

How Do Central Banks' Monetary Policy Announcements Affect Firms' Inflation Expectations? Evidence from Mexico

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Abstract

Using novel data from Banxico's Monthly Survey of Regional Economic Activity for the period 02/2020 - 01/2024, I investigate if firms' inflation expectations respond or not to Banxico's monetary policy announcements (*MPAs*). I isolate the effects of *MPAs* by using the date and hour of firms' survey response submissions to compare the responses of firms that were submitted right after a *MPA* with those that were submitted right before it. I estimate, by two-way fixed effects, an econometric specification that includes as explanatory variables an interaction term between a monetary policy surprise and a dummy that is equal to 1 if firms responded to the survey right after a *MPA* (equal to zero if otherwise), a central bank information shock, global uncertainty variables, an insecurity variable for Mexico, and firm and time fixed effects. This specification is estimated at both a national and regional level, at a sectoral level, and by the size of firms, using three different dependent variables. The main results show that a surprise tightening of the monetary policy stance leads firms' inflation expectations to decline, while a central bank information shock, higher global uncertainty, and higher levels of insecurity in Mexico result in higher inflation expectations. These findings are robust to different specifications and different uncertainty indices. Moreover, this paper finds that the main driver of Mexican firms' 12-month inflation expectations is the central bank information shock, followed by changes in insecurity in Mexico.

Keywords: Monetary Policy, Central Bank Communication, Firms' Expectations, Inflation, Survey Data

JEL codes: E52, E58, D84, E31, C83.

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1 Introduction

This paper analyzes the effect of Central Bank's (*CB*) *MPAs* on firms' 12-month inflation expectations for the case of Mexico. Why is this topic important for researchers and policy-makers? Because the effectiveness of monetary policy (i.e. a *CB*'s ability to have an impact on expenditure and, henceforth, on prices (Woodford, 2005)) mainly depends on the degree to which a *CB* is able to shape (and anchor) the general public's inflation expectations. In this task, the role of *CB*'s communication with the general public is pivotal. As autonomous, independent, and democratic entities, *CBs* have the duty to be accountable and, hence, to clearly explain their actions and intentions (Binder, 2017).^{1,2} This will enhance trust and credibility in their policies and, in turn, shape the general public's expectations. The following are some quotes that reflect this situation:

"If the public understands the central bank's view on the economy and monetary policy, then households and businesses will take those views into account in making their spending and investment plans; policy will be more effective as a result" (Jerome Powell).

"I believe these two features of Fed monetary policy - a systematic approach to policy and the steps towards more open communication and transparency - are particularly noteworthy in contributing to our policy success over the past two decades. They have helped strengthen public confidence in the Fed and thereby helped anchor inflation expectations to price stability. Additionally, by providing clear explanations of its policies to the public, greater transparency has also enhanced Fed accountability, a vital consideration for a government institution in a democracy" (Janet Yellen).

"Transparency concerning the Federal Reserve's conduct of monetary policy is desirable because better public understanding enhances the effectiveness of policy. More important,

¹Woodford (2005) argues *CBs* should communicate four broad classes of issues: their interpretation about economic conditions, policy decisions, strategies guiding their policy decisions, and the outlook for future policy

²Before mid-1990s, "central banking was shrouded in mystery, at the Fed as elsewhere...the FOMC made no public announcements regarding its target for the federal funds rate following the meetings at which the target was determined. Markets had to try and infer the target rate from the type and size of open market operations" Woodford (2005). Since 1994, the opposite has occurred: major central banks such as the Fed, the Reserve Bank of New Zealand, the Bank of England, and the European Central Bank, among others, have emphasized the relevance of *CB*'s communication in their policy goals.

however, is that transparent communications reflect the Federal Reserve’s commitment to accountability within our democratic system of government” (Janet Yellen).

“The more guidance a central bank can provide the public about how policy is likely to evolve the greater the chance that market participants will make appropriate inferences” (Ben Bernanke).

Most empirical studies on the impact of CB’s communication on economic agents’ expectations have focused on professional forecasters or financial markets participants and only few on firms (Lewis, Makridis and Mertens (2020) and Bottone and Rosolia (2019)). This has mainly occurred due to a lack of data availability (Buchheim and Link (2017), Bottone and Rosolia (2019) and Candia, Coibion and Gorodnichenko (2021)).³ However, macroeconomic theory points out that monetary policy operates through firms’ expectations since firms are price setters (Enders, Hünnekes and Müller (2019), Candia, Coibion and Gorodnichenko (2021), and Di Pace, Mangiante, and Masolo (2023)), as well as decision makers regarding hiring, wage setting, and investment (Coibion et al. (2020a)).⁴ Hence, I use data from a new module on firms’ 12-month inflation expectations that was incorporated in February 2020 to the Monthly Survey of Regional Economic Activity (*MSREA*) conducted by Banxico, to investigate whether firms inflation expectations respond or not to *MPAs* that result in *MPS*.

Following Di Pace et al. (2023), I isolate the effects of Banxico’s *MPAs* by considering a symmetric 5-day window around *MPAs* and by using the date and hour of firms’ survey response submissions to compare (within that window) the responses of firms that were submitted right after a *MPA* with those that were submitted right before it. This treatment effect is investigated by estimating an econometric specification that includes as explanatory variables an interaction term between a *MPS* and a dummy that is equal to 1 if firms responded

³The few surveys on firms’ expectations that exist have mainly been conducted by advanced countries (e.g. United States, Germany, Italy, New Zealand, among others) and have generally been characterized for being non-representative and qualitative. Only in recent years, quantitative questions have started to be included in these surveys (Candia, Coibion, and Gorodnichenko (2021)).

⁴Candia, Coibion, and Gorodnichenko (2021) emphasize that the role of firms’ inflation expectations is crucial “to understanding the link between the nominal and real sides of the economy”. They add that such role is generally characterized by an expectations-augmented Phillips curve (i.e. a relationship that links inflation with the real side of the economy, conditional on firms’ inflation expectations) and, therefore, considered in different frameworks such as the sticky price models, noisy information models, rational inattention models, behavioral models, among others.

to the *MSREA* right after Banxico's *MPA* (equal to zero if otherwise), a *CB* information shock, global uncertainty variables, an insecurity variable for Mexico, and firm and time fixed effects. This specification is estimated by two-way fixed effects. Driscoll-Kraay clustered standard errors by firm and month are used to control for heteroskedasticity, as well as for temporal and cross-sectional correlation in the residuals.

To further exploit the data provided by Banxico's *MSREA*, this specification is estimated at both, a national and regional level (i.e., North, North-Centre, Centre, and South), at a sectoral level (i.e. manufacturing and non-manufacturing sectors), and by the size of firms (i.e. small, medium and large). The survey design also allows to obtain three different dependent variables, so I conduct the analysis considering each of them. I use as well data on 12-month inflation expectations from professional forecasters to compare firms' results with those of more informed agents.

The main findings show that Banxico's *MPAs* that result in *MPS* do have an impact on firms' inflation expectations. In particular, a surprise tightening of the monetary policy stance leads firms' 12-month inflation expectations to decline. On the other hand, a *CB* information shock, higher global uncertainty (economic and political uncertainty, trade uncertainty, and financial market volatility), and higher levels of insecurity in Mexico lead firms to revise their 12-month inflation expectations upwards. These results can be observed when considering the different margins mentioned and, the three dependent variables obtained from Banxico's *MSREA*.

In order to test for the robustness of the findings, two additional exercises are conducted: the first one additionally controls for the Coronavirus Pandemic; while the second one, replaces the Global EPU Index and the World Trade Uncertainty Index with their counterparts for Mexico. These two exercises confirm the previous results.

Finally, I calculate beta coefficients to investigate the relative contribution of each explanatory variable to firms' 12-month inflation expectations. I find that the main driver of firms' inflation expectations is the *CB* information shock, followed by insecurity in Mexico.

This paper contributes to the literature in five main ways. This is the first study for the case of Mexico that analyzes the effect of Banxico's *MPAs* on firms' inflation expectations.

The reason for this is that data on firms' inflation expectations were made available for the first time in February 2020, following the introduction of a new module on firms' inflation expectations into Banxico's *MSREA*. This is the first time these data are being used. Previous studies on Mexico have focused on analyzing the effect of *MPAs* on professional forecasters' inflation expectations (e.g. Aguilar, et al., 2022), but not on firms' forecasts. Second, by exploiting all data provided by Banxico's *MSREA*, the analysis is conducted at both a national and regional level, at a sector level, and considering the size of firms. The existing literature generally presents the analysis only at a national level. In addition, the survey design allows to obtain three different dependent variables, so the analysis is also conducted using each of them. Third, this study incorporates additional regressors to the baseline model estimated in the literature that generally only includes the interaction term mentioned before. This paper also controls for a *CB* information shock, for different dimensions of uncertainty (i.e. not only political an economic uncertainty, but also for financial instability, and trade uncertainty) and, for insecurity in Mexico. Fourth, two exercises are conducted in order to test for the robustness of the results: in the first one, a proxy for the Coronavirus Pandemic is included as additional regressor; in the second one, the Global EPU Index and the World Trade Uncertainty Index are replaced with their counterparts for Mexico. Finally, beta coefficients are calculated in order to investigate the relative contribution of each explanatory variable to firms' 12-month inflation expectations. To my knowledge, no previous study has performed this particular exercise.

The paper proceeds as follows. Section 2 surveys the literature on the effect of monetary policy announcements on firms' inflation expectations. Section 3 presents the empirical model and the data used to estimate it. Section 4 shows the main results; while Section 5, two robustness tests. Section 6 analyzes the relative contribution of each explanatory variable to firms' 12-month inflation expectations. Section 7 concludes.

2 Literature Review

This paper is related to three strands of the empirical literature on the impact of *MPAs* on firms' inflation expectations. In what follows, I briefly present each of them.

2.1 Literature on Firms' Inattention to the Objectives and Actions of Monetary Policy Authorities, and to Inflation Dynamics

Three main stylized facts have been found in this literature: 1) firms' beliefs about recent inflation are disconnected from actual values;⁵ 2) firms' inflation expectations differ considerably from those of professional forecasters, but are similar to those of households;⁶ and 3) there is disagreement across firms regarding inflation dynamics (i.e. there is as much disagreement about recent inflation values than about future inflation), despite inflation data being publicly available (Kumar et al. (2015); Coibion, Gorodnichenko and Kumar (2018); Lamla and Vinogradov (2019); Coibion, et al. (2020a); Candia, Coibion, and Gorodnichenko (2021); Candia, Coibion and Gorodnichenko (2022)). Together, these stylized facts reflect a lack of firms' inflation expectations anchoring (Candia, Coibion and Gorodnichenko (2021)) and suggest there is inattention to monetary policy and inflation dynamics on the part of firms (Coibion et al. (2020a); Coibion, Gorodnichenko and Weber (2022); and Candia, Coibion and Gorodnichenko (2021)).⁷

However, Coibion et al. (2020a) and Candia, Coibion and Gorodnichenko (2022) point out firms' inattention to monetary issues vary across countries: those with low and stable inflation, which is in part the result of a successful monetary policy, give no incentives to firms to pay attention to macroeconomic conditions (e.g. United States (US) and New Zealand), while those with high and volatile inflation (e.g. Argentina and Uruguay, among

⁵Firms' inflation forecasts are also disconnected from inflation dynamics (Candia, Coibion and Gorodnichenko (2021)).

⁶Professional forecasters and financial markets participants are continuously tracking macroeconomic conditions and, therefore, are better informed about economic indicators than the general public (Coibion et al. (2020a)).

⁷Kumar et al. (2015) show that firms' inflation expectations in New Zealand are unanchored "despite 25 years of inflation targeting and relatively stable inflation". They mention this is not due to a lack of credibility on the Central Bank, but to the fact that managers are generally uninformed about the objectives and actions of this Central Institute.

others) induce firms to be better informed.⁸ The case of Ukraine is peculiar since Coibion and Gorodnichenko (2015) find that the number of firms tracking the Central Bank's actions and announcements tend to increase in times of crisis, but inflation expectations of those who track this information and those who remain inattentive do not differ. The authors suggest that this may be due to the following: either Ukraine Central Bank's communications are of very poor quality or, there is a lack of credibility on this Central Institute, both of which lead firms tracking the information not to revise their inflation expectations.

2.2 Literature on the Expectations Formation Process

This paper is also related to the literature on the expectations formation process of firms. The existing evidence shows firms form their inflation expectations based primarily on two sources of information: media coverage of inflation dynamics and firms' shopping experience (i.e. food and gasoline prices) (Kumar et al. (2015) and Coibion et al. (2020a)). Those relying particularly on the first source of information tend to know more about inflation dynamics and, hence, have lower inflation backcast and forecast errors (Kumar et al. (2015); while those relying more on the second source "extrapolate their own experiences to the aggregate economy" (Coibion et al. (2020a)) and have higher errors. This is relevant since firms use their inflation expectations to take price-setting decisions, wage-setting decisions, investment decisions and hiring decisions, though some managers even use them for personal decision-making (Kumar et al. (2015), Coibion et al. (2020a), Coibion, Gorodnichenko and Ropele (2020b), and Candia, Coibion and Gorodnichenko (2022)).

Despite firms' "veil of inattention" (Coibion et al. (2020a)) regarding monetary policy issues, a growing body of literature (Candia, Coibion, and Gorodnichenko, 2021 and 2022; Coibion, Gorodnichenko and Ropele, 2019; Coibion, et al., 2020; and Hunziker, et al., 2022) has shown that policymakers can still shape these agents' inflation expectations and beliefs. These studies use randomized control trial methods to provide additional information about

⁸For the specific case of New Zealand, Kumar et al. (2015) and Coibion, Gorodnichenko and Kumar (2018) find that observable firms' characteristics may also account for the existing differences in inattentiveness: those with more educated managers, those with a larger number of competitors, those selling a larger share of their products abroad, and those planning to change prices sooner tend to be more informed about monetary policy and inflation dynamics than the rest. However, most of these differences remain unexplained.

inflation to a randomly selected group of firms or households and find that, relative to agents that did not receive any information (control group), treated agents tend to adjust their inflation expectations and, as a consequence, their behavioral choices. For the case of Italian firms, Coibion, Gorodnichenko and Ropele (2020b) find that the provision of information about recent inflation to a selected group of firms led them to revise their inflation expectations upwards (particularly at shorter horizons) and, consequently, to increase prices and their demand for credit lines, while to reduce employment and capital. For New Zealand, Coibion, Gorodnichenko, and Kumar (2018) randomly assign 700 firms to 1 of 7 groups (each group had 100 firms) and treat them with either information on unemployment rates and GDP growth or with information on inflation (i.e. professional forecasters' inflation expectations for the next 12 months, central bank's inflation target, most recent value of annual inflation, etc.). The rest of the sample was given no information at all. Their findings show that treated firms with above average beliefs revised them downwards, while those with below average beliefs revised them upwards. This mainly occurred with firms treated with additional information on inflation. The authors also find that changes in firms' beliefs and expectations had an impact on their decisions regarding quantities of inputs (e.g. employment and investment), but not regarding prices, wages or unit costs. Hunziker, et al. (2022) conduct a randomized control trial on Swiss companies covering all industries and regions and find that those that receive additional information on the central bank's objective, its past performance, and long-term average inflation adjusted their long-term inflation expectations to a certain extent. They also find that short-term inflation expectations, factors related to prices, and a shock to the exchange rate determine these companies' long term inflation expectations.

2.3 Literature on the Causal Effect of MPAs on firms' inflation expectations

This paper mostly contributes to the scant literature on the causal effect of monetary policy announcements on the general public's (i.e. firms and households) inflation expectations. Enders, Hünnekes, and Müller (2019) investigate the impact of three different measures of monetary policy announcements on German firms' price and production expectations from 2004 to 2018. First, they find that unconventional policy announcements by the European

Central Bank (ECB) in the wake of the Global Financial Crisis have a limited and negative effect on both production and price expectations. Then, they find that monetary policy surprises, measured as “high-frequency changes in overnight-index swap (OIS) interest rates around monetary policy events”, do have an impact on firms’ price and production expectations, but in a non-linear way: a surprise increase in the OIS interest rate reduces firms’ expectations, while a surprise decrease raise them. These effects only occur with moderate surprises; large surprises have no effect at all. Finally, they find that a positive *CB* information shock (which reflects favorable news about the economy) induces firms to revise their price expectations upward, but not their production expectations. Similarly, Bottone and Rosolia (2019) study the case of Italian firms and find that an unexpected 1 percentage point increase in the 3-month OIS interest rate on an ECB Governing Council meeting day reduces 0.5 percentage points firms’ expected inflation 1 year ahead. This effect becomes stronger after 2012, once unconventional monetary policy tools became more widely used. For the case of the United Kingdom, Di Pace, Mangiante, and Masolo (2023) analyze the response of firms’ price expectations to both a Monetary Policy Committee (MPC)’s announcement of an interest rate change and a monetary policy surprise. Their surprise measure is built as the “change in the price of 3-month Sterling future contracts expiring 2 quarters ahead in a 30 minutes window around the announcement of the MPC of the Bank of England”. Their main results show that firms do not revise their price expectations when there is a monetary policy surprise, but they do revise them when there is a MPC announcement of interest rate change. In particular, an announced interest rate hike leads firms to reduce both their price expectations and uncertainty about their business.

This paper follows the analysis presented in Di Pace et al. (2023) in order to investigate if firms’ 12-month inflation expectations react or not to Banxico’s *MPAs* that result in *MPS*. However, it distinguishes from Di Pace et al. (2023) in that it incorporates additional explanatory variables to the estimated specification such as: a *CB* information shock, the Global EPU Index, the World Trade Uncertainty Index, the VIX, and a measure of insecurity in Mexico. This permits to control for different dimensions of uncertainty (i.e. not only political and economic uncertainty, but also financial instability, and trade uncertainty) and,

for both, global and domestic explanatory variables. In addition, this paper presents two exercises to test for the robustness of the results. In the first one, the estimated specification considers the newspaper-based Infectious Disease Equity Market Volatility (EMV) Tracker, built by Baker, Bloom, Davis, and Kost (2019), as an additional regressor. It is included in order to control for the Coronavirus Pandemic. In the second exercise, the Global EPU Index and the World Trade Uncertainty Index are replaced with their counterparts for Mexico. Finally, beta coefficients are estimated in order to analyze the relative contribution of each explanatory variable to firms' 12-month inflation expectations. This is important since it allows to identify which explanatory variable is the main driver of firms' 12-month inflation expectations during the sample period.

This paper also distinguishes from Di Pace et al. (2023) in the following: the analysis is performed at both a national and regional level, at a sectoral level, and considering the size of firms. In addition, the survey design allows to work with three different groups of firms (as it is explain in detail in Section 3), so I perform the different exercises mentioned considering each of them.

3 Empirical Model and Data

This paper analyzes whether Banxico's *MPAs* that resulted in *MPSs* during the February 2020 - January 2024 period had an effect on 12-month inflation expectations of Mexican firms. In order to isolate the effects of *MPAs*, I consider a symmetric 5-day window around *MPAs* and I use the date and hour in which each firm filed its responses to the *MSREA* to compare (within that window) the responses of firms that were submitted right after a *MPA* with those that were submitted right before it.^{9,10}

This effect of Banxico's *MPAs* is investigated by estimating the following specification:

$$y_{i,t} = \beta_0 + \beta_1 D_{i,t} * s_t + \beta_2 InformationShock_t + \beta_3 X_t + \delta_i + \gamma_t + \varepsilon_{i,t} \quad (1)$$

⁹The firms that were outside that window were not considered in the empirical analysis.

¹⁰The results I present in Section 4 are robust to considering a symmetric 2-day window.

Where:

i, t are sub-indexes for firm and month, respectively.

Firms' 12-month Inflation Expectations

$y_{i,t}$ is the dependent variable and stands for firm's i 12-month inflation expectations in time t . The data come from Banxico's *MSREA*.¹¹

Given the importance of this variable for price and wage determination, in February 2020 Banxico added a new module to the *MSREA* to start measuring it. The questions in this module follow international standards and consider some aspects of the empirical literature that are worth mentioning: 1) they refer to the annual variation of the National Consumer Price Index and not to sales prices or costs; 2) only 12-month firms' inflation expectations are collected through the *MSREA*; 3) in contrast to treated firms described in the literature review, no previous information on the current inflation rate, Banxico's inflation target, or professional forecasters' 12-month inflation expectations is provided to the participants; and, 4) in order to guarantee representativeness of the indicators, only firms with more than a 100 employees that belong either to the manufacturing or non-manufacturing sectors are taken into consideration.

Regarding the design of the survey questions, Banxico decided to consider three different types of questions and three randomly selected groups of firms. This allowed assigning each group of firms only one type of question. Thus, neither the groups of firms selected nor the question assigned to each of them has changed since this module began. The three types of questions considered are the following:

Question 1. For the next 12-month, what is your forecast for the headline inflation rate as measured by the annual change in the National Consumer Price Index?

¹¹This Survey is conducted on the first business day of each month and closes on the penultimate business day.

Table 1: Point Estimate

Forecast	
Headline inflation rate for the next 12-months	_____ %

Question 2. For the next 12-month, what is the headline inflation rate, measured by the annual variation in the National Consumer Price Index, that you would assign to each of the following scenarios and the probability that they occur?

Table 2: Three Scenarios

Ranges	Headline Inflation Rate	Probability that the Scenario Occurs
Lowest Possible	_____ %	_____ %
Moderately Possible	_____ %	_____ %
Highest Possible	_____ %	_____ %

Question 3. For the next 12-month, what is the headline inflation rate, measured by the annual variation in the National Consumer Price Index, that you would assign to each of the following scenarios and the probability that they occur?

Table 3: Five Scenarios

Ranges	Headline Inflation Rate	Probability that the Scenario Occurs
Lowest Possible	_____ %	_____ %
Low	_____ %	_____ %
Moderately Possible	_____ %	_____ %
High	_____ %	_____ %
Highest Possible	_____ %	_____ %

As it can be seen, Question (1) asks for a point estimate on the headline inflation, while Questions (2) and (3) ask for inflation estimates and probabilities that they will occur. I

perform the empirical analysis using data derived from each of these questions; i.e. using three different dependent variables.¹²

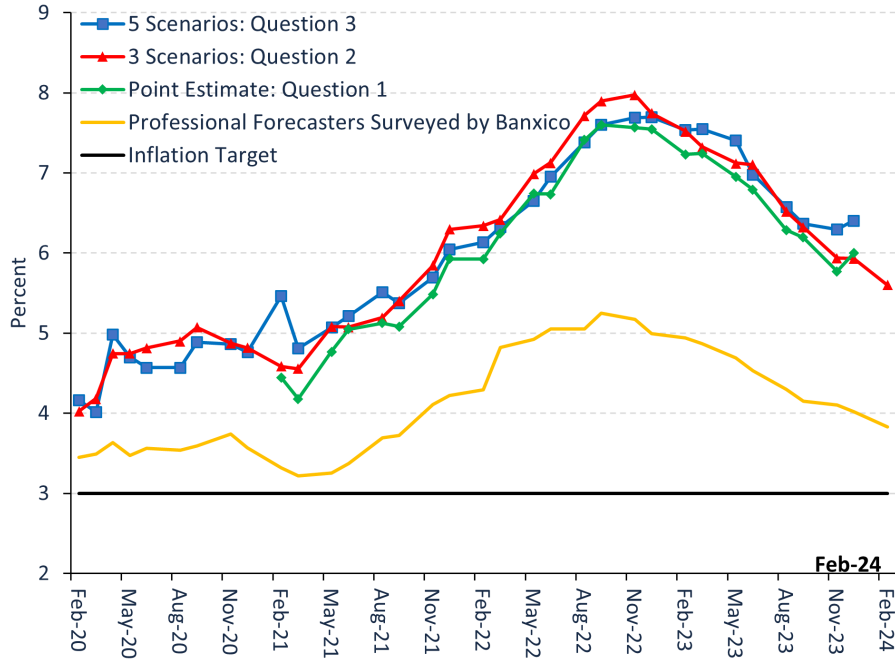
Figures 1 and 2 present the mean and the standard deviation (which can be considered a measure of disagreement about inflation among firms or among professional forecasters), respectively, of 12-month inflation expectations of firms (in green, red, and blue colors) and of professional forecasters (in yellow color), both surveyed by Banxico. As a reference, Banxico's inflation target, which is 3.0% (in black color), is also included in Figure 1.

Figure 1 shows that the mean of firms' 12-month inflation expectations is above that of professional forecasters and well above Banxico's inflation target. This confirms one stylized fact described in the literature review: 1) firms inflation expectations differ considerably from those of professional forecasters.

Figure 2 shows that, regardless of which *MSREA* question we focus on (Questions 1, 2 or 3 from *MSREA*), disagreement about inflation is greater among firms than among professional forecasters. This confirms another stylized fact described in the literature review.

¹²Question (1) was introduced in the new module of *MSREA* one year later, so the estimated results using data coming from this particular Question have less observations compared to those obtained using data from Questions (2) and (3).

Figure 1: Firms' 12-Month Inflation Expectations: Mean



Note: In the case of firms that were assigned Questions 2 and 3 (i.e. those of 3 and 5 scenarios), the mean of 12-month inflation expectation is first calculated per firm using the following formula:

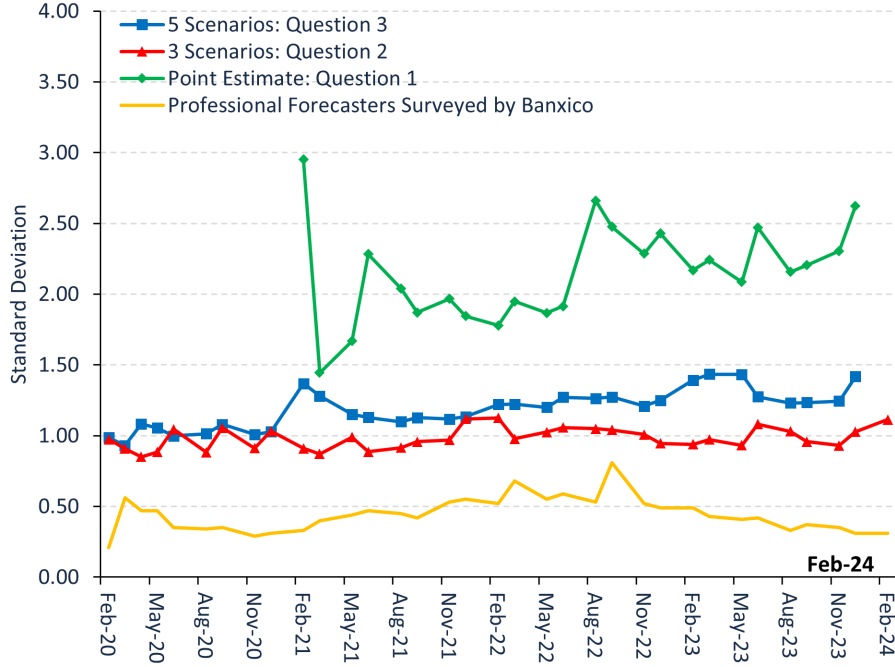
$$\mu_{j,t}(\Pi^e) = \sum_{i=1}^n p_{i,j,t} \Pi_{i,j,t}^e$$

where:

$p_{i,j,t}$ is the probability assigned to scenario i by firm j in month t ; $\Pi_{i,j,t}^e$ is the response of firm j for scenario i in month t regarding its 12-month inflation expectation and; n stands for the number of scenarios, either 3 or 5; while e , for expectations. Once these calculations per firm are obtained, I then use STATA's command `aweights` to derive the mean of 12-month inflation expectations for these two groups of firms.

Source: Data from Banxico's MSREA and author's calculations.

Figure 2: Disagreement among Firms and Professional Forecasters about Future Inflation



Note: In the case of firms that were assigned Questions 2 and 3, the standard deviation of 12-month inflation expectations is first calculated per firm, using the following formula:

$$\sigma_{j,t}(\Pi^e) = \sum_{i=1}^n p_{i,j,t} (\Pi_{i,j,t}^e - \mu_{j,t}(\Pi^e))^2$$

where:

$p_{i,j,t}$ is the probability assigned to scenario i by firm j in month t ; $\Pi_{i,j,t}^e$ is the response of firm j for scenario i in month t regarding its 12-month inflation expectation; $\mu_{j,t}$ corresponds to the mean described in equation (1); and n stands for the number of scenarios, either 3 or 5; while e , for expectations. Once these calculations per firm are obtained, I then use STATA's command known as `aweight` to derive the standard deviation of 12-month inflation expectations for these two groups of firms.

Source: Data from Banxico's MSREA and author's calculations.

Interaction Term

I introduce an interaction term between a dummy $D_{i,t}$ that is equal to 1 if firm i answers the MSREA survey right after Banxico's MPA and 0 otherwise, and s_t , which stands for MPS. This term allows me to investigate whether MPAs had or not an effect on firms' inflation expectations.

MPSs are calculated by Solís (2023a, b) with data from Bloomberg, as the change in 3-month swap rates in 30-minute windows around Banxico's MPAs. These windows start 10

minutes before the *MPC* meeting and end 20 minutes after.

MPS are based on 3-months swap rates given they are the most liquid swaps referencing the 28-day inter-bank interest rate (known as TIIE28D) in Mexico's derivatives market. While swaps in other countries reference the monetary policy rate, swaps in Mexico reference the TIIE28D, which follows Banxico's monetary policy rate very closely (Solís, 2023a). In addition, due to the time horizon they cover, 3-month swaps can consider information on more than one meeting of monetary policy and, hence, capture not only surprises about the current level of the policy rate, but also about its future path (Solís (2023a, b)).¹³

MPSs are considered exogenous. The reason for this is that *MPSs* are calculated in a 30-minute window around *MPAs* and it is very unlikely that in this period of time "other variables influence asset prices ... or that monetary policy reacts to events minutes before the release of *MPAs*" (Solís (2023a, b)).

According to the literature, a positive *MPS* means the following: 1) a Central Bank's monetary policy rate was increased more than expected by financial markets; 2) it was reduced less than expected; 3) it increased despite no change was expected; or 4) it remained constant despite a reduction was expected. A negative *MPS* means the following: 1) a Central Bank's monetary policy rate was increased less than expected by financial markets; 2) it was reduced more than expected; 3) it decreased despite no change was expected; or 4) it remained constant despite an increase was expected. A *MPS* equal to zero means that the policy rate decision was correctly anticipated by financial markets and, therefore, that it was not a surprise. In this paper, I focus on both positive and negative *MPS*.

Main Estimated Regressor

β_1 from Equation (1) captures by how much inflation expectations of firms that submitted their responses to the *MSREA* after a monetary policy rate surprise differ from those of firms that submitted their responses right before it. The expected sign for the β_1 coefficient is

¹³In contrast, 1-month swaps, which also reference the TIIE28D in Mexico's derivatives market, are less liquid and, due to the shorter time horizon they cover, they do not capture surprises about the future path of the policy rate. Nonetheless, according to Solís (2023a, b) the correlation between daily changes in 1 and 3-months swap rates is 0.7.

negative since it is assumed that the *MPS* is positive and that, therefore, firms will reduce their inflation expectations. There are positive and negative *MPS*, but for the specific case of Mexico positive *MPS* are the majority. This is the reason why I assume the *MPS* is positive.

Information Shock

It could be the case that the interpretation of Banxico regarding the economy has suddenly changed due, for example, to inflationary pressures not foreseen previously. This could lead convergence to inflation to be more gradual and, as a consequence, that firms revise upwards their 12-month inflation expectations. In order to control for this effect, I introduce a *CB* information shock in the specification. It is built as the deviation between the observed inflation and Banxico's inflation target, which is 3.0%. The data used to build it come from the National Institute of Statistics in Mexico (*INEGI* in Spanish) and Banxico.

Additional Independent Variables

X_t stands for additional control variables that may also affect firms' 12-month inflation expectations such as the Global EPU Index, the World Trade Uncertainty Index, the VIX, and insecurity in Mexico.

The Global EPU Index is a Gross Domestic Product (*GDP*)-weighted average of 21 national economic policy uncertainty indices (Australia, Brazil, Canada, Chile, China, Colombia, France, Germany, Greece, India, Ireland, Italy, Japan, Mexico, the Netherlands, Russia, South Korea, Spain, Sweden, the United Kingdom, and the United States) built by Bloom, Davis, and Baker.¹⁴ Each of these national indices reflects the relative frequency of each country's newspaper articles that contain terms related to the economy, policy, and uncertainty.¹⁵

The World Trade Uncertainty Index is a *GDP*-weighted average of 143 national trade uncertainty indices built by Ahir, Bloom, and Furceri. It measures trade uncertainty across the globe. The methodology employed to construct it is "to count the number of times uncertainty

¹⁴Mexico is included in this Global EPU Index, but according to Steven J. Davis this is not a problem since Mexico's weight in it is small, around 2 percent.

¹⁵For more details see: https://www.policyuncertainty.com/global_monthly.html.

is mentioned within a proximity to a word related to trade in the Economist Intelligence Unit country reports” (Ahir, Bloom, and Furceri).¹⁶

The VIX stands for the Chicago Board Options Exchange Volatility Index. It is constructed using the implied volatilities of the S&P 500 index options. It is considered a measure of global financial market volatility.

Insecurity in Mexico is measured using data from Banxico’s Survey of Professional Forecasters (*SPF*). This survey has been conducted monthly since January 1999 and comprises the responses of an average of 40 analysts from the private sector, both national and foreign. In order to build this proxy I focus on the following question from the SPF:

Which are the three factors that you consider will most limit growth in economic activity in the following six months?

To answer this question, the participants of the SPF choose three options out of a list of 32 factors related to inflation and monetary policy in Mexico; external conditions; domestic economic conditions; public finances; governance; and other. The topic of governance includes the following factors: domestic political uncertainty, corruption, impunity, lack of rule of law, and insecurity. Once this information is obtained from each participant, Banxico calculates the percentage distribution of the responses. The insecurity measure used in this analysis is, therefore, the percentage this factor obtains every month.

As it can be seen, Equation (1) includes as additional explanatory variables both, survey-based (e.g. the insecurity proxy for Mexico) and media or newspaper-based (e.g. EPU Index and World Trade Uncertainty Index) variables. It also considers different dimensions of uncertainty, not only political and economic uncertainty, but also financial market volatility, and trade uncertainty.

¹⁶For more details see: https://www.policyuncertainty.com/wui_quarterly.html.

Fixed Effects and Error Term

δ_i stands for firm fixed effects. This term controls for unobserved time-invariant firm specific effects.

γ_t stands for time (i.e. month) fixed effects. This term controls for macroeconomic shocks common to all firms.

$\varepsilon_{i,t}$, for the specification error term.

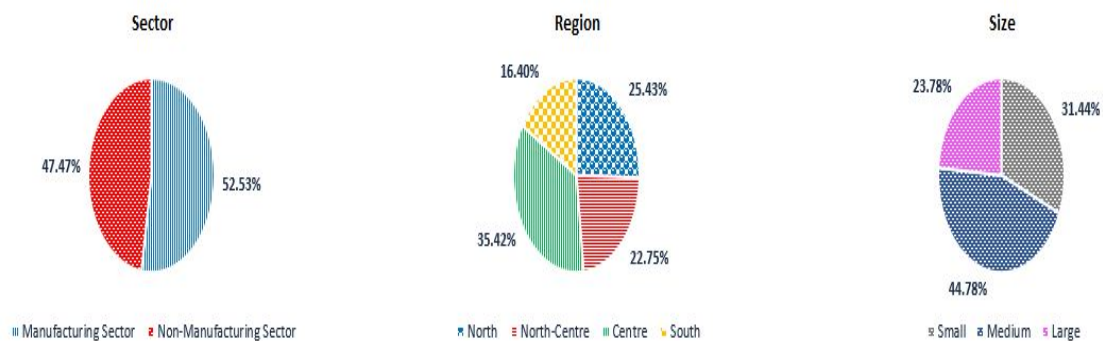
Equation (1) is estimated using two-way fixed effects, i.e. firm and month fixed effects. In addition, I use Driscoll-Kraay clustered standard errors, also by firm and month, in order to control for heteroskedasticity, as well as for temporal and cross-sectional or “spatial” correlation in the residuals. Failing to do so would lead to present biased statistical inference.

To further exploit the data provided by Banxico’s *MSREA*, Equation (1) is estimated at a national level, at a regional level, at a sector level, and by size of firms, considering the three different dependent variables I am able to derive from each *MSREA*’s question.

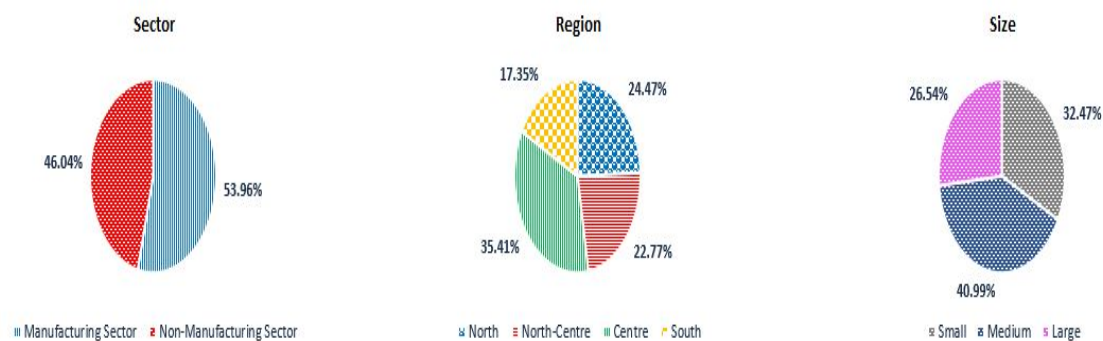
Figure 3 shows the composition (by region, sector, and by size of firms) of the three groups of firms that were randomly selected to answer either Question 1, 2, or 3 from Banxico’s *MSREA*. It can be observed that the group of firms that responds Question 1 (and that therefore reports point estimates on headline inflation for the next 12-months) is the one that has a larger number of firms that belong to the manufacturing sector; the one that has a larger number of firms that are located in the South of Mexico, which is the least developed region in the country; and the one that has the greatest proportion of firms that are small as compared to its counterparts.

Figure 3: Composition of the Group of Firms that Responded Questions 1, 2, and 3 from Banxico's *MSREA*

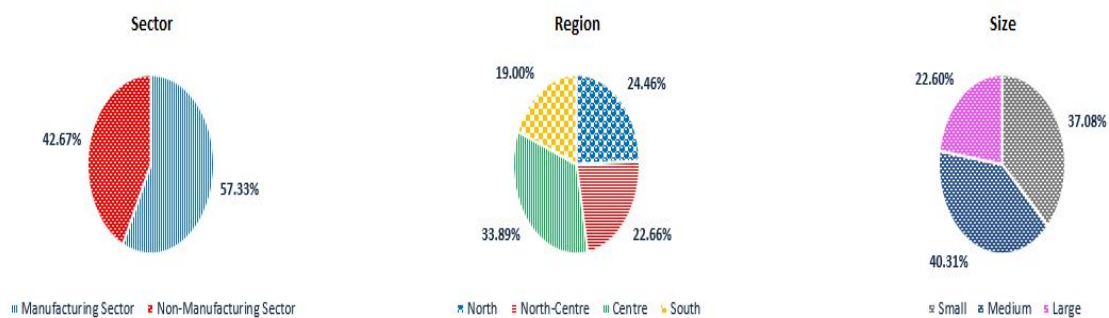
Question 1



Question 2



Question 3



Source: Data from Banxico's *MSREA* and author's calculations.

Finally, I estimate Equation (1) using data on 12-month inflation expectations from professional forecasters also surveyed by Banxico in order to compare firms' results with those of more informed agents. However, this comparison can only be made for the data derived from Question (1) of Banxico's *MSREA*, but not for the data derived from Questions (2) or (3). The reason for this is that the former data are the only ones that are compatible (i.e. they are point estimates and not forecasts and probabilities that they will occur) with those of Banxico's Survey of Professional Forecasters.

Table 4 presents summary statistics for the three dependent variables and the explanatory variables included in Equation (1).

Table 4: Summary Statistics for Dependent and Independent Variables

		Summary Statistics				
		Observations	Mean	Std. Deviation	Min	Max
Dependent Variable	Firms' 12-Month Inflation Expectations (Mean):					
	Point Estimate	36	6.712	0.977	4.391	8.510
	Three Scenarios	48	6.577	1.273	4.748	9.079
	Five Scenarios	48	6.777	1.261	4.552	8.841
Independent Variables	Monetary Policy Surprises (MPS)	48	0.797	4.585	-9.500	19.500
	CB Information Shock	48	2.665	1.828	-0.850	5.700
	Global Economic Policy Uncertainty Index	48	265.166	56.106	178.800	431.565
	World Trade Uncertainty Index	48	9.316	24.212	0.019	100.824
	VIX	48	22.801	7.692	12.719	57.737
	Insecurity in Mexico	48	14.450	6.476	2.600	24.300

Note 1: the inflation bias is calculated as the deviation between the observed inflation and Banxico's inflation target.

Note 2: There are 36 observations for the dependent variable I called "point estimate" due to the fact that Banxico started collecting these specific data one year later and not in February 2020 as in the case of the other two dependent variables.

Source: data on firms' 12-month inflation expectations come from Banxico's *MSREA*; data on MPS come from Solís (2023a, b); data used to build the inflation bias come from INEGI and Banxico; data on the Global Economic Policy Uncertainty Index and World Trade Uncertainty Index come from Baker, Bloom, and Davis' webpage: <https://www.policyuncertainty.com/>; data on the VIX come from the Chicago Board Options Exchange Volatility Index <https://www.finance.yahoo.com/quote/%5EVIX/>; and data on insecurity in Mexico come from Banxico's Survey of Professional Forecasters.

4 Estimated Results

This section presents the main estimated results on the impact of *MPAs* on 12-month inflation expectations of Mexican firms.

Tables 5, 6, and 7 report the results of estimating Equation (1) by two-way fixed effects. The difference between these three Tables is the dependent variable used, which can be derived either from Question 1 (point estimate) or from Questions 2 (3 scenarios) and 3 (5 scenarios) from the *MSREA's* module on firms' 12-month inflation expectations.

The findings of these three tables show that β_1 from Equation (1), the main estimated regressor, is negative and statistically significant (in most of the cases). It suggests, for example, that a surprise tightening of the monetary policy stance reduces firms' 12-month inflation expectations, which is in line with the literature. In terms of its quantitative interpretation, if I focus on the first estimated specification of Table 5 (i.e. specification estimated at a national level), β_1 which is equal to -0.0233 indicates that a change of 25 basis points in the *MPS* reduces firms' inflation expectations by 0.583 percentage points.

The results also show that the *CB* information shock has a positive and a statistically significant effect on firms' 12-month inflation expectations. As it was explained in Section 3, the *CB* information shock was measured as the deviation between the observed inflation and Banxico's inflation target. This means that if there are inflationary pressures not foreseen previously, convergence to inflation will be more gradual and, as a consequence, firms will increase their 12-month inflation expectations, as expected. As regards global uncertainty measures (i.e. Global EPU Index; the World Trade Uncertainty Index, and the VIX), the findings show that their effect on firms's 12-month inflation expectations is positive and statistically significant (except for the VIX in Tables 6 and 7 in some cases), as expected. This suggests that higher global uncertainty leads firms to revise their 12-month inflation expectations upwards. Finally, the findings shows that insecurity in Mexico does have a positive and a statistically significant effect on firms' 12-month inflation expectations: higher levels of insecurity in Mexico leads firms to revise their inflation expectations upwards. These results can be observed at a national level, at a regional level, at a sector level, and considering firms'

size.

When I analyze the *MPS* effect on 12-month inflation expectations of more informed agents such as professional forecasters (see Table 5), I observe that the estimated β_1 is not statistically significant. The reason for this may be that these agents are continuously tracking macroeconomic conditions and, hence, movements in the interest rate are rarely a surprise to them. In addition, professional forecasters don't consider inflation is that persistent, they think it will eventually come down. It is also important to mention that these additional regressions have been estimated with a smaller number of observations, which could lead to imprecise estimates. On the other hand, their inflation expectations do react positively to a *CB* information shock, to uncertainty variables, and the insecurity variable for Mexico, as expected.

Overall, the results show that firms in Mexico do react to *MPAs* that result in *MPS*. They suggest that firms in Mexico are not inattentive to the objectives and actions of monetary policy authorities. They react to *MPAs* and *CB* information shock as in Enders, Hünnekes, and Müller (2019) for the case of German firms and as in Bottone and Rosolia (2019) for the case of Italian firms.

Table 5: The Response of Firms' Inflation Expectations to Banxico's *MPAs* that Resulted in Surprises

Independent Variables:	Linear Regression by Multiple Fixed Effects											
	Dependent Variable : Point Estimate - Question 1 from Banxico's MSREA						Dependent Variable : Point Estimate from Banxico's SPF					
	Regions			Sectors			Firm's Size			Professional Forecasters		
	National	North	North-Centre	Centre	South	12-Month Inflation Expectations (t)	Manufacturing	Non-Manufacturing	Small	Medium	Large	12-Month Inflation Expectations (t+1)
Surprise 1 (St) x Dummy = 1 if Firm Answers MSREA Right After MPA (Dit)	-0.0233** (0.010)	-0.0377** (0.017)	-0.0366* (0.019)	-0.0278*** (0.009)	0.0110 (0.007)	-0.0225** (0.009)	-0.0238** (0.010)	-0.0227*** (0.005)	-0.0250 (0.018)	-0.0234** (0.009)	0.0009 (0.010)	-0.0186 (0.014)
CB Information Shock	0.3390*** (0.064)	0.2007*** (0.058)	0.4188*** (0.111)	0.4076*** (0.062)	0.3017*** (0.062)	0.3243*** (0.065)	0.3548*** (0.066)	0.3467*** (0.053)	0.2646*** (0.084)	0.4660*** (0.068)	0.1797*** (0.044)	0.3270*** (0.057)
Global Economic Policy Uncertainty Index	0.0049*** (0.001)	0.0038 (0.003)	0.0064*** (0.001)	0.0057*** (0.001)	0.0030** (0.001)	0.0023 (0.001)	0.0072*** (0.001)	0.0057*** (0.001)	0.0042** (0.002)	0.0054*** (0.002)	0.0042*** (0.001)	0.0088*** (0.002)
World Trade Uncertainty Index	0.0216*** (0.007)	0.0159** (0.007)	0.0384*** (0.009)	0.0261** (0.010)	-0.0018 (0.007)	0.0300*** (0.008)	0.0157** (0.007)	0.0187*** (0.006)	0.0321*** (0.009)	0.0121 (0.009)	0.0867*** (0.024)	0.0321 (0.035)
VIX	0.0531** (0.022)	0.1217*** (0.014)	0.0524 (0.033)	0.0066 (0.024)	0.0520*** (0.017)	0.0663** (0.024)	0.0414* (0.021)	0.0342 (0.021)	0.0713*** (0.023)	0.0436 (0.025)	0.0453*** (0.009)	-0.0298 (0.020)
Insecurity in Mexico	0.1317*** (0.012)	0.1665*** (0.009)	0.1631*** (0.019)	0.0851*** (0.015)	0.1363*** (0.015)	0.1356*** (0.014)	0.1280*** (0.013)	0.1387*** (0.013)	0.1300*** (0.013)	0.1158*** (0.016)	0.1031*** (0.011)	0.0356** (0.015)
Observations	2,612	600	617	880	515	1,173	1,439	985	1,000	627	228	224
Overall R-squared	0.355	0.386	0.418	0.331	0.326	0.341	0.373	0.333	0.316	0.496	0.784	0.659
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Note: Surprise 1 (S0) stands for St in Equation (1). Dummy =1 if Firm Answers MSREA Right After MPA stands for Dit in Equation (1). Driscoll-Kraay clustered standard errors in parentheses. Clusters by month and firm.												

Note: Surprise 1 (St) stands for St in Equation (1). Dummy = 1 if Firm Answers MSREA Right After MPA stands for Dit in Equation (1). Driscoll-Kraay clustered standard errors in parentheses. Clusters by month and firm.

*** p<0.01, ** p<0.05, * p<0.1

Table 6: The Response of Firms' Inflation Expectations to Banxico's *MPAs* that Resulted in Surprises

Independent Variables:	Linear Regression by Multiple Fixed Effects									
	Regions					Sectors				
	Dependent Variable: Question 2 from Banxico's MSREA									
	National	North	North-Centre	Centre	South	Manufacturing	Non-Manufacturing	Small	Medium	Large
12-Month Inflation Expectations (t)										
Suprise 1 (St) x Dummy = 1 if Firm Answers MSREA Right After MPA (Dit)	-0.0164** (0.006)	0.0063 (0.015)	-0.0196*** (0.005)	-0.0203 (0.014)	-0.0272 (0.017)	-0.0285*** (0.009)	-0.0054 (0.005)	-0.0098 (0.007)	-0.0165*** (0.004)	-0.0221 (0.013)
CB Information Shock	0.3991*** (0.052)	0.4241*** (0.062)	0.3652*** (0.043)	0.4717*** (0.054)	0.2861** (0.106)	0.4278*** (0.067)	0.3721*** (0.045)	0.3017*** (0.052)	0.4155*** (0.075)	0.4802*** (0.044)
Global Economic Policy Uncertainty Index	0.0054*** (0.001)	0.0059*** (0.001)	0.0064*** (0.001)	0.0049*** (0.001)	0.0042* (0.002)	0.0055*** (0.002)	0.0053*** (0.001)	0.0047*** (0.001)	0.0044** (0.002)	0.0074*** (0.001)
World Trade Uncertainty Index	0.0255*** (0.006)	0.0097 (0.011)	0.0225*** (0.004)	0.0376*** (0.011)	0.0225 (0.014)	0.0308*** (0.009)	0.0201*** (0.005)	0.0290*** (0.009)	0.0313*** (0.005)	0.0142 (0.009)
VIX	0.0326 (0.024)	-0.0079 (0.024)	0.0235 (0.022)	0.0149 (0.027)	0.1163** (0.051)	0.0244 (0.030)	0.0414* (0.022)	0.0400 (0.025)	0.0389 (0.034)	0.0211 (0.019)
Insecurity in Mexico	0.1016*** (0.015)	0.0906*** (0.019)	0.1057*** (0.015)	0.0604*** (0.019)	0.1750*** (0.029)	0.0834*** (0.018)	0.1191*** (0.015)	0.1151*** (0.018)	0.0891*** (0.021)	0.1042*** (0.013)
Observations	3,518	811	855	1,185	667	1,668	1,850	1,203	1,288	1,027
Overall R-squared	0.282	0.331	0.382	0.223	0.296	0.282	0.285	0.186	0.298	0.457
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Note: Surprise 1 (St) stands for St in Equation (1). Dummy = 1 if Firm Answers MSREA Right After MPA stands for Dit in Equation (1). Driscoll-Kraay clustered standard errors in parentheses. Clusters by month and firm.
 *** p<0.01, ** p<0.05, * p<0.1

Table 7: The Response of Firms' Inflation Expectations to Banxico's *MPAs* that Resulted in Surprises

Independent Variables:	Linear Regression by Multiple Fixed Effects									
	Regions					Sectors			Firm's Size	
	Dependent Variable: Question 3 from Banxico's MSREA									
	National	North	North-Centre	Centre	South	Manufacturing	Non-Manufacturing	Small	Medium	Large
12-Month Inflation Expectations (t)										
Suprise 1 (St) x Dummy = 1 if Firm Answers MSREA Right After MPA (Dit)	-0.0274*** (0.005)	-0.0210** (0.009)	-0.0564*** (0.015)	-0.0190* (0.009)	-0.0224*** (0.005)	-0.0331*** (0.008)	-0.0152** (0.005)	-0.0310* (0.018)	-0.0112 (0.007)	-0.0499*** (0.009)
CB Information Shock	0.3429*** (0.069)	0.2536*** (0.052)	0.5085*** (0.071)	0.3502*** (0.089)	0.2514** (0.101)	0.3753*** (0.062)	0.2920*** (0.087)	0.3446*** (0.102)	0.2884*** (0.071)	0.4226*** (0.049)
Global Economic Policy Uncertainty Index	0.0062*** (0.002)	0.0063*** (0.001)	0.0103*** (0.002)	0.0052** (0.002)	0.0029 (0.002)	0.0067*** (0.002)	0.0054*** (0.002)	0.0087*** (0.002)	0.0046* (0.002)	0.0060*** (0.001)
World Trade Uncertainty Index	0.0217*** (0.005)	0.0394*** (0.010)	0.0339*** (0.012)	0.0135 (0.010)	0.0013 (0.003)	0.0342*** (0.008)	0.0055 (0.005)	0.0301* (0.015)	0.0113* (0.006)	0.0301*** (0.004)
VIX	0.0022 (0.024)	-0.0084 (0.013)	-0.0404 (0.028)	0.0327 (0.036)	0.0145 (0.030)	-0.0124 (0.024)	0.0216 (0.028)	-0.0510* (0.029)	0.0330 (0.033)	0.0171 (0.020)
Insecurity in Mexico	0.1027*** (0.015)	0.0634*** (0.016)	0.1026*** (0.016)	0.1244*** (0.026)	0.1217*** (0.028)	0.1129*** (0.019)	0.0929*** (0.017)	0.0805*** (0.029)	0.1200*** (0.017)	0.0996*** (0.012)
Observations	3,157	774	730	1,117	536	1,541	1,616	1,035	1,337	785
Overall R-squared	0.166	0.099	0.278	0.191	0.128	0.230	0.115	0.097	0.186	0.346
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Note: Surprise 1 (St) stands for St in Equation (1). Dummy = 1 if Firm Answers MSREA Right After MPA stands for Dit in Equation (1). Driscoll-Kraay clustered standard errors in parentheses. Clusters by month and firm.

*** p<0.01, ** p<0.05, * p<0.1

5 Robustness Tests

In this Section I perform some additional exercises to test for the robustness of the results.

5.1 Using a Measure to Control for the Coronavirus Pandemic

First, I re-estimate Equation (1) considering the Infectious Disease Equity Market Volatility (EMV) Tracker, built by Baker, Bloom, Davis, and Kost (2019), as an additional regressor. This variable is included in the specification in order to control for the Coronavirus Pandemic that occurred at the beginning of the sample period.

Baker, Bloom, Davis, and Kost (2019) build this Index as follows. First, they consider four sets of terms: E:economic, economy, financial; M:”stock market”, equity, equities, ”Standard and Poors”; V:volatility, volatile, uncertain, uncertainty, risk, risky; and ID:epidemic, pandemic, virus, flu, disease, coronavirus, mers, sars, ebola, H5N1, H1N1. Second, they ”obtain daily counts of newspapers articles that contain at least one term in each of E,M, V, and ID across approximately 3,000 United States newspapers. Third, they scale the raw EMV-ID counts by the count of all articles in the same way. In a final step, they match the level of the VIX between a certain period of time (1990-2016) using the overall EMV index and then scale this ID-EMV index to reflect the ratio of the ID-EMV articles to total EMV articles” (Baker, Bloom, Davis, and Kost (2019)).

Due to the methodology used to construct the Infectious Disease EMV Tracker, it can be observed that it is also controlling for financial market volatility. Hence, the VIX is excluded from the estimated regression in order to avoid endogeneity problems.

The results of this exercise are presented in Tables 8, 9, and 10. In general, they show the following: 1) firms’ 12-month inflation expectations do react to Banxico’s *MPAs* that result in *MPS*; and 2) the *CB* information shock, the uncertainty variables, and the proxy of insecurity in Mexico have a positive and a statistically significant effect on firms’ 12-month inflation expectations. The exception is the Infectious Disease EMV Tracker, which is not statistically significant in most of the cases.

Table 8: The Response of Firms' Inflation Expectations to Banxico's *MPAs* that Resulted in Surprises

Independent Variables:	Linear Regression by Multiple Fixed Effects											
	Dependent Variable : Point Estimate - Question 1 from Banxico's MSREA						Dependent Variable : Point Estimate from Banxico's SPF					
	Regions						Firm's Size					
	National	North	North-Centre	Centre	South	12-Month Inflation Expectations (t)	Non-Manufacturing	Manufacturing	Small	Medium	Large	Professional Forecasters
12-Month Inflation Expectations (t)												
Surprise 1 (St) x Dummy = 1 if Firm Answers MSREA Right After MPA (Dit)	-0.0275** (0.010)	-0.0425** (0.015)	-0.0423** (0.019)	-0.0298*** (0.009)	0.0057 (0.009)	-0.0263*** (0.008)	-0.0282** (0.011)	-0.0272*** (0.006)	-0.0270 (0.016)	-0.0302** (0.011)	0.0106** (0.004)	-0.0259 (0.015)
CB Information Shock	0.4387*** (0.044)	0.4018*** (0.067)	0.5191*** (0.079)	0.4273*** (0.041)	0.4092*** (0.047)	0.4417*** (0.044)	0.4383*** (0.048)	0.4192*** (0.034)	0.3824*** (0.059)	0.5633*** (0.058)	0.3013*** (0.018)	0.2694*** (0.033)
Global Economic Policy Uncertainty Index	0.0063*** (0.002)	0.0063** (0.003)	0.0078*** (0.002)	0.0059*** (0.002)	0.0045* (0.002)	0.0039* (0.002)	0.0083*** (0.002)	0.0066*** (0.001)	0.0059** (0.002)	0.0066*** (0.002)	0.0072*** (0.000)	0.0055*** (0.000)
World Trade Uncertainty Index	0.0240** (0.008)	0.0115 (0.008)	0.0433*** (0.013)	0.0288** (0.011)	0.0057 (0.007)	0.0302*** (0.010)	0.0200** (0.008)	0.0228*** (0.007)	0.0314*** (0.011)	0.0177 (0.012)	0.1101*** (0.015)	0.0332 (0.040)
Infectious Disease EMV tracker	0.0016 (0.022)	0.0644* (0.034)	-0.0056 (0.041)	-0.0135 (0.015)	-0.0265 (0.016)	0.0185 (0.024)	0.0125 (0.021)	-0.0134 (0.016)	0.0281 (0.027)	-0.0232 (0.027)	0.0377*** (0.008)	0.0062 (0.016)
Insecurity in Mexico	0.1038*** (0.015)	0.1403*** (0.022)	0.1311*** (0.027)	0.0732*** (0.015)	0.0900*** (0.016)	0.1106*** (0.019)	0.0976*** (0.014)	0.1119*** (0.011)	0.1086*** (0.020)	0.0763*** (0.023)	0.0942*** (0.007)	0.0621*** (0.008)
Observations	2,612	600	617	880	515	1,173	1,439	985	1,000	627	228	224
Overall R-squared	0.351	0.368	0.414	0.331	0.322	0.333	0.371	0.331	0.308	0.494	0.788	0.657
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Note: Surprise 1 (St) stands for St in Equation (1). Dummy = 1 if Firm Answers MSREA Right After MPA stands for Dit in Equation (1). Driscoll-Kraay clustered standard errors in parentheses. Clusters by month and firm.

*** p<0.01, ** p<0.05, * p<0.1

Table 9: The Response of Firms' Inflation Expectations to Banxico's *MPAs* that Resulted in Surprises

Independent Variables:	Linear Regression by Multiple Fixed Effects									
	Regions					Sectors				
	Dependent Variable: Question 2 from Banxico's MSREA					Firm's Size				
	National	North	North-Centre	Centre	South	Manufacturing	Non-Manufacturing	Small	Medium	Large
12-Month Inflation Expectations (t)										
Suprise 1 (St) x Dummy = 1 if Firm Answers MSREA Right After MPA (Dit)	-0.0192*** (0.006)	0.0068 (0.015)	-0.0218*** (0.005)	-0.0237 (0.014)	-0.0354 (0.022)	-0.0313*** (0.009)	-0.0082*** (0.004)	-0.0142** (0.007)	-0.0192*** (0.004)	-0.0236* (0.013)
CB Information Shock	0.4531*** (0.021)	0.4117*** (0.041)	0.4049*** (0.025)	0.4985*** (0.025)	0.4772*** (0.050)	0.4696*** (0.028)	0.4398*** (0.022)	0.3685*** (0.023)	0.4808*** (0.028)	0.5137*** (0.028)
Global Economic Policy Uncertainty Index	0.0068*** (0.001)	0.0056*** (0.001)	0.0074*** (0.001)	0.0062*** (0.001)	0.0085*** (0.000)	0.0070*** (0.001)	0.0067*** (0.001)	0.0067*** (0.001)	0.0060*** (0.001)	0.0082*** (0.001)
World Trade Uncertainty Index	0.0290*** (0.007)	0.0089 (0.013)	0.0255*** (0.006)	0.0423*** (0.011)	0.0289 (0.019)	0.0359*** (0.009)	0.0220*** (0.006)	0.0348*** (0.009)	0.0341*** (0.005)	0.0158 (0.009)
Infectious Disease EMV tracker	-0.0067 (0.014)	0.0017 (0.019)	-0.0056 (0.013)	-0.0207 (0.013)	0.0099 (0.035)	-0.0195 (0.014)	0.0064 (0.016)	-0.0151 (0.018)	-0.0051 (0.018)	0.0010 (0.014)
Insecurity in Mexico	0.0779*** (0.013)	0.0963*** (0.019)	0.0878*** (0.014)	0.0376* (0.019)	0.1152*** (0.028)	0.0559*** (0.016)	0.0993*** (0.013)	0.0815*** (0.018)	0.0630*** (0.016)	0.0924*** (0.014)
Observations	3,518	811	855	1,185	667	1,668	1,850	1,203	1,288	1,027
Overall R-squared	0.280	0.331	0.381	0.223	0.283	0.282	0.283	0.185	0.296	0.457
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Note: Surprise 1 (St) stands for St in Equation (1). Dummy = 1 if Firm Answers MSREA Right After MPA stands for Dit in Equation (1). Driscoll-Kraay clustered standard errors in parentheses. Clusters by month and firm.
 *** p<0.01, ** p<0.05, * p<0.1

Table 10: The Response of Firms' Inflation Expectations to Banxico's *MPAs* that Resulted in Surprises

	Linear Regression by Multiple Fixed Effects									
	Regions					Sectors				
	Dependent Variable: Question 3 from Banxico's MSREA					Firm's Size				
	National	North	North-Centre	Centre	South	Manufacturing	Non-Manufacturing	Small	Medium	Large
Independent Variables:										
12-Month Inflation Expectations (t)										
Suprise 1 (St) x Dummy = 1 if Firm Answers MSREA Right After MPA (Dit)	-0.0297*** (0.007)	-0.0222** (0.010)	-0.0570*** (0.018)	-0.0236** (0.010)	-0.0225*** (0.004)	-0.0351*** (0.010)	-0.0174*** (0.006)	-0.0325 (0.023)	-0.0128* (0.007)	-0.0547*** (0.010)
CB Information Shock	0.3479*** (0.032)	0.2404*** (0.041)	0.4434*** (0.043)	0.4122*** (0.024)	0.2761*** (0.048)	0.3548*** (0.020)	0.3295*** (0.046)	0.2643*** (0.069)	0.3425*** (0.031)	0.4526*** (0.028)
Global Economic Policy Uncertainty Index	0.0072*** (0.001)	0.0066*** (0.001)	0.0105*** (0.002)	0.0077*** (0.001)	0.0030 (0.002)	0.0078*** (0.001)	0.0065*** (0.001)	0.0087*** (0.001)	0.0058*** (0.002)	0.0079*** (0.001)
World Trade Uncertainty Index	0.0291*** (0.008)	0.0440*** (0.010)	0.0429*** (0.016)	0.0250* (0.013)	-0.0007 (0.010)	0.0450*** (0.011)	0.0094* (0.005)	0.0411* (0.021)	0.0128*** (0.005)	0.0420*** (0.006)
Infectious Disease EMV tracker	-0.0376 (0.025)	-0.0243 (0.019)	-0.0648** (0.028)	-0.0540 (0.037)	0.0165 (0.047)	-0.0628** (0.027)	-0.0110 (0.025)	-0.0767** (0.036)	0.0014 (0.028)	-0.0520*** (0.017)
Insecurity in Mexico	0.0756*** (0.017)	0.0522** (0.019)	0.0811*** (0.015)	0.0683** (0.030)	0.1248*** (0.036)	0.0772*** (0.023)	0.0729*** (0.016)	0.0570* (0.031)	0.1018*** (0.018)	0.0534*** (0.015)
Observations	3,157	774	730	1,117	536	1,541	1,616	1,035	1,337	785
Overall R-squared	0.167	0.099	0.281	0.193	0.128	0.235	0.115	0.100	0.185	0.351
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Note: Surprise 1 (St) stands for St in Equation (1). Dummy = 1 if Firm Answers MSREA Right After MPA stands for Dit in Equation (1). Driscoll-Kraay clustered standard errors in parentheses. Clusters by month and firm.

*** p<0.01, ** p<0.05, * p<0.1

5.2 Using Uncertainty Variables for Mexico

Second, I re-estimate Equation (1) using two alternative uncertainty variables, focused on Mexico: the EPU Index for Mexico and the Trade Uncertainty Index for Mexico. These two variables replace the Global EPU Index and the World Trade Uncertainty Index considered before. They are built by Bloom, Baker and Davis and Ahir, Bloom, and Furceri, respectively, using the methodology employed to construct their global counterparts. The Mexican version of the VIX is still not available, so I control for global financial market volatility.

The results are presented in Tables 11, 12, and 13. They mainly show that, regardless of which EPU Index and Trade Uncertainty Index is used, the included regressors have the same effect on firms' 12-month inflation expectations as in the main exercise: Banxico's *MPAs* that result in *MPS* have a negative effect on firms' 12 month inflation expectations, while the *CB* information shock, the uncertainty variables, and the proxy of insecurity in Mexico have a positive effect, as expected. Most of these effects are statistically significant.

Table 11: The Response of Firms' Inflation Expectations to Banxico's *MPAs* that Resulted in Surprises

Independent Variables:	Linear Regression by Multiple Fixed Effects											
	Dependent Variable : Point Estimate - Question 1 from Banxico's MSREA											
	Regions			Sectors			Firm's Size			Professional Forecasters		
	North	North-Centre	Centre	South	Manufacturing	Non-Manufacturing	Small	Medium	Large	12-Month Inflation Expectations (t)	12-Month Inflation Expectations (t+1)	
Suprise 1 (SI) x Dummy = 1 if Firm Answers MSREA Right After MPA (Dit)	-0.0277*** (0.007)	-0.0426** (0.016)	-0.0359** (0.013)	-0.0324*** (0.006)	0.0028 (0.005)	-0.0242*** (0.007)	-0.0302*** (0.008)	-0.0274*** (0.004)	-0.0269* (0.014)	-0.0312*** (0.009)	-0.0131*** (0.003)	-0.0104 (0.006)
CB Information Shock	0.3043*** (0.080)	0.1567** (0.067)	0.3812** (0.152)	0.3631*** (0.070)	0.3036*** (0.069)	0.2444*** (0.060)	0.3549*** (0.102)	0.3363*** (0.092)	0.2085** (0.088)	0.4234*** (0.068)	0.0242 (0.038)	0.1608** (0.054)
Economic Policy Uncertainty Index for Mexico	0.0025 (0.002)	0.0032 (0.002)	0.0040 (0.004)	0.0025 (0.003)	-0.0008 (0.002)	0.0057** (0.002)	-0.0000 (0.002)	0.0001 (0.004)	0.0036 (0.002)	0.0042 (0.003)	-0.0044 (0.003)	-0.0034*** (0.001)
Trade Uncertainty Index for Mexico	0.1153*** (0.036)	0.1136** (0.040)	0.1170*** (0.039)	0.1477*** (0.047)	0.0536 (0.037)	0.1522*** (0.034)	0.0857* (0.043)	0.0916** (0.039)	0.1495*** (0.037)	0.1075* (0.055)	0.2159** (0.084)	0.3741*** (0.096)
VIX	0.0945*** (0.028)	0.1578*** (0.019)	0.1074** (0.046)	0.0554** (0.026)	0.0691** (0.026)	0.1084*** (0.022)	0.0837** (0.035)	0.0704* (0.037)	0.1153*** (0.027)	0.0924*** (0.024)	0.0860*** (0.007)	0.0709*** (0.005)
Insecurity in Mexico	0.1624*** (0.016)	0.1921*** (0.019)	0.2087*** (0.030)	0.1189*** (0.014)	0.1457*** (0.018)	0.1667*** (0.019)	0.1598*** (0.018)	0.1647*** (0.022)	0.1626*** (0.019)	0.1529*** (0.014)	0.1099*** (0.020)	0.0522** (0.019)
Observations	2,612	600	617	880	515	1,173	1,439	985	1,000	627	228	216
Overall R-squared	0.353	0.388	0.408	0.329	0.324	0.348	0.360	0.326	0.316	0.493	0.773	0.686
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Note: Surprise 1 (SI) stands for SI in Equation (1). Dummy = 1 if Firm Answers MSREA Right After MPA stands for Dit in Equation (1). Driscoll-Kraay clustered standard errors in parentheses. Clusters by month and firm.
 *** p<0.01, ** p<0.05, * p<0.1

Table 12: The Response of Firms' Inflation Expectations to Banxico's *MPAs* that Resulted in Surprises

Linear Regression by Multiple Fixed Effects										
Independent Variables:	Regions					Sectors		Firm's Size		
	Dependent Variable: Question 2 from Banxico's MSREA									
	National	North	North-Centre	Centre	South	Manufacturing	Non-Manufacturing	Small	Medium	Large
12-Month Inflation Expectations (t)										
Suprise 1 (St) x Dummy = 1 if Firm Answers MSREA Right After MPA (Dit)	-0.0131** (0.006)	0.0094 (0.019)	-0.0129** (0.005)	-0.0186 (0.013)	-0.0247 (0.020)	-0.0262*** (0.008)	-0.0016 (0.005)	-0.0076 (0.006)	-0.0149*** (0.003)	-0.0166 (0.018)
	0.2682*** (0.054)	0.2921*** (0.064)	0.2147*** (0.053)	0.3409*** (0.049)	0.1912** (0.081)	0.2900*** (0.060)	0.2508*** (0.052)	0.1920*** (0.054)	0.3000*** (0.068)	0.3093*** (0.059)
Economic Policy Uncertainty Index for Mexico	0.0065* (0.004)	0.0080*** (0.002)	0.0048 (0.003)	0.0074 (0.005)	0.0060 (0.005)	0.0058 (0.003)	0.0074* (0.004)	0.0097* (0.005)	0.0054 (0.004)	0.0042 (0.003)
Trade Uncertainty Index for Mexico	0.1409*** (0.036)	0.0888 (0.056)	0.1215*** (0.028)	0.1955*** (0.057)	0.1080 (0.069)	0.1802*** (0.052)	0.1058*** (0.031)	0.1344*** (0.048)	0.1658*** (0.044)	0.1218*** (0.039)
VIX	0.1012*** (0.018)	0.0643*** (0.018)	0.1017*** (0.016)	0.0813*** (0.020)	0.1678*** (0.027)	0.0959*** (0.019)	0.1063*** (0.018)	0.1003*** (0.022)	0.0967*** (0.021)	0.1130*** (0.019)
Insecurity in Mexico	0.1411*** (0.016)	0.1331*** (0.019)	0.1469*** (0.014)	0.1002*** (0.026)	0.2071*** (0.019)	0.1204*** (0.019)	0.1605*** (0.016)	0.1579*** (0.025)	0.1219*** (0.018)	0.1481*** (0.012)
Observations	3,518	811	855	1,185	667	1,668	1,850	1,203	1,288	1,027
Overall R-squared	0.277	0.321	0.366	0.223	0.294	0.278	0.280	0.187	0.296	0.436
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Note: Surprise 1 (St) stands for St in Equation (1). Dummy =1 if Firm Answers MSREA Right After MPA stands for Dit in Equation (1). Driscoll-Kraay clustered standard errors in parentheses. Clusters by month and firm.

*** p<0.01, ** p<0.05, * p<0.1

Note: Surprise 1 (St) stands for St in Equation (1). Dummy = 1 if Firm Answers MSREA Right After MPA stands for Dit in Equation (1). Driscoll-Kraay clustered standard errors in parentheses. Clusters by month and firm.
 *** p<0.01, ** p<0.05, * p<0.1

Table 13: The Response of Firms' Inflation Expectations to Banxico's *MPAs* that Resulted in Surprises

	Linear Regression by Multiple Fixed Effects									
	Dependent Variable: Question 3 from Banxico's MSREA									
	Regions					Sectors				
	National	North	North-Centre	Centre	South	Manufacturing	Non-Manufacturing	Small	Medium	Large
Independent Variables:										
12-Month Inflation Expectations (t)										
Surprise 1 (St) x Dummy = 1 if Firm Answers MSREA Right After MPA (Dit)	-0.0195*** (0.005)	-0.0131 (0.010)	-0.0425*** (0.011)	-0.0144 (0.012)	-0.0161 (0.010)	-0.0229*** (0.008)	-0.0111 (0.006)	-0.0195 (0.016)	-0.0097 (0.009)	-0.0371*** (0.007)
	0.1980** (0.071)	0.0910 (0.067)	0.2885*** (0.082)	0.2273** (0.087)	0.1896** (0.073)	0.2146*** (0.062)	0.1724* (0.087)	0.1433 (0.125)	0.1853*** (0.053)	0.2719*** (0.067)
Economic Policy Uncertainty Index for Mexico	0.0040 (0.002)	0.0060 (0.005)	0.0039 (0.003)	0.0054 (0.004)	-0.0002 (0.004)	0.0031 (0.003)	0.0046* (0.002)	0.0063* (0.004)	0.0059** (0.003)	-0.0025 (0.003)
Trade Uncertainty Index for Mexico	0.1031** (0.042)	0.1655** (0.062)	0.1690*** (0.042)	0.0723 (0.082)	-0.0064 (0.057)	0.1468** (0.053)	0.0490 (0.041)	0.1307* (0.073)	0.0777 (0.048)	0.1179*** (0.033)
VIX	0.0792*** (0.017)	0.0773*** (0.009)	0.0789*** (0.021)	0.0971*** (0.028)	0.0479** (0.020)	0.0697*** (0.017)	0.0891*** (0.020)	0.0589** (0.021)	0.0896*** (0.018)	0.0915*** (0.019)
Insecurity in Mexico	0.1414*** (0.015)	0.1097*** (0.024)	0.1548*** (0.017)	0.1610*** (0.027)	0.1356*** (0.033)	0.1516*** (0.021)	0.1286*** (0.017)	0.1382*** (0.027)	0.1531*** (0.020)	0.1255*** (0.013)
Observations	3,157	774	730	1,117	536	1,541	1,616	1,035	1,337	785
Overall R-squared	0.157	0.089	0.252	0.185	0.126	0.219	0.108	0.085	0.182	0.332
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Note: Surprise 1 (St) stands for St in Equation (1). Dummy =1 if Firm Answers MSREA Right After MPA stands for Dit in Equation (1). Driscoll-Kraay clustered standard errors in parentheses. Clusters by month and firm.										
*** p<0.01, ** p<0.05, * p<0.1										

Note: Surprise 1 (St) stands for St in Equation (1). Dummy = 1 if Firm Answers MSREA Right After MPA stands for Dit in Equation (1). Driscoll-Kraay clustered standard errors in parentheses. Clusters by month and firm.
 *** p<0.01, ** p<0.05, * p<0.1

6 Relative Contribution of Explanatory Variables to Firms' 12-Month Inflation Expectations

In this Section, I analyze the relative contribution of each independent variable to firms' 12-month inflation expectations. In order to do it, I derived the beta coefficients from the specifications that were estimated at a national level, both from Section 4 (Tables 5, 6, and 7) and sub-Section 5.1 (Tables 8, 9, and 10), using the Stata command `esttab, beta`. I chose to analyze these specifications because they have similar regressors.

The results are presented in Table 14. The first and third columns, which correspond to the exercise presented in Section 4, show that insecurity in Mexico is the explanatory variable that contributes the most to firms' 12-month inflation expectations, followed by the *CB* information shock. However, when I focus on the specifications from sub-Section 5.1, the findings show that the *CB* information shock is the main contributor to firms' 12-month inflation expectations, followed by insecurity in Mexico. This is also the case for the second column in Table 14. Given these latter results are seen in 4 out of the 6 columns presented, I therefore conclude that the main driver of firms' 12-month inflation expectations during the sample period is the *CB* information shock.

Table 14: Beta Coefficients

Independent Variables	Beta Coefficients					
	Exercise 1			Exercise 2		
	Question 1	Question 2	Question 3	Question 1	Question 2	Question 3
Suprise 1 (St) x Dummy = 1 if Firm Answers MSREA Right After MPA (Dit)	-0.057* (-2.34)	-0.032* (-2.65)	-0.043*** (-5.13)	-0.067* (-2.85)	-0.037** (-3.28)	-0.047*** (-4.19)
CB Information Shock	0.255*** (5.27)	0.292*** (7.67)	0.199*** (4.96)	0.330*** (9.88)	0.332*** (21.08)	0.202*** (10.80)
Global Economic Policy Uncertainty Index	0.097** (3.69)	0.136*** (4.50)	0.122** (3.72)	0.122** (3.15)	0.172*** (9.52)	0.142*** (5.85)
World Trade Uncertainty Index	0.058** (3.24)	0.056*** (4.00)	0.037*** (4.03)	0.065* (2.86)	0.064*** (4.44)	0.050** (3.69)
VIX	0.130* (2.42)	0.072 (1.33)	0.004 (0.09)			
Insecurity in Mexico	0.365*** (11.32)	0.291*** (6.97)	0.233*** (7.05)	0.288*** (6.85)	0.223*** (6.03)	0.171*** (4.54)
Infectious Disease EMV tracker				0.003 (0.07)	-0.017 (-0.47)	-0.074 (-1.52)

Note 1: t-statistic in parenthesis.

* p<0.05, ** p<0.01, *** p<0.001

Note 2: the beta coefficients are obtained using Stata's command "esttab, beta", after estimating each specification.

7 Conclusions

This paper exploits data from a new module on firms' 12-month inflation expectations that was incorporated to Banxico's *MSREA* in February 2020 to investigate whether firms' inflation expectations react or not to Banxico's *MPAs* that result in *MPS*. The analysis is performed for the period February 2020 - January 2024. In order to isolate the effects of *MPAs*, I consider a symmetric 5-day window around *MPAs* and I use the date and hour of firms' survey response submissions to compare (within that window) the responses of firms that were submitted right after a *MPA* with those that were submitted right before it.

This treatment effect of Banxico's *MPAs* is investigated by estimating an econometric specification that includes as explanatory variables an interaction term between *MPSs* and a dummy that is equal to 1 if firms responded to the *MSREA* right after a *MPA* (and equal to zero if otherwise), a *CB* information shock, global uncertainty variables (i.e. Global EPU Index, World Trade Uncertainty Index, and VIX), an insecurity measure for Mexico, and firm and time fixed effects. This specification is estimated by two-way fixed effects. Driscoll-Kraay clustered standard errors by firm and month are used to control for heteroskedasticity, as well as for temporal and cross-sectional correlation in the residuals.

To further exploit the data provided by Banxico's *MSREA*, this specification is estimated at both a national and regional level, at a sectoral level, and by the size of firms. The survey design also allows to obtain three different dependent variables, so I conduct the analysis considering each of them.

The findings show that Banxico's *MPAs* that result in *MPS* have a negative and a statistically significant effect on firms' 12-month inflation expectations during the sample period. This suggests, for example, that a surprise tightening of the monetary policy stance, leads firms' 12-month inflation expectations to decline, as expected. On the other hand, a *CB* information shock, higher global uncertainty, and higher levels of insecurity in Mexico lead firms to revise their 12-month inflation expectations upwards. These findings can be observed when considering the different margins mentioned and, the three different dependent variables obtained from the *MSREA*.

Two additional exercises were conducted to test for the robustness of the results. In the first one, the news-paper based Infectious Disease Equity Market Volatility (EMV) Tracker is included in the estimated specification in order to control for the Coronavirus Pandemic that occurred at the beginning of the sample period. In the second exercise, the Global EPU Index and the World Trade Uncertainty Index are replaced with their counterparts for Mexico. These two exercises confirm the previous results.

Finally, I calculate beta coefficients to investigate the relative contribution of each explanatory variable to firms' 12-month inflation expectations and, find that the main driver of Mexican firms' 12-month inflation expectations is the *CB* information shock, followed by the insecurity in Mexico.

Overall, the findings show that Banxico's *MPAs* do have an impact on Mexican firms' inflation expectations, but it is limited: regressors such as the *CB* information shock or the proxy for insecurity in Mexico result to be the main drivers of firms' inflation expectations. This suggests that Banxico's efforts to clearly explain their actions and intentions are paying off. However, there seem to be more scope to reach a larger number of firms with Banxico's communications, which apart from being clear and understandable, should be persistent. This will help sustain and nurture trust and credibility in this Central Institute's policies and will bring firms' expectations closer to Banxico's inflation target.

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