I am very honored for the opportunity to participate in this Seminar and to address such a distinguished audience. You will not be surprised if I say that I am also very impressed by the venue. The Palace of Westminster is not only one of the most beautiful sites in the United Kingdom, but also a revered symbol of history and democracy. I thank the European Economics and Financial Centre, and especially Professor Hannah Scobie, for the invitation to take part in this event, and Baroness Gloria Hooper for kindly agreeing to chair it.

I will concentrate my remarks on monetary policy in Mexico, with a special emphasis on the environment of uncertainty that has been affecting us for several years already and on one of its main ingredients, the renegotiation of the North American Free Trade Agreement (NAFTA).

The Banco de México’s primary mandate, enshrined in the country’s Constitution, is to seek the stability of the purchasing power of the national currency, that is, a low and stable inflation. This is based on a wide body of evidence leading to the conclusion that this is the best contribution that a central bank can make to a country’s growth and well-being. To this end, the conduct of monetary policy in Mexico rests at present on three main pillars which, although mutually reinforcing and therefore complementary, have been sequentially erected through efforts made over the course of several decades.

First among these, is the autonomy that our Central Bank has enjoyed since 1994. This resulted in part from a growing global trend that, in light of mounting evidence highlighting the beneficial effects of central bank autonomy on inflation and growth, sought to equip national monetary authorities with the institutional features that would allow them to formulate policy with a long-term perspective and isolated from political interference. In the Banco de México’s case, the importance of moving in this direction was

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1 The views and opinions expressed in this document are the sole responsibility of the author and do not necessarily represent the institutional position of the Banco de México or of its Board of Governors as a whole.
more evident given the need to prevent the re-emergence of damaging inflationary episodes of the past, which had resulted from the use of central bank money to finance fiscal deficits. Indeed, the independence granted to the Central Bank is one of the most transcendental institutional reforms in Mexico’s modern history.

A second pillar consists of the adoption, since 2001, of an inflation targeting regime. By assigning a numerical value to the goal for monetary policy, these frameworks have allowed central banks of both advanced and emerging economies to rely on a more efficient nominal anchor to guide inflation expectations. At the same time, they have strengthened the institutional set up for the implementation of monetary policy. In the case of Mexico, a target of 3 percent has been set for annual CPI growth, with a variability interval of plus/minus 1 percent to take into consideration the multiple shocks that can affect relative prices in the short term. Inflation targeting has proved instrumental in reducing inflation in Mexico, and is associated with important structural changes in the process of price formation in the economy – a decreased pass-through of the exchange rate to prices, a lower persistence of inflation and a much stronger resilience of long-term inflation expectations to supply shocks, among them.

Thirdly, transparency and accountability have been given a prominent role in the implementation of monetary policy. This is inherently imbedded in the nature of the above-noted inflation targeting framework. The target itself provides the yardstick against which outcomes are measured and evaluated. Further to this, continuous and incremental efforts have been made by the Banco de México through a comprehensive and evolving communication strategy with the public. This has been fundamental, since the relative importance of inflation expectations as a transmission mechanism of monetary policy actions has increased since the adoption of the inflation targeting regime. As I will explain in more detail below, additional efforts to increase transparency and accountability have been set in motion lately.

The implementation of monetary policy in Mexico has been subject to major challenges in recent years as a result of a combination of elements.

Although the world economy has shown a clear improvement after the Global Financial Crisis, this has been accompanied by the emergence of a number of risks that have stirred up an atmosphere of uncertainty. The sources are diverse and complex: a tightening of global financial conditions, persistent
vulnerabilities in several advanced and emerging economies, increased protectionist pressures, a growing anti-globalization sentiment, and problems of a political or geopolitical nature, among others.

In this context, Mexico’s economy has been hit by several shocks, of both a domestic and external origin, since the second half of 2014:

- The combination of a sharp decline in oil prices\(^2\) and in Mexico’s oil-producing capacity,\(^3\) led to a reduction of fiscal revenues from this source from 8.8 percent of GDP in 2012 to 3.8 percent in 2017.\(^4\)

- Uncertainty associated to the possible trajectory of interest rates in the United States, to a significant extent driven by the risks deriving from fiscal expansion in an economy operating around full employment, has been sharper in Mexico than in other EMEs, given tight links with the US economy and a high degree of openness to foreign capital flows.

- The 2016 presidential election in the United States and its aftermath have resulted in unease regarding the prospects for the economic relationship between the two countries in coming years.

- The renegotiation of NAFTA has become a focal point of attention for both domestic and foreign investors, in view of the importance of this Agreement for the region, both from an economic and an institutional point of view.

- The potential economic and political implications of the recently concluded electoral process in Mexico, where a new President, Congress and several state Governors were elected, has also been a source of uncertainty.

- Partly as a result of several of the above factors, the availability of external financing declined significantly, from an annual average above 4 percent of GDP in 2013-14, to some 1.5 percent in 2015-17.

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\(^2\) Although the price of the Mexican crude oil basket has recovered from the lows registered in early-2016, this came atop a sharp fall over the previous year and a half, thus resulting in current prices that are still about 30 percent below the peaks of mid-2014.

\(^3\) Oil production nearly halved in the last 15 years, from 3.45 million barrels per day in December 2003 to 1.87 million barrels per day at present, a drop of 46 percent. Although the energy sector reform of 2013 is expected to foster oil output, results are likely to flourish only gradually over coming years.

\(^4\) As per the most recent projections (March 2018), public oil revenues are expected to amount to 4.0 percent of GDP this year.
The Mexican economy has adjusted to these shocks through a number of channels. Chief among them is the significant depreciation of our currency since September 2014 which, in terms of its value vis-à-vis de US dollar, accumulates to date around 46 percent, a metric that at some stages has recorded figures nearing 70 percent. Of course, notwithstanding the above-noted reduction in the pass-through coefficient, this has had important implications for inflation. Although relatively contained during the initial stages of this process, the inflationary pressures deriving from exchange rate depreciation and a series of supply shocks that took place during 2017, resulted in an upturn in annual inflation to levels that in December of that year reached figures (6.77 percent) unseen since May 2001.

What has been the response of monetary policy to an environment characterized by increased inflationary pressures and high levels of uncertainty?

First of all, I wish to note that, as in the entire realm of economic policymaking, uncertainty is inherently embedded in the set of conditions under which monetary policy is conducted. The problem in the recent Mexican experience is that uncertainty has risen to levels well above those that can reasonably be deemed normal. This is the case because, as explained above, it includes events of paramount importance, complex in nature, that tend to appear only sporadically, and where the related risks can materialize simultaneously.

In my view, under conditions like these, central bank authorities should at least consider the following:

- Enhancing communication is essential under a situation of high uncertainty, since understanding monetary policy actions becomes more difficult in these circumstances. Therefore, additional efforts are needed for a proper grasp of the central bank’s reaction function and its assessment of the present and future economic situation.

- The responsibility of a central bank to adhere to its mandate is unaffected by uncertainty. In other words, uncertainty should not lead to excuses or indecision. The issue here is how to optimize the information used for decision-making, and how to balance the risk of having insufficient information vis-à-vis reacting too late.

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5 Namely, the surge in the domestic prices of gasoline and other energy products, increases in those of some agricultural goods, and two adjustments in the minimum wage, among others.
• Erring on the side of caution will usually be preferable under a situation of high uncertainty. This rests, on the one hand, on the premise that it is better to be prepared for events with a small probability of occurrence but a potentially high cost and, on the other, on the fact that assessing the probability of a disruptive event becomes far more difficult in the presence of high uncertainty. In this process, it is fundamental to give proper weight to the large costs, both for the institution and the economy, resulting from a hit to the credibility of the central bank.

• Models are useful to support monetary policy decisions but they have well-known limitations, and the possibility of mistaken prescriptions is positively related to uncertainty. Therefore, the role of judgement will become even more important with higher levels of uncertainty.

• The merits of a coordinated use of policy instruments are well known: potential to exploit synergies, less likelihood of overburdening policy instruments and reduced costs for the economy, among others. For obvious reasons, the advantages of this approach are clearly enhanced as uncertainty levels increase.

The strategy adopted by the Banco de México to face the complex circumstances of recent years is consistent with these principles. In general, the implementation of monetary policy has emphasized prudence, and timely and firm action whenever necessary. Thus, from December 2015 to date, the monetary policy interest rate has been increased on 13 occasions, by a total of 475 basis points.

In general terms, actions by the Central Bank during this period have been aimed at ensuring the convergence of inflation to the 3 percent target, at the least possible cost for economic activity. In this context, monetary policy actions have responded to different sorts of circumstances, such as: hikes in the reference rate in response to equivalent measures by the Federal Reserve, to mitigate the potential for disorderly capital outflows given the high degree of openness of the Mexican economy and the prevailing conditions of uncertainty; adjustments during episodes of steep depreciation of the exchange rate, even with relatively low levels of inflation, to contain the pass-through to domestic prices and to avoid second-round effects from these shocks; and a decisive response to sizable supply shocks which, combined with a substantially depreciated exchange rate, threatened to affect the process of
price formation in the economy and, therefore, an unanchoring of long-term inflation expectations.

Furthermore, as mentioned above, in an environment of high uncertainty it has been considered important to enhance the transparency and accountability of the Central Bank’s actions. Consequently, since February of this year, information is provided regarding the time lapse over which inflation is expected to converge to the target. Thus, quarterly forecasts for the trajectory of both headline and core inflation over the period of influence of monetary policy are published. This is anticipated to reinforce the role of the Central Bank in the determination of inflation expectations. Subsequently, in April, the decision was taken to identify voters in the minutes of the Board of Governors monetary policy decisions, and to release the full transcript (with a 3-year delay) of said meetings, among other measures.\(^6\)

In addition to the flexible exchange rate mechanism -which has worked as an efficient shock absorber- and sporadic interventions in the foreign exchange market, monetary policy has been supported by other policy tools. The strengthening of fiscal policy in recent years has been of crucial importance, given the pernicious effects that weak fiscal positions can have on inflation expectations, interest rates and the exchange rate. Efforts spanning over several decades to strengthen the financial system have also been instrumental, as the latter has allowed an efficient transmission mechanism for monetary policy and a sharp increase in interest rates without significant adverse side effects on banks or other financial institutions.

Despite the fact that some ground still needs to be covered on the road to bringing inflation back to target, and the remaining important risks, the results obtained thus far are encouraging, especially in light of the magnitude of the shocks that have affected our economy. Inflation has been on a downward trajectory over the course of 2018, with headline figures falling from 6.77 percent at the end of 2017 to 4.65 in June of this year, consistent with the Banco de México’s projections. Furthermore, long-term inflation expectations have remained stable, although at around 3.5 percent. On the other hand, the recent materialization of some upside risks may imply a revision of the period over which inflation is expected to converge to the 3 percent target. It is worthwhile to highlight that economic activity has not been significantly

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affected by the monetary policy stance, as evidenced by the 33 consecutive quarters of positive annual GDP growth recorded as of early-2018, and expectations of an output gap around zero during this year and the next.

To conclude, let me say a few words about NAFTA, that may contribute to understand why this is at present one of the main sources of uncertainty for the Mexican economy.

Even though the economic integration of the Mexican, Canadian and US economies had been underway well in advance of the enacting of this Agreement in 1994, and while some have argued that said process would have continued even in absence of NAFTA,7 the key role it has played in the acceleration, deepening and widening of the linkages among its member countries over the nearly 25 years it has been active is indisputable.

Naturally, the main channel through which NAFTA has boosted the region’s integration has been trade. In fact, by 2017, the value of merchandise traded between the three member countries had nearly quadrupled relative to the levels registered in 1993, while bilateral trade between Mexico and the United States showed a six-fold increase during the same period. In light of the above, it comes as no surprise that, with an 80 percent share of the total, the United States is the main destination for Mexico’s exports, while Mexico is the second largest foreign market for US goods, surpassed only by Canada. Taken together, US exports to both Mexico and Canada amount to over one third of that country’s shipments to the rest of the world.

Notwithstanding the breadth of the US-Mexico trade relationship that may be depicted by the above figures, a more detailed look at the data reveals some additional features that are worth highlighting. Mexico is among the top 2 export destinations for 27 US states, a figure similar to that of the states (28) that count Mexico as one of their 3 main sources of imports. Texas, for instance, is not only the main destination for Mexican exports within the US, but also overall, as it accounts for nearly 22 percent of all Mexican sales abroad, a figure significantly above those for countries such as Canada (2.8 percent), Germany (1.7 percent) and China (1.6 percent). Conversely, Mexico’s imports from Texas are greater than those from China, and we buy more from California than we do from countries such as Japan, Germany and South Korea.

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The region’s economic integration that has come about as a result of NAFTA goes far beyond the free international flow of goods and services. It could hardly be argued that this is just a case of three separate economies trading finished goods among them. On the contrary: they are producing many of those goods together, specializing in different stages of the corresponding production processes through the implementation of cross-border supply chains that enhance their competitiveness, both individually and jointly, in markets abroad. Therefore, as in other regions of the world, intermediate goods in North America cross borders multiple times before reaching final consumers. An input-output analysis of the productive activity in Mexico and the United States shows that, in both countries, around 20 percent of the total value added generated domestically by these countries’ manufacturing sectors is destined to activities abroad immersed in Global Value Chains (GVCs).\(^8\)

By including protective rules and procedures for cross border investors, as well as dispute settlement mechanisms for both trade and investment flows, NAFTA has given rise to a massive expansion of foreign direct investment among the three members. For instance, annual US direct investments in Mexico have multiplied by 4 since the creation of NAFTA, while the corresponding flows from Canada have increased by a factor of nearly 37, albeit from a very low base.

Naturally, the renegotiation of NAFTA provides the opportunity to update an agreement signed more than 20 years ago, and to increase its beneficial effects for the three countries. I hope that, in the end, common sense will prevail, and that both the realized and still ample scope for mutual gains will result in a strengthened Agreement and an even deeper integration within the North American region.

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