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Can Fiscal Consolidation Announcements Help Anchor Inflation Expectations?

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ABSTRACT: In this paper, we use quarterly data and a novel database on fiscal policy consolidation announcements, for a sample of advanced economies and emerging markets to quantify the effects of fiscal tightening on inflation expectations. We find that fiscal consolidation announcements reduce inflation expectations over the medium-term (three and five-years ahead), but not in the short-term (one-year ahead). There is also some evidence that consolidation announcements reduce "disagreement" about expected future inflation at longer horizons. The inflation anchoring role of consolidation announcements is enhanced by the strength of a country's fiscal and monetary frameworks, and when fiscal and monetary policy work in tandem. In addition, we find that initial conditions matter—inflation expectation's response to consolidation announcements is larger in periods of high contemporaneous inflation. With these results in hand, we show that the effectiveness of fiscal consolidation in controlling realized inflation depends greatly on the response of inflation expectations to consolidation announcements. These results show that fiscal policy is crucial to anchor inflation expectations and a key element of a credible disinflationary process.

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Introduction

The resurgence of inflation following the COVID-19 pandemic and other subsequent global shocks was accompanied by signs of a de-anchoring of near-term inflation expectations in several countries with important implications for inflation dynamics (IMF, 2023a). These trends have led to increased interest in the examination of the drivers of inflation expectations and in the analysis of fiscal and monetary policy interactions. The latter is particularly relevant given substantial fiscal support provided by governments to cushion the effects of the pandemic on households and firms (which may have contributed to fuel the inflation surge) and the potential role that fiscal policy could play in restoring price stability (IMF, 2023b).

Against this backdrop, this paper explores the role of fiscal consolidations announcements in shaping inflation expectations. We use a quarterly data and a novel database of fiscal consolidation announcements to quantify the effects of fiscal tightening on inflation expectations. Fiscal adjustment announcements can reduce inflation through a number of channels, including the effects of austerity on aggregate demand, as captured by the output gap term in the standard Philips' curve, but also via their effects on inflation expectations. In models of the so-called "fiscal theory of the price level", higher nominal debt associated with expansionary fiscal policies that is not backed by future fiscal surpluses would lead agents to anticipate higher inflation (Leeper and Leith, 2017). Conversely, higher expected fiscal surpluses would lead to a decline in inflation expectations.[1]

The use of data at a quarterly (rather than annual) frequency allows us to control for anticipation effects of fiscal policy implementation, which are particularly relevant for variables that respond quickly to news, such as inflation expectations. In this regard, the identification strategy of the paper relies on the fact that fiscal consolidation measures are unlikely to be adjusted to changes in inflation expectations within the same quarter. This assumption seems plausible since the design, announcement, and implementation of fiscal consolidation packages typically takes several months.[2] They are frequently the result of long negotiations between the executive and legislative branches as part of the budget process (Lienert, 2010). Even when done outside the normal budget cycle, fiscal consolidation announcements tend to reflect more persistent concerns about the sustainability of fiscal positions rather than being a real-time response to inflation developments.[3] In addition, omitted variable bias is attenuated by the inclusion of number of control variables as well as country and time fixed-effects in the regressions.

We find that that fiscal consolidation announcements reduce inflation expectations over the medium-term, but not in the short-term. This result seem to be driven by the dynamics of realized inflation in the aftermath of these announcements and their effect on near-term inflation expectations in emerging markets. There is also evidence that consolidation announcements reduce "disagreement" about expected future inflation at longer

[1] The strength of these effects could vary with the initial value of debt if inflation concerns rise when agents don't expect the government to fully repay its debt. At low debt levels, the probability of not repaying is likely to be small. But as the debt level increases, so might the importance of this channel.

[2] As an example, as early as January 2019, cabinet members of the newly elected President Jair Bolsonaro's government in Brazil made statements indicating that fiscal adjustment measures (such as a tax reform and a pension reform) were being considered to reduce the fiscal deficit *("Bolsonaro prepara pacote de medidas como o 38.º presidente da República" Correio Braziliense*). Nonetheless, the concrete announcement of a consolidation package only occurred in May 2019.

[3]As highlighted by Alesina and others (2017) for countries in the Euro area the size of the deficit reduction plan has to be agreed upon with the European institutions, which introduces further time constraints to the process.

horizons. Zooming into the composition of the announcements, we find that expenditure-based consolidation announcements reduce inflation expectations at shorter horizons, while revenue-based announcements reduce medium- to long-term inflation expectations. This may be due to the initial impact of taxes on prices.

In addition, we highlight how the strength of a country's fiscal and monetary frameworks can boost the inflation-anchoring role of consolidation announcements. First, we show that the response of inflation expectations to fiscal consolidation announcements is more muted in countries with higher government debt. We provide additional evidence of the importance of a country's fiscal framework by showing that consolidation announcements have a larger impact on inflation expectations in countries that display more fiscal prudence than initially forecasted. We also show that, among emerging markets, countries with inflation targeting regimes see a larger reduction in medium-term inflation expectations compared to others.

We also provide evidence of monetary-fiscal policy complementarities when it comes to the role of fiscal policy as an inflation anchoring tool and of the relevance of initial conditions. Consolidation announcements have a larger impact on inflation expectations in countries where monetary policy is tight, showing that anchoring expectations may require that countries align their fiscal and monetary actions. Further, our analysis suggests that consolidation announcements have a larger and more immediate impact on expectations in times of high inflation.

The paper then explores the role played by inflation expectations in the transmission from fiscal consolidation announcements to actual inflation. Recent empirical and theoretical work has emphasized the importance of inflation expectations as drivers of inflation dynamics and how the explanatory power of inflation expectations for wages and other key relative prices has increased after the pandemic (Bems and others, 2021; Binder, 2017; Coibion and others, 2020; Reis, 2020, among others).

To shed light on the importance of expectations in explaining realized inflation dynamics, we analyze whether inflation expectations play a role in the transmission of fiscal policy actions to inflation. We do so by estimating the relationship between fiscal consolidation announcements, inflation expectations, and realized inflation in a panel vector autoregression (PVAR) framework. We build a counterfactual scenario using the methodology proposed by Bernanke and others (1998), Sims and Zha (2006), Kilian and Lewis (2011), and Bachmann and Sims (2012). To capture the idea that countries with high inflation would stand to benefit more from tighter fiscal policy, we condition the impulse responses to depend on the level of inflation at the time fiscal consolidation announcements were made.

Against this backdrop, our results show that for economies with high realized inflation (at or above the 75th percentile of the distribution), a fiscal consolidation announcement reduces headline inflation by 100 basis points in a one-year window. In the counterfactual scenario, where the response of inflation expectations is zeroed out, the reduction in inflation is much more gradual.

To our knowledge, this is the first paper to use well-identified fiscal policy announcements at a quarterly frequency to quantify the link between fiscal consolidations and inflation expectations for large set of countries comprising advanced economies and emerging markets. It also contributes to the literature by investigating the relevance of a country's macroeconomic policy frameworks in shaping the impact of fiscal actions on expectations, and by exploring the potential monetary-fiscal policy interactions. The paper also highlights the key role of medium-term expectations on price formation processes.

A number of previous studies have examined the link between fiscal policy and inflation, focusing mostly on inflation outcomes rather than expectations. For example, Catão and Terrones (2005) use panel data for 107 countries over the period 1960–2001 and find a strong positive association between fiscal deficits and realized inflation among high-inflation and developing countries, but not among low-inflation advanced economies. More recently, Banerjee and others (2022) show in a panel of advanced economies that under fiscal dominance regimes (defined as a regime in which the government does not adjust the primary balance to stabilize debt), the effect of higher deficits on realized inflation is up to five times larger than under monetary dominance. Jorgensen and Ravn (2022) apply structural VAR models for the United States and fiscal spending shocks based on real-time forecast errors to find evidence that prices do not increase in response to a positive government spending shock. Cevik and Miryugin (2023) use fiscal shocks identified in a variety of ways, including changes in the cyclically-adjusted primary balances and forecast errors, to examine the link between fiscal expansions and realized inflation using annual data for a large set of countries.[4] They find that both headline and core measures of inflation increase in response to expansionary fiscal policies.

Overall, in contrast to our paper, these studies do not use well-identified measures of fiscal policy actions and therefore their results suffer from several biases (as disused below, see also Ramey, 2017). In a recent contribution, Dabla-Norris, Goncalves, and Nguyen (2023) address this problem by using tax changes identified using the narrative approach for a sample of 10 advanced economies and present evidence that the effects of tax-based consolidations on inflation depend on the type of tax. Increases in personal income taxes cause persistent declines in inflation (via the aggregate demand channel), whilst VAT rate increases temporarily push inflation up. Our paper is complementary to this approach as it considers a broader set of consolidation episodes (including expenditure-based adjustments) and countries in the analysis and focuses on expectations rather than inflation outcomes. As discussed below, the inclusion of emerging market economies shines a light on important dimensions of the link between consolidations and inflation.

Contributions analyzing the link between the fiscal stance and inflation expectations are scarcer and tend to consider indirect measures of fiscal policy and/or focus on a narrow set of countries. Coibion, Gorodnichenko and Weber (2021) base their analysis on a large randomized control trial on U.S. households and find that information about the current debt or deficit levels has little impact on inflation expectations but that news about future debt leads to higher expected inflation. Brandão-Marques and others (2023) examine the impact of government debt surprises on inflation expectations in advanced- and emerging market economies and find that debt surprises raise long-term inflation expectations in emerging market economies in a persistent way, but not in advanced economies. Cloyne and others (2023) use narrative shocks for tax increases in the United States and find that increases in personal income taxes reduce one-year ahead inflation expectations, but corporate tax increases do not have statistically nor economically significant effects on expectations.

The remainder of the paper is organized as follows: section II presents an overview of the data; subsequently section III presents the empirical strategy and findings on the effects of fiscal announcements on inflation expectations, as well as extensions to the baseline specification, including the relevance of fiscal and monetary frameworks when considering the link between fiscal adjustments and inflation expectations, and the role of the monetary policy stance and of initial conditions. Section IV presents the PVAR and counterfactual analysis. Finally, section V concludes and discusses policy implications of the results.

[4] One shortcoming of this paper is the challenge of identifying expansionary policy actions that are credibly exogenous to realized inflation at an annual frequency.

Data

This section describes the data sources for the two key variables in our analysis: inflation expectations/dispersion and fiscal consolidation announcements. It also discusses each data source's potential limitations and discusses data sources for additional variables.

Inflation Expectations

The data on inflation expectations used in this paper comes from consensus forecasts collected by Consensus Economics. These are survey-based inflation forecasts from professional forecasters. The number and type of forecasters considered in the surveys varies by country. But there are alternative ways to measure inflation expectations. Surveys of households or firms can provide important insights on the expectations formation process and are possibly more directly related to how consumption, investment, price-setting, and wage bargaining decisions are incorporated in macroeconomic models (Weber and others, 2022). Nonetheless, these survey data sources have a number of drawbacks, discussed further below. Expectations could also be inferred from financial market instruments (for example through inflation-indexed bonds or swaps), but data availability on such instruments is uneven and often not comparable across countries, which precludes us from using these measures in our analysis.

An important attribute of the consensus forecasts data is that it reports inflation expectations at different horizons (current year, one-year ahead, and up to 10 years ahead), and dispersion across forecasters (also at different horizons).[5] The fact that inflation expectations are collected at different horizons allows us to study whether the potential inflation anchoring role of fiscal consolidations materializes in the short- or medium-term. The dispersion in inflation expectations allows us to assess whether, in addition to anchoring expectations, fiscal consolidations can also reduce disagreement among forecasters, which itself is a dimension of anchoring.

In our exercises we focus on three horizons. For the short-term we use one year ahead expectations and dispersion. These expectations will likely be affected by current inflation dynamics and will be quite responsive to external shocks, such as commodity price shocks. For this reason, we also explore the link between inflation expectations and fiscal consolidations by focusing on medium-term expectations. To this end we also conduct our econometric analysis using three and five years ahead expectations and dispersion. We do not focus on longer horizons (10 years ahead) because these forecasts are quite stable and in inflation targeting regimes, they mostly follow the target.

Compared to household or firm surveys gauging inflation expectations, the data from consensus forecasts has the advantage that is consistently collected for a large sample of countries, is available for an extended time period, and covers different forecast horizons. In contrast, real-time direct historical measures of inflation beliefs by firms are scarce. Moreover, there is evidence that household inflation expectations as measured in surveys could be sensitive to the way that survey questions are formulated and/or to inadvertent nudging and

[5] More precisely, the data includes forecasts for the current year, one year ahead, 2-5 years ahead, and 10 years ahead.

priming (Weber and others, 2022). Sampling and low response rates can also be an issue, particularly for firm surveys, for which the opportunity cost of responding is high.

On the other hand, the consensus surveys are filled by experts, whose forecasts may not reflect those of the relevant economic agents (consumers, workers, firms). Another important shortcoming of expert surveys of inflation expectations data is that they may be subject to biases introduced by incentives for respondents not to reveal their true beliefs (Coibion, Gorodnichenko,and Kamdar, 2018). Empirical work suggests that expectations by professional forecasters and firms have better predictive power as far as current inflation is concerned relative to (median or average) household expectations (IMF, 2023a). There is also evidence of an average upward bias in inflation expectations measured in household and firm surveys, which may reflect the possibility that these agents pay less attention to policy announcements (Weber and others, 2022).

Fiscal Consolidation Announcements

Well identified fiscal consolidation announcements are key to our analysis. The strategy used to identify fiscal policy actions is of crucial importance to disentangle the macroeconomic effects of fiscal consolidations with different approaches leading to distinctive and sometimes conflicting results (see for example the discussions in Guajardo, Leigh, and Pescatori, 2014; Ramey, 2017; and David, Guajardo, and Yépez, 2022). The use of popular “statistical measures” to identify fiscal shocks, such as changes in the cyclically adjusted primary balance, residuals recovered from VAR models[6] or the use of real-time forecast errors are plagued by measurement error and include shifts in key fiscal variables that are unrelated to policy decisions, including changes driven by swings in asset or commodity prices.

To address these issues, we update the high-frequency databases of fiscal policy announcements constructed by Beetsma and others (2021) for advanced economies and by David, Guajardo, and Yépez (2022) for emerging markets based on the “narrative” approach (i.e. fiscal consolidations are identified through the examination of official budget documents, IMF or OECD reports, or other historical records). One crucial feature of these databases is that only announcements that represent net consolidation efforts resulting in an expected improvement in the fiscal balance are included. For example, announcements of tax increases that are fully offset by expenditure increases are excluded from the data. In addition, fiscal measures that are estimated to be revenue neutral, such as measures that simply shift the tax burden across taxpayers are also discarded.

The original datasets covered announcements over the period 1978 to 2013 for advanced economies (Beetsma and others, 2021) and 2000-2018 for emerging markets (David, Guajardo, and Yépez, 2022). This paper updates both datasets to add fiscal consolidation announcements up to December 2023, thus including additional 75 announcements (34 for advanced economies and 41 for emerging markets). To do so, we follow the approach described in David, Guajardo, and Yépez (2022) and rely on news articles from a variety of domestic sources (typically information from the country’s main economics and financial newspaper outlets)

[6] When referring to residuals recovered from VAR models, we alluding to the traditional and still popular identification approach for fiscal shocks proposed by Blanchard and Perotti (2002) as well as approaches based on the Cholesky decomposition or sign restrictions. In a seminal contribution, Mertens and Ravn (2013) use narrative fiscal policy shocks as instruments in structural VAR models (proxy VAR approach).to address the biases introduced by some of the other strategies to identify fiscal shocks.

contained in the Dow Jones' Factiva online database. We searched the Factiva database for news articles containing keywords such as: "fiscal consolidation"; "fiscal adjustment"; "austerity"; "tax reform"; "tax adjustment"; "spending cuts"; "budget cuts", among others, in each of the 32 countries in the sample from 2014 to 2023. Our sample is based on the availability of English, Spanish, or Portuguese versions of news articles. Once an article is deemed to be relevant, we proceed to carefully read it to determine whether it constitutes a fiscal consolidation action deemed to be relevant to be included in the database. The list of countries used in the analysis is in Table 1.[7]

This updated database allows us to analyze the effects of fiscal announcements in the aftermath of the COVID-19 pandemic, a period in which most of the countries in the sample were facing historically high inflation and at the same time embarking in a period of fiscal adjustment following the extraordinary stimulus provided during the pandemic.

It is important to note that the fiscal austerity announcements identified in the dataset do not necessarily rely on an assessment of the motivation for fiscal adjustment measures to determine whether they are ''exogenous" to cyclical considerations. In that sense, the set of policy measures considered in our analysis differs from the actions included in Romer and Romer (2010), Guajardo, Leigh, and Pescatori (2014) or Carrière-Swallow, David, and Leigh (2021), in part because in this paper we are not examining the effects of fiscal policy on output or economic activity per se. Nonetheless, there is a subset of announcements that consists of "exogenous" shocks, in particular those that overlap with the episodes identified by Guajardo, Leigh, and Pescatori (2014) and Carrière-Swallow, David, and Leigh (2021) at the annual frequency.

Moreover, the issue of the credibility of a specific announcement is not directly captured by the database. In that sense, the effects being measured in the regressions presented subsequently in the paper can be thought of reflecting the average level of credibility among announcements in the sample. At the same time, country fixed effects can capture slow moving factors such as the overall credibility of the fiscal policy framework and may to some extent absorb such credibility effects.

Figure 1 describes the timing of consolidations in our database. Except for a few years, there was a steady stream of consolidation announcements in EMs between 2000 and 2018; with announcements peaking in the early 2000s and, to a lesser extent, in the aftermath of the global financial crisis (GFC). There has also been a pickup in announcements in recent years (2022-2023). In AEs announcements were rare events before the GFC, they increased in the aftermath of the GFC and during the period of sovereign distress of 2012, and have reemerged in 2022-2023.

Additional data

In addition to including a fiscal consolidation dummy, our regressions control for a number of country-time varying variables at the quarterly level. Data on observed year-over-year inflation and real GDP come from the World Economic Outlook (WEO) database. Data for the nominal effective exchange rate are from the IMF's Information System Notice (INS) database. Output gaps are constructed by applying the Hamilton filter on real quarterly GDP.

[7] All tables are presented in the Annex.

Our baseline analysis is expanded to study the role played by fiscal prudence, the monetary policy stance, and inflation targeting regimes in shaping the relationship between fiscal consolidations and inflation expectations. To gauge fiscal anchoring, we rely on two data sources. First, we use different vintages of the October WEO databases to construct a measure of distance between observed fiscal balances in a specific year and projections made by the IMF for that year 3 years prior. The larger this difference, the more prudent the country. Second, we use the global debt database (GDD) constructed by Mbaye, Moreno Badia and Chae (2018). We use these data to assess the extent to which initial fiscal positions affect the impact of fiscal consolidations on inflation expectations. Data on whether a country has an inflation targeting regimes comes from the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER).

The Effects of Austerity Announcement on Inflation Expectations

We begin by showcasing our estimated impact of fiscal consolidations on inflation expectations. In particular, we estimate regressions using quarterly data for inflation expectations ($\pi_{i,t}^{e,h}$) for different horizons *h* (more specifically expectations for one, three, and five years-ahead inflation as of time *t*):

$$\pi_{i,t}^{e,h} = \alpha_i + \gamma_t + \theta(fiscal\ consolidation)_{i,t} + \beta X_{i,t} + \varepsilon_{i,t} \quad (1)$$

The main coefficient of interest is θ, which captures the direct effect of fiscal consolidations on inflation expectations. α_i are country fixed-effects, γ_t are time- fixed effects, $X_{i,t}$[8] is a vector of control variables that includes current and lagged realized inflation, the current and lagged output gap (estimated using the Hamilton filter), current and lagged (year-on-year) changes in the nominal effective exchange rate, and a proxy for short-term inflation expectations dynamics (captured by the weighted sum of end of year inflation expectations and inflation expectations for the last quarter of the following year, as suggested by Brito, Carrière-Swallow, and Gruss, 2018). $\varepsilon_{i,t}$ is an error term. As discussed in the introduction, the inclusion of these control variables as well as country and time fixed-effects in the regressions attenuates concerns about omitted variable bias.

In addition, we also estimate similar regressions for the dispersion of inflation expectations (defined as the standard deviation of inflation expectations) at each horizon. These dispersion measures are commonly used in the literature to assess disagreement regarding future paths for inflation, which could signal whether expectations are "anchored" or not (IMF, 2023a). We also run regressions using the gap between the highest and lowest reading of inflation expectations at each horizon as an alternative measure of dispersion.

Baseline Results

Our baseline regression results (Table 2, columns 1-3) show that the coefficients linked to fiscal consolidations are negative, indicating that fiscal adjustment announcements are associated with declines in inflation expectations at the different horizons considered, even after controlling for several other determinants of expectations. Coefficients of control variables such as the output gap and short-term expectation dynamics are statistically significant and present the expected signs. Nevertheless, the coefficient for consolidations is only

[8] Country fixed effects will capture time-invariant characteristics (or slow-moving variables) such as the country's institutional quality or its type of government. Time fixed effects are included to capture global factors affecting inflation expectations, such as the price of oil, armed conflicts, or global inflation.

statistically significant at conventional levels for the regression considering expectations at the three-year and five-year horizon (columns 2 and 3). Therefore, the evidence suggests that fiscal consolidation announcements only tend to affect medium-term inflation expectations, whereas their effect at shorter horizons is muted.

Interestingly, when we include an interaction between the consolidation announcement variable and a dummy taking value one for advanced economies, results point to a more muted link between fiscal consolidation announcements and inflation expectations in this set of countries. One possible explanation is that AEs already have relatively low inflation expectations, leaving smaller room for fiscal consolidations to act as an anchoring device.[9] Another possible factor at play, is the presence of more credible policy frameworks in these economies, which may contribute to anchor expectations. Both hypotheses will be explored in more detail in what follows. Overall, the results indicate that fiscal consolidation announcements reduce inflation expectations over the medium-term, but not in the short-term.

The link between fiscal consolidations and the dispersion of inflation expectations is also of interest given the potential role of fiscal policy in anchoring expectations. Table 3 presents results of regressions similar to equation 1 but replacing the dispersion of inflation expectations at different horizons as the dependent variable. The results point to a significant negative link between fiscal adjustment efforts and the dispersion of expectations at longer horizons (three and five years ahead), but not for one-year ahead expectations. Moreover, as before, results appear to be weaker for AEs. Therefore, there is some evidence that consolidations reduce “disagreement” about expected future inflation at longer horizons.

Table 4 further explores the relationship between fiscal consolidation announcements and dispersion by looking at the difference between the highest and lowest forecast at each horizon normalized by the median forecast as our dependent variable (rather than the standard deviation of forecasts). This normalization is useful to take into account the fact that countries with high dispersion may also have high values of inflation expectations. Results are consistent with those of Table 3—fiscal consolidation announcements significantly reduce dispersion of medium-term inflation forecasts.

Next, we explore whether the composition of the consolidation announcement affects the response of inflation expectations. To this end, we leverage our algorithm to identify consolidation announcements from news sources and label each announcement as a revenue-based consolidation (when it is a tax hike), an expenditure-based consolidation (when it mostly a reduction in government expenditure), or a combined announcement (when it includes both types of actions).

Our results suggest that both revenue- and expenditure-based consolidations are linked with lower inflation expectations, but timing and magnitudes differ (Table 5). Expenditure-based consolidations have a negative impact on expectations across different horizons, with results being statistically significant for 3 years ahead expectations. Tax-based consolidations have a lower estimated coefficient in the short-term (even positive but not significant for dispersion), but they have a strong impact on inflation expectations over the medium-term. Interestingly, expenditure-based consolidations have no statistically significant effect in the dispersion of inflation forecasts, while tax-based and combined consolidations do.

[9] Note that there are differences in the time coverage of the original fiscal announcements data for AEs (Beetsma and others, 2018) and EMs (David, Guajardo, and Yepez, 2022). To avoid the concern that these differences are driving differences between the two set of countries, we complete and expand each database such that our sample of consolidation announcements span the full 2001-2023 range for both set of countries.

The Importance of Credible Fiscal and Monetary Frameworks and of Initial Conditions

So far, our results highlight the impact of consolidation announcements on inflation expectations for the average country. However, there are several factors that could affect this relationship. For example, the transmission from fiscal policy to expectations may be stronger in countries with a higher degree of fiscal credibility. Similarly, initial conditions, such as the level of inflation at the time of the announcement, may affect the way in which fiscal announcements impact inflation expectations.

To explore the role that factors such as fiscal and monetary credibility play in shaping the impact of consolidations on inflation anchoring, we modify the specification in equation 1 to consider interaction terms between fiscal adjustments and our variable of interest, as follows:

$$\pi_{i,t}^{e,h} = \alpha_i + \gamma_t + \theta(fiscal\ consolidation)_{i,t} + \vartheta P_{i,t} + \delta(fiscal\ consolidation * P)_{i,t} + \beta X_{i,t} + \varepsilon_{i,t} \quad (2)$$

Where $P_{i,t}$is the variable of interest. For this set of regressions, the coefficient δ associated with the interaction terms is of particular interest, as it captures how each variable amplifies/dampens the impact of fiscal consolidations on inflation expectations (or dispersion).

Columns 1-3 in Table 6 present results assessing the impact of government debt levels in shaping the link between consolidation announcements and inflation expectations. Results show that consolidation announcements in countries with higher debt levels (as a share of GDP) lead to a more muted decline in inflation expectations for all horizons considered. This suggests that consolidations can play an inflation anchoring role to the extent that fiscal policy itself is prudent.

To further explore the importance of fiscal prudence in shaping inflation expectation's response to fiscal consolidation announcements, columns 4-6 in Table 6 present results of a variant of equation (2) where our variable of interest is the deviation between the fiscal balance observed in *t* and the IMF forecast of the fiscal balance in *t* produced in *t-3.* A positive number for this gap implies that the government has a relatively more prudent fiscal performance compared to what the IMF's view was 3 years prior.

Consistent with the findings in columns 1-3, columns 4-6 provide additional support to the role played by fiscal prudence in producing a more pronounced inflation expectation response to consolidation announcements. A higher gap between contemporaneous fiscal balances and those predicted by the IMF is associated with lower inflation expectations in the aftermath of consolidation announcements. The impact of higher relative fiscal prudence is more clearly seen for 5 years ahead inflation expectations, where the coefficient for the interaction term is statistically significant.

Tables 7 and 8 turn to exploring the relationship between the credibility of a country's monetary policy framework, fiscal consolidation announcements and inflation expectations. To do this, we estimate equation (1) splitting the sample between EMs that follow an inflation targeting (IT) regime at the time of the announcements and those that do not. Our focus on EMs stems from the fact that many AEs in our sample are part of the euro zone and do not have an independent monetary policy framework.

Our estimates indicate that fiscal consolidation announcements result in lower medium-term inflation expectations in countries with IT regimes (at the 3-year ahead horizon, Table 7, columns 1-3). For non-IT

countries (columns 4-6), the impact of consolidation announcements on medium-term inflation expectations, while negative, is not statistically significant. Note that our estimation sample includes the four years since the onset of the COVID-19 pandemic, during which we saw extraordinary fiscal measures, a sharp increase in inflation and unprecedented monetary policy measures. As we do in the robustness section, Table 8 presents results using our pre-2020 sample. Results point to larger point estimates in absolute terms for all horizons for IT countries, and for most horizons in non-IT countries. As for the full sample, the estimated impact of fiscal consolidation announcements is negative in the medium-term, but the statistical significance of our results is stronger in the pre-2020 sample. Thus, our results show that the monetary policy framework is an important factor determining the effectiveness of consolidation announcements as an inflation anchoring lever, an effect that was particularly stronger in the pre-pandemic years, when inflation dynamics around the world where more anchored.

To further study the interaction between monetary policy and the inflation anchoring role of fiscal announcements, we construct a dummy variable to gauge at the country's monetary policy stance. Properly estimating the monetary policy stance for each country in our sample is challenging, as it would require us to estimate neutral rates for all countries. We follow a simpler approach—for each country we calculate deviations between the ex-post real interest rate[10] relative to an 8-quarter moving average. We then define a dummy variable that takes value one if the real interest rate is above this average (tight monetary policy) and zero otherwise (loose monetary policy). Results point to monetary-fiscal policy complementarities when it comes to the role of fiscal policy as an inflation anchoring tool (Table 9). First, note that, as expected, tight monetary policy is associated with lower medium-term inflation expectations. In addition, we find that tight monetary policy boosts the inflation anchoring role of fiscal consolidation announcements in the medium-term (columns 2 and 3).

We also find that initial conditions matter. In particular, columns 4-9 in Table 9 show that inflation expectations respond more to fiscal consolidation announcements when they occur during periods of relatively high inflation. The table shows estimation results for a version of equation (2) where the variable of interest is a dummy variable if the year-on-year inflation rate at the time of the announcement is above the 75th percentile of the country-specific inflation distribution from 1990 to 2023. As shown in columns 4-6, the additional impact of fiscal consolidation announcements on inflation expectations in high inflation settings is statistically significant at all horizons considered in our analysis. However, the magnitude of the coefficient increases as the horizon increases. Note that our results are not driven exclusively by the uptick in inflation since 2021—the estimated interaction term is positive and significant at all horizons when we use our pre-2020 sample (columns 7-9). The importance of initial conditions is further explored in PVAR framework presented in the next section.

Robustness Exercises

To assess the robustness of our results, we extend our baseline analysis in three ways. First, we estimate equation (1) now controlling for a set of country fixed effect which we allow to vary across four subperiods. The four subperiods are as follows: i) 1990-2000, which coincides with the wave of structural reforms in EMs, ii) 2001-2008, which captures the rise of the price of oil and the ascent of China at the global stage, iii) 2009-2019, which coincides with the aftermath of the GFC and the zero lower bound in AEs, and iv) the post-COVID

[10] As in David and Goncalves (2021), we use the money market nominal interest rates for countries that do not have a monetary policy rate.

period. Note that our assumption is that the factors shaping these subperiods not only could have changed inflation expectations dynamics and consolidation patterns at a global level, but they could have interacted with country-specific factors. In addition, we conduct an exercise that controls for one lead and one lag of the consolidation announcements, to allow for potential anticipation effects and persistence. Finally, we estimate our baseline regression using data until 2019, to explore sensitivity of our results to the pandemic/post-pandemic inflation dynamics.

Table 10 shows that qualitatively, the inclusion of the country-period fixed effects does not affect the patterns documented in Tables 1 and 2—consolidation announcements are associated with lower inflation expectations in the medium-term (5 years ahead) and a lower level of dispersion of inflation expectations. However, the magnitude of the estimated coefficients is lower compared to our baseline estimates and, for some horizons, statistical significance is lost.

Table 11 explores the robustness of our results to the inclusion of lags and leads of announcements. This allows us to control for potential anticipation effects and for persistent effects of announcements on expectations. Results in Table 11 show that the coefficient for fiscal consolidation announcements remains significantly negative when we control for announcements in *t-1* and in *t+1.* Moreover, the impact of announcements on expectations appears to materialize mostly on impact—agents adjust their expectations at the time of the announcements with no evidence of protracted impacts. The fact that expectations do not appear to be as sticky as actual inflation is plausible given the fact that expectations are less constrained by the ability of economic agents to adjust prices in response to shocks. Reassuringly, results in Table 10 are also supportive to our assumption that announcements are surprises from the point of view of forecasters.

Finally, Table 12 explores the sensitivity of our results to the exclusion of the pandemic/post-pandemic quarters. Our results show that the connection between fiscal consolidation announcements and inflation expectations was actually stronger in the pre-2020 period, as shown by larger coefficients for the consolidation announcement dummy (columns 1-3) compared to the full sample period. Similar results emerge when looking at inflation expectation dispersion.

Assessing the Transmission Channels: Fiscal Announcements, Inflation Expectations, and Realized Inflation.

The previous section estimated the impact of consolidation announcements on inflation expectations. Next, we turn to studying how consolidations affect inflation, zooming into the inflation expectations channel.

Panel VAR (PVAR) Framework

As done in Burnside, Eichenbaum, and Fisher (2004); and Cavallo (2005), and David, Guajardo, and Yépez (2022), we embed the fiscal announcement variable in a PVAR framework. The PVAR consists of three variables: the austerity announcements, 3-year ahead inflation expectations, and realized inflation. All variables are included at a quarterly frequency. The fiscal consolidation announcements enter the system as a dummy variable that equals one in the quarter of the announcement. The 3-year ahead inflation expectations and realized inflation enter the system in levels (y/y percent).

We impose the restriction that inflation variables react contemporaneously to fiscal policy shocks, whereas fiscal policy does not react on impact to other shocks in the system. This identifying assumption is the standard Cholesky decomposition with the fiscal policy variable ordered first in the VAR. It is usually justified by delays in the legislative system that would typically prevent the contemporaneous reaction of fiscal variables. This timing restriction seems plausible at the quarterly frequency considered here. It is important to note that endogeneity concerns and anticipation effects might still not be fully addressed by this restriction, for instance if announcements are motivated by persistently high inflation. Nevertheless, most of these effects should be captured through the dynamics in the system, even if the reaction within the quarter of the announcement is restricted.

To fix ideas, the panel VAR system can be written as (abstracting from the country-specific intercepts) as:

$$\begin{pmatrix} 1 & 0 & 0 \\ a_{i,2,1} & 1 & a_{i,2,3} \\ a_{i,3,1} & a_{i,3,2} & 1 \end{pmatrix} \begin{bmatrix} D_{i,t} \\ E_{i,t} \\ \pi_{i,t} \end{bmatrix} = \sum_{j=1}^{p} A_{i,j} \begin{bmatrix} D_{i,t-j} \\ E_{i,t-j} \\ \pi_{i,t-j} \end{bmatrix} + \begin{bmatrix} \varepsilon_{i,t}^{1} \\ \varepsilon_{i,t}^{2} \\ \varepsilon_{i,t}^{3} \end{bmatrix}, \quad (3)$$

where $D_{i,t}$ is the fiscal announcement dummy, $E_{i,t}$ is the three-year ahead inflation expectations, and $\pi_{i,t}$ is realized inflation. The lag length is denoted by p. The structural shocks are denoted by $\varepsilon_{i,t}^{k}$ with $k \in [1, 2, 3]$. The austerity announcement shock is denoted by $\varepsilon_{i,t}^{1}$.

Conceptually, fiscal announcements affect inflation directly in two ways: contemporaneously through $a_{i,3,1}$ and dynamically through the relevant coefficients in the $A_{i,j}$matrices. But there are also indirect effects of fiscal actions to the extent that fiscal announcements move inflation expectations contemporaneously (through $a_{i,2,1}$), as shown in the previous section, and in turn expectations impact realized inflation (through $a_{i,3,2}$). Moreover, inflation expectations can serve as a propagation mechanism for fiscal shocks if they respond to fiscal announcements at any horizon and the coefficients for lagged values of inflation expectations in the realized inflation equation are significant.

Our objective is to statistically isolate the role of inflation expectations in explaining realized inflation dynamics following fiscal consolidation announcements. To do so, we follow the methodology put forward by Bachmann and Sims (2012) and implemented by David, Guajardo, and Yépez (2022) and "shut off" the indirect channels described previously. In practical terms, we do so by constructing a hypothetical impulse response of realized inflation to an austerity announcement by holding the response of expected inflation fixed at zero at all forecast horizons.[11] Using this "counterfactual" analysis we compare this hypothetical response of realized inflation to the actual response, hence allowing us to quantify how important are inflation expectations as a transmission mechanism of fiscal consolidation announcements.

To perform this counterfactual analysis, we need to impose more structure in the model. While the timing assumption that government consolidation announcements do not react within the same quarter to the level of expected or realized inflation is sufficient to identify the coefficient $a_{i,2,1}$ and $a_{i,3,1}$, an additional restriction is required to identify $a_{i,3,2}$ and $a_{i,2,3}$. We assume that $a_{i,2,3}$ = 0, which amounts to using a Cholesky decomposition

[11] This approach is similar to the methodology used, for example, by Bernanke and others (1998), Sims and Zha (2006), and Kilian and Lewis (2011) to understand the systematic component of monetary policy in the transmission of shocks.

of the system, with the level of inflation expectations ordered second and realized inflation ordered third. This in turn means that $\varepsilon_{i,t}^{2}$ and $\varepsilon_{i,t}^{3}$ denote an expected inflation shock and a realized inflation shock, respectively.

Once the restriction has been imposed on $a_{i,2,3}$ and the impact matrix ($A_{i,0}$) is inverted, the structural form of the system specified in (3) above can be written as (again abstracting from country-specific intercepts) as :

$$Y_{i,t} = \sum_{j=1}^{p} A_{i,0}^{-1} A_{i,j} Y_{i,t-1} + A_{i,0}^{-1} \varepsilon_{i,t} \tag{4}$$

Where $Y_{i,t} = [D_{i,t} \quad E_{i,t} \quad \pi_{i,t}]'$. This can be written more compactly in companion matrix form as a VAR(1) by defining $Z_{i,t} = \begin{bmatrix} y_{i,t} & y_{i,t-1} & \dots & y_{i,t-p} \end{bmatrix}'$:$Z_{i,t} = \Lambda_i Z_{i,t-1} + A_{i,0}^{-1} \varepsilon_{i,t}$,
where

$$\Lambda = \begin{bmatrix} A_{i,0}^{-1}A_{i,1} & A_{i,0}^{-1}A_{i,2} & \cdots & A_{i,0}^{-1}A_{i,p} \\ I & 0 & \dots & 0 \\ 0 & I & \dots & 0 \\ \vdots & \vdots & \ddots & \vdots \\ 0 & \dots & I & 0 \end{bmatrix}.$$

The impulse response for variable *k* to a fiscal announcement at horizon *h*=1,…,H is denoted by:

$$IRF_k(1,h) = \Lambda_i^{h-1} A_{i,0}^{-1}(k,\ 1) \tag{5}$$

That is, the impulse response of the variable *k* to a fiscal announcement will be in the k^{th} row and first column, for *h*=1,…,H.

The construction of the counterfactual scenario consists in holding the responses of inflation expectations to a fiscal consolidation announcement fixed at zero:

$$IRF_2(1,h) = 0. \tag{6}$$

A hypothetical sequence of inflation expectation shocks, $\varepsilon_{i,t}^{2}$, is constructed so as to force (6) to hold at each forecast horizon *h*. On impact (i.e., when *h*=1) this requires that $\varepsilon_{i,t}^{2} = a_{i,2,1}$, or in matrix notation:

$$A_{i,0}^{-1}(2,1) + A_{i,0}^{-1}(2,2)\varepsilon_{i,t}^{2} = 0$$

Hence the requires shock to inflation expectations when *h*=1 is:

$$\varepsilon_{i,1}^{2} = -\frac{A_{i,0}^{-1}(2,1)}{A_{i,0}^{-1}(2,2)} \tag{7}$$

The required values for subsequent inflation expectation shocks can be recursively calculated as follows:

$$\varepsilon_{i,h}^{2} = \frac{IRF_2(1,h) + \sum_{j=1}^{h-1} \Lambda_i^{h-j} A_{i,0}^{-1}(2,\ 1)\varepsilon_{i,j}^{2}}{A_{i,0}^{-1}(2,2)}$$

for *h*= 2,…,H. The modified impulse responses of the variables in the PVAR framework to the fiscal announcements are computed as:

$$\widetilde{IRF_k}(1,\ h) = IRF_k(1, h) + \sum_{j=1}^{h} \Lambda^{h-j}\, A_{i,0}^{-1}(2,\ 1)\varepsilon_{i,j}^{2} \tag{8}$$

for *k*=1, 2, 3.

The difference between $IRF_i(1, h)$ and $\widetilde{IRF_i}(1,\ h)$ will provide a measure of how important inflation expectations are in the transmission of austerity announcements to realized inflation.

In the previous section we highlighted the importance of initial conditions, in particular the level of realized inflation when the announcement is made, in analyzing the effects of fiscal consolidation announcements. We perform a similar analysis in this section by allowing the coefficients in the $A_{i,j}$ matrix to vary depending on the inflation level:

$$A_{i,j} = \beta_{i,j} + \varsigma_{i,j} * \pi level_{i,t} \tag{9}$$

for *j*=1,…,p. Impulse responses are estimated for the full empirical distribution of realized inflation levels in the sample (see Towbin and Weber, 2013, for a detailed description of the PVAR framework with interaction terms). Each equation of the system is estimated using ordinary least squares (OLS) with 4 lags, given the quarterly frequency of the data. As the impulse responses are non-linear functions of the OLS estimates, the procedure employs Runkle (1987) bootstrapping method to adjust for the fact that the data is in a panel format and to make use of the interaction terms. We apply the following algorithm for statistical inference:

1. Estimate the PVAR(p) in equation (4) and generate 1,000 bootstrap replications $\widehat{A_i}$ using equation (9) and the values of the selected values for the levels of inflation spreads in quarter t.[12]

2. After the first period is simulated for all variables in the system, interact the variables with the interaction terms in (9) and then repeat step 1 for t=2,...,T and i=1,. . . ,N, where T is the sample length and N is the number of countries.

3. The artificial sample, together with the interaction variables, are then used to re-estimate the coefficients of the system. IRFs are computed 1,000 times for each generated variable *k* to the first structural shock (that is the fiscal announcement) at horizon *h* = 1, . . . , H.

4. Construct 1,000 adjusted impulse responses holding the response of inflation expectations fixed at zero at each horizon *h*.

5. Finally, the bootstrap simulations are used to calculate the empirical distribution for the difference between the baseline and counterfactual scenarios. One standard deviation confidence bands are constructed around the simulated estimates.

[12] Bootstrapping for the panel was done by generating initial conditions separately for each country as in Runkle (1987), but sampling from the entire panel vector of residuals. This was done to account for possible cross-country correlations.

PVAR Results

The solid lines in Figure 2 plot the conditioned impulse response to an austerity announcement in an 8 quarter window, with the coefficients of the PVAR varying depending on the inflation level. To derive the estimated impulse response function of expected and realized inflation to the announcement of a fiscal consolidation package, we simulate the estimated version of (4) in response to the dummy variable with the fiscal announcement dates assuming the value of 1 on impact and zero thereafter (hence a cumulative value of 1 over the 8-quarter window). The shaded gray regions are one standard error confidence bands from Runkle's (1987) bootstrapping method.

Results show that for periods of high inflation, defined to be at or above the 75th percentile of the empirical distribution, inflation expectations significantly decline in the aftermath of the announcements by around 10 basis points one year after the announcement. This result is consistent with the findings presented in the previous section and complements them by presenting the dynamic effects of austerity announcement on inflation expectations. On the other hand, austerity announcements tend to be followed by an increase of realized inflation in the short term, but inflation quickly falls four quarters after a year of the announcement.

The dashed lines in the figure show the hypothetical impulse responses holding the response of expected inflation fixed at zero. The direct response of realized inflation without the endogenous response of expectations is indeed higher at most horizons, suggesting a significant role of expectations in the transmission of fiscal policy. The differences in the response of realized inflation following the fiscal announcements is significant are economically important and statistically significant, with inflation in the baseline scenario being almost half than the counterfactual response a year after the announcement. These results constitute direct evidence that strong fiscal policy is key to anchor expectation and contain inflationary pressures during high inflation episodes.

To quantify the importance of initial conditions, we run the same analysis for austerity measures during low inflation environments (i.e., when realized inflation is below the 25th percentile). In this scenario the role of fiscal policy and inflation expectations appear to be more limited, and the differences between impulse responses are economically small and not statistically significant (Figure 3).

Conclusions

The inflation uptick of recent years has led to renewed interest in understanding the factors contributing to it and the drivers of inflation expectations. This paper sheds light on the potential role of fiscal consolidations as tool to lower/anchor inflation expectations. It shows that fiscal consolidation announcements are associated with lower medium-term inflation expectations, with stronger effects found for emerging. The results also show that fiscal consolidation announcements help anchor expectations, as reflected by a lower dispersion of inflation expectations.

These findings are particularly relevant given the prominent role played by fiscal policy in supporting activity and, arguably, inflation, in the aftermath of the pandemic, which has resulted in calls for a turn to a more prudent fiscal stance (IMF, 2023b). Our results suggest that, in addition to putting fiscal trajectories in a more sustainable path, such a turn could help anchor expectations going forward. Our results also point to the important role played by fiscal and monetary frameworks and initial conditions in shaping the response of

expectations to fiscal consolidation announcements. In particular, we find that the inflation anchoring role of fiscal consolidation announcements is enhanced by the credibility of a country's fiscal and monetary frameworks, and when fiscal and monetary policy work in tandem. One possible avenue for future research would be to explore whether fiscal expansions push up inflation expectations i.e., whether the link between fiscal policy changes and inflation expectations is symmetric (i.e. the same in the cases of fiscal tightening and fiscal stimulus).

Fiscal prudence can affect inflation through three related channels: (i) it can curb aggregate demand contemporaneously (demand channel), thus easing price pressures, (ii) it can reduce pressures to finance fiscal deficits through inflationary monetary expansions (monetary channel), and (iii) it can affect inflation expectations, and as a result current inflation (expectations channel). Our paper sheds a bright light on the importance of the latter. Results suggest that fiscal consolidation, by anchoring expectations, can be a quite powerful tool to contain inflationary pressures and drive inflation dynamics in the medium-term. These results point to the strong complementarities of fiscal and monetary policies, particularly during high-inflation episodes.

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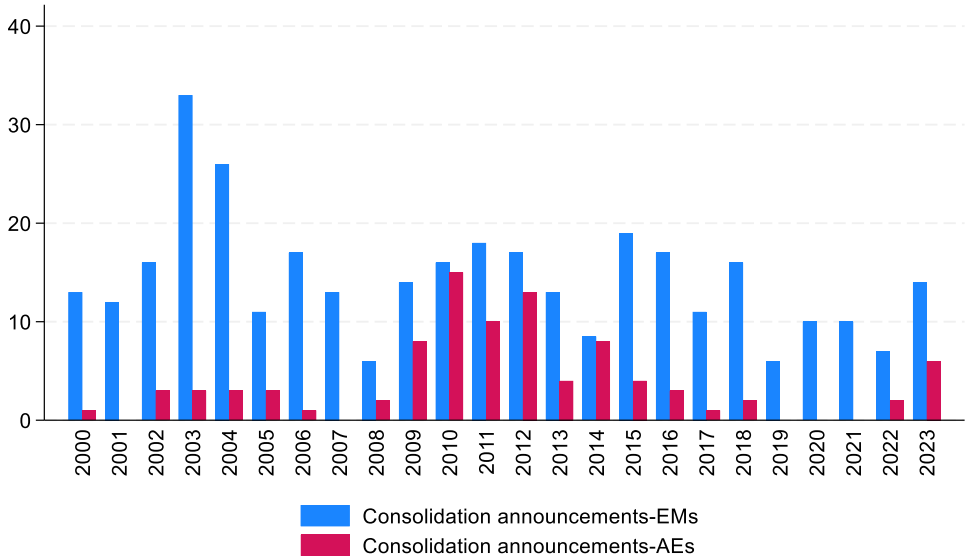
Annex 1: Figures and Tables

Figure 1. The Timing of Fiscal Consolidation Announcements



Source: Data on fiscal consolidation announcements come from Beetsma and others (2021) for advanced economies and by David, Guajardo, and Yépez (2022), and from our updates.

Figure 2. PVAR Impulse Responses Fiscal Consolidation Announcements

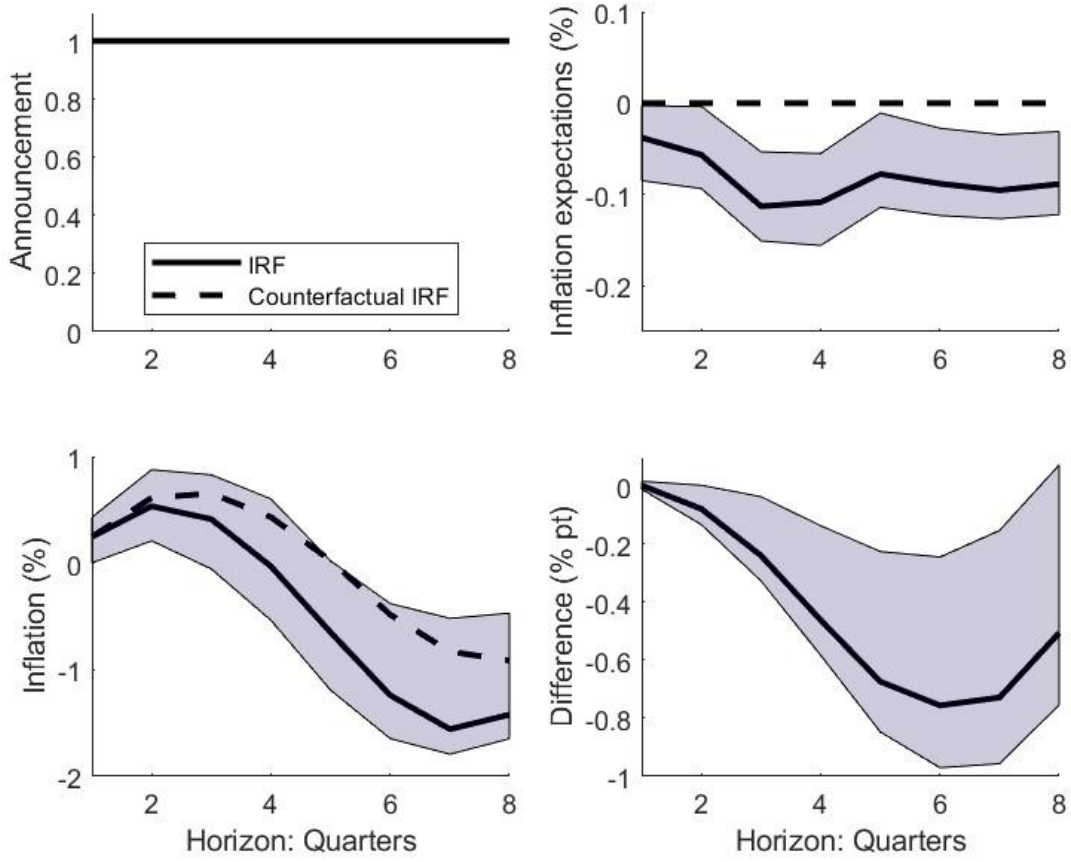


Figure 3. Difference in Realized Inflation in Baseline and Counterfactual Scenarios

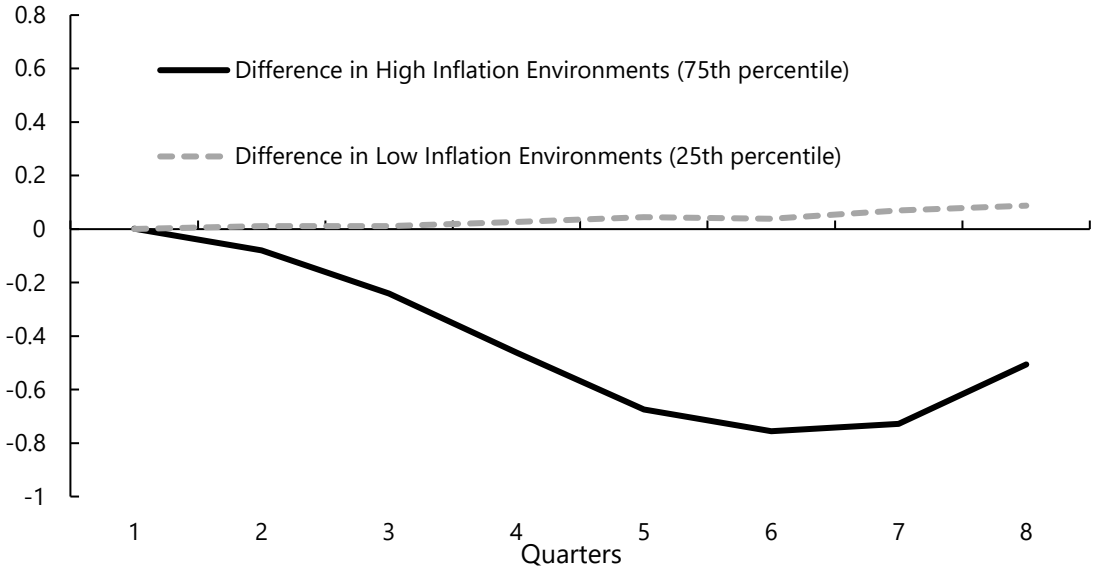


Table 1. Countries Included in the Sample

United Kingdom	Brazil
Austria	Chile
Belgium	Colombia
Denmark	Costa Rica
France	Dominican Republic
Germany	Ecuador
Italy	Guatemala
Netherlands	Mexico
Sweden	Paraguay
Finland	Peru
Ireland	Uruguay
Portugal	India
Spain	Indonesia
South Africa	Slovak Republic
Argentina	Hungary
Bolivia	Poland

Table 2. Regressions for Inflation Expectations at Different Horizons

	(1) 1-year inflation expect.	(2) 3-year inflation expect.	(3) 5-year inflation expect.	(4) 1-year inflation expect.	(5) 3-year inflation expect.	(6) 5-year inflation expect.
Consolid. announcement dummy	-0.0294	-0.1160**	-0.1078**	-0.0188	-0.1540*	-0.1565**
	(0.0350)	(0.0572)	(0.0449)	(0.0534)	(0.0827)	(0.0707)
Consolidation announcement*AE dummy				-0.0312	0.1269	0.1627*
				(0.0600)	(0.1038)	(0.0885)
Inflation	0.0032	-0.2663***	-0.1482***	0.0032	-0.2656***	-0.1472***
	(0.0691)	(0.0693)	(0.0472)	(0.0691)	(0.0696)	(0.0474)
Inflation (t-1)	-0.0322	0.0761	0.0457	-0.0322	0.0759	0.0455
	(0.0445)	(0.0723)	(0.0543)	(0.0446)	(0.0721)	(0.0541)
Inflation (t-2)	0.0046	-0.0921	-0.0398	0.0046	-0.0922	-0.0401
	(0.0404)	(0.0780)	(0.0642)	(0.0404)	(0.0781)	(0.0645)
Output gap	0.3229	0.3252	1.0465	0.3225	0.3553	1.0846
	(0.5406)	(1.1351)	(1.0309)	(0.5402)	(1.1506)	(1.0476)
Output gap (t-1)	-0.0575	1.3243	0.9404	-0.0562	1.3536	0.9782
	(1.2209)	(1.2114)	(0.8183)	(1.2183)	(1.2163)	(0.8159)
Output gap (t-2)	2.2013**	1.3444	1.7648	2.1877**	1.4275	1.8712
	(1.0764)	(1.3158)	(1.1741)	(1.0748)	(1.3593)	(1.2353)
Exchange rate	0.0121*	0.0185*	0.0096	0.0121*	0.0186*	0.0098
	(0.0065)	(0.0097)	(0.0072)	(0.0065)	(0.0097)	(0.0072)
Exchange rate (t-1)	-0.0010	-0.0015	-0.0043	-0.0010	-0.0015	-0.0043
	(0.0086)	(0.0147)	(0.0112)	(0.0086)	(0.0147)	(0.0111)
Exchange rate (t-2)	0.0032	-0.0085	0.0011	0.0032	-0.0084	0.0012
	(0.0068)	(0.0126)	(0.0102)	(0.0068)	(0.0126)	(0.0102)
Short-term inflation expectations	0.6680***	0.8423***	0.4790***	0.6679***	0.8416***	0.4782***
	(0.1448)	(0.0907)	(0.0609)	(0.1449)	(0.0908)	(0.0609)
Short-term inflation expectations (t-1)	0.1173	-0.5023***	-0.3587***	0.1175	-0.5015***	-0.3579***
	(0.1134)	(0.1698)	(0.0962)	(0.1135)	(0.1698)	(0.0961)
Short-term inflation expectations (t-2)	0.1208	0.4679***	0.3140***	0.1208	0.4673***	0.3133***
	(0.1001)	(0.1041)	(0.0702)	(0.1002)	(0.1042)	(0.0702)
Constant	0.1175	2.4118***	3.3011***	0.1183	2.4204***	3.3121***
	(0.1086)	(0.3304)	(0.3065)	(0.1087)	(0.3327)	(0.3082)
Observations	3,084	1,411	1,410	3,084	1,411	1,410
R-squared	0.938	0.852	0.748	0.938	0.852	0.748

Note: Driscoll-Kraay standard errors in parentheses. All especifications include country and time fixed effects.
*** p<0.01, ** p<0.05, * p<0.1

Table 3. Regressions for Dispersion of Inflation Expectations at Different Horizons

	(1) 1-year inflation expect. Dispersion	(2) 3-year inflation expect. Dispersion	(3) 5-year inflation expect. Dispersion	(4) 1-year inflation expect. Dispersion	(5) 3-year inflation expect. Dispersion	(6) 5-year inflation expect. Dispersion
Consolid. announcement dummy	-0.0109	-0.0877**	-0.0532**	-0.0176	-0.1265***	-0.0634**
	(0.0246)	(0.0337)	(0.0253)	(0.0318)	(0.0450)	(0.0316)
Consolidation announcement*AE dummy				0.0226	0.1364**	0.0360
				(0.0356)	(0.0560)	(0.0479)
Inflation	-0.0992***	-0.1146***	-0.0351*	-0.0991***	-0.1140***	-0.0350*
	(0.0299)	(0.0343)	(0.0209)	(0.0299)	(0.0339)	(0.0208)
Inflation (t-1)	-0.0046	0.0490	-0.0210	-0.0046	0.0489	-0.0210
	(0.0327)	(0.0437)	(0.0377)	(0.0327)	(0.0438)	(0.0377)
Inflation (t-2)	-0.0527*	-0.0848***	0.0267	-0.0527*	-0.0847***	0.0267
	(0.0301)	(0.0268)	(0.0300)	(0.0301)	(0.0270)	(0.0301)
Output gap	0.1755	-0.3469	0.1465	0.1798	-0.3247	0.1523
	(0.4925)	(0.6604)	(0.3188)	(0.4921)	(0.6625)	(0.3195)
Output gap (t-1)	-0.3674	0.5682	0.0032	-0.3669	0.5996	0.0115
	(0.4797)	(0.3660)	(0.3894)	(0.4801)	(0.3682)	(0.3878)
Output gap (t-2)	-0.9655	-0.4401	0.1480	-0.9577	-0.3522	0.1712
	(0.6357)	(0.7444)	(0.4166)	(0.6357)	(0.7546)	(0.4228)
Exchange rate	0.0022	0.0122***	0.0137*	0.0022	0.0124***	0.0138*
	(0.0049)	(0.0039)	(0.0070)	(0.0049)	(0.0039)	(0.0069)
Exchange rate (t-1)	-0.0059	-0.0030	-0.0134	-0.0059	-0.0031	-0.0134
	(0.0042)	(0.0051)	(0.0096)	(0.0042)	(0.0050)	(0.0096)
Exchange rate (t-2)	-0.0064**	-0.0085*	0.0048	-0.0064**	-0.0084*	0.0049
	(0.0025)	(0.0047)	(0.0057)	(0.0025)	(0.0047)	(0.0057)
Short-term inflation expectations	0.2023***	0.1309	0.1468**	0.2023***	0.1312	0.1469**
	(0.0238)	(0.0795)	(0.0704)	(0.0238)	(0.0796)	(0.0704)
Short-term inflation expectations (t-1)	0.1243***	0.1391	-0.0271	0.1242***	0.1392	-0.0271
	(0.0337)	(0.1450)	(0.0905)	(0.0337)	(0.1449)	(0.0905)
Short-term inflation expectations (t-2)	0.0015	0.0156	-0.0103	0.0015	0.0147	-0.0105
	(0.0193)	(0.0736)	(0.0769)	(0.0193)	(0.0736)	(0.0770)
Constant	-0.2601***	0.2927**	0.3738***	-0.5487***	0.1875*	0.3774***
	(0.0860)	(0.1212)	(0.0733)	(0.0707)	(0.1116)	(0.0745)
Observations	1,786	1,116	1,115	1,786	1,116	1,115
R-squared	0.844	0.622	0.396	0.844	0.623	0.396

Note: Driscoll-Kraay standard errors in parentheses. All especifications include country and time fixed effects.
*** p<0.01, ** p<0.05, * p<0.1

Table 4. Regressions for the High-Low Gap of Inflation Expectations at Different Horizons

	(1) 1-year inflation expect. High-Low gap	(2) 3-year inflation expect. High-Low gap	(3) 5-year inflation expect. High-Low gap	(4) 1-year inflation expect. High-Low gap	(5) 3-year inflation expect. High-Low gap	(6) 5-year inflation expect. High-Low gap
Consolid. announcement dummy	0.0558**	-0.0443**	-0.0129	0.0689*	-0.0498**	-0.0047
	(0.0270)	(0.0219)	(0.0215)	(0.0384)	(0.0194)	(0.0235)
Consolidation announcement*AE dummy				-0.0447	0.0190	-0.0285
				(0.0629)	(0.0565)	(0.0416)
Inflation	-0.0285	0.0076	0.0117	-0.0285	0.0077	0.0116
	(0.0239)	(0.0108)	(0.0081)	(0.0240)	(0.0107)	(0.0080)
Inflation (t-1)	0.0216	-0.0106	-0.0205	0.0217	-0.0106	-0.0205
	(0.0264)	(0.0157)	(0.0126)	(0.0264)	(0.0157)	(0.0124)
Inflation (t-2)	-0.0349	0.0033	0.0156	-0.0349	0.0033	0.0155*
	(0.0238)	(0.0107)	(0.0093)	(0.0239)	(0.0107)	(0.0093)
Output gap	-4.9173*	0.2071	0.0639	-4.9264*	0.2102	0.0594
	(2.8788)	(0.3041)	(0.1957)	(2.8825)	(0.3085)	(0.1949)
Output gap (t-1)	-3.5658	-0.0682	-0.0343	-3.5667	-0.0639	-0.0410
	(4.2088)	(0.2471)	(0.3065)	(4.2094)	(0.2500)	(0.3069)
Output gap (t-2)	-9.6174	0.1417	0.1952	-9.6334	0.1539	0.1769
	(7.2417)	(0.4192)	(0.2354)	(7.2408)	(0.4297)	(0.2380)
Exchange rate	0.0084	0.0010	0.0024	0.0083	0.0010	0.0024
	(0.0060)	(0.0018)	(0.0022)	(0.0060)	(0.0018)	(0.0022)
Exchange rate (t-1)	-0.0057	-0.0003	-0.0040	-0.0057	-0.0003	-0.0040
	(0.0046)	(0.0029)	(0.0030)	(0.0046)	(0.0029)	(0.0030)
Exchange rate (t-2)	0.0009	0.0001	0.0018	0.0009	0.0001	0.0017
	(0.0038)	(0.0022)	(0.0020)	(0.0037)	(0.0022)	(0.0021)
Short-term inflation expectations	-0.0523	0.0002	0.0226	-0.0524	0.0003	0.0225
	(0.0409)	(0.0148)	(0.0189)	(0.0408)	(0.0148)	(0.0189)
Short-term inflation expectations (t-1)	0.0511	0.0128	-0.0251	0.0513	0.0128	-0.0251
	(0.0338)	(0.0278)	(0.0253)	(0.0338)	(0.0278)	(0.0253)
Short-term inflation expectations (t-2)	-0.0354	-0.0090	-0.0036	-0.0354	-0.0092	-0.0034
	(0.0301)	(0.0162)	(0.0186)	(0.0301)	(0.0163)	(0.0186)
Constant	0.7859***	0.5338***	0.4956***	0.6915***	0.5036***	0.4927***
	(0.2701)	(0.0518)	(0.0296)	(0.2364)	(0.0423)	(0.0298)
Observations	1,792	1,116	1,115	1,792	1,116	1,115
R-squared	0.169	0.126	0.103	0.169	0.126	0.104

Note: The high-low gap is the difference between the highest and lowest inflation forcast at each horizon, normalized by the median forecast. Driscoll-Kraay standard errors in parentheses. All especifications include country and time fixed effects.
*** p<0.01, ** p<0.05, * p<0.1

Table 5. Fiscal Consolidations and Inflation Expectations: Does the Composition of Consolidations Matter?

	(1) 1-year inflation expect.	(2) 3-year inflation expect.	(3) 5-year inflation expect.	(4) 1-year inflation expect. Dispersion	(5) 3-year inflation expect. Dispersion	(6) 5-year inflation expect. Dispersion
tax based consolidations	-0.0000	-0.1627***	-0.1739***	0.0306	-0.1529***	-0.0811***
	(0.0244)	(0.0532)	(0.0367)	(0.0278)	(0.0426)	(0.0268)
expenditure based consolidations	-0.0513	-0.1794*	-0.1098	-0.0119	-0.0193	-0.0394
	(0.0467)	(0.0937)	(0.0804)	(0.0251)	(0.0381)	(0.0255)
tax and expenditure based	0.1347	0.1113	0.0162	-0.1001	-0.1553**	-0.0462
	(0.1542)	(0.1670)	(0.1034)	(0.0607)	(0.0628)	(0.0634)
Inflation	0.0018	-0.2688***	-0.1492***	-0.0986***	-0.1128***	-0.0349*
	(0.0681)	(0.0700)	(0.0479)	(0.0300)	(0.0337)	(0.0206)
Inflation (t-1)	-0.0301	0.0783	0.0462	-0.0052	0.0463	-0.0214
	(0.0454)	(0.0718)	(0.0538)	(0.0321)	(0.0434)	(0.0377)
Inflation (t-2)	0.0031	-0.0924	-0.0397	-0.0525*	-0.0838***	0.0270
	(0.0411)	(0.0774)	(0.0637)	(0.0299)	(0.0266)	(0.0300)
Output gap	0.4300	0.4161	1.1130	0.1113	-0.3482	0.1581
	(0.5855)	(1.1688)	(1.0574)	(0.4901)	(0.6705)	(0.3272)
Output gap (t-1)	-0.0703	1.3233	0.9446	-0.3745	0.5794	0.0053
	(1.2247)	(1.2090)	(0.8131)	(0.4805)	(0.3669)	(0.3903)
Output gap (t-2)	2.2875**	1.4165	1.8141	-1.0086	-0.4494	0.1568
	(1.1125)	(1.3265)	(1.1844)	(0.6315)	(0.7418)	(0.4221)
Exchange rate	0.0121*	0.0187*	0.0096	0.0021	0.0124***	0.0138*
	(0.0065)	(0.0098)	(0.0073)	(0.0049)	(0.0039)	(0.0070)
Exchange rate (t-1)	-0.0008	-0.0015	-0.0042	-0.0058	-0.0033	-0.0136
	(0.0086)	(0.0147)	(0.0113)	(0.0042)	(0.0050)	(0.0096)
Exchange rate (t-2)	0.0031	-0.0085	0.0010	-0.0064**	-0.0083*	0.0050
	(0.0067)	(0.0124)	(0.0101)	(0.0025)	(0.0047)	(0.0057)
Short-term inflation expectations	0.6677***	0.8413***	0.4788***	0.2023***	0.1316	0.1470**
	(0.1448)	(0.0905)	(0.0610)	(0.0238)	(0.0794)	(0.0706)
Short-term inflation expectations (t-1)	0.1176	-0.5005***	-0.3581***	0.1239***	0.1396	-0.0272
	(0.1133)	(0.1697)	(0.0964)	(0.0338)	(0.1449)	(0.0905)
Short-term inflation expectations (t-2)	0.1208	0.4672***	0.3138***	0.0019	0.0146	-0.0102
	(0.1001)	(0.1037)	(0.0702)	(0.0195)	(0.0737)	(0.0770)
Constant	0.1222	2.4195***	3.3055***	-0.2621***	0.1864*	0.3665***
	(0.1101)	(0.3300)	(0.3066)	(0.0866)	(0.1109)	(0.0710)
Observations	3,084	1,411	1,410	1,786	1,116	1,115
R-squared	0.938	0.853	0.748	0.844	0.624	0.396

Note: Driscoll-Kraay standard errors in parentheses. All especifications include country and time fixed effects.
*** p<0.01, ** p<0.05, * p<0.1

Table 6. Regressions for Fiscal Consolidations and Inflation Expectations: The Role of Government Debt and Fiscal Prudence

	(1) 1-year inflation expect.	(2) 3-year inflation expect.	(3) 5-year inflation expect.	(4) 1-year inflation expect.	(5) 3-year inflation expect.	(6) 5-year inflation expect.
Consolid. announcement dummy	-0.0709	-0.3208**	-0.3034***	-0.0442	-0.1886**	-0.1854***
	(0.0505)	(0.1245)	(0.1086)	(0.0556)	(0.0823)	(0.0595)
Government debt (precent of GDP)	-0.0051**	-0.0068*	-0.0013			
	(0.0021)	(0.0036)	(0.0029)			
Government debt x Consolid. ann.	0.0010	0.0037**	0.0033**			
	(0.0009)	(0.0016)	(0.0013)			
Dev.of fiscal balance relative to WEO forecast, t-3				-0.0095	-0.0075	-0.0154
				(0.0080)	(0.0145)	(0.0111)
Consolid. ann. x Dev.of fiscal balance relative to WEO forecast, t-3				0.0068	-0.0166	-0.0255**
				(0.0108)	(0.0197)	(0.0120)
Inflation	-0.0036	-0.2721***	-0.1501***	0.0071	-0.2560***	-0.1407***
	(0.0675)	(0.0678)	(0.0462)	(0.0699)	(0.0742)	(0.0507)
Inflation (t-1)	-0.0356	0.0742	0.0466	-0.0425	0.0501	0.0227
	(0.0447)	(0.0702)	(0.0537)	(0.0577)	(0.0829)	(0.0612)
Inflation (t-2)	0.0067	-0.0919	-0.0406	0.0252	-0.0608	-0.0017
	(0.0400)	(0.0785)	(0.0643)	(0.0448)	(0.0851)	(0.0681)
Output gap	0.2455	0.5668	1.1384	0.3334	0.5594	1.4385
	(0.5582)	(1.2286)	(1.0552)	(0.6277)	(1.1565)	(1.0927)
Output gap (t-1)	-0.1504	1.1739	0.9058	0.0945	1.2296	0.8391
	(1.2404)	(1.2314)	(0.8146)	(1.1492)	(1.3219)	(0.7737)
Output gap (t-2)	1.9025*	1.3865	1.8540	2.1783*	1.5498	2.1698
	(1.0861)	(1.4116)	(1.2238)	(1.1645)	(1.4114)	(1.3071)
Exchange rate	0.0109	0.0168*	0.0095	0.0117	0.0191*	0.0106
	(0.0066)	(0.0099)	(0.0073)	(0.0074)	(0.0105)	(0.0071)
Exchange rate (t-1)	-0.0010	-0.0004	-0.0043	-0.0005	-0.0037	-0.0066
	(0.0087)	(0.0148)	(0.0111)	(0.0091)	(0.0166)	(0.0119)
Exchange rate (t-2)	0.0021	-0.0103	0.0010	0.0034	-0.0074	0.0009
	(0.0063)	(0.0121)	(0.0098)	(0.0074)	(0.0136)	(0.0107)
Short-term inflation expectations	0.6731***	0.8410***	0.4783***	0.6351***	0.7898***	0.4256***
	(0.1411)	(0.0878)	(0.0607)	(0.1348)	(0.0850)	(0.0576)
Short-term inflation expectations (t-1)	0.1165	-0.4907***	-0.3554***	0.1581	-0.4382***	-0.2911***
	(0.1113)	(0.1612)	(0.0948)	(0.1089)	(0.1650)	(0.0916)
Short-term inflation expectations (t-2)	0.1245	0.4637***	0.3128***	0.0824	0.4226***	0.2522***
	(0.0985)	(0.1010)	(0.0698)	(0.1134)	(0.1137)	(0.0804)
Constant	0.4504***	2.7107***	3.3732***	0.1681	1.4322***	2.5439***
	(0.1590)	(0.3825)	(0.3264)	(0.1119)	(0.3722)	(0.3348)
Observations	3,073	1,411	1,410	2,645	1,319	1,318
R-squared	0.938	0.854	0.749	0.926	0.799	0.660

Note: Driscoll-Kraay standard errors in parentheses. All especifications include country and time fixed effects.
*** p<0.01, ** p<0.05, * p<0.1

Table 7. Fiscal Consolidations and Inflation Expectations: The Role of Inflation Targeting

	(1)	(2)	(3)	(4)	(5)	(6)
	Inflation Targeting Countries			Non-Inflation Targetting Countries		
	1-year inflation expect.	3-year inflation expect.	5-year inflation expect.	1-year inflation expect.	3-year inflation expect.	5-year inflation expect.
Consolid. announcement dummy	-0.0061	-0.0483**	-0.0453	0.0593	-0.4900	-0.4343
	(0.0244)	(0.0234)	(0.0362)	(0.1906)	(0.6160)	(0.4269)
Inflation	-0.0426	-0.0929***	-0.0568**	0.0273	-0.1691	-0.0967
	(0.0270)	(0.0234)	(0.0241)	(0.0899)	(0.1878)	(0.1202)
Inflation (t-1)	-0.0670*	0.0179	0.0186	0.0237	-0.0418	0.0193
	(0.0372)	(0.0241)	(0.0271)	(0.0792)	(0.2092)	(0.1904)
Inflation (t-2)	0.0104	-0.0379	-0.0251	-0.0547	-0.1008	-0.0577
	(0.0197)	(0.0268)	(0.0254)	(0.0672)	(0.1911)	(0.1839)
Output gap	0.4338	-1.0212***	-0.5256	-1.4531	-8.3042	-1.2656
	(0.3914)	(0.3505)	(0.4846)	(2.7437)	(8.2719)	(7.0384)
Output gap (t-1)	0.3918	-0.3270	0.1997	-1.7847	8.4938	4.4368
	(0.4303)	(0.4324)	(0.4246)	(4.4077)	(9.7393)	(8.3800)
Output gap (t-2)	0.7934	-0.1001	0.1255	3.0686	-5.1136	2.1550
	(0.4913)	(0.6263)	(0.5635)	(3.4098)	(7.8826)	(8.2035)
Exchange rate	-0.0022	0.0019	0.0022	0.0333	0.0298	0.0010
	(0.0030)	(0.0030)	(0.0031)	(0.0210)	(0.0422)	(0.0285)
Exchange rate (t-1)	0.0024	-0.0003	-0.0053	0.0148	0.0177	0.0242
	(0.0033)	(0.0061)	(0.0051)	(0.0317)	(0.0641)	(0.0531)
Exchange rate (t-2)	-0.0022	0.0007	0.0056	-0.0021	-0.0269	-0.0034
	(0.0025)	(0.0042)	(0.0039)	(0.0123)	(0.0409)	(0.0309)
Short-term inflation expectations	0.9647***	0.3146***	0.1795***	0.6497***	1.0615***	0.6024***
	(0.0710)	(0.0378)	(0.0411)	(0.1329)	(0.1972)	(0.1435)
Short-term inflation expectations (t-1)	-0.2610**	0.0578	0.0096	0.1790	-0.7709**	-0.5371**
	(0.1130)	(0.0530)	(0.0549)	(0.1096)	(0.3459)	(0.2268)
Short-term inflation expectations (t-2)	0.2336***	0.1975***	0.1819***	0.1007	0.6464***	0.4441***
	(0.0710)	(0.0586)	(0.0579)	(0.1056)	(0.1963)	(0.1203)
Constant	0.7173***	1.7679***	2.3882***	-0.0743	-1.0576	5.0050***
	(0.1173)	(0.2988)	(0.3307)	(0.2958)	(1.8785)	(1.0039)
Observations	968	545	545	609	200	199
R-squared	0.932	0.819	0.657	0.951	0.940	0.891

Note: Driscoll-Kraay standard errors in parentheses. All especifications include country and time fixed effects.
*** p<0.01, ** p<0.05, * p<0.1

Table 8. Fiscal Consolidations and Inflation Expectations: The Role of Inflation Targeting, Pre-2020

	(1)	(2)	(3)	(4)	(5)	(6)
	Inflation Targeting Countries			Non-Inflation Targetting Countries		
	1-year inflation expect.	3-year inflation expect.	5-year inflation expect.	1-year inflation expect.	3-year inflation expect.	5-year inflation expect.
Consolid. announcement dummy	-0.0065	-0.0593**	-0.0792***	0.0854	-0.3166	-0.7488
	(0.0256)	(0.0238)	(0.0278)	(0.1844)	(0.9572)	(0.6090)
Inflation	-0.0550*	-0.1214***	-0.0869***	0.0477	-0.1862	-0.1141
	(0.0312)	(0.0233)	(0.0263)	(0.0767)	(0.2432)	(0.1574)
Inflation (t-1)	-0.0765*	0.0052	-0.0048	0.0101	-0.0339	0.0020
	(0.0430)	(0.0331)	(0.0332)	(0.0835)	(0.1914)	(0.2309)
Inflation (t-2)	0.0134	-0.0427	-0.0238	-0.0373	-0.1796	-0.0833
	(0.0219)	(0.0363)	(0.0302)	(0.0676)	(0.1584)	(0.1912)
Output gap	0.0833	-1.4478***	-1.3788***	-0.6756	-3.2115	6.8629
	(0.4064)	(0.3280)	(0.3518)	(2.7824)	(12.6692)	(12.3921)
Output gap (t-1)	0.8186	-1.5572***	-1.8734***	-5.0399	-1.1227	-11.3906
	(0.9211)	(0.5579)	(0.5389)	(4.2017)	(14.9988)	(11.8565)
Output gap (t-2)	1.2427	0.0530	0.8391	1.8342	6.7304	19.8243*
	(0.8116)	(1.3466)	(1.2532)	(2.9559)	(10.5797)	(11.5117)
Exchange rate	-0.0011	0.0010	0.0059*	0.0196	0.0273	-0.0089
	(0.0031)	(0.0043)	(0.0031)	(0.0212)	(0.0454)	(0.0278)
Exchange rate (t-1)	0.0015	0.0007	-0.0084	0.0150	0.0165	0.0114
	(0.0037)	(0.0084)	(0.0060)	(0.0268)	(0.0813)	(0.0569)
Exchange rate (t-2)	-0.0035	-0.0018	0.0047	-0.0045	-0.0397	-0.0176
	(0.0026)	(0.0056)	(0.0045)	(0.0120)	(0.0450)	(0.0321)
Short-term inflation expectations	1.0009***	0.3435***	0.2031***	0.5686***	1.1703***	0.6584***
	(0.0705)	(0.0416)	(0.0475)	(0.1209)	(0.1726)	(0.1292)
Short-term inflation expectations (t-1)	-0.2976**	0.0395	-0.0034	0.2100**	-0.9262***	-0.6565***
	(0.1166)	(0.0638)	(0.0594)	(0.0951)	(0.3112)	(0.2029)
Short-term inflation expectations (t-2)	0.2603***	0.2579***	0.2342***	0.0587	0.7179***	0.4418***
	(0.0761)	(0.0611)	(0.0670)	(0.1077)	(0.1941)	(0.1320)
Constant	0.2006	2.1949***	2.4450***	-0.1703	1.3471	3.9640***
	(0.1665)	(0.3625)	(0.3857)	(0.4181)	(2.7118)	(1.0090)
Observations	850	427	427	569	160	159
R-squared	0.931	0.831	0.699	0.929	0.896	0.809

Note: Driscoll-Kraay standard errors in parentheses. All especifications include country and time fixed effects.
*** p<0.01, ** p<0.05, * p<0.1

Table 9. Fiscal Consolidations and Inflation Expectations: The Role of the Monetary Policy Stance and Initial Inflation

	(1) 1-year inflation expect.	(2) 3-year inflation expect.	(3) 5-year inflation expect.	(4) 1-year inflation expect.	(5) 3-year inflation expect.	(6) 5-year inflation expect.	(7) 1-year inflation expect.	(8) 3-year inflation expect.	(9) 5-year inflation expect.
Consolid. announcement dummy	-0.0268	-0.0220	-0.0230	-0.0221	-0.1141**	-0.1060**	-0.0082	-0.1368**	-0.1429***
	(0.0485)	(0.0562)	(0.0372)	(0.0331)	(0.0572)	(0.0448)	(0.0336)	(0.0645)	(0.0455)
Tight monetary policy dummy	-0.0231	-0.0746	-0.0263						
	(0.0419)	(0.0508)	(0.0395)						
Consolid. ann. x Tight monetary policy dummy	-0.0065	-0.2248**	-0.2016**						
	(0.0707)	(0.1065)	(0.0773)						
High inflation dummy				-0.3676*	0.1927	0.1780	-0.3237	0.2355	0.1933
				(0.2203)	(0.1946)	(0.1682)	(0.2109)	(0.2127)	(0.2058)
Consolid. ann. x High Inflation dummy				-0.8400**	-0.9064***	-0.9421***	-0.7957**	-0.6653***	-0.7695***
				(0.4030)	(0.2699)	(0.2322)	(0.3751)	(0.2469)	(0.2562)
Inflation	0.0014	-0.2694***	-0.1495***	0.0107	-0.2704***	-0.1521***	0.0382	-0.2674***	-0.1413***
	(0.0711)	(0.0703)	(0.0479)	(0.0717)	(0.0711)	(0.0480)	(0.0655)	(0.0838)	(0.0468)
Inflation (t-1)	-0.0317	0.0731	0.0440	-0.0307	0.0775	0.0473	-0.0388	0.0982	0.0571
	(0.0446)	(0.0734)	(0.0550)	(0.0445)	(0.0729)	(0.0557)	(0.0486)	(0.0745)	(0.0628)
Inflation (t-2)	0.0050	-0.0868	-0.0368	0.0032	-0.0912	-0.0391	0.0082	-0.1242*	-0.0455
	(0.0406)	(0.0793)	(0.0652)	(0.0408)	(0.0780)	(0.0645)	(0.0423)	(0.0685)	(0.0638)
Output gap	0.3022	0.2658	1.0147	0.4279	0.3298	1.0522	-0.0463	0.3986	1.0629
	(0.5453)	(1.1498)	(1.0330)	(0.5413)	(1.1413)	(1.0382)	(0.7592)	(1.4157)	(1.4896)
Output gap (t-1)	-0.0525	1.3151	0.9316	-0.1123	1.2832	0.8999	-1.0305	0.2596	-0.7613
	(1.2273)	(1.2323)	(0.8337)	(1.2289)	(1.2081)	(0.8204)	(1.4783)	(2.0913)	(1.2956)
Output gap (t-2)	2.1771**	1.2811	1.7170	2.2490**	1.3441	1.7653	2.7843***	5.2303**	5.9223**
	(1.0767)	(1.2838)	(1.1580)	(1.0770)	(1.3199)	(1.1787)	(0.9578)	(2.4545)	(2.2758)
Exchange rate	0.0122*	0.0186*	0.0095	0.0128**	0.0184*	0.0095	0.0079	0.0150	0.0046
	(0.0066)	(0.0099)	(0.0074)	(0.0064)	(0.0097)	(0.0072)	(0.0077)	(0.0109)	(0.0073)
Exchange rate (t-1)	-0.0010	-0.0014	-0.0041	-0.0007	-0.0021	-0.0049	0.0008	0.0008	-0.0023
	(0.0086)	(0.0149)	(0.0113)	(0.0087)	(0.0147)	(0.0111)	(0.0079)	(0.0174)	(0.0120)
Exchange rate (t-2)	0.0034	-0.0078	0.0014	0.0033	-0.0079	0.0017	0.0020	-0.0133	-0.0026
	(0.0068)	(0.0126)	(0.0101)	(0.0067)	(0.0125)	(0.0101)	(0.0063)	(0.0136)	(0.0105)
Short-term inflation expectations	0.6683***	0.8394***	0.4772***	0.6672***	0.8433***	0.4798***	0.5923***	0.8082***	0.4046***
	(0.1451)	(0.0905)	(0.0609)	(0.1443)	(0.0912)	(0.0617)	(0.1277)	(0.1088)	(0.0762)
Short-term inflation expectations (t-1)	0.1180	-0.4967***	-0.3560***	0.1167	-0.5027***	-0.3589***	0.1580*	-0.4909***	-0.2975***
	(0.1133)	(0.1692)	(0.0959)	(0.1128)	(0.1703)	(0.0974)	(0.0931)	(0.1632)	(0.1017)
Short-term inflation expectations (t-2)	0.1211	0.4670***	0.3133***	0.1181	0.4687***	0.3146***	0.0699	0.4395***	0.2463***
	(0.1000)	(0.1037)	(0.0700)	(0.0995)	(0.1045)	(0.0711)	(0.0965)	(0.1193)	(0.0927)
Constant	0.1182	2.4829***	3.3235***	0.0645	2.4111***	3.2999***	1.4803***	2.9132***	4.2013***
	(0.1089)	(0.3359)	(0.3133)	(0.1160)	(0.3327)	(0.3073)	(0.2958)	(0.4844)	(0.3310)
Sample	Full	Full	Full	Full	Full	Full	Pre-2020	Pre-2020	Pre-2020
Observations	3,084	1,411	1,410	3,084	1,411	1,410	2,830	1,157	1,156
R-squared	0.938	0.853	0.749	0.938	0.852	0.748	0.918	0.731	0.563

Note: Driscoll-Kraay standard errors in parentheses. All especifications include country and time fixed effects.
*** p<0.01, ** p<0.05, * p<0.1

Table 10. Regressions for Inflation Expectations: Controlling for Time-Varying Fixed Effects

	(1)	(2)	(3)	(4)	(5)	(6)
	1-year inflation expect.	3-year inflation expect.	5-year inflation expect.	1-year inflation expect. Dispersion	3-year inflation expect. Dispersion	5-year inflation expect. Dispersion
Consolid. announcement dummy	-0.0136	-0.0988*	-0.0896**	-0.0380*	-0.0991***	-0.0476*
	(0.0333)	(0.0542)	(0.0358)	(0.0202)	(0.0302)	(0.0254)
Inflation	-0.0157	-0.2781***	-0.1345***	-0.1093***	-0.1428***	-0.0494**
	(0.0569)	(0.0686)	(0.0375)	(0.0316)	(0.0357)	(0.0226)
Inflation (t-1)	-0.0157	0.1405**	0.0936*	-0.0133	0.0537	-0.0388
	(0.0518)	(0.0605)	(0.0478)	(0.0339)	(0.0490)	(0.0412)
Inflation (t-2)	0.0017	-0.1486**	-0.0726	-0.0457*	-0.0921***	0.0373
	(0.0466)	(0.0706)	(0.0507)	(0.0263)	(0.0324)	(0.0350)
Output gap	-0.0767	-1.0121	0.0988	0.3347	-0.5659	-0.1038
	(0.6710)	(1.0036)	(0.8800)	(0.5161)	(0.6063)	(0.3372)
Output gap (t-1)	-0.2464	2.2151	1.3115	-0.8800	0.0496	-0.8246
	(1.4266)	(1.3742)	(0.9671)	(0.7954)	(0.6468)	(0.5502)
Output gap (t-2)	2.4200***	0.5339	1.4872	-0.5196	-1.0965	0.4193
	(0.8546)	(1.8811)	(1.8074)	(0.9525)	(1.0191)	(0.8524)
Exchange rate	0.0091	0.0214**	0.0108**	0.0034	0.0142***	0.0150**
	(0.0076)	(0.0098)	(0.0052)	(0.0046)	(0.0034)	(0.0072)
Exchange rate (t-1)	-0.0039	-0.0035	-0.0067	-0.0057	-0.0046	-0.0165
	(0.0075)	(0.0148)	(0.0093)	(0.0049)	(0.0045)	(0.0100)
Exchange rate (t-2)	0.0004	-0.0157	-0.0048	-0.0059**	-0.0090**	0.0077
	(0.0052)	(0.0117)	(0.0093)	(0.0026)	(0.0040)	(0.0050)
Short-term inflation expectations	0.5876***	0.5936***	0.2535***	0.2205***	0.1471*	0.1685**
	(0.1136)	(0.0977)	(0.0720)	(0.0250)	(0.0825)	(0.0662)
Short-term inflation expectations (t-1)	0.1644**	-0.2302*	-0.1293	0.1258***	0.1314	-0.0122
	(0.0818)	(0.1268)	(0.0874)	(0.0331)	(0.1478)	(0.0927)
Short-term inflation expectations (t-2)	0.0530	0.2638**	0.1207	0.0173	0.0464	0.0248
	(0.0815)	(0.1043)	(0.0765)	(0.0255)	(0.0795)	(0.0808)
Constant	0.8579***	2.0230***	2.8607***	-0.1968***	-0.0351	0.0358
	(0.1560)	(0.2580)	(0.2346)	(0.0626)	(0.1525)	(0.1056)
Observations	2,892	1,313	1,312	1,678	1,036	1,035
R-squared	0.887	0.617	0.388	0.825	0.456	0.357

Note: Driscoll-Kraay standard errors in parentheses.
*** p<0.01, ** p<0.05, * p<0.1

Table 11. Regressions for Inflation Expectations: Controlling for Leads and Lags

	(1) 1-year inflation expect.	(2) 3-year inflation expect.	(3) 5-year inflation expect.	(4) 1-year inflation expect. Dispersion	(5) 3-year inflation expect. Dispersion	(6) 5-year inflation expect. Dispersion
fiscal consolidation$_t$	-0.0310	-0.1074*	-0.1130**	-0.0160	-0.0817***	-0.0515**
	(0.0336)	(0.0573)	(0.0448)	(0.0202)	(0.0303)	(0.0239)
fiscal consolidation$_{t+1}$	-0.0110	-0.0846	0.0039	-0.0128	-0.0566	-0.0060
	(0.0188)	(0.0598)	(0.0435)	(0.0315)	(0.0482)	(0.0367)
fiscal consolidation$_{t-1}$	-0.0112	0.0014	0.0405	0.0163	-0.0195	-0.0092
	(0.0327)	(0.0519)	(0.0365)	(0.0187)	(0.0265)	(0.0250)
Inflation	0.0055	-0.2630***	-0.1488***	-0.0997***	-0.1123***	-0.0348*
	(0.0694)	(0.0704)	(0.0475)	(0.0298)	(0.0341)	(0.0208)
Inflation (t-1)	-0.0349	0.0715	0.0453	-0.0017	0.0463	-0.0213
	(0.0449)	(0.0731)	(0.0548)	(0.0324)	(0.0431)	(0.0380)
Inflation (t-2)	0.0067	-0.0898	-0.0392	-0.0558*	-0.0831***	0.0270
	(0.0409)	(0.0774)	(0.0644)	(0.0302)	(0.0263)	(0.0303)
Output gap	0.2727	0.3630	1.1371	0.1492	-0.3551	0.1151
	(0.5354)	(1.1475)	(1.0733)	(0.4876)	(0.6881)	(0.3241)
Output gap (t-1)	-0.0616	1.4190	0.9976	-0.3777	0.5991	-0.0099
	(1.2450)	(1.2190)	(0.8118)	(0.4918)	(0.3695)	(0.3813)
Output gap (t-2)	2.1263*	1.2491	1.7884	-0.9120	-0.4883	0.1322
	(1.0759)	(1.2811)	(1.1910)	(0.6108)	(0.7384)	(0.4325)
Exchange rate	0.0130*	0.0179*	0.0093	0.0019	0.0120***	0.0137*
	(0.0067)	(0.0099)	(0.0075)	(0.0052)	(0.0038)	(0.0069)
Exchange rate (t-1)	-0.0018	-0.0002	-0.0037	-0.0052	-0.0027	-0.0133
	(0.0091)	(0.0152)	(0.0116)	(0.0046)	(0.0050)	(0.0096)
Exchange rate (t-2)	0.0033	-0.0093	0.0008	-0.0073***	-0.0087*	0.0048
	(0.0069)	(0.0127)	(0.0103)	(0.0025)	(0.0047)	(0.0057)
Short-term inflation expectations	0.6678***	0.8434***	0.4789***	0.2024***	0.1317*	0.1469**
	(0.1453)	(0.0900)	(0.0607)	(0.0240)	(0.0789)	(0.0704)
Short-term inflation expectations (t-1)	0.1186	-0.5051***	-0.3587***	0.1252***	0.1365	-0.0274
	(0.1142)	(0.1683)	(0.0959)	(0.0333)	(0.1439)	(0.0905)
Short-term inflation expectations (t-2)	0.1188	0.4690***	0.3142***	0.0004	0.0166	-0.0101
	(0.1008)	(0.1035)	(0.0703)	(0.0195)	(0.0733)	(0.0770)
Constant	0.1206	2.8851***	3.2703***	0.0247	0.2191*	0.3735***
	(0.1064)	(0.2871)	(0.2946)	(0.0626)	(0.1145)	(0.0729)
Observations	3,064	1,404	1,403	1,775	1,112	1,111
R-squared	0.937	0.852	0.748	0.843	0.623	0.3057

Note: Driscoll-Kraay standard errors in parentheses. All especifications include country and time fixed effects.
*** p<0.01, ** p<0.05, * p<0.1

Table 12. Regressions for Inflation Expectations at Different Horizons—Pre-2020 Sample

	(1) 1-year inflation expect.	(2) 3-year inflation expect.	(3) 5-year inflation expect.	(4) 1-year inflation expect. Dispersion	(5) 3-year inflation expect. Dispersion	(6) 5-year inflation expect. Dispersion
Consolid. announcement dummy	-0.0156	-0.1389**	-0.1446***	-0.0117	-0.1011***	-0.0509*
	(0.0358)	(0.0640)	(0.0454)	(0.0254)	(0.0332)	(0.0299)
Inflation	0.0318	-0.2633***	-0.1374***	-0.1093***	-0.1407***	-0.0497
	(0.0634)	(0.0823)	(0.0462)	(0.0322)	(0.0377)	(0.0332)
Inflation (t-1)	-0.0407	0.0990	0.0570	-0.0014	0.0125	-0.0634
	(0.0484)	(0.0741)	(0.0608)	(0.0331)	(0.0560)	(0.0480)
Inflation (t-2)	0.0097	-0.1262*	-0.0471	-0.0520*	-0.0689*	0.0571
	(0.0416)	(0.0687)	(0.0634)	(0.0278)	(0.0356)	(0.0375)
Output gap	-0.1386	0.3639	1.0295	0.2057	-0.1331	0.2838
	(0.7321)	(1.3956)	(1.4653)	(0.5122)	(0.5081)	(0.4315)
Output gap (t-1)	-0.9827	0.3827	-0.6474	-0.7271	-0.4790	-1.5251*
	(1.4866)	(2.1334)	(1.3032)	(0.9139)	(1.2455)	(0.8588)
Output gap (t-2)	2.7466***	5.1887**	5.8883**	-1.1731	0.0267	2.1792
	(0.9814)	(2.4448)	(2.2566)	(1.4287)	(2.2480)	(1.6524)
Exchange rate	0.0073	0.0152	0.0047	0.0037	0.0115**	0.0172**
	(0.0077)	(0.0110)	(0.0074)	(0.0051)	(0.0045)	(0.0084)
Exchange rate (t-1)	0.0005	0.0017	-0.0015	-0.0074	-0.0035	-0.0191
	(0.0077)	(0.0174)	(0.0119)	(0.0046)	(0.0060)	(0.0127)
Exchange rate (t-2)	0.0019	-0.0140	-0.0033	-0.0054**	-0.0115***	0.0078
	(0.0064)	(0.0137)	(0.0106)	(0.0025)	(0.0041)	(0.0060)
Short-term inflation expectations	0.5923***	0.8060***	0.4030***	0.2144***	0.1286*	0.1724**
	(0.1280)	(0.1091)	(0.0756)	(0.0274)	(0.0758)	(0.0804)
Short-term inflation expectations (t-1)	0.1589*	-0.4886***	-0.2961***	0.1211***	0.2012	0.0011
	(0.0934)	(0.1630)	(0.1002)	(0.0357)	(0.1418)	(0.1063)
Short-term inflation expectations (t-2)	0.0720	0.4373***	0.2447***	0.0094	0.0273	-0.0025
	(0.0970)	(0.1193)	(0.0916)	(0.0245)	(0.0829)	(0.0936)
Constant	1.4294***	2.9120***	4.1993***	-0.5324***	-0.0715	0.1709
	(0.2958)	(0.4830)	(0.3306)	(0.1088)	(0.1409)	(0.1171)
Observations	2,830	1,157	1,156	1,636	862	861
R-squared	0.917	0.731	0.562	0.814	0.552	0.397

Note: Driscoll-Kraay standard errors in parentheses. All especifications include country and time fixed effects.
*** p<0.01, ** p<0.05, * p<0.1

PUBLICATIONS

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