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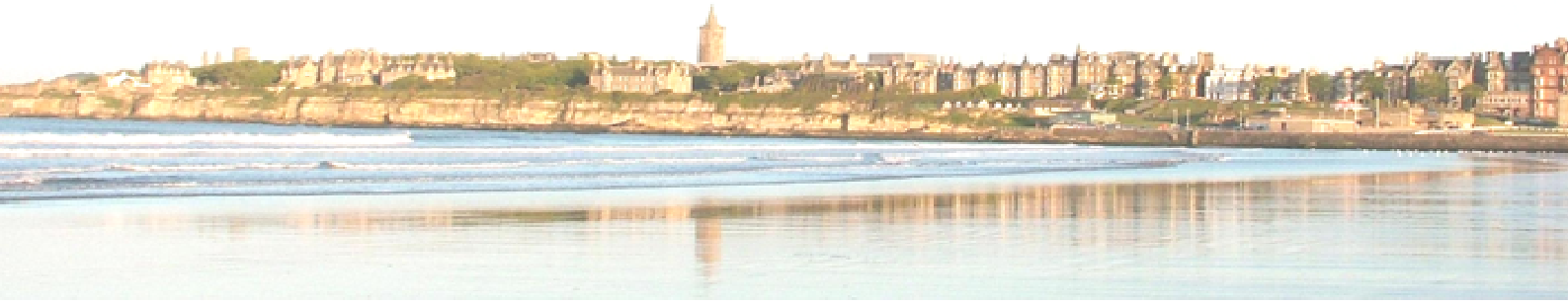

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Bank Inflation Expectations, Risk Premia and Lending Behavior*

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Abstract

This paper investigates the impact of banks' medium-term inflation expectations on credit supply in a major emerging market. Theoretically, higher inflation expectations can either expand credit via the Fisher effect or contract it through a risk-premium channel. By linking novel survey data on banks' macroeconomic expectations with 43.6 million micro-level credit records in Türkiye (2009–2019), we find that the risk-premium channel dominates. A one-percentage-point increase in a bank's inflation expectation leads to a 1.6%–1.7% contraction in domestic currency credit supply. These results are robust to instrumental-variable estimations and a difference-in-differences design centered on the 2018 exchange rate shock. Beyond credit volumes, higher expectations lead to elevated interest rates and tighter collateral requirements. This contraction is most pronounced for small, highly leveraged, and domestically focused firms, with negative spillovers to investment, productivity, and export performance through firm-bank relationships.

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1 Introduction

While traditional frameworks often assume full information and rational expectations, a growing body of empirical evidence demonstrates that economic agents operate under significant informational frictions and display wide dispersion in their subjective beliefs (Weber et al., 2022). Previous research has extensively documented how these expectations shape the real economy by influencing the investment and employment decisions of firms (Coibion et al., 2023) and the consumption patterns of households (Savignac et al., 2024). However, the expectations of the very institutions responsible for the allocation of capital, banks, remain largely underexplored. Since inflation expectations are a fundamental component of nominal interest rate pricing and risk assessment, banks' subjective beliefs should play a critical role in the supply and terms of credit. Assessing this link is essential for understanding how macroeconomic sentiment propagates through the financial system to affect the broader economy.

Theoretically, the impact of bank inflation expectations on credit supply is ambiguous. On one hand, rising inflationary beliefs may signal a period of robust nominal growth and higher future returns, encouraging banks to expand lending—a mechanism akin to the Fisher effect or a search-for-yield behavior. Conversely, a risk-premium channel suggests that higher expected inflation serves as a proxy for macroeconomic instability and impending monetary tightening (Adrian and Shin, 2010). Under this view, banks internalize the potential for impaired borrower cash flows and the erosion of real collateral values, leading to a defensive contraction in credit supply (Bernanke et al., 1999). Whether expectations act as a catalyst for growth or a trigger for tightening likely depends on the institutional context. Existing studies that document a neutral or positive link between inflation expectations and lending have focused almost exclusively on developed markets (e.g., De Marco and Friedheim, 2025), where inflation expectations are well-anchored. In contrast, in emerging markets where price stability is less established, subjective beliefs may be more tightly coupled with perceived systemic risk, making the risk-premium channel the dominant force.

In this paper, we analyze the effect of Turkish banks' inflation expectations on credit

allocation. Türkiye provides an ideal laboratory for this study due to its bank-centric financial system, frequent fluctuations in inflationary pressures, and the availability of granular micro-data (Figure 1). Our empirical design utilizes the Survey of Market Participants to obtain bank-level inflation forecasts, which are merged with the national Credit Registry and corporate tax records. This creates a massive panel covering 43.6 million credit relationships of 26 banks between 2009 and 2019. To isolate supply-side impacts, we employ a within-firm-across-bank identification strategy with firm-time fixed effects, effectively controlling for borrower-specific credit demand and aggregate shocks.

Our findings reveal that the risk-premium channel dominates financial intermediation in this setting. A one-percentage-point increase in a bank's inflation expectations results in a 1.6 to 1.7 percent contraction in real credit supply. This contractionary effect is further confirmed by our analysis of exchange rate expectations, where expectations of depreciation in the Turkish lira act as a similar trigger for credit tightening in a dollarized economy. Beyond volume adjustments, the risk-premium mechanism is evident in the hardening of contract terms: banks respond to higher expected inflation by raising interest rates, lowering credit limits and requiring more stringent collateral. Moreover, credit reduction is more acute for firms with specific characteristics including small size, high leverage and domestic orientation. The idiosyncratic shifts in lender sentiment also aggregate into substantial real-sector consequences, leading to diminished investment, reduced productivity, and lower export participation among affected firms.

We contribute to three strands of literature. First, we explore how inflation expectations reshape credit allocation, moving beyond broad lending contractions (Ma et al., 2021) to document the impact on contract terms like financing costs, limits and collateralization. Our findings provide a counter-perspective to the Fisher effect often observed in developed economies (De Marco and Friedheim, 2025), demonstrating that a risk-premium channel dominates in emerging markets where credit contractions disproportionately affect smaller, highly leveraged firms. Second, we build on the literature examining macroeconomic expectations under information rigidities and diagnostic expectations (Coibion and Gorodnichenko, 2015; Bordalo et al., 2017). While prior work focuses on the subjec-

tive inflation experience of firms and consumers, we extend this by showing how domestic banks process nominal shocks in an EM context (Malmendier and Nagel, 2016; Benhima et al., 2022; Akarsu et al., 2025a). Third, we add to the business cycle literature by showing how a deterioration in bank expectations propagates into real outcomes, including firm-level productivity and investment (Gennaioli et al., 2016; Gulen et al., 2024).

The rest of the paper is structured as follows. Section 2 describes the granular datasets and sample formation process. Section 3 provides details on our identification strategy. Section 4 presents baseline results, heterogeneity analyses, robustness checks, alternative empirical designs and additional estimations. Section 5 gives concluding remarks.

2 Data

In this paper, we use multiple survey-based and administrative datasets generated by governmental institutions -and collectively accessed via CBRT- to form our empirical setting. These databases are merged with each other in a standardized way using unique (and masked) bank and firm identifiers.

2.1 Survey of Market Participants

We utilize Survey of Market Participants (SMP) to obtain a panel of inflation expectations. SMP is a high-frequency survey designed by CBRT to monitor and quantify the expectations of professional forecasters, academicians, experts from financial institutions and real sector as well as other market participants. As of 2025, almost half of the respondents are affiliated with banks (Figure 2). The survey responses are provided by the banks' in-house economists, whose assessments would be expected to directly inform banks' pricing strategies and balance sheet planning. The survey is administered on a monthly basis and inquires forward-looking assessments of respondents for a range of macroeconomic and financial indicators including consumer price inflation, economic growth, exchange rates, policy interest rates, and current account deficit. The main objective of the survey is to track the market sentiment on future course of macroeconomic conditions. CBRT publicly releases aggregated summary statistics from the SMP such as mean and median

expectations, standard deviations and the distribution of forecasts across participants.

In this paper, we exploit the underlying micro-level responses by focusing on the medium-term inflation expectations of experts that are employed in financial institutions. This proprietary dataset enables tracing the evolution of banks' expectations across different survey rounds, facilitating the analysis of heterogeneity in expectation formation. Specifically, we complied in panel format the quantitative responses to the question: "What is your annual consumer inflation expectation for 12 months ahead?". We observe considerable intertemporal and cross-sectional heterogeneities of how Turkish banks predict the future inflation based on SMP dataset (Figure 3). By linking these expectations to granular data on lending outcomes and firm-bank relationships, we can study the role of macroeconomic beliefs in shaping banks' lending decisions.

2.2 Credit Registry

We monitor lending relationships by using the micro-level Credit Registry database provided by Banking Regulation and Supervision Agency (BRSA) and made available to CBRT. This data source contains the entire universe of credit agreements between firms and banks located in Türkiye. Thus, we can gather the information on principal amount (of flow loans) as well as additional term characteristics such as quoted interest rate, currency of denomination, original date of issuance, maturity, collateral value, allocated credit limit and default status. This data provides us valuable insights on how the trend of loan allocation evolves inter-temporally across banks/firms, while allowing us to construct proxies of different facets of lending outcomes.

2.3 Other Data Sources

We complement the aforementioned datasets with additional information on firm and bank features, which are also derived from administrative sources. First, we obtain firm financials (e.g., balance sheet and income statements) and auxiliary descriptive information (e.g., location and sector), as provided by Revenue Administration and processed by Turkish Statistics Institute (TurkStat) and CBRT on a yearly basis. These records are pre-

pared in compliance with Tax Procedure Law and contain firm-specific characteristics for the entire universe of incorporated firms in Türkiye that are required to submit financial statements in lieu with the corporate income tax regime. In this context, we are able to observe detailed composition of firm assets, liabilities and equity, together with disaggregated income and expense items.

Second, we collect bank-level characteristics from confidential supervisory filings, as facilitated by BRSA. Banks are mandated to report a variety of forms to the banking regulator as a part of off-site supervisory framework. Relatedly, we utilize time-varying data on banks' asset holdings, market share, funding conditions and credit risk in addition to deposit pricing. Finally, we gather other information on specific firm activities from secondary administrative datasets including foreign trade transactions from Ministry of Trade (MTI).

2.4 Sample

Our sample period covers the interval January 2009-December 2019 at monthly frequency. We follow certain steps to form our ultimate sample. In the first step, we focus on the panel of responses from SMP to track the expectations on the future course of inflation. In this step, we disregard the institutions that abstain from stating their predictions for 12 months ahead consumer inflation rate. Within SMP, we consider only the experts affiliated with commercial banks. The professionals from participation and investments banks are excluded given that the lending procedures, target customers and funding conditions of such financial intermediaries differ from those of conventional banks.

After merging survey data with other datasets (credit information from Credit Registry, firm characteristics from Revenue Administration and bank financials from BRSA) via standardized unique tax identifiers, we implemented a set of filters to process the merged dataset. We omit observations with zero loan principal and interest rate. Additionally, we drop non-cash loans such as loan commitments. In this context, we also discard consumer loans, individual credit cards and loans extended to banks. We further remove sole-proprietorship firms. Ultimately, the aggregation conducted at bank-firm-

month level has resulted in a sample of 43,597,660 million credit relationships between 26 banks and 508,887 firms, corresponding to 1,535,481 distinct firm-bank relationship. The summary statistics are presented in Table 1, while the variable definitions are given in Tables A1 and A2 of the Appendix.

3 Empirical Design

To identify how banks' inflation expectations shape their credit supply behavior, we employ a within-firm-across-bank estimation strategy. Our identification approach exploits cross-bank variation in lending to the same firm to isolate supply-side dynamics, in line with the seminal contribution of Khwaja and Mian (2008) and the subsequent works using similar matched bank-firm frameworks (Amiti and Weinstein, 2018; Jiménez et al., 2020). Essentially, we compare the credit allocation of different banks to the same firm at a given point in time by controlling for borrower-driven credit demand and potential contemporaneous macroeconomic and sectoral shocks. This consideration restricts our estimations to the group of firms that have multiple banking relationships over time. Furthermore, linking survey-based proxies of inflation expectations to bank-firm matched data allows us to investigate whether the heterogeneity in banks' macroeconomic beliefs translate into a shift in lending policies, while holding firm characteristics constant.

Formally, we estimate the following baseline specification:

$$TLCredit_{ibt} = \beta \cdot InfExp_{bt-1} + \delta_b + \delta_{it} + \varepsilon_{ibt} \tag{1}$$

where $TLCredit_{ibt}$ denotes the amount of local currency-denominated credit extended by bank b to firm i at time t, where real credit balances (adjusted with CPI index) are log-transformed. $InfExp_{bt-1}$ stands for the medium-term inflation expectation of bank b in the previous period, measured in percentage points. The empirical model is saturated with bank (δ_b) and firm-by-time (δ_{it}) fixed effects, absorbing all time-invariant heterogeneity across banks as well as any changes in credit demand and aggregate trends. In

this framework, the main coefficient of interest (β) is identified from within-firm variation across banks at a given time-point. This coefficient measures the sensitivity of real credit supplied on a change in banks' inflation expectations. Standard errors clustered at bank-month level are used for inference.

4 Empirical Findings

4.1 Baseline Results

To contextualize the empirical analysis, we first interpret the baseline estimates given by Table 2. These results are based on the identification strategy described in Equation 1 exploiting firm-time fixed effects and multi-bank structure of lending relationships to isolate supply-side determinants of credits. In column (1), we observe a significant and negative association between banks' inflation expectations and credit supply for local currency credit extension, while column (2) suggests a similar relationship regarding total credits. The coefficients imply that a one-percentage-point hike in banks' inflation expectations leads to a reduction of roughly 1.6-1.7 percent in credits supplied to the same firm by the same bank. For our sample period, the estimate implies that a standard deviation increase in inflation expectations (3.1 percentage points) reduces local currency-denominated credit supply by 5.3 percent. The magnitude of these effects are economically meaningful suggesting that the shifts in macroeconomic beliefs translate into sizable adjustments in lending volumes. For the sake of completeness, in column (3), we test the role of inflation expectations on FX credit supply. We do not document a strong and highly significant effect on FX credit extension, which is in line with the notion that foreign currency lending practices are heavily regulated and less sensitive to the long-term riskiness of the borrowers.

The results also resonate with the prior literature documenting how banks adjust credit conditions via loan volumes and pricing in response to changes in perceived macroeconomic conditions (Ioannidou et al., 2015; Bordalo et al., 2017). In this context, the results support the notion that banks internalize the implications of higher expected inflation for

future funding conditions and borrower creditworthiness. The stronger decline observed in TL credit is also in line with the prior evidence from emerging-market banking systems where domestic-currency exposures exhibit heightened sensitivity to the macroeconomic risk premium (Bräuning and Ivashina, 2020; Avdjiev et al., 2025).[1] Overall, Table 2 presents evidence that banks' medium-term inflation expectations exert a material and contractionary influence on credit supply.

4.2 The Role of Exchange Rate Expectations

Given that inflation expectations reduce credit supply, the risk premium channel appears to dominate the Fisher effect in our context. A similar mechanism would be expected to be operate through exchange rate expectations in emerging market settings, which we test next. The estimates in columns (1) and (2) of Table 3 display a negative and significant association between expected currency depreciation and credit supply in terms of both TL-denominated and total real lending. In columns (3) and (4), the main effect of exchange rate expectations survives when inflation expectations are controlled in a simultaneous way. This finding is intuitively plausible in a highly dollarized emerging market setting such as Türkiye, where frequent exchange rate volatility tends to amplify financial risks due to sizeable foreign currency liabilities and currency mismatches on both bank and firm balance sheets. It aligns with the earlier evidence that currency movements might curtail financial intermediation by restricting bank funding conditions, weakening borrower net worth and increasing systemic fragility (Abbassi and Bräuning, 2023; Bagsic et al., 2025).

4.3 Other Credit Outcomes

In next step, we examine whether banks' inflation expectations affect terms and risk characteristics of lending to understand the potential mechanisms through which expectations

[1] To further motivate how the decline in credit supply is relevant to the macroeconomic risk premium, we undertake an additional analysis. In Table A3, we revise the main specification by interacting the term *Inf Exp* with *CDS*, which monitors the variation in sovereign risk premium of Türkiye over time (relative to the mean of sample period). Here, we find a negative and significant coefficient on the interaction term, suggesting that the downward effect of de-anchored inflation expectations on credit supply is stronger when the country risk of Türkiye elevates.

are translated into tighter financial conditions. In Table 4, by using the details in Credit Registry, we repeat our estimations with alternative variables describing price and non-price terms of lending. In column (1), we report that higher inflation expectations are associated with a significant increase in TL loan interest rates, consistent with banks pricing in heightened macroeconomic and inflation risk. This finding is in accordance with the view that the phases of elevated inflation expectations coincide with weaker borrower balance sheets and increased default risk. The impact on loan pricing is economically substantial. A one standard deviation increase in a bank's inflation expectations (3.1 percentage points) leads to a 1.19 percentage point increase in the interest rate charged to the same borrower. Relative to the sample mean credit rate (16.12 percent), it represents approximately 7.4% increase in the cost of borrowing.

In column (2), we find that the impact of inflation expectations on maturity aspect of lending is inconclusive. However, the additional estimations show that banks adjust other non-price terms of credit as expectations shift. In columns (3) and (4), both credit limits and collateral values decline significantly, displaying a symptom of broad-based tightening of lending standards as a response to higher inflation expectations. In terms of economic significance, the impacts on credit limits and collateral (based on one standard deviation increase in inflation expectations) correspond to 7.1% and 10.5% decline, respectively. Taken together, these results imply that banks respond to adverse expectations not only by curtailing credit volumes, but also by raising financing costs and restricting limit and collateral conditions. Hence, banks' reaction is consistent with a comprehensive risk management approach rather than a narrow pricing or volume-based adjustment in credit allocation.

4.4 Heterogeneous Effects Across Firm Characteristics

Next, we discuss how the contractionary impact of banks' inflation expectations on credit allocation differs across firms with distinct operational and financial features. Table 5 presents findings pertaining to augmented versions of Equation 1. These estimations are derived from specifications with interaction terms allowing the baseline effect to vary by

firm size, leverage and exporter status. In this context, banks are expected to retrench disproportionately from smaller and highly leveraged firms due to their informational opaqueness and limited buffers when perceived risk of default and collateral erosion rise in a high-inflation environment. Indeed, the results indicate statistically meaningful heterogeneity: the negative effect of increasing inflation expectations on credit supply is stronger for small and highly leveraged firms, whereas exporting firms appear comparatively resilient.

In column (1), the stronger contraction for smaller firms echoes the earlier consensus pointing out that SMEs face disproportionately tighter credit conditions in the presence of worsening expectations and macroeconomic disturbances. Other works find that credit supply shocks often reduce lending to smaller enterprises, stemming from higher informational opaqueness and financial frictions (Russo et al., 2024). Furthermore, leveraged firms are more likely to carry weaker balance sheets and higher default risks. In turn, this might prompt banks to cut lending more aggressively when adverse perceptions of macroeconomic conditions bring uncertainty about future cash flows and collateral values (Vansteenberghe, 2025), as seen in column (2). Last, the positive interaction for exporters found in column (3) suggests that those firms may be insulated from domestic inflation expectation effects thanks to alternative revenue sources and financing opportunities. For the case of Türkiye, Akarsu et al. (2025b) show that export-oriented firms are resilient against the ramifications of macro shocks (e.g., monetary policy surprises) on credit usage.

Hence, our findings corroborate that firm-level characteristics critically shape the transmission of credit supply shocks generated by the variation in inflation expectations. Rising inflation expectations do not uniformly tighten credit extension, but create more financing obstacles for vulnerable firms (small, highly-leveraged and domestically-oriented).

4.5 Heterogeneous Effects Across Bank Characteristics

In this sub-section, we complement the earlier analyses by examining how the expectations-induced curtailment in credit supply varies based on several bank characteristics. The

findings presented in Table 6 reveal that bank-specific factors such as bank size, funding composition, banks' own credit risk and provisioning policies emerge as significant determinants.

In columns (1) and (2), we observe that larger banks and those with higher reliance on core funding sources (defined as the share of local currency deposits in total deposits) reduce lending less (relative to other banks) facing an expectation shock. The mitigating role of bank size is in line with the earlier literature. Thanks to their size and diversified portfolios, larger banks are more likely to display resilience facing adverse shocks, including the shift in inflation expectations (Gelman et al., 2023). Moreover, the mitigating role of core funding is consistent with prior research highlighting that stable deposit base (rather than the dependence on retail funding) is influential in maintaining lending against worsening macroeconomic outlook (Gambacorta and Marqués-Ibáñez, 2011).

In columns (3) and (4), we turn our attention to other bank features describing the risk-taking tendencies. The results indicate that banks with higher NPL ratios and lower provisions are more likely to decrease allocated credit when faced with rising inflation expectations. These findings reinforce the fact that riskier banks with inadequate buffers may become more conservative in their lending practices when default risks are amplified in the context of worsening expectations.

4.6 Robustness Checks

This sub-section discusses the robustness of the baseline findings (initially presented in column (1) of Table 2) to test whether the estimated impact of banks' inflation expectations on credit extension remains stable across a wide set of alternative specifications and sample modifications. These checks are given as rows of Table 7 for the sake of brevity. In row (1), we see that the negative relationship persists when the analysis is restricted to large Turkish banks, suggesting that the effect is not sensitive to the presence of smaller or more specialized lenders. In row (2), excluding state-owned banks yields impacts of similar magnitude and statistical significance level, aligning with the previous literature arguing that public banks often follow distinct credit allocation patterns due to their unique

mandates (Bertay et al., 2015). In row (3), extending the sample to a more recent period produces a similar negative relationship, despite the fact that inference becomes less clean because the post-2020 period in Türkiye is characterized by binding macroprudential interventions that confound lending decisions (Cerutti et al., 2017). In row (4), incorporating banks' expectations of GDP growth and policy rates leaves the main effect essentially unchanged, consistent with the view that the role of inflation expectations is not subsumed by broader macroeconomic forecasts. In row (5), adding the short-term inflation expectations as a control likewise does not alter the main results, reinforcing the idea that medium-term inflation expectations consitute an independent informational channel (Coibion and Gorodnichenko, 2015; Andrade et al., 2016).

Furthermore, in row (6), we use contemporaneous expectations instead of lagged values, providing similar results in the sense that the timing structure does not spuriously drive the empirical pattern. In rows (7) and (8), adjusting the level at which standard errors are clustered (to the firm or bank-firm level) maintains statistical precision. In row (9), we employ a binary below/above consensus measure of expectations and retain a negative and significant effect. This shows that even coarse variations in beliefs lead to systematic differences in lending behavior. Lastly, in row (10), we explicitly control for time-varying bank characteristics including size, profitability, funding composition and capitalization (that are likely to influence lending tendencies) to highlight that the link between expectations and credit supply survives after conditioning on bank observables. In sum, these robustness exercises point out that the negative impact on credit supply due to heterogeneous inflation expectations is persistent across alternative specifications.

4.7 Additional Estimations for Endogeneity Concerns

In the following phase, we turn to alternative ways to construct the empirical design in order to ensure that the observed contraction in lending dynamics is not mechanically driven by any endogeneity concerns.

First, we utilize instrumental variable technique to strengthen the causal interpretation of the findings. In this context, we construct an instrument defined as the interac-

tion between each bank's inflation surprise and the lagged average inflation expectations of its peer banks. Fundamentally, this design exploits cross-sectional heterogeneity in how banks respond to system-wide expectations evolve. In particular, it is assumed that banks witnessing substantial forecast errors adjust their subsequent expectations more visibly when the overall banking sector's expectations shift. The instrument is thought to be valid considering both theoretical and empirical arguments. Expectation-updating frameworks argue that agents systematically revise their beliefs when confronted with forecast errors, with larger surprises inducing more profound belief revisions (Coibion and Gorodnichenko, 2015). The prior literature posits that economic agents' expectations are shaped not only by their own information sets but also by the signals of their peers. Therefore, social-learning and peer-interaction channels in expectation formation would propagate system-wide revisions (Angeletos et al., 2018; Coibion et al., 2018). Other studies also indicate that, when interacted with cross-bank aggregates, bank-level shocks that are orthogonal to firm fundamentals could create credible variation to identify supply-side channels (Amiti and Weinstein, 2018).

The stages of our IV specification are formulated as follows:

$$InfExp_{bt} = \gamma \cdot (\text{Inf Surprise}_{bt} \times \text{Peer Inf Exp}_{bt-1}) + \delta_b + \delta_{it} + \nu_{ibt} \tag{2}$$

$$TLCredit_{ibt} = \beta \cdot \widehat{InfExp}_{bt-1} + \delta_b + \delta_{it} + \varepsilon_{ibt} \tag{3}$$

where $TLCredit$ refers to the log-transformed real balance of the credit relationship, $InfExp$ denotes the bank-level expectations for inflation developments. $InfSurprise$ describes the difference between one year-lagged inflation expectations of a specific bank and current realization of inflation rate, whereas $PeerInfExp$ represents the leave-one-out average inflation expectations of the sector observed in last month. The same set of fixed effects are included.

The column (1) of Table 8 reports the first stage estimation results. We find a significant coefficient on the interaction term, implying that there exists a positive relationship between the instrument and banks' inflation expectations. As anticipated, banks experiencing larger inflation surprises adjust their expectations more sharply when peer expectations increase. The related first-stage F-statistic (=17.78) exceeds conventional thresholds, supporting the relevance of the instrument. Furthermore, the exclusion restriction seems plausible because the interaction of bank-level inflation surprises with peers' lagged expectations can affect credit supply only by altering its own inflation expectations, while having no direct structural link to bilateral lending outcomes. Additionally, the inclusion of higher degree fixed effects are likely to absorb other bank traits, demand-side and macro shocks, thereby limiting the remaining pathways through which the instrument could influence credit outcomes. Column (2) of Table 8 demonstrates the second stage findings. Here, the instrumented inflation expectations carry a negative and significant coefficient in predicting TL-denominated credit extension. The results still suggest that banks' upward revisions of inflation forecasts reduce credit supply. To ensure that our inferences are not driven by the composition of IV specification, we perform further robustness analyses in Table A4 of the Appendix. The findings pertaining to IV estimations do not vary significantly when only large banks are included or time-varying bank controls are used. Overall, these results support the causal interpretation of the baseline estimates and underscores the central role of expectation formation in shaping real credit outcomes.

Second, we leverage the occurrence of 2018 currency shock in Türkiye as a sharp and plausibly exogenous macro-financial shock that triggered abrupt revisions in banks' inflation expectations to perform an event study analysis. We essentially focus on a narrowed estimation interval covering six months before and after August 2018 when Turkish Lira faced a sizable depreciation. Importantly, this episode was largely precipitated by geopolitical developments rather than gradual deterioration in domestic macroeconomic or firm-level fundamentals, strengthening its suitability as an external shock for identification purposes. In our case, we aim to compare banks that witnessed above-median changes in average inflation expectations after the currency shock to those with more

muted reaction in expectations. Our design leverages differential belief updating around an economy-wide event.

We use the following specification for event study estimation:

$$TLCredit_{ibt} = \sum_{k=-6,\, k\neq 0}^{6} \beta_k \left(\text{Treated}_b \times \mathbb{1}\{t - t_0 = k\}\right) + \delta_b + \delta_{it} + \varepsilon_{ibt} \tag{4}$$

where $TLCredit_{ibt}$ denotes the amount of local currency-denominated credit, while $Treated_b$ is the binary indicator marking the banks experiencing higher increases in inflation expectations following the occurrence of currency shock. The model accommodates bank and firm-time fixed effects. The interactions between the treatment indicator and relative time dummies capture the dynamic evolution of differential credit supply responses across banks with heterogeneous inflation-expectation revisions following the currency fluctuations.

The findings displayed in Figure 4 reveal no evidence of differential pre-trends between the two groups during the period before the currency shock, making parallel trends assumption more likely to hold in our setting. On the other hand, aftermath of the shock, banks that revised their inflation expectations upward more visibly exhibited a persistent contraction in local currency lending relative to control banks. The estimated coefficients become negative after the event and decrease further in the subsequent months, showing that expectation-related tightening in credit supply unfolds gradually. Therefore, the event study estimation also supports the finding that the shifts in banks' inflation expectations co-exist with sustained reductions in credit extension.

4.8 Bank-Level Outcomes

Next, we resort to bank-level estimations to understand the impact of inflation expectations on bank behavior including credit market share, lending contract structure, and deposit pricing. The findings are given in Table 9. In column (1), we use the market share of banks in total lending (of industry) as the outcome variable, while controlling for bank

and time fixed effects. The negative and significant coefficient implies that banks anticipating higher inflation tend to reduce market share, in line with the micro-level results. This behavior is compatible with the risk-taking channel, which posits that increasing risk perception of banks (due to rising inflation expectations) would cause loss in competitiveness as banks tend to charge higher rates to maintain margins. In this context, when banks widen spreads in response to changing macro environment, they trade off volume for higher margins, leading to a contraction in market share (Drechsler et al., 2017).

In column (2), we document a positive and significant relationship between inflation expectations and the share of variable-rate lending. This finding is aligned with duration gap management. It is known that banks are sensitive to income risk, which stems from the fact that interest expenses rise faster than interest income (Landier et al., 2013). When inflationary pressures are evident, banks seek to minimize the maturity mismatch in balance sheet composition. Therefore, by shifting borrowers toward variable-rate contracts, banks implement a hedging strategy to ensure that asset yields move in tandem with the rising cost of liabilities. This allows the transfer of interest risk from banks' equityholders to borrowers.

Last, the results in column (3) reveal a positive association between inflation expectations and weighted-average deposit rates, which is consistent with theoretical implications of liquidity preference framework.[2] As inflation expectations are heightened, the real return on nominal cash balances decline, prompting depositors to seek higher yields (Nagel, 2016). Thus, banks are forced to increase nominal deposit rates to maintain the funding base and avoid deposit flight.

[2]These effects are also economically meaningful. A standard deviation hike in inflation expectations is related to 8.3% decline in *Lender Share* and 6.0% elevation in *Variable Rate Share* relative to their mean values, respectively. Furthermore, our estimations imply that a standard deviation upward shock to bank inflation expectations results in 3.3% increase in deposit rate relative to the mean.

4.9 Macroeconomic Effects

The evidence presented so far suggests that banks' inflation expectations alter their lending strategies and pricing. In Table 10, we assess whether these idiosyncratic shifts in credit allocation aggregate into tangible consequences for the real economy. We evaluate the impact of lender sentiment on three pillars of firm performance: investment intensity (*CAPEX to Assets*), operational productivity (*Net Sales to Assets*) and participation to international trade (*Exporter*). To establish the link between bank expectations and subsequent firm outcomes via credit channel, we create a credit-weighted measure of inflation expectations based on each firm's specific lender composition (*Weighted Inf Exp*) and run firm-level regressions. This empirical strategy is grounded in the setting that the decline in credit supply driven by the subjective beliefs of banks can have second-order effects on the future real activity of borrowers. In this specification, by including firm and year fixed effects, we aim to ensure that the estimated effects are not confounded by aggregate demand shocks or time-invariant firm characteristics.

In columns (1) and (2), we document that an increase in the weighted inflation expectations translate into a significant reduction in the future investment trends and physical capital accumulation. In columns (3) and (4), we also find that the tightening in credit supply and related investment contraction lead to a decline in operational capacity and firm productivity. Furthermore, in columns (5) and (6), we find evidence displaying the negative impact on extensive margin of international trade. This shows that firms facing higher inflationary sentiment from their lenders are less likely to engage in export activities. Overall, these results provide a comprehensive view of macroeconomic transmission mechanism of lenders' expectations. The strategic hedging behavior of banks in response to higher inflation expectations (through credit contraction) imposes real costs on the corporate sector as seen in weaker investment, sales and export activities.

As an additional analysis, we test how the effects of belief-induced credit contraction on firms' economic performance varies with respect to firm size. In Table A5 of the Appendix, we find that the downward impact on firm investment, operational performance and exporting tendencies is more pronounced for small firms. This further points out that

the negative externalities of banks' inflation expectations are reflected more on firms that are already facing financial constraints and greater need of external finance.

5 Conclusion

In this study, we investigate the transmission of bank-level inflation expectations to the supply and terms of credit in an emerging market. By merging proprietary survey data on the subjective beliefs of financial professionals in Türkiye with granular administrative records from the national Credit Registry and corporate tax filings, our analysis provides new insights into how informational frictions shape financial intermediation. Leveraging a within-firm-across-bank identification strategy, we isolate supply-side shifts to ensure that the observed changes in lending can be attributed to idiosyncratic bank beliefs rather than borrower-specific demand or other shocks.

Our empirical results show that the risk-premium channel acts as the primary driver of the link between inflation expectations and bank credit supply in this setting. An increase in a bank's inflation expectations leads to a contraction in the real credit supply. This is unlike the positive links often found in developed markets. The contraction is further accompanied by a hardening of contract terms including elevated interest rates, lowered limits and stringent collateral requirements. The tightening in credit supply is mirrored by bank expectations concerning exchange rate depreciation, which suggests that macroeconomic sentiment acts as an important trigger for credit contractions in a dollarized economy as banks price in a greater risk premium.

The heterogeneity in effects is also in line with the risk premium as the primary driver of the link. The intensity of credit contraction is more visible for small, highly-leveraged and domestically-oriented firms and more pronounced when the overall country risk spikes. Furthermore, the effects are somewhat mitigated for banks of larger size, those relying on stable deposit-based funding and those with lower credit risk. We also find evidence that the idiosyncratic shifts in lender sentiment aggregate into real-sector consequences, diminishing investment, productivity and export participation.

These results offer critical implications for policymakers and regulators, particularly

in emerging markets where price stability is less established. First, the evidence underscores that inflation expectations are active determinants of credit supply. A de-anchoring of these beliefs can cause a broad-based tightening of financial conditions even without immediate policy rate adjustments. Second, the heterogeneous impact across firm types provides some justification to macroprudential policies that try to support particularly vulnerable sectors. Finally, our findings highlight that price stability is a prerequisite for financial stability. By anchoring expectations, monetary authorities can mitigate the risk-premium channel, preventing credit contractions and spillovers to the real economy in response to short-term price shocks.

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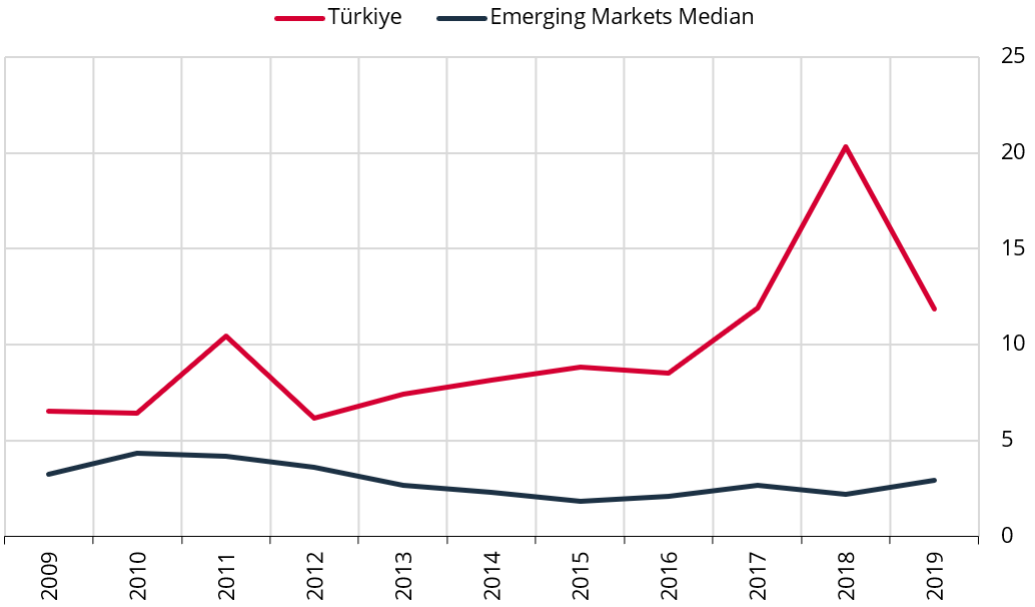
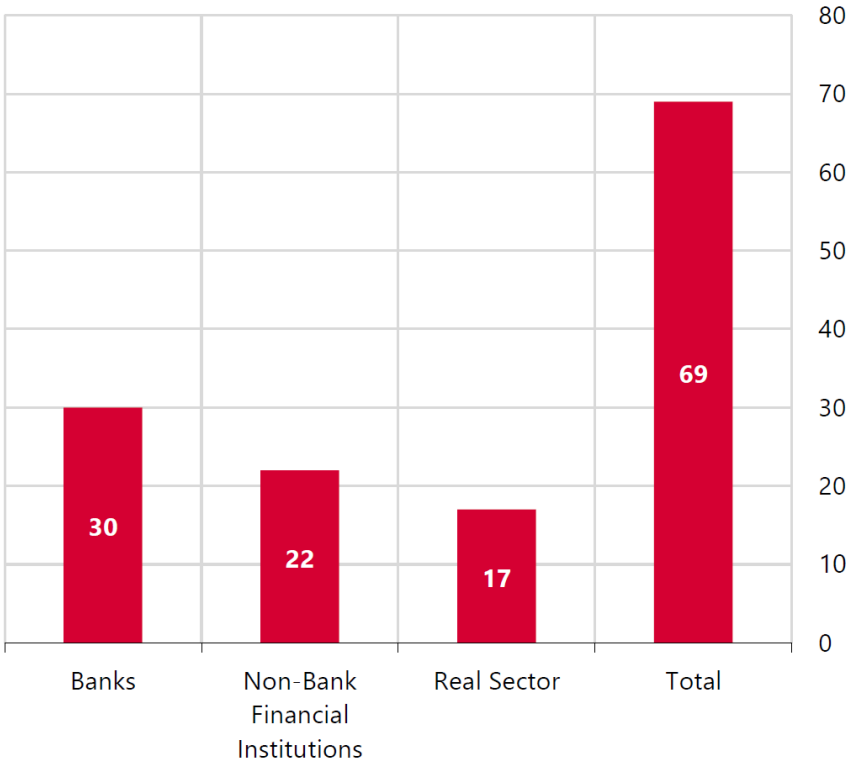
Figure 1: Inflation Developments in Türkiye and Emerging Markets



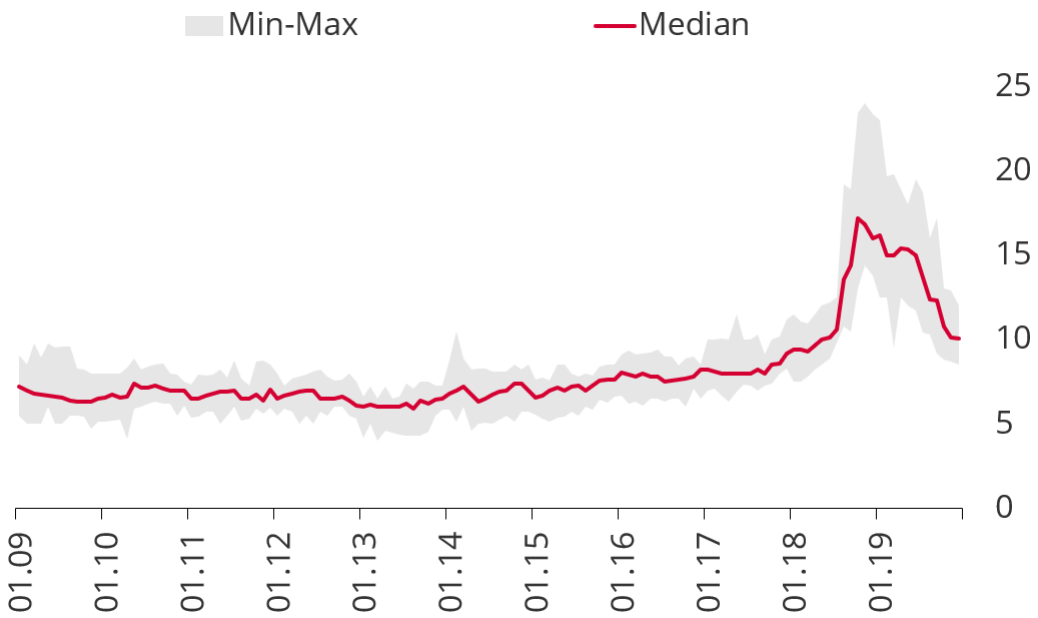
Notes: This chart shows the year-on-year growth rate of CPI in Türkiye and median inflation rate of a selected EM group. The set of EM countries include Bangladesh, Brazil, Chile, Colombia, Costa Rica, Croatia, Czechia, Egypt, Georgia, Greece, Hungary, India, Indonesia, S. Korea, Malaysia, Mexico, Nepal, Paraguay, Peru, Philippines, Poland, Romania, Russia, Saudi Arabia, Senegal, Serbia, Slovakia, Slovenia, South Africa and Thailand. Inflation rate records are sourced from IMF World Economic Outlook Database.

Figure 2: Respondents of CBRT Survey of Market Participants



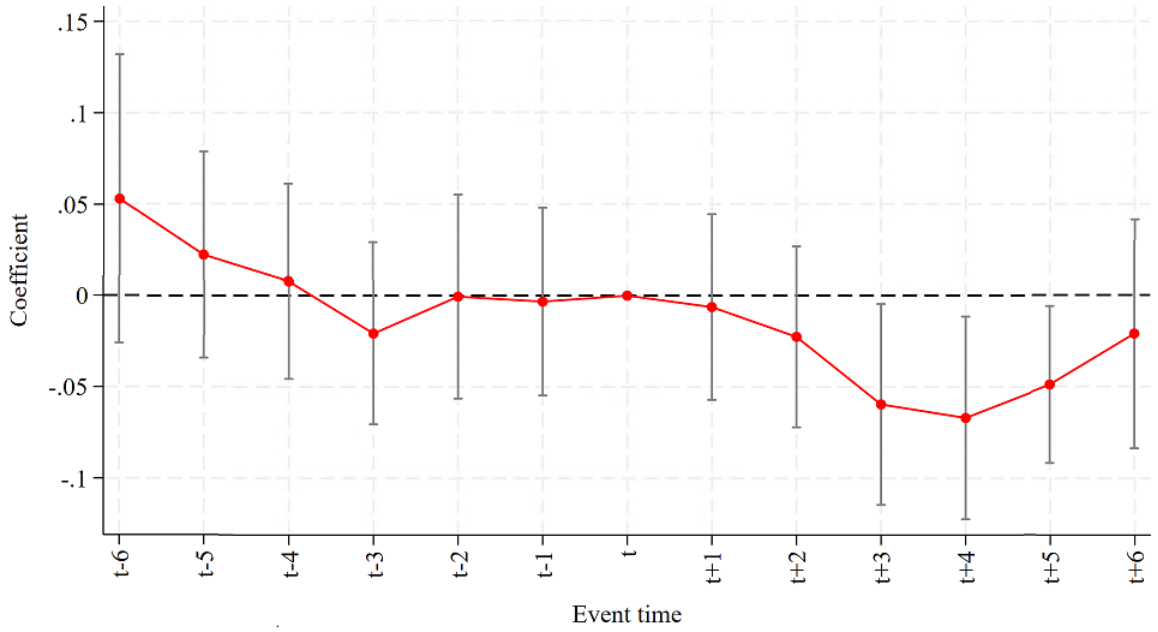
Notes: This chart shows the count of participants of CBRT Survey of Market Participants across the broader categories, as of 2025. The classification of respondents is done with respect to banks, non-bank financial institutions and real sector.

Figure 3: Bank Inflation Expectations



Notes: This chart shows intertemporal and cross-sectional variation in sample banks' 12 months ahead inflation expectations for the period 2009-2019. The data is sourced from Survey of Market Participants. The solid red line represents the median inflation expectations, whereas the shaded area shows the interval between minimum and maximum values.

Figure 4: Event Study Analysis with 2018 Currency Shock



Notes: This chart shows the results of event study analysis around the occurrence of 2018 currency shock in Türkiye. The estimations are performed in line with Equation 4. The coefficient estimates with 95% confidence intervals are provided.

Table 1: Summary Statistics

	(1) Obs.	(2) Mean	(3) Std. Dev.	(4) p5	(5) p95
Bank-Firm Level					
TL Credit	25,381,958	4.880	1.531	2.338	7.362
Total Credit	26,996,104	5.043	1.641	2.437	7.756
FX Credit	26,996,104	0.236	0.884	0.000	2.156
TL Credit Rate	25,381,958	16.123	7.796	8.251	26.682
Maturity	25,381,958	0.738	0.439	0.000	1.000
Credit Limits	25,381,958	0.760	1.580	-1.747	3.319
Collateral	20,787,859	5.667	1.687	2,996	8.415
Bank Level					
Inf Exp	1,956	8.457	3.091	5.600	16.000
Inf Surprise	1,956	-2.772	4.030	-11.252	1.953
Peer Inf Exp	1,956	8.541	2.863	6.108	15.484
ST Inf Exp	1,950	0.731	0.649	-0.200	1.950
GDP Exp	1,657	4.002	0.893	2.500	5.200
Exc Rate Exp	1,932	3.363	1.600	1.605	6.500
Policy Rate Exp	1,657	9.294	4.253	5.000	19.000
Bank Size	1,956	18.708	1.018	16.565	19.901
Core Funding	1,956	60.159	9.677	44.423	75.004
Bank NPL	1,956	3.425	1.494	1.626	6.187
Provisions	1,956	75.623	12.282	55.317	98.547
Lender Share	1,937	6.235	5.962	0.058	16.087
Variable Rate Share	1,937	32.866	17.284	0.000	59.326
Deposit Rate	1,923	11.082	4.295	6.966	21.741
Firm Level					
Small Firm	7,576,179	0.664	0.472	0.000	1.000
Leverage	7,576,179	25.895	25.984	-3.437	72.218
Exporter	7,576,179	0.083	0.277	0.000	1.000
Weighted Inf Exp	2,057,343	14.495	10.767	6.100	40.326
CAPEX to Assets	2,057,343	5.833	16.689	-11.651	37.151
NetSales to Assets	2,057,343	142.394	160.535	1.819	422.595

Notes: This table presents the summary statistics of the variables used in the analyses. Column (1) gives the number of observations. Columns (2), (3), (4) and (5) provide the mean, standard deviation, 5th percentile and 95th percentile values, respectively.

Table 2: Baseline Results

	(1) TL Credit	(2) Total Credit	(3) FX Credit
Inf Exp	-0.017***	-0.016***	0.001*
	(0.004)	(0.004)	(0.000)
Obs.	25,381,958	26,996,104	26,996,104
Bank FE	✓	✓	✓
Firm x Time FE	✓	✓	✓
Adj. R^2	0.459	0.523	0.634

Notes: This table reports estimates of the effect of banks' inflation expectations on credit allocation. The analysis covers the years 2009–2019 and is restricted to firms borrowing from multiple banks in a given time. In column (1), the outcome variable is log-transformed TL-denominated credit balance (adjusted for CPI) of a firm from a given bank at a particular time. In column (2), the outcome variable is log-transformed total (real) credit balance. In column (3), the outcome variable is log-transformed FX credit balance. The main explanatory variable is the 12 months ahead inflation expectations of banks. The regression includes bank and firm-by-time fixed effects. Standard errors are clustered at bank-month level. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 3: Results for Exchange Rate Expectations

	(1) TL Credit	(2) Total Credit	(3) TL Credit	(4) Total Credit
Exc Rate Exp	-0.116***	-0.111***	-0.093***	-0.089***
	(0.017)	(0.016)	(0.017)	(0.017)
Inf Exp			-0.011***	-0.011***
			(0.005)	(0.004)
Obs.	25,231,105	26,833,650	25,175,219	26,774,447
Bank FE	✓	✓	✓	✓
Firm x Time FE	✓	✓	✓	✓
Adj. R^2	0.459	0.523	0.643	0.683

Notes: This table reports estimates of the effect of banks' exchange rate expectations on credit allocation. The analysis covers the years 2009-2019 and is restricted to firms borrowing from multiple banks in a given time. In column (1), the outcome variable is log-transformed TL-denominated credit balance (adjusted for CPI) of a firm from a given bank at a particular time. In column (2), the outcome variable is log-transformed total (real) credit balance. In columns (3) and (4), we repeat the same estimations by including exchange rate and inflation expectations simultaneously. The main explanatory variable is the 12 months ahead exchange rate expectations of banks. The regression includes bank and firm-by-time fixed effects. Standard errors are clustered at bank-month level. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 4: Results for Other Lending Outcomes

	(1) TL Credit Rate	(2) Maturity	(3) Credit Limits	(4) Collateral
Inf Exp	0.384***	-0.000	-0.023***	-0.034***
	(0.063)	(0.002)	(0.008)	(0.012)
Obs.	25,381,958	25,381,958	25,381,958	20,787,859
Bank FE	✓	✓	✓	✓
Firm x Time FE	✓	✓	✓	✓
Adj. R^2	0.401	0.200	0.494	0.479

Notes: This table report estimates of the effect of banks' inflation expectations on other lending outcomes. The analysis covers the years 2009-2019 and is restricted to firms borrowing from multiple banks in a given time. In column (1), the outcome variable is interest rate applicable to TL-denominated credits. In column (2), the outcome variable is a binary indicator taking the value of one for existence of credit relationships with maturity higher than or equal to 365 days, otherwise zero. In columns (3) and (4), the outcome variables are one plus log transformed credit limit balances and collateral values, respectively. The main explanatory variable is the 12 months ahead inflation expectations of banks. The regression includes bank and firm-by-time fixed effects. Standard errors are clustered at bank-month level. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 5: Heterogeneous Effects Based on Firm Characteristics

	(1) TL Credit	(2) TL Credit	(3) TL Credit
Inf Exp x Small Firm	-0.018***		
	(0.006)		
Inf Exp x Leverage		-0.0002***	
		(0.000)	
Inf Exp x Exporter			0.007**
			(0.003)
Inf Exp	-0.004	-0.013***	-0.017***
	(0.004)	(0.004)	(0.004)
Obs.	25,381,958	25,381,958	25,381,958
Bank FE	✓	✓	✓
Firm x Time FE	✓	✓	✓
Adj. R^2	0.459	0.459	0.459

Notes: This table reports the estimates of the heterogeneity analysis of the effect of banks' inflation expectations on credit allocation based on firm characteristics. The analysis covers the years 2009-2019 and is restricted to firms borrowing from multiple banks in a given time. In all columns, the outcome variable is log-transformed TL-denominated credit balance (adjusted for CPI) of a firm from a given bank at a particular time. The set of variables describing firm characteristics consists of a binary indicator based on the regulatory classification of small firms (*Small Firm*), the ratio of total liabilities to total assets (*Leverage*) and a binary indicator showing the exporter status of firms (*Exporter*). The main explanatory variable is the 12 months ahead inflation expectations of banks. The regression includes bank and firm-by-time fixed effects. Standard errors are clustered at bank-month level. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 6: Heterogeneous Effects Based on Bank Characteristics

	(1) TL Credit	(2) TL Credit	(3) TL Credit	(4) TL Credit
Inf Exp x Bank Size	0.003**			
	(0.001)			
Inf Exp x Core Funding		0.001***		
		(0.000)		
Inf Exp x Bank NPL			-0.005***	
			(0.000)	
Inf Exp x Provisions				0.0005*
				(0.0001)
Inf Exp	-0.071***	-0.065***	0.005	-0.046***
	(0.027)	(0.028)	(0.006)	(0.011)
Obs.	25,381,958	25,381,958	25,381,958	25,381,958
Bank FE	✓	✓	✓	✓
Firm x Time FE	✓	✓	✓	✓
Adj. R^2	0.459	0.459	0.459	0.459

Notes: This table reports the estimates of the heterogeneity analysis of the effect of banks' inflation expectations on credit allocation based on bank characteristics. The analysis covers the years 2009-2019 and is restricted to firms borrowing from multiple banks in a given time. In all columns, the outcome variable is log-transformed TL-denominated credit balance (adjusted for CPI) of a firm from a given bank at a particular time. The set of variables describing bank characteristics consists of the log-transformed total bank assets (*Bank Size*), the ratio of TL-denominated deposits in total deposits (*Core Funding*), the ratio of non-performing loans to total loans extended (*Bank NPL*) and the ratio of loan loss provisions to total loans (*Provisions*). The main explanatory variable is the 12 months ahead inflation expectations of banks. The regression includes bank and firm-by-time fixed effects. Standard errors are clustered at bank-month level. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 7: Robustness Checks

	(1) Coefficient (β)	(2) SE
(1) Large banks sample	-0.025***	(0.006)
(2) Excluding state banks	-0.016***	(0.004)
(3) Extending sample period (2009-2023)	-0.003**	(0.011)
(4) Controlling for GDP growth and policy rate expectations	-0.017***	(0.004)
(5) Controlling for short-term inflation expectations	-0.021***	(0.004)
(6) Using contemporaneous values of inflation expectations	-0.016***	(0.004)
(7) Clustering standard errors at firm level	-0.017***	(0.001)
(8) Clustering standard errors at firm-bank level	-0.017***	(0.006)
(9) Binary inflation expectations (above/below consensus)	-0.021***	(0.008)
(10) Controlling for time varying bank level characteristics	-0.011***	(0.004)

Notes: This table reports robustness checks for the effect of banks' inflation expectations on credit allocation by revising the specification in Equation (1). The findings of robustness checks are given as rows instead of columns for the sake of brevity. In row (1), we repeat the main estimations with a limited sample of only larger Turkish banks. In row (2), we exclude state-owned banks. In row (3), we extend the sample period to 2009-2023. In row (4), we control for bank-level expectations on other macroeconomic forces including predictions for next year's GDP growth rate and 12 month ahead CBRT policy rate. In row (5), we control for the short-term inflation expectations (3 months ahead). In row (6), we utilize contemporaneous values of inflation expectations instead of lagged values. In rows (7) and (8), we cluster the standard errors at firm and firm-bank levels, respectively. In row (9), we define *Inf Exp* variable as a binary representation of inflation expectations in the form of below and above consensus of sample banks, instead of continuous measure. In row (10), we extend the Equation (1) with the time-varying lagged bank characteristics including the natural logarithm of bank assets (*Bank Size*), the ratio of net income to total equity (*ROE*), the share of domestic currency deposits in total deposits (*Core Funding*) and the capital adequacy ratio (*CAR*). The regression includes bank and firm-by-time fixed effects. Unless stated otherwise, standard errors are clustered at bank-month level. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 8: IV Estimation Results

	(1) Inf Exp	(2) TL Credit
Inf Surprise x Peer Inf Exp	0.024***	
	(0.006)	
$\widehat{InfExp}$		-0.045**
		(0.020)
Obs.	21,354,499	21,354,499
Estimation	First-Stage	Second-Stage
Bank FE		✓
Firm x Time FE		✓
F-Stat	17.78	

Notes: This table presents the two-stage least squares (2SLS) estimates of the baseline specification. Column (1) presents the first-stage results, where the dependent variable is the banks' inflation expectation, and the instrument is the multiplication of the bank's inflation surprise and the lagged average inflation expectations of remaining banks. Column (2) shows the second-stage results where the outcome variable is log-transformed TL-denominated credit balance (adjusted for CPI) and the main explanatory variable is the instrumented bank inflation expectations. The regression includes bank and firm-by-time fixed effects. Standard errors are clustered at bank-month level. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 9: Results for Bank-Level Outcomes

	(1) Lender Share	(2) Variable Rate Share	(3) Deposit Rate
Inf Exp	-0.167***	0.638**	0.119***
	(0.037)	(0.306)	(0.029)
Obs.	1,937	1,937	1,923
Bank FE	✓	✓	✓
Time FE	✓	✓	✓
Adj. R^2	0.965	0.431	0.967

Notes: This table reports bank-level estimates of the effect of banks' inflation expectations on additional bank outcomes. The analysis covers the years 2009-2019 and is restricted to banks for which inflation expectations can be collected from Survey of Market Participants. In column (1), the outcome variable is the market share of a specific bank in total banking industry (based on credits), while, in column (2), the outcome variable is the ratio of variable-rate lending to total lending of a specific bank. In column (3), the outcome variable is the weighted-average deposit rate charged by a specific bank.The main explanatory variable is the 12 months ahead inflation expectations of banks. The regression includes bank and time fixed effects. Standard errors are clustered at bank-month level. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 10: Macroeconomic Effects

	(1) CAPEX to Assets	(2) CAPEX to Assets	(3) Net Sales to Assets	(4) Net Sales to Assets	(5) Exporter	(6) Exporter
Weighted Inf Exp (t-1)	-0.034***		-0.251***		-0.0003***	
	(0.006)		(0.051)		(0.000)	
Weighted Inf Exp (t-2)		-0.072***		-0.274***		-0.0001
		(0.012)		(0.097)		(0.0001)
Obs.	2,057,343	1,543,655	2,070,797	1,553,659	2,070,865	1,533,697
Firm FE	✓	✓	✓	✓	✓	✓
Year FE	✓	✓	✓	✓	✓	✓
Adj. R^2	0.414	0.444	0.544	0.562	0.550	0.560

Notes: This table reports firm-level estimates of the effect of banks' inflation expectations on macroeconomic outcomes. The analysis covers the years 2009-2019 and is restricted to firms borrowing from multiple banks in a given time. In columns (1) and (2), the outcome variable is the ratio of capital expenditures to total assets (*CAPEX to Assets*). In columns (3) and (4), the outcome variable is the ratio of net sales to total assets (*Net Sales to Assets*). In columns (5) and (6), the outcome variable is a binary indicator showing the exporter status (*Exporter*). The main explanatory variable (*Weighted Inf Exp*) that is defined at firm-level is the inflation expectations faced by a firm, which is weighted by the credit balance of a specific firm across different banks. The estimations are conducted at annual frequency due to the data availability of macroeconomic variables. The regression includes firm and year fixed effects. Standard errors are clustered at firm level. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Appendix

Table A1: Variable Definitions

	(1) Definition	(2) Source
TL Credit	The log-transformed TL-denominated real credit balance	Credit Registry
Total Credit	The log-transformed real total credit balance	Credit Registry
TL Credit Rate	The weighted average interest rate applicable to TL credits	Credit Registry
Maturity	A binary variable taking the value of one for credit relationships with maturity higher than or equal to 365 days	Credit Registry
Credit Limits	The log-transformed credit limit balances	Credit Registry
Collateral	The log-transformed collateral values	Credit Registry
Inf Exp	12 months ahead expectations of banks for annual CPI inflation rate	Survey of Market Participants
Inf Surprise	The difference between 12 months lagged inflation expectations of banks and the current realized inflation rate	Survey of Market Participants
Peer Inf Exp	The average 12 months ahead inflation expectations of the banking sector excluding a specific bank	Survey of Market Participants
Weighted Inf Exp	Banks' inflation expectations faced by a specific firm that is weighted by the credit balance of the firm across different banks	Survey of Market Participants, Credit Registry
GDP Exp	The expectations of banks regarding annual GDP growth rate for the end of next year	Survey of Market Participants
Policy Rate Exp	12 months ahead expectations of banks for CBRT one week repo rate	Survey of Market Participants
ST Inf Exp	The expectations of banks regarding monthly CPI inflation rate for the end of current month	Survey of Market Participants

Notes: This table presents the definitions and data sources of the variables used in the analyses. Column (1) gives the detailed explanations regarding the definitions of the variables, whereas column (2) provides the information about data sources.

Table A2: Variable Definitions (contd.)

	(1) Definition	(2) Source
Small Firm	A binary indicator based on the regulatory classification of small firms	Revenue Administration
Leverage	The ratio of total liabilities to total firm assets	Revenue Administration
Exporter	A binary indicator based on the exporter status of firms	Ministry of Trade
CAPEX to Assets	The ratio of capital expenditures to total firm assets	Revenue Administration
NetSales to Assets	The ratio of net sales to total firm assets	Revenue Administration
Bank Size	The log-transformed total bank assets	BRSA
Core Funding	The ratio of TL-denominated deposits to total deposits	BRSA
Bank NPL	The ratio of non-performing credits to total credits of banks	BRSA
Provisions	The ratio of loan loss provisions to total credits of banks	BRSA
Lender Share	The market share of a specific bank in total banking industry based on credits extended	BRSA
Variable Rate Share	The ratio of variable-rate lending to total lending of banks	BRSA
Deposit Rate	The weighted-average deposit rate charged by banks	BRSA

Notes: This table presents the definitions and data sources of the variables used in the analyses. Column (1) gives the detailed explanations regarding the definitions of the variables, whereas column (2) provides the information about data sources.

Table A3: Baseline Results Contingent on Türkiye CDS Premium

	(1) TL Credit
Inf Exp x CDS	-0.010***
	(0.003)
Inf Exp	-0.007
	(0.005)
Obs.	25,381,958
Bank FE	✓
Firm x Time FE	✓
Adj. R^2	0.459

Notes: This table reports the heterogeneity of baseline results with respect to the fluctuations in the CDS premium of Türkiye. The analysis covers the years 2009–2019 and is restricted to firms borrowing from multiple banks in a given time. In column (1), the outcome variable is log-transformed TL-denominated credit balance (adjusted for CPI) of a firm from a given bank at a particular time. The main explanatory variable is the 12 months ahead inflation expectations of banks. The variable *CDS* represents the deviation of Türkiye's 5-year CDS premium from its historical average (2006-2019) denoted in basis points. The regression includes bank and firm-by-time fixed effects. Standard errors are clustered at bank-month level. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table A4: IV Estimation Results

	(1) Inf Exp	(2) TL Credit	(3) Inf Exp	(4) TL Credit
Inf Surprise x Peer Inf Exp	0.037***		0.023***	
	(0.009)		(0.006)	
$\widehat{InfExp}$		-0.049**		-0.039**
		(0.022)		(0.018)
Obs.	13,151,779	13,151,779	19,810,255	19,810,255
Estimation	First-Stage	Second-Stage	First-Stage	Second-Stage
Sample	Large Banks	Large Banks	All Banks	All Banks
Bank Controls				✓
Bank FE		✓		✓
Firm x Time FE		✓		✓
F-Stat	17.29		15.59	

Notes: This table presents the robustness analyses for the two-stage least squares (2SLS) estimates of the baseline specification. Columns (1) and (3) present the first-stage results, where the dependent variable is the banks' inflation expectation, and the instrument is the multiplication of the bank's inflation surprise and the lagged average inflation expectations of remaining banks (excluding the relevant bank). Columns (2) and (4) show the second-stage results where the outcome variable is log-transformed TL-denominated credit balance (adjusted for CPI) and the main explanatory variable is the instrumented bank inflation expectations. Columns (1) and (2) restrict the analysis to only large banks, while columns (3) and (4) use all banks but include time-varying bank controls. The regression includes bank and firm-by-time fixed effects. Standard errors clustered at bank-month level. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table A5: Macroeconomic Effects Based on Firm Size

	(1) CAPEX to Assets	(2) CAPEX to Assets	(3) Net Sales to Assets	(4) Net Sales to Assets	(5) Exporter	(6) Exporter
Weighted Inf Exp (t-1) x Small Firm	-0.074***		-0.973***		-0.002***	
	(0.003)		(0.038)		(0.000)	
Weighted Inf Exp (t-1)	-0.011*		0.533***		0.001***	
	(0.007)		(0.060)		(0.000)	
Weighted Inf Exp (t-2) x Small Firm		-0.053***		-1.784***		-0.003***
		(0.004)		(0.059)		(0.000)
Weighted Inf Exp (t-2)		-0.047***		1.240***		0.002***
		(0.012)		(0.109)		(0.000)
Obs.	2,057,343	1,543,655	2,070,797	1,553,659	2,070,865	1,533,697
Firm FE	✓	✓	✓	✓	✓	✓
Year FE	✓	✓	✓	✓	✓	✓
Adj. R^2	0.402	0.434	0.544	0.563	0.550	0.560

Notes: This table reports how firm-level estimates of the effect of banks' inflation expectations on macroeconomic outcomes vary with respect to firm size. The analysis covers the years 2009-2019 and is restricted to firms borrowing from multiple banks in a given time. In columns (1) and (2), the outcome variable is the ratio of capital expenditures to total assets (*CAPEX to Assets*). In columns (3) and (4), the outcome variable is the ratio of net sales to total assets (*Net Sales to Assets*). In columns (5) and (6), the outcome variable is a binary indicator showing the exporter status (*Exporter*). The main explanatory variable (*Weighted Inf Exp*) that is defined at firm-level is the inflation expectations faced by a firm, which is weighted by the credit balance of a specific firm across different banks. *Small Firm* is a binary indicator based on the regulatory classification of small firms. The estimations are conducted at annual frequency due to the data availability of macroeconomic variables. The regression includes firm and year fixed effects. Standard errors are clustered at firm level. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

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