by the New York Association for Business Economics and the Canadian Consulate General, New York, February.
[17] See Murray, John (2010): "Re-examining Canada's Monetary Policy Framework: Recent Research and Outstanding Issues", *Remarks before the Canadian Association for Business Economics*, August.