Interest Rate Sensitivities, Firm Growth Rates, and Stock Returns

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November 2024

Abstract

We examine the relationship between stock return sensitivities to interest rate changes (interest rate sensitivities) and firm growth. A discounted cash flow method implies a negative association between interest rate sensitivities and growth expectations because, all else equal, the present value of distant cash flows declines more sharply than that of near-term cash flows when interest rates rise. However, changes in interest rates may also influence expected cash flows and the risk premium, making the overall relationship between interest rate sensitivities and firm growth an empirical question. Our findings indicate that while stock return sensitivity to nominal interest rates weakly predicts growth, the expected inflation component is a strong *negative* predictor. We further demonstrate that firms with low expected inflation sensitivity experience high growth with greater persistence. However, analysts' forecasts of long-term earnings growth are *positively* associated with expected inflation sensitivity, and forecast bias is systematically more optimistic for firms with high expected inflation sensitivity. In line with this bias, we find that expected inflation sensitivity is negatively associated with future stock returns. Conversely, real interest rate sensitivities show no significant relationship with firm growth, analysts' forecasts, or future stock returns. Taken together, these results suggest that expected inflation sensitivity conveys useful yet overlooked information about firms' long-term growth.

JEL Classification: E43, G12, G17, G30, M41
Keywords: firm growth prediction; analyst forecasts; interest rate; expected inflation; real interest rate; stock return; valuation

*We are grateful for helpful comments from Samuel Anderson (discussant), June Huang (discussant), Vincent Lin (discussant), Stephen Penman, and workshop participants at the Columbia Junior Accounting Faculty Conference, Seoul National University, Hawai'i Accounting Research Conference (HARC) 2024, the Financial Accounting and Reporting Section (FARS) 2024 Midyear Meeting, and the American Accounting Association 2024 Annual Meeting. We gratefully acknowledge the financial support from Columbia University. All errors are our own.

1. Introduction

Forecasting *long-term* growth in fundamentals, such as earnings, is crucial for equity valuation and other financial applications. For example, in intrinsic valuation models like the discounted cash flow model, even small adjustments to terminal growth rates can significantly impact the valuation outcome. As a result, minor inaccuracies in long-term earnings growth projections can lead to considerable mispricings (Da and Warachka 2011). Similarly, Copeland, Dolgoff, and Moel (2004) highlight that revisions in long-term earnings growth forecasts have a much greater impact on stock returns than changes in short-term earnings expectations.

However, previous studies have documented significant difficulties in predicting firms' future growth, particularly over long time horizons (e.g., Chan, Karceski, and Lakonishok 2003). During periods of notable interest rate shifts, such as in 2022, the stock returns of firms with high growth expectations tend to exhibit sharp fluctuations, suggesting that stock return sensitivity to interest rate changes (hereinafter, *interest rate sensitivity*) may provide information about firms' long-term growth prospects.[1] Prior research has explored the information content of interest rate sensitivities in contexts such as nominal contract revaluation (Bernard 1986) and hedging against inflation (Ang, Brière, and Signori 2012), but not in the context of predicting firm growth. This paper addresses this gap by investigating whether interest rate sensitivities can forecast firm growth and whether stock prices incorporate this information.

[1] Especially when interest rates fluctuate substantially, the business press and market commentators tend to extensively cover stock price movements of high expected growth firms, such as tech firms. Starting in 2021 and 2022, inflation surged dramatically, driven by disruptions in supply chains, government stimulus programs, and Russia's invasion of Ukraine. By February 2022, headlines across U.S. business outlets highlighted the *40-year inflation high*, and the Federal Reserve rapidly increased the federal funds rates. By mid-October 2022, the tech-heavy Nasdaq Composite Index plummeted almost 35% from its January 2022 peak, compared to a 20% loss on the S&P 500 Ex-Information Technology Index. A casual search with keywords such as "tech crash in 2022" yields numerous articles pointing to rising inflation and interest rates as the primary drivers of the crash: e.g., https://www.cnbc.com/2022/11/25/techs-reality-check-how-the-industry-lost-7point4-trillion-in-one-year.html.

A simple discounted cash flow valuation model can account for the high sensitivity of growth stocks to interest rate changes. Firms with high expected growth in cash flows derive a disproportionate share of their value from distant future cash flows. When interest rates rise, increasing discount rates, the present value of these distant cash flows declines more sharply than that of near-term cash flows, implying that growth stocks experience greater losses in value when interest rates increase.

The denominator effect suggests that expected firm growth is negatively related to interest rate sensitivities. However, changes in interest rates (and inflation) also influence future cash flows (e.g., Modigliani and Cohn 1979; Nissim and Penman 2003), and the risk premium component of the discount rate may adjust in response to revisions in expected future cash flows if the perceived riskiness of those cash flows changes. Additionally, the risk premium associated with interest rates (and inflation) fluctuates over time (e.g., Boons, Duarte, de Roon, and Szymanowska 2020; Brandt and Wang 2003). Thus, whether interest rate sensitivities convey information about future growth is an empirical question.

To address this question, we analyze the relationship between interest rate sensitivity and future growth in fundamentals. For each firm/quarter observation, we estimate nominal interest rate sensitivity by regressing weekly stock returns on the weekly change in the 10-year U.S. Treasury yield over the preceding 104 weeks, controlling for the S&P 500 total return. We further break down nominal interest rate sensitivity into real interest rate and expected inflation components, using the 10-year Treasury Inflation Protected Securities (TIPS) yields.[2] Firm growth is measured by the annualized growth rates in per-share (i) sales, (ii) earnings before interest, taxes,

[2] See equation (2) in Section 3 for details. Nominal interest rates include an inflation risk premium in addition to expected inflation and real rates (e.g., Ang, Bekaert, and Wei 2008). We do not separately distinguish the inflation risk premium and define nominal (real) interest rates as the yields on 10-year U.S. Treasuries (TIPS).

depreciation, and amortization (EBITDA), (iii) earnings, and (iv) operating cash flows (OCF), over the next three- and five-year periods.[3]

We begin our empirical analysis by exploring the industry and firm characteristics associated with interest rate sensitivities. Firms with high (low) interest rate sensitivities tend to operate in cyclical (non-cyclical) sectors, such as energy, materials, and industrials (consumer staples and health care). These associations are more pronounced for expected inflation sensitivity. We also find that interest rate sensitivity is negatively correlated with return on equity and implied equity duration, providing mixed signals about the firms' stages in the corporate life cycle. Based on this descriptive analysis, we control for industry, firm characteristics, analyst forecasts, and corporate life cycle to evaluate whether interest rate sensitivities provide incremental predictive power for firm growth beyond these factors.

Next, we examine whether interest rate sensitivities can predict firm growth. While nominal interest rate sensitivities predict future growth in per-share sales and cash flows in univariate analysis, they do not exhibit incremental predictive power when controlling for other variables. However, when we decompose nominal interest rate sensitivities, the expected inflation component emerges as a strong and negative predictor of firm growth in both univariate and multivariate regressions, whereas real interest rate sensitivities show no significant relationship. Expected inflation sensitivities consistently demonstrate strong negative correlations with all dimensions of firm growth—per-share sales, EBITDA, earnings, and OCF—in our multivariate regressions. In terms of magnitude, a one standard deviation increase in expected inflation

[3] We focus on three- and five-years growth, which are arguably over long horizons, because they are considered particularly challenging to predict in previous studies (e.g., Chan et al. 2003).

sensitivity is associated with a 0.8 percentage point reduction in five-year annual EPS growth, or 10% of the mean (8.2%).

We also explore whether expected inflation sensitivities can signal the persistence of firm growth rates. Using a non-parametric approach known as "runs tests" (Chan et al., 2003), we examine the average percentage of firms that consistently deliver above-median growth over the next five years. Firms with low expected inflation sensitivities exhibit more persistent growth than those with high expected inflation sensitivities. Specifically, 12.5% of firms with low expected inflation sensitivity sustain above-median growth each year over the next five years, whereas only 6.1% of high-sensitivity firms achieve this. Similar patterns are observed for per-share EBITDA, earnings, and OCF.

Having established that expected inflation sensitivity is a strong *negative* predictor of firm growth, we next explore whether the stock market incorporates this information. We investigate whether analysts' forecasts of long-term EPS growth (LTG forecasts) account for expected inflation sensitivity. We find that LTG forecasts are *positively* associated with expected inflation sensitivity, and forecast bias is systematically more optimistic for firms with high expected inflation sensitivity. In contrast, analysts show no such bias regarding real interest rate sensitivities.

Building on the literature related to betting-against-beta and analyst forecasts, we investigate the factors driving the upward bias in analysts' long-term growth forecasts for firms with high expected inflation sensitivity. Prior research suggests that (i) institutional investors tend to favor stocks with high market betas (Frazzini and Pedersen 2014), (ii) analysts' coverage decisions are influenced by institutional investor demand (Brown, Call, Clement, and Sharp 2015), and (iii) this demand can result in overly optimistic forecasts and recommendations (Jegadeesh, Kim, Krische, and Lee 2004). These factors collectively imply a positive correlation between the

bias in analysts' long-term growth forecasts and market beta. Given that market betas are empirical proxies prone to substantial measurement error, this relationship may also help explain the observed association between the bias in analyst growth forecasts and interest rate sensitivities.

Consistent with our hypothesis, we find that LTG forecasts are positively correlated with market beta. Moreover, the positive association between expected inflation sensitivity and LTG forecasts disappears after controlling for market beta, suggesting that the increase in LTG forecasts with respect to expected inflation sensitivity is driven by market beta. Importantly, we demonstrate that the positive association between the *bias* in LTG forecasts and expected inflation sensitivity persists even after controlling for market beta, suggesting that expected inflation sensitivity contributes to the bias incrementally to market beta.

Lastly, we examine whether expected inflation sensitivity predicts future stock returns. Consistent with the systematic bias observed in analyst forecasts, we find that expected inflation sensitivity is significantly and negatively associated with cumulative stock returns over the subsequent three years. Specifically, a one standard deviation increase in expected inflation sensitivity is associated with a decrease of 0.6 to 1.2 percentage points in annualized stock returns, representing approximately 8 to 16% of the median stock return (7.2%). Portfolio analysis further supports our regression results, showing that hedge portfolios that go long (short) on stocks with low (high) expected inflation sensitivity yield about 6% in annualized returns over the next three years, regardless of equal or value weighting. Again, real interest rate sensitivities do not correlate with future stock returns. These findings highlight the economic significance of expected inflation sensitivity as an underappreciated predictor of firms' long-term growth.

Acknowledging the challenge of differentiating mispricing from risk-based explanations of return predictability, our findings suggest that the negative return predictability associated with

expected inflation sensitivities appears to be driven by expectational errors about long-term growth. First, prior literature indicates that positive shocks to inflation signal good news for future consumption and output gap during our sample period (e.g., Boons et al. 2020; Campbell, Pflueger, and Viceira 2020), implying that stocks with high inflation sensitivity are *riskier*, contrasting with the observed *negative* return predictability. Second, our results collectively demonstrate that expected inflation sensitivity is *negatively* correlated with firm growth yet *positively* with analysts' growth forecasts, supporting the notion that expectational errors contribute to the negative return predictability. Finally, we find that the return predictability of expected inflation sensitivities disappears when controlling for biases in future earnings growth forecasts, providing further evidence that expectational errors are driving the return predictability. Our interpretation is consistent with prior studies suggesting that investors misunderstand the implications of inflation for future cash flow growth (money illusion) (e.g., Asness 2003; Campbell and Vuolteenaho 2004; Modigliani and Cohn 1979).

This study contributes to three strands of literature. First, it relates to the literature examining how interest rates and inflation influence or convey information about firm value. Contrary to the traditional view that common stocks serve as a perfect hedge against inflation, as claims on real assets (Fisher 1930; Williams 1938), the literature documents a negative association between inflation and stock returns (e.g., Bodie 1976; Modigliani and Cohn 1979; Fama and Schwert 1977; Lintner 1975). Existing research also explores how firms' earnings and risk premia are related to fluctuations in interest rates and inflation.[4] Additionally, the variance decomposition literature (e.g., Campbell and Shiller 1988; Campbell and Vuolteenaho 2004) seeks to separate

[4] Prior research examining the earnings or cash flow effects of inflation include Basu, Markov, and Shivakumar (2010), Binz, Joos, and Kubic (2021), Campbell and Vuolteenaho (2004), Modigliani and Cohn (1979), and Nissim and Penman (2003). Studies investigating risk premia associated with interest rates or inflation include Barroso, Boons, and Karehnke (2021), Boons (2016), Boons et al. (2020), and Brandt and Wang (2003).

stock returns into cash flow and discount rate news. Rather than attempting to disentangle them, we take interest rate sensitivities as given and focus on their predictability over firm growth.

Second, our study is related to the literature on the predictability and persistence of firms' long-term growth. Expected long-term growth rates are critical inputs in various applications. However, studies highlight significant challenges in predicting firms' growth beyond the two-year horizon (Chan et al. 2003; Lakonishok, Shleifer, and Vishny 1994). We show that expected inflation sensitivities, which can be easily calculated using historical stock returns, are useful predictors of long-term growth and its persistence. Expected inflation sensitivities offer several advantages over alternative indicators of firm growth.[5]

Third, our study relates to the literature on the informativeness and biases of financial analysts. Previous research highlights the strengths and limitations of analysts' earnings forecasts and stock recommendations (see Kothari, So, and Verdi 2016 for a review), with recent studies exploring the causes and effects of biases in their forecasts (e.g., Guo, Li, Wei 2020; Hirshleifer, Levi, Lourie, and Teoh 2019; Hirshleifer and Sheng 2022). Our paper focuses on the biases in analysts' long-term earnings growth forecast with respect to the stock market reactions to macroeconomic news. Understanding potential biases in long-term growth forecasts is important because even minor errors in these forecasts can lead to significant mispricing (Chan et al. 2003; Da and Warachka 2011). Additionally, the stock market reacts more strongly to revisions in long-term growth forecasts than short-term earnings expectations (Copeland et al. 2004). We contribute

[5] Unlike price multiples (e.g., price-to-book), expected inflation sensitivities are derived from stock price changes, offering additional insight into firm growth. They also provide advantages over analyst forecasts due to their wider availability, objectivity, and timeliness: the sensitivities (i) are available for all publicly traded firms, (ii) are less prone to biases from brokerage incentives (Cowen, Groysberg, and Healy 2006), and (iii) avoid issues of forecast staleness (Conrad et al. 2006; O'Brien, McNichols, and Lin 2005). Furthermore, compared to implied equity duration (Dechow, Sloan, and Soliman 2004; Dechow, Erhard, Sloan, and Soliman 2021), expected inflation sensitivities do not rely on assumptions about future profitability, growth in book values, or terminal values.

to the literature by showing that expected inflation sensitivity is a key factor driving systematic bias in analysts' long-term earnings forecasts.

The study proceeds as follows. Section 2 discusses prior research and develops the hypotheses. Section 3 describes the sample and data, and Section 4 contains the empirical analysis. Section 5 concludes the study.

2. Theoretical Background and Prior Research

2.1. Conceptual Framework for Interest Rate Sensitivities and Future Growth

A simple discount cash flow method suggests a negative association between firm growth and interest rate sensitivities. Firms with high growth rates are expected to realize a larger proportion of their cash flows in the distant future. When interest rates rise (decline), the present values of distant cash flows decline (rise) more sharply than those of near-term cash flows, indicating an inverse relationship between interest rate sensitivity and expected long-term growth in cash flows.

The denominator effect of changes in interest rates suggests that interest rate sensitivities may convey information about firm growth. However, changes in interest rates may also affect or be correlated with expected future cash flows and the risk premium component of the discount rate, potentially offsetting the interest rate discounting effect.

Prior studies show that changes in interest rates and inflation are correlated with future cash flows. Binz et al. (2021) find that unexpected changes in the federal funds rate are positively related to firm profits one and two quarters ahead, although this effect reverses in subsequent quarters. Nissim and Penman (2003) report similar earnings effects with respect to changes in longer-term interest rates, finding a positive future earnings association but not large enough to

offset the change in the cost of capital. Additionally, Campbell and Vuolteenaho (2004) demonstrate that inflation is positively correlated with aggregate market dividend growth.

One explanation for the positive association between interest rates and future cash flows is that firms' earnings, expressed in nominal terms, increase in tandem with inflation. Thus, when nominal interest rates rise due to higher expected inflation, future cash flows in a nominal valuation model should be adjusted upward (Asness 2003; Modigliani and Cohn 1979).[6] However, Modigliani and Cohn (1979) demonstrate that stock market investors fail to revise future cash flows with respect to inflation (money illusion), arguing that the depressed equity market in the late 1970s was driven by excessive fear over inflation.[7] Using an extended sample over the period between 1927 and 2002, Campbell and Vuolteenaho (2004) strongly support the money illusion hypothesis by showing that inflation is positively associated with the mispricing component of the dividend-to-price ratio attributed to misspecified dividend growth rates.

The risk premium component of the discount rate may vary in the same or opposite direction as changes in interest rates and inflation. For instance, Brandt and Wang (2003) develop a consumption-based asset pricing model that incorporates time-varying risk aversion to unexpected inflation, where an unexpected increase in inflation ("bad news") increases aggregate risk aversion. On the other hand, recent studies document that inflation has conveyed good news about future macroeconomic conditions since the early 2000s, suggested by the positive association between inflation and future consumption growth (Boons et al. 2020) and the output gap (Campbell et al. 2020). The positive correlations between inflation and future consumption

[6] Indeed, consistent with this rationale, a common approach for estimating the equity risk premium is to subtract the 10-year Treasury Inflation-Protected Securities (TIPS) rate (rather than the 10-year Treasury rate) from the earnings yield.

[7] Asness (2003) similarly points out that the widespread use of the "Fed model," in which the stock market's earnings yield is compared to nominal interest rates, is a manifestation of the money illusion.

suggest that stocks with high sensitivity to inflation are riskier, as they negatively covary with marginal utility from consumption (Boons et al. 2020).

There could also be an interaction between revisions in future cash flows and the risk premium component of the firm-specific discount rates. For example, shifts in future cash flows due to changes in interest rates (and inflation) could simultaneously alter the perceived risk associated with those cash flows. Therefore, separating changes in interest rates and inflation into cash flow news and discount rate news is difficult, even at the conceptual level.

To summarize, due to the potential simultaneous effects of changes in interest rates on expected future cash flows and the risk premium component of the discount rate, whether interest rate sensitivities convey information about firm growth is an empirical question.[8] Although distinguishing the effects of interest rate changes on cash flows and discount rates is challenging, our objective is to test whether interest rate sensitivities can predict firm growth. Rather than attempting to parse stock returns into cash flow and discount rate news (e.g., Campbell and Amber 1993; Campbell and Shiller 1988; Campbell and Vuolteenaho 2004), we take interest rate sensitivities as a given and relate them to firm growth.

2.2. Informativeness and Bias of Sell-Side Financial Analysts

We also investigate whether financial information users and the stock market understand the growth implications of interest rate sensitivity (if any). We use analysts' forecasts of long-term

[8] Several prior studies provide evidence on a related proxy—the sensitivity of stock returns to realized inflation. For example, Bernard (1986) shows a significant cross-sectional variation in the stock return sensitivity to unexpected inflation and explains the variation in terms of revaluation of nominal contracts (e.g., receivables and payables). Ang et al. (2012) use stock return sensitivity to realized inflation as a measure of individual stock's hedge against inflation. They document that the short-term return predictability (over the next month) of inflation sensitivities is low, which is attributed to the high volatility of inflation sensitivities. Our study differs from Ang et al. (2012) in several ways. First, they estimate inflation sensitivities based on realized inflation as opposed to expected inflation. Second, they estimate inflation sensitivities based on historical monthly return series over the past five years, whereas we rely on weekly return series over the past two years. Third and most importantly, they focus on short-term return predictability by examining future monthly returns, while we are interested in the implications for long-term growth and returns.

growth (LTG) in earnings per share (EPS) to address this question—forecasts of EPS growth are one of the key information items provided by analysts. Financial analysts are information intermediaries who collect, assess, and generate information for investors (see Kothari et al. 2016 for a review). Prior studies suggest that the information disseminated by analysts can significantly influence the stock market (e.g., So 2013; Guo et al.2020).

Recent studies in the analyst literature emphasize the importance of understanding the causes and effects of biases in analysts' forecasts and stock recommendations. For example, Hirshleifer et al. (2019) demonstrate that decision fatigue among analysts leads to more heuristic decision-making, such as herding toward consensus, which reduces forecast accuracy. Guo et al. (2020) find that analysts fail to incorporate market anomalies (e.g., value, momentum, investment, profitability, etc.) into their stock recommendations, potentially exacerbating market inefficiencies.

A related stream of literature examines whether analysts incorporate macroeconomic news into their earnings forecasts. Hirshleifer and Sheng (2022) document that analysts produce more accurate forecasts when earnings announcements coincide with macro news, consistent with macroeconomic news enhancing market efficiency by complementing firm-specific earnings news. Similarly, Hutton, Lee, and Shu (2012) find that analysts provide more accurate earnings forecasts than management when firms' earnings co-move with macroeconomic factors. On the other hand, several studies suggest that analysts do not fully incorporate macroeconomic news, such as GDP news and inflation, into their near-term earnings forecasts (e.g., Basu et al. 2010; Hugon et al. 2016).

Our paper relates to the intersection of the above literature by examining whether analysts factor in stock market reactions to interest rate changes (macroeconomic news) in their LTG forecasts and whether the LTG forecasts exhibit systematic bias with respect to interest rate

sensitivity. While prior studies provide mixed evidence on the extent to which analysts incorporate inflation news into their earnings forecasts, stock price reactions to changes in interest rates and inflation are easily observable and sometimes receive extensive coverage from the media (see footnote 1 in Section 1). Thus, whether analysts incorporate interest rate sensitivity into their LTG forecasts is an empirical question.

A related question is the return predictability of interest rate sensitivities. If analysts display systematic errors in their LTG forecasts with respect to interest rate sensitivity, any return predictability of interest rate sensitivity may be attributed to the market's underappreciation of interest rate sensitivities. On the other hand, even when there is a bias in LTG forecasts with respect to interest rate sensitivity, the stock market may correctly account for it, as several prior studies have highlighted the optimism in LTG forecasts (e.g., Chan et al. 2003; La Porta 1996).[9] Alternatively, in the absence of systematic errors in analyst forecasts, a lack of return predictability of interest rate sensitivities may be consistent with stock prices properly reflecting the information content of interest rate sensitivities for firm growth. Likewise, whether interest rate sensitivity generates predictable return patterns is an empirical question.

3. Data and Sample

Our sample consists of U.S. domestic ordinary stocks of non-financials/REIT and non-utility firms listed on the major stock exchanges between January 1999 and December 2020. The sample period starts in January 1999 because real interest rates are available starting January 1997, and two years of historical data are required for estimating interest rate sensitivities. The sample period ends in December 2020 to allow for three years of subsequent stock returns and realized growth, which

[9] For instance, Hirshleifer et al. (2019) find that analysts' forecast accuracy systematically declines with decision fatigue, but the stock market understands these effects and correctly discounts for analyst decision fatigue.

are available through December 2023. To construct the sample, we start with the CRSP monthly file and select common stocks listed on the NYSE, AMEX, and NASDAQ during the sample period. For each firm-month observation, we obtain stock returns over the last 104 weeks from the CRSP daily file and use them together with information about nominal and real 10-year Treasury rates to calculate interest rate sensitivities.[10] To increase the likelihood that the weekly stock returns reflect investors' pricing of the information released during the week, we delete observations relating to firms with a market value of equity less than 100 million USD in December 2022 prices.[11]

Next, we add the most recent accounting information available at the end of the month to each firm-month observation, as well as future values of some of these variables, which we obtain from the Compustat Fundamentals Quarterly and Annual files.[12] We restrict our sample to U.S. domestic firms in Compustat (FIC = "USA" and CURNCD = "USD"). As accounting data are updated on a quarterly basis, we only keep the observations at the end of each quarter-end.

We obtain analysts' EPS forecasts from the IBES unadjusted summary file, generate synthetic consensus forecasts using the procedure described in Appendix A, and merge the

[10] We obtain the Treasury rates from https://fred.stlouisfed.org/.

[11] The estimated interest rate sensitivities are unreliable for small/micro-cap stocks due to their low trading volume and liquidity. Our main results hold when we apply a more conservative filter by excluding firms below one billion USD in the market value of equity (in December 2022 prices). Additionally, in robustness tests, we find that including firms above 10 million USD in the market value of equity provides similar results.

[12] To identify available financial information at the end of each month, we use the following procedure. We conservatively assume that financial information becomes available after the 10-Q/K filing date, which we obtain from the SEC's EDGAR system. For observations with unavailable filing dates, we estimate the availability date using the earnings announcement date (from Compustat) as follows: for fiscal quarters one through three, we assume that the filing occurs within 30 days after the earnings announcement date, while for the fourth fiscal quarter, we assume that the filing occurs within 65 days after the earnings announcement date. We further assume that accounting information becomes available within 55 (100) days from the quarter end for the first three (fourth) fiscal quarters, but no earlier than the earnings announcement date. These assumptions are based on a careful examination of the gaps between the fiscal quarter end, earnings announcement date, and the 10-Q/K filing date over time. They are selected to ensure that in at least 99 percent of cases, any error is on the conservative side. Moreover, in most cases, some financial information becomes available prior to the 10-Q/K filing date, either at the time of the earnings announcement or in 8-K filings (Lerman and Livnat 2010).

consensus forecasts with the Compustat data.[13] Finally, we only retain firm-quarter observations with data on analysts' consensus growth forecasts to keep the sample consistent across different tests. Overall, our sample consists of firms with material size and relatively transparent information environment as indicated by the presence of analysts following.

We estimate nominal interest rate sensitivities (β_1) using the following firm/month-specific regression:

$$Ret = \beta_0 + \beta_1 \Delta 10Y\_TR + \beta_2 S\&P500 + \varepsilon, \quad (1)$$

where *Ret* is the weekly stock returns, $\Delta 10Y\_TR$ is the weekly change in the 10-year Treasury rate, and $S\&P500$ is the S&P 500 total return.[14] Each regression is estimated over the 104 weeks until the end of that month. In addition, we estimate real interest rate sensitivities (β_{c1}) and expected inflation sensitivities (β_{c2}) using the following regression.

$$Ret = \beta_0 + \beta_{c1} \Delta 10Y\_TIPS + \beta_{c2} \Delta ExpInf + \beta_3 S\&P500 + \varepsilon, \quad (2)$$

where $\Delta 10Y\_TIPS$ ($\Delta ExpInf$) is the weekly change in the 10-year Treasury Inflation-Protected Securities (TIPS) yields (the weekly change in expected inflation). Expected inflation is derived from the relationship between the Treasury and TIPS rates as (1+10-year Treasury rate)/(1+TIPS rate)–1.

Firm growth is measured using the annualized growth rates in per-share (i) sales, (ii) EBITDA, and (iii) earnings, and (iv) operating cash flows (OCF) for the next three and five years, which represent relatively long horizons. We focus on long-term growth rates because,

[13] Call, Hewitt, Watkins, and Yohn (2021) document pervasive ex-post deletion of individual analysts' earnings estimates in the detail file. In addition, WRDS reports that certain brokerages, such as Goldman Sachs, provide estimates exclusively to the summary files. For these reasons, we use the summary file.

[14] Similar approaches to measure stock return sensitivity to interest rates and inflation are found in Ang et al. (2012), Bekaert and Wang (2010), Bernard (1986), and Reilly, Wright, and Johnson (2007). Our results remain similar when we estimate interest rate sensitivities (i) with additional control variables for CBOE Volatility index returns and changes in BAA-AAA credit spreads or (ii) without including any control variables (see Section 4.7).

conceptually, interest rate sensitivities convey information about long-term, rather than short-term, growth. We use per-share measures of growth following Chan et al. (2003) because interest rate sensitivities reflect the changes in the price of existing shares and most uses of growth proxies attempt to capture organic growth (e.g., analysts and investors typically focus on existing operations when valuing stocks and do not explicitly forecast business combinations). Per-share measures are computed by dividing each measure by the average shares outstanding used in calculating basic EPS (adjusting for stock splits and stock dividends).[15] For earnings, we use the earnings per share from operations (OPEPS) as measured by Compustat, which excludes nonrecurring items such as discontinued operations, one-time income tax expenses/benefits, and special items. According to Sloan and Wang (2023), growth rates derived from OPEPS are more stable than those based on per-share income before extraordinary items (IBCOM).

The four growth measures capture different aspects of firm growth. Sales growth indicates an expanding customer base or the ability to command higher prices. Growth in EBITDA, an increasingly popular non-GAAP metric, represents a firm's operational profits excluding the impact of financing and capacity costs. Earnings growth is influenced by sales growth, pricing power, and operating leverage, and analysts frequently provide EPS growth forecasts. Growth in OCF reflects a firm's capacity to generate cash from operations and is less prone to estimation uncertainty related to accruals. After calculating all the variables, we identify and trim outlier values of each firm-specific variable.[16]

[15] We use the average outstanding shares to measure assets per share to maintain consistency with the calculation of sales per share and earnings per share. The results are similar when measuring assets per share using end-of-period outstanding shares.

[16] We use the following procedure. For each variable, we calculate the 5th and 95th percentiles of the empirical distribution (P5 and P95 respectively) and trim observations outside the following range: P5 – 1 × (P95 – P5) to P95 + 1 × (P95 – P5). For normally distributed variables, this range covers approximately 5 standard deviations from the mean in each direction (= 1.65 + 1 × (1.65 – (-1.65)), which includes more than 99.99% of the observations. However, for poorly behaved variables, a relatively large proportion of the observations is deleted.

4. Empirical Analysis

4.1. Summary Statistics

Panel A in Table 1 presents summary statistics for interest rate sensitivities and firm growth rates. The sample consists of 3,016 unique firms over 88 quarters from March 1999 to December 2020. The distributions of growth rates in per-share sales and EBITDA are comparable, with the mean and median annualized growth rates of 6 to 7%. These growth rates are slightly lower than those in total sales and EBITDA (not reported in the table) due to offsetting increases in outstanding shares. Annualized growth in per-share OCF and OPEPS is slightly higher, with a mean (median) of 7.1-9.2% (7.2-8.6%). Notably, analysts' earnings growth forecasts, both in the long-term (*Consensus LTG Forecast*) and short-term (*FY2/FY0 Forecast*), are substantially higher, with a mean of 15.7-17.8%, as reported in Panel B. Growth rates in EBITDA, OCF, and OPEPS are less available than sales growth due to undefined ratios of loss-making firms.

Shifting the focus to interest rate sensitivities, both the medians and means of nominal interest rate sensitivity *(Nominal IRS*), real interest rate sensitivity (*Real IRS*), and expected inflation sensitivity (*ExpInfSen*) are positive, implying that most companies experience stock price movements that align with the direction of changes in interest rates. This indicates that the positive impact of rising interest rates on earnings (the numerator effect) tends to outweigh the negative effect of higher discount rates. Expected inflation sensitivity has a higher mean than real interest rate sensitivity, suggesting a stronger earnings effect from changes in expected inflation. For example, firms may experience increased earnings from higher inflation that more than compensate for the adverse impact of higher discount rates. The results are consistent with prior studies showing that inflation has been positively associated with future consumption growth and

the output gap since the early 2000s (e.g., Boons et al. 2020; Campbell et al. 2020). In other words, inflation has conveyed good news about future macroeconomic conditions since the early 2000s. The lower mean and standard deviation of real interest rate sensitivity compared to expected inflation sensitivity are also in line with prior research that real interest rates have a modest impact on stock returns (e.g., Campbell and Ammer 1993).

Table 2 reports the bivariate Pearson correlation coefficients among the variables. As expected, the three realized growth variables (*V1*, *V2*, and *V3*) are strongly correlated. Nominal and real interest rate sensitivity (*V6* and *V7*) are negatively associated with the three-year future growth rates in sales and EBITDA (*V1* and *V2*) but not with earnings growth (*V3*). In contrast, expected inflation sensitivity (*V8*) consistently shows strong negative correlations with the future growth rates in sales, EBITDA, and earnings.

4.2. The Determinants of Interest Rate Sensitivities

We begin our empirical analysis by examining the industry and firm characteristics associated with interest rate sensitivity in Table 3. Panel A of Table 3 presents the results from regressing interest rate sensitivities on indicator variables of industries (GICS two-digit sectors). Firms with high (low) interest rate sensitivities tend to operate in cyclical (non-cyclical) sectors, such as energy, materials, and industrials (consumer staples and health care). These associations are more pronounced for expected inflation sensitivity. Notably, information technology firms are positively associated with nominal interest rate sensitivity and expected inflation sensitivity despite their long implied equity durations (Dechow et al. 2004) (not reported in the table). The positive expected inflation sensitivity of information technology firms can be explained by their ability to maintain the prices of their products by introducing new products (Ang et al. 2012).

Panel B of Table 3 presents the results of regressing interest rate sensitivities on various firm characteristics associated with long-term growth in prior studies (e.g., Chan et al. 2003; Sloan and Wang 2023). We additionally incorporate a broad set of firm characteristic variables that are likely to predict firm growth: implied equity duration (Dechow et al. 2004), financial leverage, accruals, SG&A (selling, general, and administrative) expense intensity, indicators for mergers and acquisitions, and measures of product market competitiveness (Hoberg and Phillips 2010; Hoberg, Phillips, and Prabhala 2014).[17]

The results in Panel B indicate that interest rate sensitivity conveys mixed signals about firm growth. Firms with low sensitivity to interest rates and expected inflation tend to have high equity duration (*Duration*) and SG&A intensity (*SG&A/Sales*), suggesting they are in an early stage of their corporate life cycle. Yet, low sensitivity firms are also associated with high profitability (*Return on Equity*), indicative of mature companies. Nonetheless, firms in the mature stage of the corporate life cycle can achieve high growth by leveraging operational efficiencies, expanding into new markets, or innovating their product offerings. Thus, whether interest rate sensitivities can predict firm growth, despite their mixed relationships with other growth indicators, is an empirical question.

We control for industry, firm characteristics, analyst forecasts, and corporate life cycle (Dickinson 2011) to evaluate whether interest rate sensitivities predict firm growth incrementally to these variables.

[17] Equity duration is a proxy for a firm's stage in its corporate life cycle, with early-stage, loss-making firms typically exhibiting long equity durations. In contrast, firms generating steady profits have shorter durations. High financial leverage restricts financial flexibility, potentially limiting investment and future growth. Accruals represent growth in net operating assets and are associated with future profitability (Fairfield, Whisenant, and Yohn 2003). Accruals are also shown to be less persistent than the cash component of earnings (Sloan 1996). SG&A intensity partly reflects investments in brand development and human capital, both of which can drive firm growth. Mergers may facilitate firm growth through synergies but may also hinder it due to integration challenges. Lastly, product market competition may impact firm growth through the entry and exit of competing firms.

4.3. The Association Between Interest Rate Sensitivities and Firm Growth

To examine whether interest rate sensitivities predict growth, Table 4 reports the times-series means and *t*-statistics of coefficients estimated using cross-sectional (quarterly) regressions of the following model:

$$Y = \beta_0 + \beta_1 Nominal\ IRS + \boldsymbol{\Gamma X} + \varepsilon, \quad (3)$$

where the dependent variables, *Y*, are annualized growth rates over the next three and five years in per-share (i) sales, (ii) EBITDA, (iii) earnings, and (iv) OCF. $\boldsymbol{X}$ represents a vector of control variables including industry indicators, proxies of corporate life cycle (Dickinson 2011), firm characterstics used in the determinants analysis of interest rate sensitivities in Section 4.2, and analyst forecasts of EPS growth over the short-term (*FY2/FY0 Forecast*) and long-term (*Consensus LTG Forecast*). Controlling for both short-term and long-term EPS forecasts of analysts is important, as recent studies show that short-term growth forecasts are more accurate predictors of long-term EPS than LTG forecasts (Sloan and Wang 2023). Additionally, the disparity between short-term EPS forecasts and LTG forecasts has been found to predict revisions in LTG forecasts (Da and Warachka 2011).

The results in Table 4 suggest that nominal interest rate sensitivity is negatively associated with future growth in per-share sales, EBITDA, earnings, and cash flows, but none of the coefficients are significant at the 5% level. In univariate regressions (not reported for brevity), we find that *Nominal IRS* significantly predicts future growth in per-share sales and OCF. Taken together, while *Nominal IRS* appears to univariately predict certain aspects of firm growth, its predictive power does not extend beyond the control variables.

Next, we decompose nominal interest rate sensitivities into real interest rate and expected inflation sensitivities. Table 5 presents the times-series means and *t*-statistics of coefficients estimated using cross-sectional (quarterly) regressions of the following model:

$$Y = \beta_0 + \beta_1 Real\ IRS + \beta_2 ExpInfSen + \boldsymbol{\Gamma X} + \varepsilon, \quad (4)$$

where the dependent variables, *Y*, are annualized growth rates over the next three and five years in per-share (i) sales, (ii) EBITDA, (iii) earnings, and (iv) OCF. We use the same set of control variables as in equation (3).

The results in Table 4 reveal strong negative associations between expected inflation sensitivity and firm growth. In terms of economic magnitude, a one standard deviation increase in expected inflation sensitivity (10.1 from Table 1) is associated with 0.85 (10.1×-0.085) percentage points lower annualized per-share earnings and OCF growth over the next five years, about 10-12% decrease in the growth rate relative to the mean. The consistently negative associations across all measures of firm growth—sales, EBITDA, earnings, and cash flows—provide robust evidence that expected inflation sensitivity contains predictive information about firm growth.[18] On the contrary, real interest rate sensitivities are unrelated to future growth.

The results are visualized more evidently in Figure 1. Figure 1 presents binned scatterplots of the relationship between interest rate sensitivity (*x*-axis) and firm growth (*y*-axis), controlling for the same set of variables as in equation (3) as well as for time (quarter) and industry (GICS two-digits) fixed effects.[19] The figures are graphical representations of panel regressions, providing further evidence of the association between interest rate sensitivity and firm growth through an alternative regression specification. Consistent with Table 4, Panels A and B of Figure

[18] In unreported univariate analysis, we also find that expected inflation sensitivity strongly predicts per-share growth in sales, EBITDA, and OCF, suggesting that it is a useful predictor of firm growth as a standalone variable.
[19] To produce the figures, we regress each dependent variable and the explanatory variable of interest (interest rate sensitivity) on all the control variables and use the residuals from the regressions instead of the original variables.

1 show strong negative relationships between expected inflation sensitivity and firm growth, whereas real interest rate sensitivity is unrelated to firm growth. The figures also demonstrate that the negative association between firm growth and expected inflation sensitivity is fairly linear, suggesting that the association is not driven by a few outliers.

4.4. Expected Inflation Sensitivity and Persistence of Firm Growth

We also explore whether expected inflation sensitivity predicts the persistence of firm growth rates. Previous studies document the challenge of identifying firms that can persistently achieve high growth over the long term (e.g., Chan et al. 2003; Lakonishok et al. 1994). Using a non-parametric approach known as "runs tests" (Chan et al. 2003), we track the average percentage of firms that deliver above-median growth consecutively over the next five years. Employing a similar approach to Chan et al. (2003), we first conduct the runs test on the full sample and report the results for subsamples of firms with high (fifth quintile) and low (first quintile) expected inflation sensitivity. Unlike the regression analysis, we do not require the presence of control variables or analyst coverage to fully leverage the flexibility of this non-parametric test.

In Table 6, we find that firms with low expected inflation sensitivity achieve more persistent growth than those with high expected inflation sensitivity. For example, 12.5% of firms with low expected inflation sensitivity attain above-median growth each year over the next five years, compared to only 6.1% among high sensitivity firms. Similar patterns are observed for growth in per-share EBITDA, earnings, and OCF.

Collectively, the results provided in Sections 4.3 and 4.4 suggest that expected inflation sensitivity not only predicts firm growth over the next three and five years but also the persistence with which that growth is attained. Having established that expected inflation sensitivity conveys

useful predictive information about firms' long-term growth, we next examine whether analysts' forecasts reflect such information.

4.5. Expected Inflation Sensitivity and Analysts' LTG Forecasts

In this section, we examine whether analyst LTG forecasts exhibit any systematic errors with respect to expected inflation sensitivity and, if so, what drives the errors. Table 7 replicates the regression specifications from equations (3) and (4), substituting the dependent variable with analysts' consensus long-term EPS growth rates (*Consensus LTG Forecasts*). In columns (1) and (2), we observe that LTG forecasts are *positively* associated with expected inflation sensitivity, contrasting with the *negative* relationship between expected inflation sensitivity and firm growth reported in Table 5 and Figure 1. That is, analysts assign high growth to high *ExpInfSen* firms, even though they are associated with low growth.

Column (5) in Table 7 directly examines systematic errors in analyst LTG forecasts. The dependent variable in column (5) is the bias in analyst forecasts, defined as LTG forecasts minus realized five-year OPEPS growth—higher values indicate more optimistic bias. Expected inflation sensitivity loads positively in column (5), suggesting that the bias in analyst forecasts systematically increases with respect to expected inflation sensitivity.

Figure 2 plots the relationships between interest rate sensitivities, analysts' LTG forecasts, and forecast bias. Again, the figures are graphical representations of panel regressions, serving as a robustness check on the association between expected inflation sensitivity and LTG forecasts using an alternative regression approach. Consistent with the findings in Table 7, Panel B of Figure 2 indicates that bias in LTG forecasts increases with expected inflation sensitivity.

We next explore a potential explanation driving the bias in LTG forecasts, drawing from the betting-against-beta literature (Frazzini and Pedersen 2014). This literature suggests that

institutional investors prefer high market beta stocks due to leverage and margin constraints, and their demand bids up the prices of high beta stocks and lowers subsequent returns. Institutional demand for high beta stocks may also lead to increased analysts' coverage (Brown et al. 2015) and overly optimistic forecasts. For example, analysts may issue positive recommendations for glamour stocks because these stocks are often widely held by institutional clients (Jegadeesh et al. 2004). Combining these effects implies a positive correlation between the bias in analysts' long-term growth forecasts and market beta. One explanation that expected inflation sensitivity may incrementally contribute to the bias in consensus growth forecasts is due to measurement errors in market beta.

Consistent with our hypothesis, column (3) of Table 7 shows that LTG forecasts are positively correlated with market beta. Furthermore, the positive relationship between expected inflation sensitivity and LTG forecasts disappears after controlling for market beta (column 2 vs. 4), indicating that the increase in LTG forecasts associated with expected inflation sensitivity is driven by market beta. Column (6) also shows that market beta is positively associated with the bias in LTG forecasts, consistent with analysts overestimating the growth prospect of high market beta stocks. Importantly, the positive association between the bias in LTG forecasts and expected inflation sensitivity remains similar when controlling for market beta (column 5 vs. 7), suggesting that expected inflation sensitivity independently contributes to the bias beyond market beta.

Overall, we find that analysts exhibit systematic errors in their LTG forecasts regarding expected inflation sensitivity and provide evidence that the betting-against-beta effect may drive the errors.

4.6. Return Predictability of Expected Inflation Sensitivity

We next examine whether the bias in LTG forecasts with respect to expected inflation sensitivity generates predictable patterns in future stock returns. Table 8 presents the results from regressing annualized cumulative stock returns over the next three years on expected inflation sensitivities. Column (1) in Table 8 shows that expected inflation sensitivity is negatively associated with future long-term stock returns, in line with the increasing optimistic bias in LTG forecasts with respect to expected inflation sensitivity resulting in negative stock returns. In columns (2) and (3), the coefficients on expected inflation sensitivity remain similar when we control for the conventional asset pricing factors such as size, book-to-market, investment (asset growth), profitability (return on equity), and stock price momentum (Fama and French 2015; Hou, Xue, and Zhang 2015; Jegadeesh and Titman 1993) and LTG forecasts. In terms of the economic magnitude, a one standard deviation increase in expected inflation sensitivity is associated with a 1.2% decline (10.1×-0.121) in annualized returns over the next three years, which is 16.9% of the mean (7.23%; reported in Table 1).

In column (4), we expand the control variables to include all the variables used to predict firm growth, including indicator variables of industry and corporate life cycle. The coefficient on expected inflation sensitivity halves to -0.061 compared to -0.121 in column (3) but remains significantly negative. To mitigate the concern that OLS regressions place excessive weight on small firms in return regressions, we conduct a subsample analysis on large stocks (market capitalizations exceeding 1 billion USD) and find a strong negative coefficient of -0.070 on expected inflation sensitivity using the full set of control variables (not shown in the table).

Figure 3 visualizes the negative association between expected inflation sensitivity and firm growth with binned scatterplots. The figures are graphical representations of panel regressions,

providing additional evidence of this relationship through an alternative regression specification. The figure shows that the negative association between future returns and expected inflation sensitivity is fairly linear.

We corroborate our return predictability results with portfolio analysis. Following the convention in the literature (e.g., Fama and French 1992), we sort stocks at the end of June each year into five quintiles based on interest rate sensitivities and track the equal- and value-weighted returns on each portfolio over the next one, two, and three years. We also report hedge returns from long (short) positions in low (high) interest rate sensitivity stocks.

In Table 9, we find that both the equal-weighted and value-weighted hedge portfolio returns over the next three years are significantly positive, and, consistent with the regression analysis, they are driven by the expected inflation component. The economic magnitude of the returns is significant, with annualized hedge returns over the next three years of 5.9% (5.6%) for the equal-weighted (value-weighted) portfolios sorted on expected inflation sensitivity.[20] The hedge returns are only significant with longer horizons of return estimation (strongest with three years), consistent with the interpretation that expected inflation sensitivity relates to errors regarding long-term growth expectations. Notably, the hedge returns are driven by sharply low returns from the highest expected inflation sensitivity portfolio (Q5). This is precisely where the optimistic bias in LTG forecasts is the most severe (Panel B of Figure 2).

Figure 4 presents the time series of hedge portfolio returns based on expected inflation sensitivity. The plots reveal that betting against (on) portfolios with high (low) expected inflation sensitivity yields positive returns, with the equal-weighted portfolio delivering more consistently

[20] To validate the significance of the hedge returns, we also conduct a Monte Carlo simulation technique (e.g., Frankel and Lee 1998). Specifically, each stock is randomly assigned to Q1 to Q5 portfolios at the end of June each year, and the empirical distribution of the average hedge return (Q1-Q5) is obtained. The empirical *p*-values computed from 5,000 iterations are significant at the 1% level.

positive results. This can be attributed to the higher likelihood of expectational errors in smaller firms (e.g., Baker and Wurgler, 2006), which produces more consistently positive returns when smaller firms are assigned greater weights in portfolio construction.

Acknowledging the difficulty of distinguishing between mispricing and risk-based explanations for return predictability, we cautiously interpret that the negative return predictability of expected inflation sensitivity stems from expectational errors about long-term growth. Firstly, the literature suggests that inflation has conveyed favorable news for future consumption and output gaps since the early 2000s (e.g., Boons et al. 2020; Campbell et al. 2020), which implies that stocks with high stock return sensitivity to realized inflation are *riskier* (Boons et al. 2020). Although this conclusion is drawn using *realized* inflation, not expected inflation, it at least suggests that the negative return predictability we document is unlikely to be driven by the inflation risk premium.

Secondly, recall that expected inflation sensitivity is *negatively* associated with firm growth but *positively* correlated with analysts' LTG forecasts. This supports the inference that expectational errors about long-term growth drive the return predictability of expected inflation sensitivity. The finding from portfolio analysis (Table 9) that firms with the highest quintile of expected inflation sensitivity earn sharply lower returns provides corroborating evidence, as this is precisely where the bias in LTG is most pronounced (Panel B of Figure 2). More consistently positive hedge returns from equal-weighted portfolio returns (Table 9) further support the expectational error hypothesis, as there is greater scope for expectational errors (e.g., due to investor sentiments) regarding firms' fundamentals in small firms (Baker and Wurgler 2006).

Lastly, we provide direct evidence of whether the return predictability of expected inflation sensitivity is due to expectational errors about future earnings growth, similar to Arif and Lee

(2014). Specifically, if expected inflation sensitivity forecasts future stock returns as a leading indicator of expectational errors regarding long-term growth, its return predictability should vanish when we directly control for ex-post LTG forecast errors. Consistent with the expectational error hypothesis, we find that the coefficient on expected inflation sensitivity disappears when we control for the bias in LTG forecasts in column (5) of Table 8.[21]

In summary, we show that expected inflation sensitivity is negatively related to future stock returns. We provide several pieces of evidence collectively suggesting that this return predictability is driven by expectational errors regarding firms' long-term growth. Our interpretation aligns with prior research supporting the money illusion hypothesis, where investors fail to revise future cash flow expectations with respect to inflation (e.g., Asness 2003; Campbell and Vuolteenaho 2004; Modigliani and Cohn 1979). We provide further evidence that analysts and investors fail to revise firms' long-term earnings growth expectations with respect to stock price reactions to changes in expected inflation.

4.7. Robustness Checks

We conduct several robustness checks. First, we examine whether the results are sensitive to alternative regression specifications and clustering of standard errors. We construct a quarterly sample, carefully handling the accounting data by incorporating both quarterly and annual reports based on availability rather than solely relying on annual data or selecting an arbitrary month as

[21] In this test, we define the bias in LTG forecasts as the consensus LTG forecasts minus the three-year realized OPEPS growth. We choose a three-year horizon to align it with the estimation window of future returns. Consequently, column (5) has fewer observations than column (4); however, this sample difference does not account for the insignificant coefficient on *ExpInfSen*, as *ExpInfSen* remains significant when we do not control for the bias in LTG forecasts in column (5).

the reference point for analysis. However, a potential concern arises regarding the overlap of measurement periods across observations with respect to the accounting variables.[22]

We conduct two additional tests to address this potential concern. First, we estimate panel regressions, clustering the standard errors at the firm level to account for any arbitrary serial correlation within firms that may occur due to overlapping measurement periods (Thompson 2011)—we further cluster the standard errors by months to account for cross-sectional correlations. In Table OA1, we find that the coefficient on expected inflation sensitivity remains strongly significant in the same direction as in the cross-sectional regressions. Second, we conduct bootstrapping analysis by resampling data (with replacement, keeping the total number of observations the same) 200 times and reproducing our main results in each sample. Table OA2 confirms a negative (positive) association between expected inflation sensitivity and firm growth (bias in LTG forecasts) and negative return predictability of expected inflation sensitivity.

We further examine within-firm variation in expected inflation sensitivity. Ang et al. (2012) find that stock return sensitivity to (realized) inflation is not persistent, indicating that firms with high stock return sensitivity to inflation do not provide reliable hedges against inflation.[23] While expected inflation sensitivity may vary less within firms, such intertemporal variations may also provide information about firm growth. Table OA3, where we estimate panel regressions with firm fixed effects, shows that the coefficients on expected inflation sensitivity are significantly negative, suggesting that expected inflation sensitivity predicts growth within firms.

[22] Using 12 lags (12 quarters) for the Newey-West standard errors in our main regressions is conservative for several reasons. First, Greene (2003) notes that it is common practice to set the number of lags as the integer part of $T^{1/4}$, where T is the total number of periods (see Section 20.5.2, p. 960). With our data spanning 88 quarters, this calculation gives $88^{1/4} = 3.06$, suggesting our choice of 12 lags conservative. Second, firm growth is measured using trailing four-quarter sales, EBITDA, earnings, and OCF so that there is no overlap in firm growth variables beyond 4-5 periods. Additionally, 12 quarters (three years) fully span the estimation window for three-year future stock returns.

[23] While persistence may enhance the reliability of a predictor variable, excessive persistence in an independent variable is econometrically undesirable because it can produce biased standard errors in predictive regressions (Stambaugh 1999).

Next, we test whether our findings are sensitive to control variables in estimating the interest rate sensitivities. We re-estimate interest rate sensitivities (i) without any control variables and (ii) with additional control variables of CBOE Volatility index returns and changes in Baa-Aaa credit spreads. With and without control variables, expected inflation sensitivity strongly predicts firm growth (Table OA4).

Additionally, we investigate whether the predictive power of expected inflation sensitivity for firm growth varies with the direction of interest rate changes. Table OA5 presents panel regression results where firm growth is regressed on the interaction between expected inflation sensitivity and changes in the 10-year Treasury yield. The coefficient on the interaction term is significantly negative when firm growth is measured over the next three years, indicating that the negative association between expected inflation sensitivity and three-year firm growth strengthens in a rising interest rate environment. On the other hand, the interaction term is insignificant when growth is measured over the next five years, suggesting that the direction of interest rate changes does not substantially impact the association over the longer horizon.

We then test the robustness of our findings using alternative sample constructions. In Panel A of Table OA6, we assess whether our results hold when including firms without analyst forecasts, given that interest rate sensitivities can be calculated without relying on external information sources like analysts or IBES. We also add firms with market capitalizations between 10 and 100 million USD, as smaller firms are less likely to be followed by analysts. Panel B of Table OA6 presents a subsample analysis for firms exceeding market capitalizations of 1 billion USD. In both panels, expected inflation sensitivity significantly predicts firm growth.

Finally, Table OA7 presents the relationship between quintile ranks of expected inflation sensitivity and firm growth to address potential measurement errors in expected inflation

sensitivities. Less precise estimates, like quintile ranks, are subject to substantially less estimation error than point estimates derived from regressions. In Table OA7, we continue to observe a strong negative association between quintile ranks of expected inflation sensitivity and firm growth.

5. Conclusion

The expected long-term growth rate of firms' fundamentals is a critical input in numerous applications. Our findings show that the expected inflation component of interest rate sensitivity is a useful predictor of firm growth. Specifically, expected inflation sensitivity *negatively* predicts firm growth across sales, EBITDA, net income, and operating cash flows over the next three and five years. However, analyst forecasts of long-term earnings growth *positively* correlate with expected inflation sensitivity, and consistent with this bias, expected inflation sensitivity negatively predicts future stock returns. We show that the bias in analysts' long-term growth expectations can explained by the betting-against-beta effects and provide several pieces of evidence suggesting that the return predictability is driven by expectational errors about firm growth. Taken together, the stock market reactions to changes in expected inflation provide useful yet overlooked information about firms' long-term growth.

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Appendix A. Constructing Consensus Analysts' Forecasts

We obtain analysts' EPS forecasts from the unadjusted summary EPS U.S. IBES file, which contains summary statistics of individual analysts' EPS forecasts for U.S. firms. Based on the findings by Call et al. (2021) that there is a widespread ex-post deletion of individual analysts' earnings estimates in the detail file, we use the IBES summary file. Furthermore, according to WRDS, certain brokerages, including Goldman Sachs, exclusively provide estimates to the summary files, suggesting that the summary files offer more comprehensive data on the forecasts.

To obtain the consensus long-term growth rates, we select all firm-month observations in the summary EPS U.S. file. Given that we are interested in obtaining the expected growth of firms over the long run, our primary measure is the "long-term" growth forecast (LTG) variable.[24] There are two major empirical limitations of the LTG variable. First, prior studies document substantial measurement errors in this variable (e.g., Chan et al. 2003). Second, LTG availability has steadily declined over time (Sloan and Wang 2023). To alleviate these concerns, we replace the LTG variable with a synthetic consensus forecast of long-term growth, calculated as the median value of (1) LTG (outliers below -10% and above 50% trimmed), (2) EPS5/EPS4 – 1, (3) EPS4/EPS3 – 1, and (4) EPS3/EPS2 – 1, where EPS*t* is forecasted EPS*t* fiscal years ahead. If any of these four variables is missing, we take any available variables to calculate the median value. This procedure increases our sample size by about 10% compared to just relying on the LTG variable. We merge these forecasts with our monthly data of CRSP-Compustat merged data.[25]

[24] According to IBES, "Long term growth rate forecasts are received directly from contributing analysts; they are not calculated by Thomson Financial. While different analysts apply different methodologies, the Long Term Growth Forecast generally represents an expected annual increase in operating earnings over the company's next full business cycle. In general, these forecasts refer to a period of between three to five years. … [There is] variance in methodologies for Long Term Growth calculations."

[25] We link Compustat's GVKEY with IBES Ticker using the two-step approach described in https://wrds-www.wharton.upenn.edu/pages/support/applications/risk-and-valuation-measures/research-application-price-earnings-pe-ratio/#background.

Appendix B. Variable Definition

The table describes the definition of our variables. Variables that use data from Compustat are constructed using the most recently disclosed values as of the end of the month, utilizing both the quarterly and annual files from Compustat. Income statement items (e.g., sales and earnings) are measured each month over the trailing four quarters using annual and quarterly financial reports based on their availability (see Section 3. Data and Sample).

Variable	Data Sources	Description
Interest Rate Sensitivity, Firm Growth Rates, and Stock Returns		
Nominal IRS	CRSP, FRED	The firm/quarter-specific coefficient from a regression of weekly stock returns on the weekly change in the 10-year Treasury rate over the 104 weeks period until the end of that quarter, controlling for the S&P 500 total returns.
Real IRS, ExpInfSen	CRSP, FRED	Real interest rate sensitivity and expected inflation sensitivity are the firm/quarter-specific coefficients from a regression of weekly stock returns on the weekly change in the 10-year TIPS rate and on the change in expected inflation, respectively, over the past 104 weeks, controlling for the S&P 500 total return. (The three explanatory variables are included in the same regression.) Expected inflation is derived from the relationship between the Treasury and TIP rates as (1 + 10-year Treasury yield)/(1 + 10-year TIP rate)-1.
3Yr Future Stock Ret	CRSP	Annualized stock return over the next three years, expressed as a percentage.
3Yr Future Per-Share Sales Growth	Compustat	Annualized future growth rates in sales per share adjusted for stock splits and stock dividends (sale/(cshpri*ajex)). The growth rate is measured over the subsequent three years (12 quarters) relative to the most recently disclosed value as of the end of the month, ((Value_QTR+12 / Value_QTR0) – 1)*100.
5Yr Future Per-Share Sales Growth	Compustat	Same as above, except that the growth rate is measured over the subsequent five years (20 quarters) relative to the most recently disclosed value as of the end of the month.
3Yr Future Per-Share EBITDA Growth	Compustat	Annualized future growth rates in EBITDA (earnings before interest, taxes, and depreciation and amortization) per share adjusted for stock splits and stock dividends (oibdp/(cshpri *ajex)). The growth rate is measured over the subsequent three years (12 quarters) relative to the most recently disclosed value as of the end of the month, ((Value_QTR+12 / Value_QTR0) – 1)*100.
5Yr Future Per-Share EBITDA Growth	Compustat	Same as above, except that the growth rate is measured over the subsequent five years (20 quarters) relative to the most recently disclosed value as of the end of the month.
3Yr Future OPEPS Growth	Compustat	Annualized future growth rates in operating earnings adjusted for stock splits and stock dividends (opeps/ajex). The growth rate is measured over the subsequent three years (12 quarters) relative to the most recently disclosed value as of the end of the month, ((Value_QTR+12 / Value_QTR0) – 1)*100.
5Yr Future OPEPS Growth	Compustat	Same as above, except that the growth rate is measured over the subsequent five years (20 quarters) relative to the most recently disclosed value as of the end of the month.
3Yr Future OCF Growth	Compustat	Annualized future growth rates in operating cash flows adjusted for stock splits and stock dividends (oancf/(cshpri *ajex)). The growth rate is measured over the subsequent three years (12 quarters) relative to the most recently disclosed value as of the end of the month, ((Value_QTR+12 / Value_QTR0) – 1)*100.
5Yr Future OCF Growth	Compustat	Same as above, except that the growth rate is measured over the subsequent five years (20 quarters) relative to the most recently disclosed value as of the end of the month.
Future Stock Ret (36m)	CRSP	Annualized stock return over the next 36 months, expressed as a percentage.
Control Variables		
Accruals	Compustat	Accruals are measured as the difference between income before extraordinary items (ib) and operating cash flows (oancf) excluding extraordinary items and discontinued operations (xidoc): (ib - (oancf - xidoc)). We scale accruals by total assets (at) lagged by four quarters.

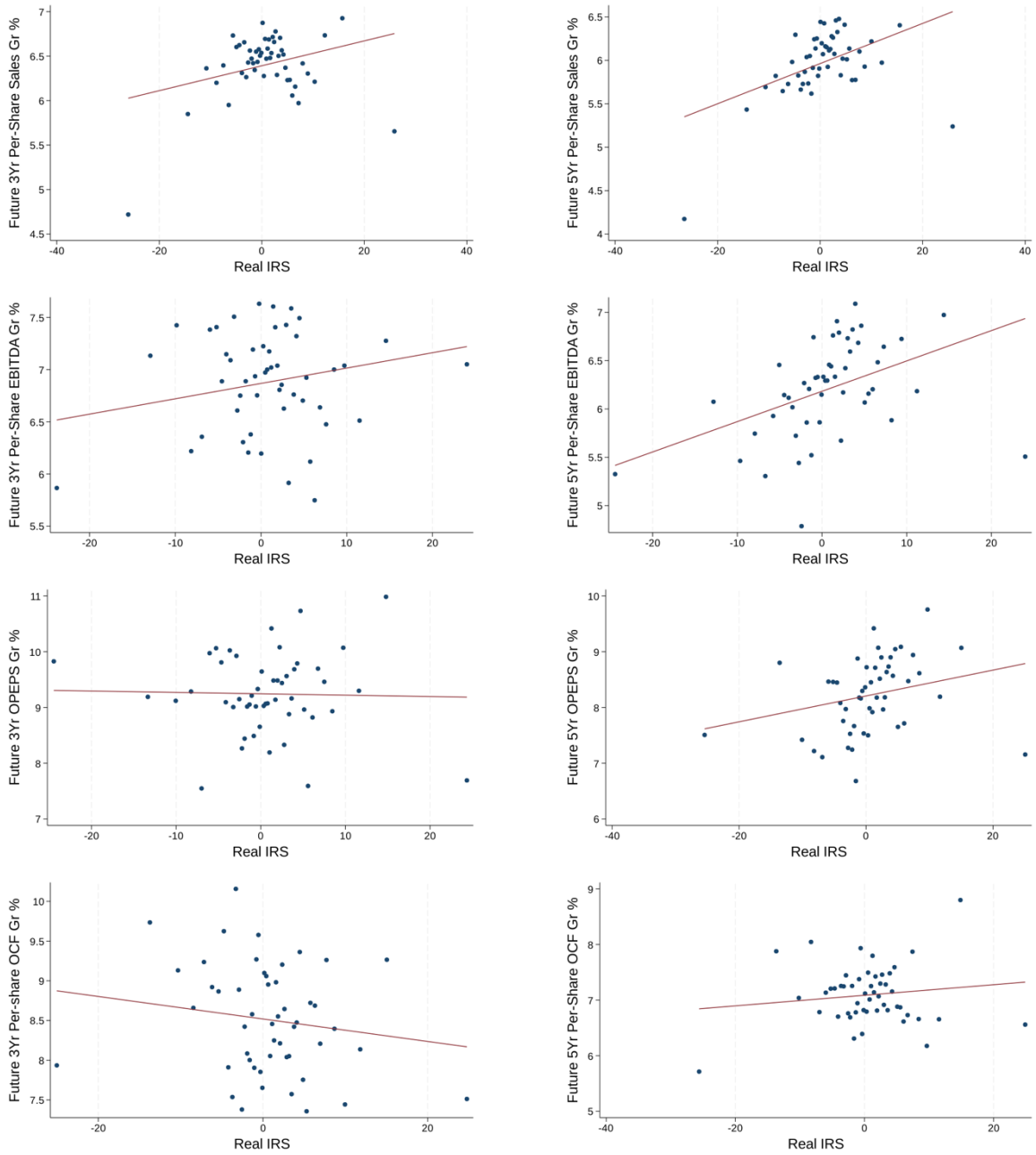
Book-to-Mkt	Compustat, CRSP	The ratio of book value of common equity (Compustat: ceq) over market value of equity (CRSP: prc*shrout/1000). The book value utilizes the most recently disclosed value as of the end of the month, and the market value of equity is as of the month end. This variable is defined only if book equity is positive.
Consensus LTG Forecast	IBES	Synthetic consensus expected long-term growth in EPS expressed as a percentage. The synthetic consensus growth rate is calculated as the median value of (LTG, EPS Gr 3, EPS Gr 4, EPS Gr 5), where EPS GR N is defined as 100*((forecast EPS for fiscal year +N / forecast EPS for fiscal year +N-1) – 1). When the median value is calculated, extreme values of LTG (below -10% and above 50%) are dropped. Additional details on the calculation are provided in Appendix A.
Duration	Compustat	Implied equity duration from Dechow et al. (2021) using 15 years of explicit forecast periods.
FY2/FY0 Forecast	IBES	Implied annualized EPS growth projected over the next two fiscal years, based on analysts' annual EPS forecasts. We use the median EPS forecasts, and the growth rate is calculated as 100*[(FY2/FY0)^(1/2)-1], where FY2 represents the median EPS forecast for two fiscal years ahead, and FY0 is the most recent actual annual EPS.
HP HHI	https://hobergphillips.tuck.dartmouth.edu/	A measure of industry concentration (Herfindahl–Hirschman index) derived from 10-K Text-based Network Industry Classifications (TNIC) by Hoberg and Phillips (2010).
HP ProdMktFluid	https://hobergphillips.tuck.dartmouth.edu/	Developed by Hoberg, Phillips, and Prabhala (2014), product market fluidity measures the level of competitive threat and changes in the product market environment surrounding a firm.
Leverage	Compustst	Net debt/book equity. Net debt is measured as total debt (dlc + dltt) less financial assets (che if available; ch + ivst if che not available). Book equity is measured as ceq. This variable is defined only if book equity is positive.
Life Cycle Control	Compustat	Indicator variables for corporate life cycle stages, following Dickinson (2011). Dickinson (2011) categorizes firms into five life cycle stages—introduction, growth, maturity, shake-out, and decline—based on the signs of cash flows from operating, investing, and financing activities.
Log(MktCap)	CRSP	Natural logarithm of the market value of equity (natural log of prc*shrout/1000).
Market Beta	CRSP	Market beta is estimated using a time series regression of monthly stock returns over the prior 60-month period on the S&P 500 total returns (a minimum of 30 observations is required).
Merger	Compustat Footnotes	An indicator variables that equals one if the firm had significant M&A activities in the trailing four quarters based on the annual and quarterly sales footnotes. We reviewed the document provided by Compustat to determine that the following sales footnote codes indicate potential M&A activities: 'AA', 'AB', 'AR', 'AS', 'FA', 'FB', 'FC', 'FD', 'FE', 'FF', 'CA', 'CB', 'CC', 'KA', 'KB', 'KC', 'KD', 'KE', 'KF', 'KG', 'KH', 'KJ'.
Mkt Cap ($ million)	CRSP	Market value of equity (prc*shrout/1000) calculated as of the end of each quarter.
Momentum	CRSP	Past six-month stock return.
Past Asset Growth	Compustat	Past growth rate in total assets per share adjusted for stock splits and stock dividends (at/(cshpri*ajex)). The growth rate is measured over the previous one year (4 quarters) through the most recently disclosed value as of the end of the month, ((Value_QTR / Value_QTR–4) – 1)*100.
Past Sales Growth	Compustat	Past growth rate in sales per share adjusted for stock splits and stock dividends (sales/(cshpri*ajex)). The growth rate is measured over the previous one year (4 quarters) through the most recently disclosed value as of the end of the month, ((Value_QTR / Value_QTR–4) – 1)*100.
PP&E/Asset	Compustat	Fixed asset intensity calculated as net PP&E scaled by total assets (ppent/at). The ratio is calculated using the most recently disclosed values as of the end of the month.
R&D/Sales	Compustat	R&D intensity calculated as R&D expenditures scaled by sales (xrd/sale). The ratio is calculated using the most recently disclosed values as of the end of the month.
Return on Equity	Compustat	Return on equity calculated as operating earnings (opeps*cshpri) scaled by the average balance of current book equity (ceq) and book equity from four quarters prior. The ratio is only calculated if the average book equity is positive.

SG&A/Sales	Compustat	SG&A expenses (excluding R&D) intensity calculated as non-R&D SG&A expenses scaled by sales ((xsga-xrd)/sale). The value is calculated based on the most recently disclosed value as of the end of the month.
Size Decile	Compustat	Decile ranks of firms' market capitalization at the end of each quarter.

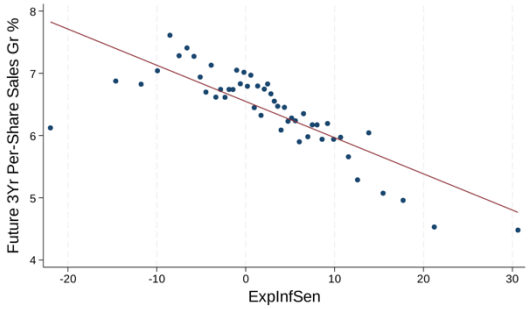
Figure 1 Decomposition of Nominal Interest Rate Sensitivities and Firm Growth

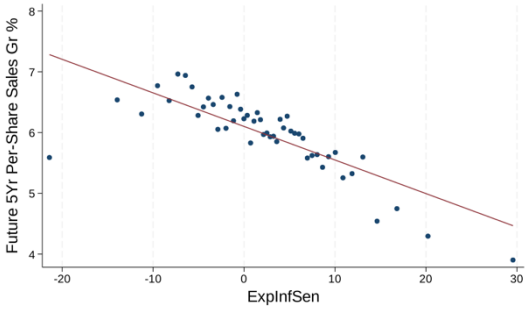
The plots describe the relationship between interest rate sensitivities (*x*-axis) and annualized future growth in per-share sales, EBITDA, EPS, and OCF (*y*-axis). Panel A presents real interest rate sensitivities on the *x*-axis, while Panel B replaces the variable on the *x*-axis with expected inflation sensitivities. To produce the figures, we first regress these variables on all the control variables of equation (4) as well as on time (month) and industry (GICS two-digits) fixed effects. We then substitute the residuals from the regressions for the original variables. We use 50 bins for the scatterplots. All variables are defined in Appendix B.

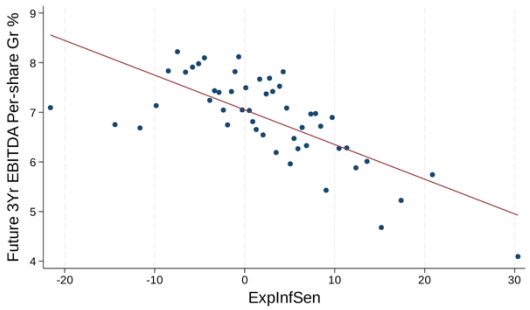
Panel A. Real Interest Rate Sensitivities and Firm Growth (3 years and 5 years)

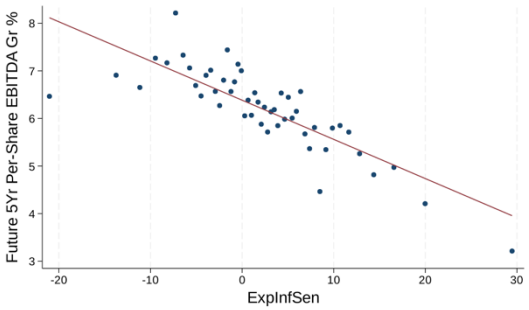


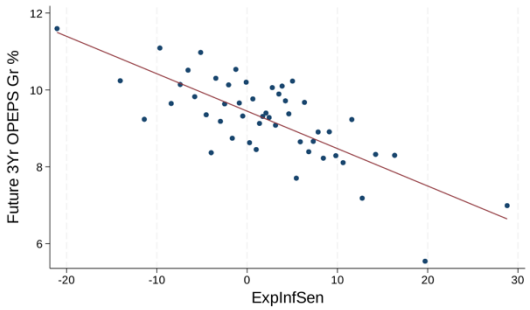
Panel B. Expected Inflation Sensitivities and Firm Growth (3 years and 5 years)

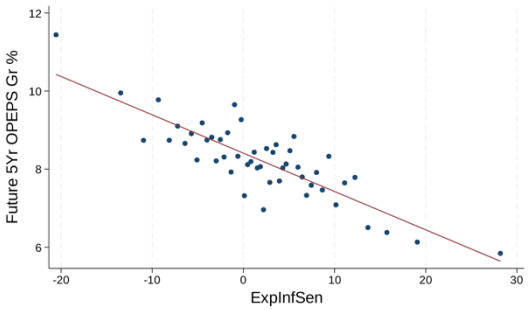


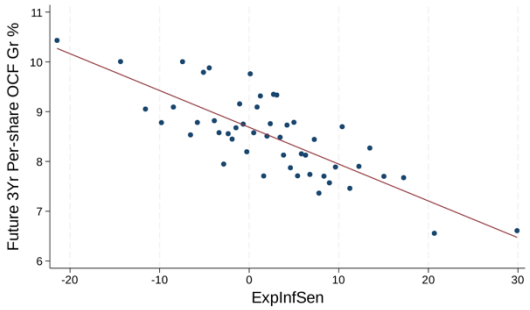












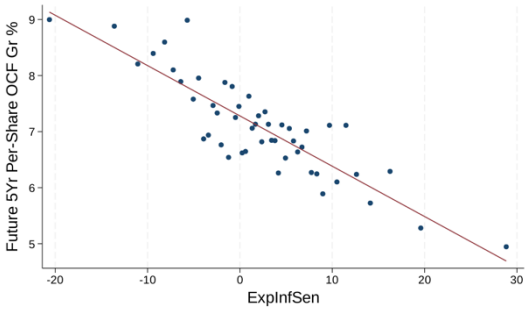
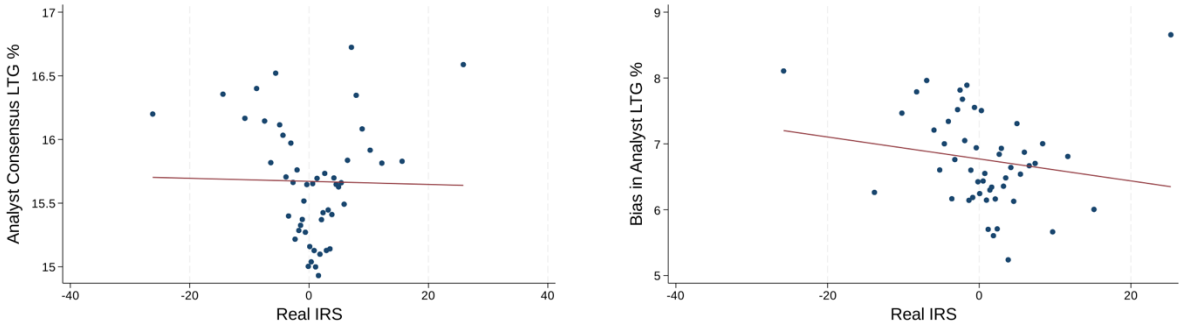


Figure 2. Systematic Errors in Analyst Long-Term EPS Growth Forecasts

The plots describe the relationship between consensus LTG forecast and interest rate sensitivities (three plots on the left), and bias in LTG forecasts and interest rate sensitivities (three plots on the right). Bias in LTG forecasts is defined as LTG minus future five-year growth rates in earnings (OPEPS). Thus, increasing bias indicates increasingly optimistic LTG forecasts. To produce the figures, we first regress these variables on the control variables in equation (4) as well as on time (month) and industry (GICS two-digits) fixed effects. We then substitute the residuals from the regressions for the original variables. We use 50 bins for the scatterplots. All variables are defined in Appendix B.

Panel A. Real Interest Sensitivities and Consensus LTG Forecasts



Panel B. Expected Inflation Sensitivities and Consensus LTG Forecasts

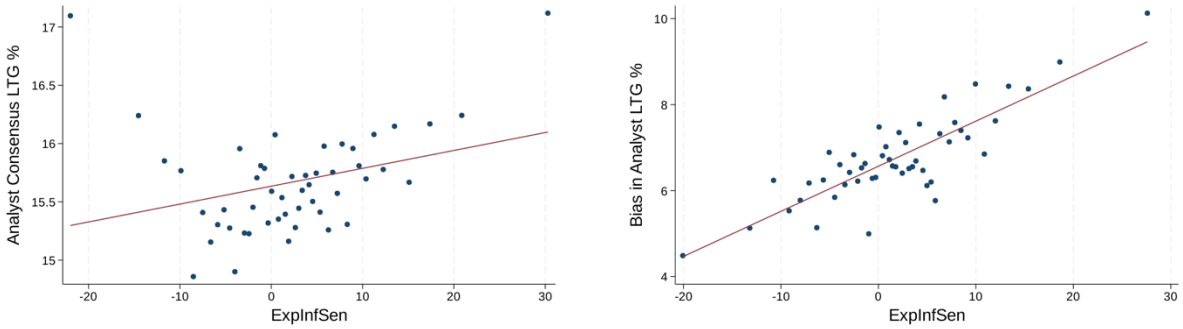


Figure 3. Interest Rate Sensitivities and Future Stock Returns

The figures describe the relationship between the decomposed interest rate sensitivities (*x*-axis) and three-year annualized future stock returns (*y*-axis). To produce the figures, we first regress these variables on the control variables in equation (4) as well as on time (month) and industry (GICS two-digits) fixed effects. We then substitute the residuals from the regressions for the original variables. We use 50 bins for the scatterplots. All variables are defined in Appendix B.

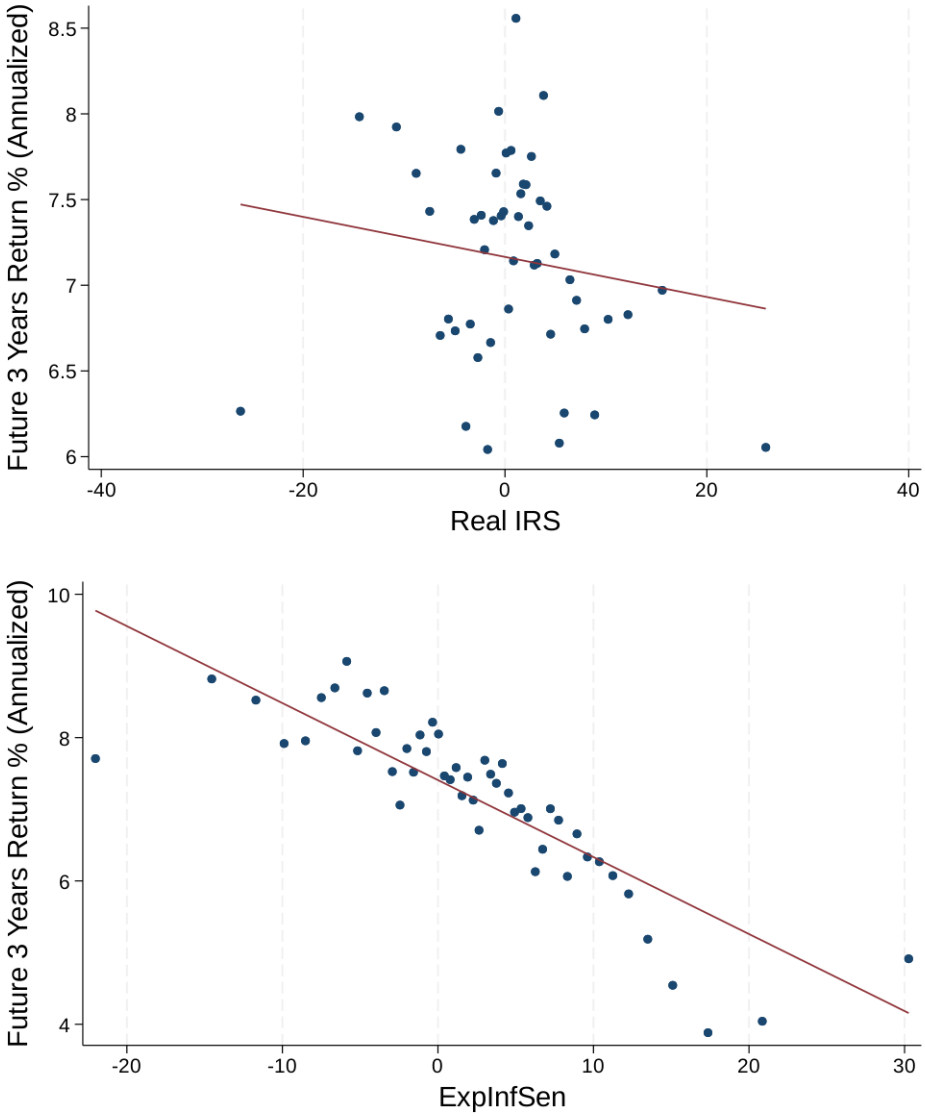
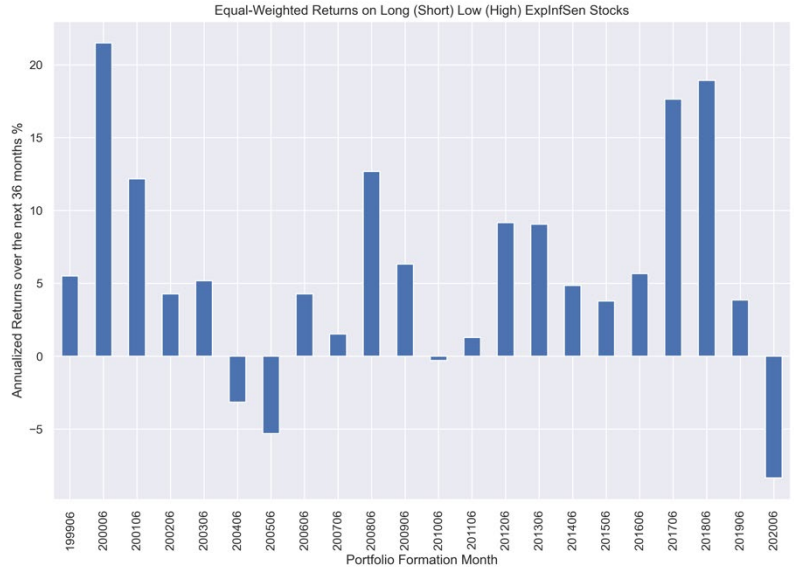


Figure 4. Time Series of Hedge Portfolio Returns

The figures plot returns on portfolios that long (short) low (high) expected inflation sensitivity stocks. At the end of June each calendar year, stocks are sorted into five quintiles based on their expected inflation sensitivities. High (low) expected inflation sensitivity stocks are defined as firms in the fifth (first) quintile. The bars corresponding to each portfolio formation month represent the difference in the annualized forward returns in the next 36 months between low and high expected inflation beta portfolios. Panel A (Panel B) presents the difference in the equal-weighted (value-weighted) portfolio returns.

Panel A. Annualized Equal-Weighted Returns over the Next 3 Years



Panel B. Annualized Value-Weighted Returns over the Next 3 Years

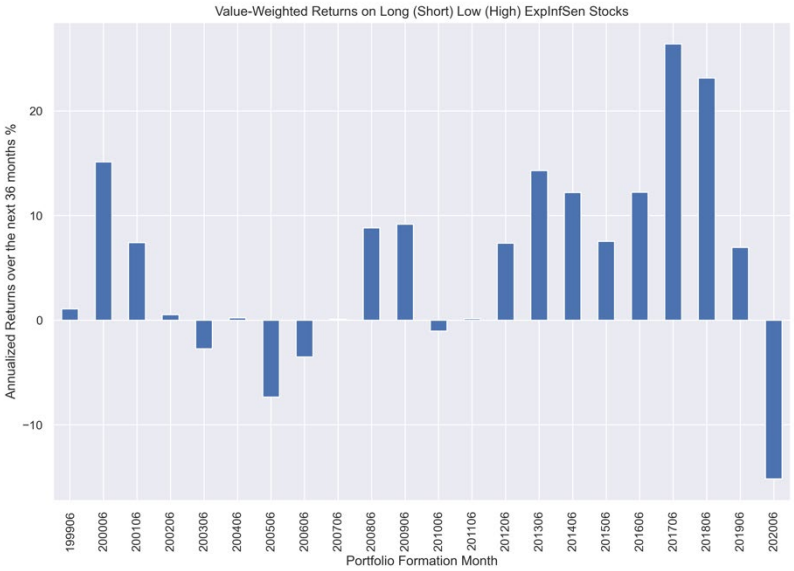


Table 1. Summary Statistics

The table reports the summary statistics of the variables. The sample consists of quarterly observations for non-financial/REIT and non-utility firms during the period January 1999 through December 2020 (88 quarters; future value measured through December 2023 for three-year growth), with a market value of equity in the base month of at least $100MM in December 2022 prices. We retain firm-month observations with non-missing interest rate sensitivities, future three-year growth rates in per-share sales, three-year future stock returns, and the control variables in equation (3). All variables are defined in Appendix B.

Panel A. Interest Rate Sensitivities and Firm Growth

	N	Mean	StdDev	P25	Median	P75
Interest Rate Sensitivities						
Nominal IRS	80,491	1.24	5.54	-2.07	0.93	4.16
Real IRS	80,491	0.73	8.08	-2.94	0.74	4.53
ExpInfSen	80,491	2.51	10.09	-3.51	1.54	7.4
Annualized Future Stock Returns and Growth Rates						
3Yr Future Stock Return	80,491	7.23	22.40	-5.67	7.76	20.10
3Yr Future Per-Share Sales Growth	80,491	6.40	11.70	0.45	6.61	12.65
5Yr Future Per-Share Sales Growth	67,807	5.98	9.59	1.13	6.27	11.33
3Yr Future Per-Share EBITDA Growth	70,359	6.88	20.67	-2.74	7.19	16.31
5Yr Future Per-Share EBITDA Growth	59,231	6.21	14.98	-0.97	6.84	13.84
3Yr Future Per-Share OCF Growth	73,310	8.51	26.18	-4.64	7.57	19.46
5Yr Future Per-Share OCF Growth	61,433	7.09	17.74	-1.83	7.22	15.52
3Yr Future OPEPS Growth	68,313	9.24	27.87	-4.00	8.61	20.51
5Yr Future OPEPS Growth	57,612	8.22	18.75	-1.14	8.26	16.94

Panel B. Control Variables

	N	Mean	StdDev	P25	Median	P75
Control Variables						
Market Beta	80,491	1.19	0.68	0.74	1.11	1.54
Mkt Cap ($ million)	80,491	10,480.10	41,345.55	577.66	1,647.83	5,464.54
Book-to-Mkt	80,491	0.49	0.40	0.24	0.39	0.62
Duration	80,491	19.98	3.18	18.77	20.43	21.69
Leverage	80,491	0.35	0.92	-0.22	0.18	0.65
Accruals	80,491	-0.06	0.08	-0.09	-0.05	-0.02
Consensus LTG Forecast	80,491	15.68	11.05	10.00	14.40	19.82
FY2/FY0 Forecast	80,491	17.82	29.74	5.61	13.39	23.66
Past Per-Share Sales Growth	80,491	10.92	19.68	1.22	9.05	18.36
Past Per-Share Asset Growth	80,491	12.47	22.10	1.18	8.46	18.40
Momentum	80,491	3.85	28.39	-10.08	5.52	19.65
Return on Equity	80,491	0.16	0.15	0.08	0.14	0.21
PP&E/Asset	80,491	0.24	0.20	0.09	0.18	0.33
R&D/Sales	80,491	0.04	0.07	0.00	0.01	0.06
SG&A/Sales	80,491	0.22	0.14	0.11	0.19	0.29
Merger	80,491	0.16	0.37	0.00	0.00	0.00
HP ProdMktFluid	80,491	5.64	2.80	3.59	5.13	7.17
HP HHI	80,491	0.30	0.26	0.11	0.21	0.41
GICS Industry (Two-Digit Sector) Indicator Variables						
Energy	80,491	0.05	0.22	0.00	0.00	0.00
Materials	80,491	0.08	0.26	0.00	0.00	0.00
Industrials	80,491	0.21	0.41	0.00	0.00	0.00
ConsumerDiscretionary	80,491	0.23	0.42	0.00	0.00	0.00
ConsumerStaples	80,491	0.07	0.25	0.00	0.00	0.00
HealthCare	80,491	0.13	0.33	0.00	0.00	0.00
Info Tech	80,491	0.23	0.42	0.00	0.00	0.00
CommunicationService	80,491	0.01	0.11	0.00	0.00	0.00
Firm Life Cycle (Dickinson 2011) Indicator Variables						
LifeCycle Intro	80,491	0.02	0.16	0.00	0.00	0.00
LifeCycle Growth	80,491	0.32	0.47	0.00	0.00	1.00
LifeCycle Mature	80,491	0.57	0.50	0.00	1.00	1.00
LifeCycle Decline	80,491	0.01	0.09	0.00	0.00	0.00
LifeCycle ShakeOut	80,491	0.08	0.27	0.00	0.00	0.00

Table 2. Correlation Matrix

The table reports the bivariate Pearson correlation coefficients among the variables. The sample consists of quarterly observations for non-financial/REIT and non-utility firms during the period January 1999 through December 2020 (88 quarters; future value measured through December 2022 for three-year growth), with a market value of equity in the base month of at least $100MM in December 2022 prices. We retain firm-month observations with non-missing interest rate sensitivities, future three-year growth rates in per-share sales, three-year future stock returns, and the control variables in equation (3). All variables are defined in Appendix B.

		V1	***V2***	***V3***	***V4***	***V5***	***V6***	***V7***	***V8***	***V9***	***V10***	***V11***	***V12***
V1	*3Yr Future Per-Share Sales Growth*	1.00											
V2	*3Yr Future Per-Share EBITDA Gr*	0.67***	1.00										
V3	*3Yr Future OPEPS Growth*	0.47***	0.74***	1.00									
V4	*Consensus LTG Forecast*	0.15***	0.16***	0.09***	1.00								
V5	*3Yr Future Stock Ret*	0.28***	0.44***	0.47***	-0.02***	1.00							
V6	*Nominal IRS*	-0.06***	-0.02***	-0.00	0.04***	-0.03***	1.00						
V7	*Real IRS*	-0.02***	-0.01**	0.01*	-0.00	-0.01	0.69***	1.00					
V8	*ExpInfSen*	-0.08***	-0.03***	-0.02***	0.03***	-0.04***	0.62***	0.15***	1.00				
V9	*Market Beta*	-0.03***	0.02***	0.02***	0.12***	-0.02***	0.18***	0.07***	0.20***	1.00			
V10	*Log(MktCap)*	0.02***	-0.04***	0.02***	-0.19***	-0.06***	-0.09***	-0.05***	-0.06***	-0.06***	1.00		
V11	*Book-to-Mkt*	-0.20***	-0.09***	-0.02***	-0.07***	0.13***	0.06***	0.03***	0.08***	0.04***	-0.37***	1.00	
V12	*Leverage*	-0.15***	-0.08***	0.01	-0.15***	0.02***	-0.01*	-0.00	0.04***	-0.05***	0.08***	0.05***	1.00

Table 3. Determinants of Interest Rate Sensitivities

The table presents descriptive analyses of the industry and firm characteristics associated with interest rate sensitivities. Panel A (B) regresses interest rate sensitivities on two-digit GICS sectors (firm characteristics) at each quarter-end. Both panels report the average estimated coefficients derived from the quarterly cross-sectional regressions, and the corresponding *t*-statistics (in the parentheses) are computed using Newey-West standard errors with a lag of 12. The reported R-squared represents the average adjusted R-squared obtained from the cross-sectional regressions. All variables are defined in Appendix B.

Panel A. GICS Sectors (two-digit)

	(1) *Nominal IRS*	(2) *Real IRS*	(3) *ExpInf Sen*
Energy	1.746	-0.760	12.102***
	(1.287)	(-0.401)	(3.884)
Materials	1.194*	2.013*	4.222**
	(1.737)	(1.879)	(2.271)
Industrials	1.212*	1.898**	2.892**
	(1.701)	(2.265)	(2.143)
ConsumerDiscretionary	0.221	1.255	0.248
	(0.335)	(1.659)	(0.258)
ConsumerStaples	-1.693**	-0.126	-2.721**
	(-2.438)	(-0.116)	(-2.480)
HealthCare	-1.419**	-0.102	-1.922**
	(-2.307)	(-0.088)	(-2.305)
Info Tech	1.446*	1.411	2.000**
	(1.740)	(1.514)	(2.074)
Intercept	0.809	-0.304	1.053
	(1.176)	(-0.335)	(0.962)
Observations	80,491	80,491	80,491
Number of quarters	88	88	88
Adjusted R-squared	0.112	0.094	0.161

Panel B. Firm Characteristics

	(1) *Nominal IRS*	(2) *Real IRS*	(3) *ExpInf Sen*
Book-to-Mkt	0.168	0.344	0.401
	(0.691)	(1.538)	(0.733)
Market Beta	1.597***	0.673	3.447***
	(4.425)	(1.272)	(4.880)
Size Decile	-0.157**	-0.087	-0.205*
	(-2.550)	(-1.124)	(-1.742)
Duration	-0.035**	0.010	-0.148***
	(-2.063)	(0.328)	(-2.861)
Leverage	-0.073	-0.037	0.044
	(-1.186)	(-0.344)	(0.321)
Accruals	-3.364***	-4.571***	-1.794
	(-3.714)	(-5.722)	(-1.312)
Consensus LTG Forecast	0.003	0.005	0.004
	(0.612)	(0.668)	(0.421)
FY2/FY0 Forecast	-0.002	-0.004	0.004
	(-0.822)	(-1.597)	(0.582)
Past Per-Share Sales Growth	-0.009**	-0.011**	-0.001
	(-2.140)	(-2.446)	(-0.070)
Past Per-Share Asset Growth	-0.001	-0.004*	0.003
	(-0.575)	(-1.720)	(0.833)
Momentum	-0.005	-0.011*	-0.006
	(-1.171)	(-1.779)	(-0.663)
Return on Equity	-1.300**	-0.471	-2.547***
	(-2.621)	(-1.235)	(-3.136)
PP&E/Asset	-0.311	-1.139**	2.726*
	(-0.521)	(-2.560)	(1.867)
R&D/Sales	2.660	0.780	2.041
	(1.364)	(0.533)	(0.663)
SG&A/Sales	-1.754***	-0.206	-5.117***
	(-3.911)	(-0.250)	(-4.602)
Merger	-0.005	0.033	-0.019
	(-0.053)	(0.418)	(-0.114)
HP ProdMktFluid	-0.091***	-0.134***	0.078
	(-3.486)	(-3.164)	(1.425)
HP HHI	-0.159	-0.148	0.606
	(-0.673)	(-0.424)	(1.343)
Intercept	2.060***	1.147	2.321
	(3.350)	(1.347)	(1.666)
Observations	80,491	80,491	80,491
Number of quarters	88	88	88
Adjusted R-squared	0.148	0.107	0.184

Table 4. Nominal Interest Rate Sensitivities and Future Growth

The table examines whether nominal interest rate sensitivities predict future growth in fundamentals. The dependent variable is annualized future growth rates in per-share sales (columns 1-2), EBITDA (columns 3-4), operating earnings (columns 5-6), and operating cash flows (columns 7-8), projected three and five years ahead. The independent variable of interest is nominal interest rate sensitivities (*Nominal IRS*). At the end of each quarter, we estimate the cross-sectional regression specified in equation (3). The table reports the average estimated coefficients derived from the quarterly cross-sectional regressions, and the corresponding *t*-statistics (in the parentheses) are computed using Newey-West standard errors with a lag of 12. The reported R-squared represents the average adjusted R-squared obtained from the cross-sectional regressions. All variables are defined in Appendix B.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	3Yr Future Per-Share Sales Growth	*5Yr Future Per-Share Sales Growth*	*3Yr Future Per-Share EBITDA Growth*	*5Yr Future Per-Share EBITDA Growth*	*3Yr Future OPEPS Growth*	*5Yr Future OPEPS Growth*	*3Yr Future Per-Share OCF Growth*	*5Yr Future Per-Share OCF Growth*
Nominal IRS	-0.034	-0.016	-0.051	-0.007	-0.067	-0.008	-0.052	-0.052
	(-1.045)	(-0.496)	(-1.022)	(-0.178)	(-1.098)	(-0.143)	(-0.806)	(-1.089)
Market Beta	-0.682***	-0.714***	-0.542	-0.458	0.747	0.157	-0.197	-0.110
	(-3.320)	(-5.349)	(-1.257)	(-1.086)	(1.315)	(0.390)	(-0.332)	(-0.462)
Size Decile	0.225***	0.217***	0.408***	0.380***	0.538***	0.377***	0.028	0.093
	(3.399)	(3.688)	(3.210)	(4.362)	(2.902)	(3.451)	(0.322)	(1.642)
Book-to-Mkt	-3.867***	-3.178***	-3.324***	-2.202***	0.976	1.549	-1.183**	-1.011**
	(-11.514)	(-12.196)	(-5.336)	(-6.528)	(0.678)	(1.297)	(-2.049)	(-2.428)
Duration	0.041	0.073	0.253***	0.269***	0.883***	0.634***	1.458***	1.057***
	(0.689)	(1.118)	(3.132)	(2.964)	(8.059)	(8.400)	(13.238)	(9.964)
Leverage	-1.513***	-1.450***	-0.787***	-0.779***	1.581***	1.095***	-0.250	-0.582***
	(-11.016)	(-8.795)	(-4.088)	(-3.767)	(7.918)	(7.096)	(-0.719)	(-2.779)
Accruals	0.196	-0.790	-6.045*	-0.394	-25.425***	-15.708***	129.697***	85.008***
	(0.249)	(-1.094)	(-1.674)	(-0.141)	(-6.880)	(-3.860)	(21.952)	(34.208)
Consensus LTG Forecast	0.066***	0.061***	0.109***	0.108***	0.120***	0.136***	0.058***	0.068***
	(7.305)	(12.718)	(7.756)	(7.785)	(3.252)	(3.927)	(3.565)	(4.404)
FY2/FY0 Forecast	0.033***	0.024***	0.104***	0.067***	0.215***	0.141***	0.114***	0.067***
	(7.303)	(3.890)	(7.826)	(5.051)	(8.340)	(6.750)	(6.241)	(4.010)
Past Per-Share Sales Growth	0.049***	0.032***	0.025	0.019*	0.033	0.002	0.055***	0.025*
	(3.610)	(3.529)	(1.491)	(1.900)	(1.269)	(0.160)	(3.190)	(1.728)
Past Per-Share Asset Growth	0.022***	0.020***	-0.006	-0.002	-0.017**	-0.003	0.006	0.014**
	(4.831)	(6.159)	(-0.735)	(-0.305)	(-2.343)	(-0.284)	(0.841)	(2.243)
Momentum	0.058***	0.048***	0.091***	0.056***	0.066***	0.039***	0.043***	0.030***
	(16.695)	(15.701)	(10.402)	(12.998)	(8.566)	(9.768)	(5.083)	(5.952)
Return on Equity	2.656**	2.132**	-10.234***	-7.603***	-31.451***	-21.030***	-9.949***	-6.374***
	(2.420)	(2.089)	(-6.113)	(-6.119)	(-9.111)	(-10.407)	(-8.258)	(-5.190)
PP&E/Asset	1.733	1.334	0.771	0.185	-0.045	0.047	8.354***	5.351***
	(1.661)	(1.367)	(0.769)	(0.235)	(-0.029)	(0.054)	(5.509)	(5.555)
R&D/Sales	-4.871	-4.239	12.352**	5.637	14.868**	10.714*	8.769	5.461
	(-1.113)	(-1.146)	(2.149)	(1.131)	(2.563)	(1.832)	(1.424)	(1.359)
SG&A/Sales	1.403	1.335	3.877*	3.853*	2.652	3.486	1.537	2.519
	(1.172)	(1.254)	(1.729)	(1.885)	(1.096)	(1.580)	(0.661)	(1.285)
Merger	-0.195	-0.168	0.169	0.135	-0.341	-0.187	0.536**	0.244
	(-1.526)	(-1.064)	(0.569)	(0.532)	(-0.771)	(-0.529)	(2.184)	(0.768)
HP ProdMktFluid	0.136**	0.110	-0.008	0.061	0.031	0.119	0.146	0.121
	(2.075)	(1.567)	(-0.086)	(0.625)	(0.232)	(1.278)	(1.123)	(1.103)
HP HHI	-0.704***	-0.677**	-1.707**	-0.998*	-1.499	-0.770	-2.480***	-1.925***
	(-3.163)	(-2.488)	(-2.216)	(-1.720)	(-1.372)	(-0.851)	(-4.556)	(-3.129)
Intercept	0.008	-2.009	-6.328**	-8.339***	-23.977***	-19.924***	-17.238***	-13.614***
	(0.004)	(-0.686)	(-2.342)	(-3.029)	(-6.517)	(-5.951)	(-12.705)	(-5.517)
Observations	80,491	67,792	70,359	59,218	68,313	57,600	73,310	61,420
Number of quarters	88	81	88	81	88	81	88	81
Adjusted R-squared	0.223	0.221	0.168	0.158	0.171	0.168	0.188	0.183
Industry Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Life Cycle Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 5. Decomposition of Interest Rate Sensitivities and Future Growth

The table presents the decomposition analysis of the growth predictability of nominal interest rate sensitivities. The dependent variable is annualized future growth rates in per-share sales (columns 1-2), EBITDA (columns 3-4), operating earnings (columns 5-6), and operating cash flows (columns 7-8), projected three and five years ahead. The independent variables of interest are real interest rate sensitivities (*Real IRS*) and expected inflation sensitivities (*ExpInfSen*). At the end of each quarter, we estimate the cross-sectional regression specified in equation (4). The table reports the average estimated coefficients derived from the cross-sectional regressions, and the corresponding *t*-statistics (in the parentheses) are computed using Newey-West standard errors with a lag of 12. The reported R-squared represents the average adjusted R-squared obtained from the monthly cross-sectional regressions. All variables are defined in Appendix B.

	(1) *3Yr Future Per-Share Sales Growth*	(2) *5Yr Future Per-Share Sales Growth*	(3) *3Yr Future Per-Share EBITDA Growth*	(4) *5Yr Future Per-Share EBITDA Growth*	(5) *3Yr Future OPEPS Growth*	(6) *5Yr Future OPEPS Growth*	(7) *3Yr Future Per-Share OCF Growth*	(8) *5Yr Future Per-Share OCF Growth*
Real IRS	0.009	0.019	0.028	0.067**	0.035	0.082**	0.029	0.034
	(0.402)	(0.763)	(0.773)	(2.173)	(0.717)	(2.133)	(0.670)	(1.277)
ExpInfSen	-0.043**	-0.034**	-0.079**	-0.074***	-0.100***	-0.085***	-0.079**	-0.085***
	(-2.437)	(-2.673)	(-2.155)	(-3.867)	(-3.730)	(-3.487)	(-2.260)	(-2.749)
Market Beta	-0.591***	-0.657***	-0.384	-0.336	0.852	0.251	-0.095	-0.015
	(-2.848)	(-4.773)	(-0.972)	(-0.857)	(1.545)	(0.638)	(-0.159)	(-0.068)
Size Decile	0.223***	0.213***	0.410***	0.378***	0.535***	0.377***	0.023	0.088
	(3.319)	(3.604)	(3.209)	(4.249)	(2.850)	(3.312)	(0.266)	(1.492)
Book-to-Mkt	-3.836***	-3.162***	-3.282***	-2.156***	1.043	1.591	-1.143**	-0.992**
	(-11.324)	(-12.135)	(-5.444)	(-6.516)	(0.730)	(1.320)	(-2.009)	(-2.420)
Duration	0.041	0.073	0.251***	0.269***	0.884***	0.634***	1.454***	1.055***
	(0.701)	(1.131)	(3.166)	(3.009)	(8.143)	(8.257)	(13.037)	(9.965)
Leverage	-1.505***	-1.448***	-0.783***	-0.789***	1.582***	1.087***	-0.247	-0.593***
	(-10.814)	(-8.699)	(-4.116)	(-3.775)	(7.736)	(7.139)	(-0.719)	(-2.835)
Accruals	0.335	-0.697	-5.979	-0.118	-25.131***	-15.359***	129.675***	85.313***
	(0.428)	(-0.970)	(-1.672)	(-0.042)	(-6.745)	(-3.748)	(21.694)	(33.383)
Consensus LTG Forecast	0.067***	0.061***	0.109***	0.109***	0.120***	0.135***	0.058***	0.068***
	(7.378)	(13.255)	(7.518)	(7.614)	(3.274)	(3.871)	(3.508)	(4.316)
FY2/FY0 Forecast	0.033***	0.024***	0.104***	0.067***	0.216***	0.141***	0.115***	0.067***
	(7.489)	(3.939)	(8.014)	(5.129)	(8.495)	(6.756)	(6.316)	(4.055)
Past Per-Share Sales Growth	0.050***	0.032***	0.026	0.020**	0.034	0.002	0.056***	0.025*
	(3.667)	(3.578)	(1.574)	(2.054)	(1.330)	(0.241)	(3.252)	(1.805)
Past Per-Share Asset Growth	0.023***	0.020***	-0.005	-0.001	-0.016**	-0.002	0.007	0.015**
	(4.960)	(6.273)	(-0.606)	(-0.192)	(-2.265)	(-0.225)	(0.932)	(2.255)
Momentum	0.058***	0.048***	0.091***	0.056***	0.065***	0.038***	0.043***	0.030***
	(17.373)	(16.391)	(10.865)	(14.346)	(8.653)	(9.477)	(5.036)	(5.740)
Return on Equity	2.646**	2.126**	-10.156***	-7.555***	-31.267***	-20.972***	-9.914***	-6.345***
	(2.424)	(2.100)	(-5.988)	(-6.167)	(-9.033)	(-10.287)	(-8.271)	(-5.117)
PP&E/Asset	1.730	1.328	0.747	0.183	-0.079	0.105	8.365***	5.418***
	(1.654)	(1.353)	(0.744)	(0.234)	(-0.052)	(0.118)	(5.537)	(5.757)
R&D/Sales	-4.875	-4.271	12.375**	5.622	14.836**	10.708*	8.674	5.416
	(-1.113)	(-1.153)	(2.172)	(1.128)	(2.574)	(1.812)	(1.411)	(1.346)
SG&A/Sales	1.337	1.273	3.757*	3.743*	2.510	3.409	1.393	2.334
	(1.143)	(1.190)	(1.686)	(1.819)	(1.040)	(1.526)	(0.597)	(1.205)
Merger	-0.199	-0.164	0.171	0.153	-0.326	-0.169	0.532**	0.247
	(-1.541)	(-1.041)	(0.576)	(0.594)	(-0.736)	(-0.474)	(2.181)	(0.782)
HP ProdMktFluid	0.139**	0.113	-0.004	0.069	0.035	0.127	0.155	0.129
	(2.115)	(1.614)	(-0.042)	(0.705)	(0.266)	(1.364)	(1.187)	(1.169)
HP HHI	-0.688***	-0.657**	-1.681**	-0.941	-1.474	-0.711	-2.420***	-1.861***
	(-3.154)	(-2.403)	(-2.136)	(-1.578)	(-1.317)	(-0.766)	(-4.465)	(-2.994)
Intercept	-0.062	-2.065	-6.457**	-8.632***	-24.224***	-20.287***	-17.314***	-13.748***
	(-0.031)	(-0.708)	(-2.496)	(-3.250)	(-6.606)	(-5.982)	(-12.718)	(-5.710)
Observations	80,491	67,792	70,359	59,218	68,313	57,600	73,310	61,420
Number of quarters	88	81	88	81	88	81	88	81
Adjusted R-squared	0.225	0.223	0.169	0.159	0.172	0.170	0.189	0.185
Industry Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Life Cycle Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 6. Persistence in Firm Growth Rates

This table presents the persistence of growth rates in fundamentals for firms with high and low sensitivity to expected inflation (*ExpInfSen*), defined at the fifth and first quintile. The reported results are known as "runs test" (Chan et al. 2003). The sample does not require the availability of control variables as in the regression analysis, given the flexibility of the runs test's non-parametric design. At the end of each quarter, growth rates in operating performance are calculated for each of the next one to five years. For each of these five years, we report the percentage (columns 3 and 6) and the number of firms (columns 2 and 5) whose growth rates exceed the median growth rate for each of the specified number of years. Columns (1) and (4) present the number of firms with valid growth rate rates. The statistics for high and low expected inflation sensitivity firms are shown separately in columns (1)-(3) and (4)-(6), respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
		High ExpInfSen			**Low ExpInfSen**	
	Average Number of Valid Firms	Average Number Above Median	Percent Above Median	Average Number of Valid Firms	Average Number Above Median	Percent Above Median
			Per-Share Sales Growth			
Year 1	407	187	46.0	408	210	51.5
Year 2	378	94	24.9	381	127	33.4
Year 3	351	49	14.0	357	82	23.1
Year 4	327	29	8.9	335	56	16.7
Year 5	304	19	6.1	313	39	12.5
			Per-Share EBITDA Growth			
Year 1	325	156	48.1	325	166	51.0
Year 2	282	73	25.8	292	89	30.4
Year 3	255	34	13.3	268	50	18.6
Year 4	236	17	7.3	249	30	12.0
Year 5	223	9	4.2	234	18	7.8
			OPEPS Growth			
Year 1	315	148	46.9	315	160	50.9
Year 2	256	67	26.3	273	83	30.3
Year 3	227	32	14.1	250	46	18.3
Year 4	212	16	7.7	234	27	11.3
Year 5	200	9	4.4	221	16	7.2
			Per-Share OCF Growth			
Year 1	345	164	47.4	345	174	50.5
Year 2	292	62	21.3	303	74	24.4
Year 3	272	24	9.0	284	34	11.8
Year 4	254	11	4.2	268	17	6.2
Year 5	237	5	2.1	251	9	3.6

Table 7. Consensus Analyst Long-Term EPS Growth Forecasts

The table examines whether analysts understand the growth predictability of interest rate sensitivities. Columns (1) to (4) regress consensus LTG forecasts on interest rate sensitivities. In columns (5) to (7), the dependent variable is the bias in LTG forecasts, defined as LTG forecasts minus realized five-year OPEPS growth rates. The regressions are estimated cross-sectionally each quarter, and the panels report the time-series average of the estimated coefficients and the corresponding *t*-statistics (in parentheses), which are computed using Newey-West standard errors with a lag of 12. The reported R-squared represents the average adjusted R-squared obtained from the monthly cross-sectional regressions. All variables are defined in Appendix B.

	(1) *Consensus LTG Forecast*	(2) *Consensus LTG Forecast*	(3) *Consensus LTG Forecast*	(4) *Consensus LTG Forecast*	(5) *Bias in LTG Forecast*	(6) *Bias in LTG Forecast*	(7) *Bias in LTG Forecast*
Real IRS	0.025	-0.003		-0.003	-0.092**		-0.090*
	(1.408)	(-0.171)		(-0.218)	(-2.027)		(-1.964)
ExpInfSen	0.059**	0.021**		0.006	0.094***		0.093***
	(2.167)	(2.585)		(0.911)	(3.768)		(3.658)
Market Beta			1.450***	1.424***		1.052***	0.858**
			(7.092)	(6.851)		(3.229)	(2.431)
Size Decile		-0.710***	-0.720***	-0.712***	-0.958***	-0.966***	-0.946***
		(-22.377)	(-32.057)	(-30.971)	(-8.655)	(-9.046)	(-8.691)
Book-to-Mkt		-2.011***	-2.007***	-1.992***	-3.146***	-3.030***	-3.083***
		(-5.655)	(-5.830)	(-5.742)	(-3.116)	(-2.950)	(-3.026)
Duration		0.455***	0.473***	0.472***	-0.233***	-0.220***	-0.220***
		(11.887)	(10.102)	(10.077)	(-3.183)	(-3.280)	(-3.146)
Leverage		-0.574***	-0.613***	-0.614***	-1.657***	-1.639***	-1.641***
		(-3.595)	(-4.725)	(-4.826)	(-10.202)	(-9.832)	(-10.219)
Accruals		3.531*	3.880*	3.870*	17.825***	18.253***	17.931***
		(1.809)	(1.935)	(1.913)	(4.088)	(4.174)	(4.112)
FY2/FY0 Forecast		0.036***	0.034***	0.034***	-0.094***	-0.095***	-0.096***
		(7.591)	(7.617)	(7.770)	(-5.017)	(-5.266)	(-5.322)
Past Per-Share Sales Growth		0.043***	0.042***	0.042***	0.034***	0.034***	0.032***
		(8.878)	(9.102)	(9.448)	(3.942)	(3.996)	(3.793)
Past Per-Share Asset Growth		0.020***	0.020***	0.020***	0.021*	0.022**	0.021**
		(10.011)	(9.991)	(10.295)	(1.923)	(2.154)	(2.052)
Momentum		-0.001	-0.001	-0.001	-0.040***	-0.041***	-0.039***
		(-0.476)	(-0.477)	(-0.394)	(-8.212)	(-8.814)	(-8.142)
Return on Equity		-4.639***	-4.412***	-4.403***	18.435***	18.421***	18.418***
		(-4.740)	(-4.440)	(-4.509)	(8.350)	(8.678)	(8.404)
PP&E/Asset		1.012	1.317	1.279	0.198	0.465	0.362
		(0.979)	(1.354)	(1.314)	(0.223)	(0.584)	(0.413)
R&D/Sales		9.437***	8.440***	8.325***	-5.220	-5.826	-6.343
		(4.668)	(3.824)	(3.745)	(-0.907)	(-0.953)	(-1.078)
SG&A/Sales		3.919***	3.951***	3.917***	-1.551	-1.639	-1.423
		(5.209)	(5.083)	(5.361)	(-0.649)	(-0.701)	(-0.604)
Merger		0.066	0.065	0.059	0.202	0.229	0.214
		(1.047)	(1.015)	(0.905)	(0.553)	(0.636)	(0.597)
HP ProdMktFluid		0.243***	0.243***	0.241***	0.059	0.074	0.062
		(6.183)	(6.775)	(6.802)	(0.746)	(0.916)	(0.783)
HP HHI		-0.674**	-0.424*	-0.421*	0.054	0.362	0.302
		(-2.329)	(-1.846)	(-1.805)	(0.061)	(0.426)	(0.352)
Intercept	15.487***	8.560***	6.832***	6.864***	27.048***	25.627***	25.771***
	(36.403)	(7.152)	(5.439)	(5.581)	(8.625)	(8.733)	(8.854)
Observations	75,006	75,006	75,006	75,006	57,600	57,600	57,600
Number of groups	81	81	81	81	81	81	81
Adjusted R-squared	0.021	0.250	0.255	0.257	0.129	0.128	0.132
Industry Control	No	Yes	Yes	Yes	Yes	Yes	Yes
Life Cycle Control	No	Yes	Yes	Yes	Yes	Yes	Yes

Table 8. Return Predictability of Interest Rate Sensitivities

The table examines whether interest rate sensitivities predict future stock returns. Stock returns over the next three years are regressed on interest rate sensitivities. The regressions are estimated cross-sectionally each quarter, and the panels report the time-series average of the estimated coefficients and the corresponding *t*-statistics (in parentheses), which are computed using Newey-West standard errors with a lag of 12. The reported R-squared represents the average adjusted R-squared obtained from the monthly cross-sectional regressions. All variables are defined in Appendix B.

	(1)	(2)	(3)	(4)	(5)
	3-Year Future Ret	*3-Year Future Ret*	*3-Year Future Ret*	*3-Year Future Ret*	*3-Year Future Ret*
Real IRS	0.027	0.049	0.047	0.015	-0.025
	(0.395)	(0.674)	(0.652)	(0.489)	(-0.909)
ExpInfSen	-0.142**	-0.122***	-0.121***	-0.061***	-0.005
	(-2.627)	(-3.066)	(-3.107)	(-3.106)	(-0.234)
Consensus LTG Forecast			-0.121**	-0.107**	
			(-2.020)	(-2.013)	
Bias in LTG Forecast(3Yr)					-0.336***
					(-20.547)
Market Beta		-1.281	-0.862	-0.757*	0.302
		(-1.628)	(-1.306)	(-1.768)	(0.552)
Size Decile		0.277	0.168	0.225	-0.650***
		(1.294)	(0.662)	(0.826)	(-2.995)
Book-to-Mkt		0.910	0.083	0.923	0.635
		(0.668)	(0.070)	(0.987)	(1.070)
Past Per-Share Asset Growth		-0.019**	-0.014*	-0.014***	0.003
		(-2.155)	(-1.676)	(-2.955)	(0.638)
Momentum		0.004	0.006	0.005	-0.038***
		(0.303)	(0.430)	(0.496)	(-5.247)
Return on Equity		1.203	0.338	1.401	9.127***
		(0.654)	(0.183)	(0.893)	(5.715)
Duration				-0.069	-0.274
				(-0.701)	(-1.477)
Leverage				-0.143	-0.650
				(-0.304)	(-1.661)
Accruals				-2.333	7.876**
				(-0.675)	(2.099)
FY2/FY0 Forecast				-0.001	-0.065***
				(-0.068)	(-10.185)
Past Per-Share Sales Growth				0.007	0.006
				(0.588)	(0.504)
PP&E/Asset				0.421	2.626*
				(0.296)	(1.936)
R&D/Sales				3.922	6.223
				(0.563)	(1.304)
SG&A/Sales				1.991	0.829
				(0.618)	(0.344)
Merger				-0.114	-0.249**
				(-0.378)	(-2.462)
HP ProdMktFluid				0.004	0.085
				(0.026)	(0.806)
HP HHI				-0.653	-0.193
				(-0.711)	(-0.324)
Intercept	7.984***	6.607**	9.467***	1.696	15.370***
	(3.725)	(2.634)	(2.912)	(0.338)	(3.087)
Observations	80,491	80,491	80,491	80,491	68,313
Number of groups	88	88	88	88	88
Adjusted R-squared	0.019	0.061	0.065	0.143	0.364
Industry Control	No	No	No	Yes	Yes
LifeCycle Control	No	No	No	Yes	Yes

Table 9. Portfolio Return Analysis

The table presents future annualized returns on five quintiles of portfolios sorted based on the three interest rate sensitivities. At the end of June each calendar year, stocks are sorted into five quintiles based on their interest rate sensitivities (nominal interest rate, real interest rate, and expected inflation sensitivities). Then, for each of the five portfolios, we track the equal-weighted (Panel A) and value-weighted (Panel B) stock returns over the next 12, 24, and 36 months. The reported returns are average portfolio returns. The reported *t*-statistics (*t*-stat) tests whether the reported hedge return, *Diff (Q1-Q5)*, is significantly different from zero using the standard *t*-test. Using empirical *p*-values derived from Monte-Carlo simulation (e.g., Frankel and Lee 1998), we validate that the three-year hedge returns from *ExpInfSen* are significant at the 1% level.

Panel A. Equal-Weighted Portfolio Returns

	Q1 (Low)	**Q2**	**Q3**	**Q4**	**Q5 (High)**	**Diff (Q1-Q5)**	***t*-stat**
				Sorted on *Real IRS*			
Future Stock Ret (1 Yr)	14.4%	13.9%	13.4%	12.0%	14.1%	0.3%	0.08
Future Stock Ret (2 Yr)	5.3%	7.4%	6.9%	6.0%	4.9%	0.3%	0.17
Future Stock Ret (3 Yr)	3.2%	6.1%	5.7%	5.2%	3.3%	-0.1%	-0.09
				Sorted on *ExpInfSen*			
Future Stock Ret (1 Yr)	14.4%	14.2%	12.9%	14.3%	12.0%	2.5%	0.54
Future Stock Ret (2 Yr)	6.9%	8.1%	7.4%	6.5%	1.4%	5.6%	2.24
Future Stock Ret (3 Yr)	5.5%	6.9%	6.4%	5.0%	-0.5%	5.9%	3.74

Panel B. Value-Weighted Portfolio Returns

	Q1 (Low)	**Q2**	**Q3**	**Q4**	**Q5 (High)**	**Diff (Q1-Q5)**	***t*-stat**
				Sorted on *Real IRS*			
Future Stock Ret (1 Yr)	12.6%	8.4%	10.0%	8.7%	9.4%	3.2%	0.72
Future Stock Ret (2 Yr)	8.3%	6.8%	6.3%	5.3%	5.4%	2.9%	0.94
Future Stock Ret (3 Yr)	6.1%	7.0%	6.1%	5.8%	5.1%	1.0%	0.51
				Sorted on *ExpInfSen*			
Future Stock Ret (1 Yr)	9.6%	10.1%	9.3%	11.0%	7.8%	1.8%	0.41
Future Stock Ret (2 Yr)	7.1%	7.9%	5.9%	6.2%	2.5%	4.5%	1.44
Future Stock Ret (3 Yr)	6.9%	7.7%	5.8%	5.3%	1.3%	5.6%	2.71

Online Appendix

Interest Rate Sensitivities, Firm Growth Rates, and Stock Returns

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November 2024

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Table OA1. Panel Regressions with Standard Errors Clustered by Firm and Quarter

The table presents robustness checks using pooled OLS regressions with fixed effects (industry defined as two-digit GICS and quarter) and standard errors two-way clustered by firm and month. Panel A presents the association between the decomposed interest rate sensitivities (real and expected inflation sensitivities) and future growth in per-share sales, EBITDA, earnings, and operating cash flow growth. Panel B reports the association between analyst EPS growth forecasts and interest rate sensitivities. All variables are defined in Appendix B.

Panel A. Expected Inflation Sensitivity and Firm Growth

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	3Yr Future Per-Share Sales Growth	*5Yr Future Per-Share Sales Growth*	*3Yr Future Per-Share EBITDA Growth*	*5Yr Future Per-Share EBITDA Growth*	*3Yr Future OPEPS Growth*	*5Yr Future OPEPS Growth*	*3Yr Future Per-Share OCF Growth*	*5Yr Future Per-Share OCF Growth*
Real IRS	0.014	0.023*	0.015	0.031	-0.002	0.023	-0.014	0.009
	(0.989)	(1.802)	(0.597)	(1.467)	(-0.084)	(0.931)	(-0.526)	(0.463)
ExpInfSen	-0.058***	-0.055***	-0.070***	-0.082***	-0.097***	-0.098***	-0.074***	-0.089***
	(-3.834)	(-4.313)	(-2.698)	(-4.354)	(-3.164)	(-4.480)	(-3.004)	(-4.621)
Market Beta	-0.896***	-0.755***	-0.828**	-0.583*	0.448	0.116	-0.436	-0.277
	(-4.103)	(-3.856)	(-2.059)	(-1.785)	(0.965)	(0.301)	(-1.138)	(-0.856)
Size Decile	0.197***	0.177***	0.408***	0.332***	0.570***	0.373***	-0.045	0.011
	(3.521)	(3.046)	(4.474)	(3.824)	(4.762)	(3.589)	(-0.451)	(0.119)
Book-to-Mkt	-3.711***	-3.188***	-3.016***	-2.245***	1.430	1.058	-1.269*	-1.360***
	(-7.573)	(-6.460)	(-4.504)	(-3.901)	(1.560)	(1.495)	(-1.981)	(-2.701)
Duration	-0.013	0.002	0.175**	0.175***	0.689***	0.417***	1.309***	0.872***
	(-0.293)	(0.048)	(2.324)	(2.722)	(6.614)	(4.881)	(14.899)	(10.648)
Leverage	-1.258***	-1.236***	-0.360	-0.460**	2.295***	1.513***	0.290	-0.279
	(-8.897)	(-8.022)	(-1.656)	(-2.083)	(7.931)	(5.401)	(1.061)	(-1.174)
Accruals	-2.181	-2.475	-9.358***	-3.075	-29.347***	-19.968***	126.370***	80.827***
	(-1.358)	(-1.606)	(-3.358)	(-1.253)	(-8.684)	(-6.781)	(27.956)	(24.303)
Consensus LTG Forecast	0.043***	0.046***	0.112***	0.112***	0.176***	0.183***	0.066***	0.072***
	(4.533)	(4.626)	(6.141)	(6.656)	(6.914)	(7.349)	(3.369)	(4.113)
FY2/FY0 Forecast	0.033***	0.024***	0.093***	0.059***	0.187***	0.118***	0.099***	0.058***
	(8.051)	(5.911)	(10.196)	(7.597)	(12.690)	(10.799)	(10.793)	(7.683)
Past Per-Share Sales Growth	0.037***	0.027***	0.017	0.020**	0.021	0.001	0.049***	0.023**
	(5.274)	(4.916)	(1.591)	(2.419)	(1.316)	(0.077)	(4.014)	(2.391)
Past Per-Share Asset Growth	0.020***	0.018***	0.000	-0.002	-0.017*	-0.009	0.006	0.013*
	(4.457)	(4.454)	(0.005)	(-0.377)	(-1.885)	(-1.162)	(0.697)	(1.871)
Momentum	0.049***	0.038***	0.075***	0.049***	0.061***	0.032***	0.036***	0.024***
	(7.914)	(7.626)	(7.931)	(7.363)	(5.492)	(4.156)	(3.812)	(3.527)
Return on Equity	2.297**	2.181**	-10.621***	-7.549***	-33.476***	-22.729***	-11.394***	-6.594***
	(2.485)	(2.298)	(-6.766)	(-5.383)	(-12.493)	(-10.979)	(-7.306)	(-4.545)
PP&E/Asset	1.508*	1.124	0.211	-0.625	-0.231	-0.552	7.578***	4.750***
	(1.939)	(1.440)	(0.185)	(-0.602)	(-0.161)	(-0.450)	(5.842)	(4.186)
R&D/Sales	-1.012	-0.775	17.379***	11.147**	17.976***	14.955***	14.522***	10.152**
	(-0.384)	(-0.292)	(3.600)	(2.612)	(3.400)	(3.211)	(2.689)	(2.003)
SG&A/Sales	2.061*	1.747	4.119**	3.564**	3.556*	4.128**	2.212	2.620
	(1.890)	(1.602)	(2.297)	(2.143)	(1.720)	(2.184)	(1.088)	(1.462)
Merger	-0.248	-0.187	0.204	0.138	-0.259	-0.067	0.327	0.270
	(-1.132)	(-0.918)	(0.569)	(0.446)	(-0.562)	(-0.187)	(0.793)	(0.814)
HP ProdMktFluid	0.075	0.033	-0.056	-0.027	-0.065	0.006	0.041	0.025
	(1.300)	(0.564)	(-0.609)	(-0.326)	(-0.551)	(0.058)	(0.416)	(0.286)
HP HHI	-0.810*	-0.867*	-1.454*	-0.922	-1.095	-0.713	-2.063***	-1.680**
	(-1.884)	(-1.988)	(-1.986)	(-1.339)	(-1.120)	(-0.850)	(-2.833)	(-2.458)
Constant	4.453***	4.079***	0.247	0.088	-11.499***	-5.552**	-11.886***	-7.092***
	(3.082)	(2.780)	(0.119)	(0.048)	(-4.048)	(-2.317)	(-5.434)	(-3.398)
Observations	80,490	67,791	70,358	59,217	68,312	57,599	73,309	61,419
Adjusted R-squared	0.175	0.150	0.114	0.103	0.134	0.128	0.149	0.136
Method	Panel	Panel	Panel	Panel	Panel	Panel	Panel	Panel
Industry Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Quarter Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Life Cycle Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustered SE	Firm & Quarter	Firm & Quarter	Firm & Quarter	Firm & Quarter	Firm & Quarter	Firm & Quarter	Firm & Quarter	Firm & Quarter

Panel B. Analyst Consensus Forecasts of Long-Term EPS Growth

	(1) *Consensus LTG Forecast*	(2) *Bias in LTG Forecast*
Real IRS	-0.001	-0.027
	(-0.150)	(-1.008)
ExpInfSen	0.019*	0.104***
	(1.827)	(4.545)
Market Beta	1.575***	1.071***
	(9.658)	(2.827)
Size Decile	-0.728***	-0.893***
	(-16.740)	(-8.432)
Book-to-Mkt	-2.387***	-2.517***
	(-7.852)	(-3.491)
Duration	0.397***	-0.077
	(8.200)	(-0.911)
Leverage	-0.723***	-2.082***
	(-6.900)	(-7.253)
Accruals	4.081***	22.726***
	(3.093)	(7.703)
FY2/FY0 Forecast	0.028***	-0.082***
	(6.309)	(-7.717)
Past Per-Share Sales Growth	0.039***	0.033***
	(8.257)	(3.064)
Past Per-Share Asset Growth	0.024***	0.028***
	(7.382)	(3.426)
Momentum	-0.002	-0.036***
	(-0.702)	(-3.904)
Return on Equity	-6.188***	20.146***
	(-8.044)	(10.121)
PP&E/Asset	1.409**	0.924
	(2.144)	(0.722)
R&D/Sales	8.702***	-10.409**
	(4.878)	(-2.200)
SG&A/Sales	4.983***	-2.131
	(6.136)	(-1.104)
Merger	0.059	0.126
	(0.398)	(0.334)
HP ProdMktFluid	0.239***	0.183*
	(5.842)	(1.854)
HP HHI	-0.167	0.488
	(-0.521)	(0.573)
Constant	8.738***	11.660***
	(8.226)	(4.892)
Observations	80,490	57,599
Adjusted R-squared	0.169	0.106
Method	Panel	Panel
Industry Fixed Effect	Yes	Yes
Quarter Fixed Effect	Yes	Yes
Life Cycle Control	Yes	Yes
Clustered SE	Firm & Quarter	Firm & Quarter

Table OA2. Bootstrapping Analysis

The table reports the results from the bootstrapping analysis. For each iteration, we resample our quarterly data, keeping the total number of observations equal to our original sample (with replacement). In each resampled data, we estimate quarterly cross-sectional regressions specified in equation (4), where the dependent variable is future growth rates in per-share sales, EBITDA, earnings, and OCF (projected five years ahead), bias in consensus LTG forecasts, and three-year future stock returns. The independent variables of interest are real interest rate sensitivities (*Real IRS*) and expected inflation sensitivities (*ExpInfSen*). We store the average coefficients on *Real IRS* and *ExpInfSen* each iteration and repeat this procedure 200 times. The table reports the mean and the standard deviation of the average coefficients. The reported bootstrap *t*-stat is computed as the mean over the standard deviation. All variables are defined in Appendix B.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Dep Var:	*5Yr Future Per-Share Sales Growth*		*5Yr Future Per-Share EBITDA Growth*		*5Yr Future OPEPS Growth*		*5Yr Future Per-Share OCF Growth*		*Bias in LTG Forecasts*		*3-Year Future Ret*	
Indep Var of Interest:	*Real IRS*	*ExpInfSen*	*Real IRS*	*ExpInfSen*	*Real IRS*	*ExpInfSen*	*Real IRS*	*ExpInfSen*	*Real IRS*	*ExpInfSen*	*Real IRS*	*ExpInfSen*
Mean	0.019	-0.032	0.065	-0.075	0.072	-0.086	0.034	-0.084	-0.060	0.091	0.021	-0.067
Std Dev	0.008	0.005	0.014	0.010	0.018	0.011	0.016	0.012	0.020	0.012	0.016	0.010
Bootstrap t-stat	2.487	-5.881	4.745	-7.613	4.046	-7.766	2.165	-7.147	-3.021	7.694	1.365	-6.664

Table OA3. Within-Firm Variation in Expected Inflation Sensitivity and Firm Growth

The table investigates whether within-firm temporal variations in expected inflation sensitivity predict growth. The regressions are estimated using panel OLS with firm and quarter fixed effects, and standard errors are two-way clustered by firm and quarter. The dependent variables are annualized future growth rate in per-share sales, EBITDA, earnings, and operating cash flows. The independent variables of interest are are real interest rate sensitivities (*Real IRS*) and expected inflation sensitivities (*ExpInfSen*). All variables are defined in Appendix B.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	3Yr Future Per-Share Sales Growth	*5Yr Future Per-Share Sales Growth*	*3Yr Future Per-Share EBITDA Growth*	*5Yr Future Per-Share EBITDA Growth*	*3Yr Future OPEPS Growth*	*5Yr Future OPEPS Growth*	*3Yr Future Per-Share OCF Growth*	*5Yr Future Per-Share OCF Growth*
Real IRS	0.007	0.014	0.008	0.027	0.003	0.032	-0.035	-0.018
	(0.518)	(1.276)	(0.315)	(1.488)	(0.115)	(1.646)	(-1.340)	(-0.960)
ExpInfSen	-0.050***	-0.038***	-0.068***	-0.057***	-0.091***	-0.061***	-0.055**	-0.051***
	(-3.650)	(-3.474)	(-2.860)	(-3.401)	(-3.115)	(-2.921)	(-2.326)	(-3.041)
Market Beta	-0.038	0.201	0.456	0.330	1.455**	0.712*	0.519	0.590
	(-0.147)	(0.867)	(0.886)	(0.920)	(2.384)	(1.684)	(1.127)	(1.565)
Size Decile	-1.431***	-1.653***	-4.244***	-4.078***	-5.788***	-4.983***	-4.025***	-3.955***
	(-10.120)	(-12.571)	(-14.688)	(-16.618)	(-16.334)	(-17.252)	(-15.004)	(-17.517)
Book-to-Mkt	-6.268***	-5.384***	-8.663***	-6.755***	-4.308***	-3.148***	-4.194***	-3.909***
	(-10.203)	(-9.532)	(-8.226)	(-8.048)	(-2.932)	(-2.870)	(-4.443)	(-5.179)
Duration	0.061	0.014	0.246***	0.159***	0.682***	0.395***	1.758***	1.095***
	(1.478)	(0.385)	(3.127)	(3.047)	(6.172)	(4.846)	(14.652)	(11.577)
Leverage	-2.314***	-1.977***	-1.922***	-1.629***	3.099***	2.546***	0.177	-0.436
	(-10.849)	(-9.498)	(-5.424)	(-5.239)	(5.484)	(5.671)	(0.478)	(-1.331)
Accruals	5.151***	3.849***	-1.258	3.260	-19.080***	-13.361***	178.989***	113.672***
	(3.725)	(3.461)	(-0.414)	(1.374)	(-5.603)	(-4.703)	(32.160)	(30.115)
Consensus LTG Forecast	0.034***	0.031***	0.133***	0.115***	0.207***	0.194***	0.082***	0.076***
	(3.781)	(3.962)	(6.916)	(7.747)	(7.846)	(8.129)	(4.361)	(5.039)
FY2/FY0 Forecast	0.027***	0.018***	0.085***	0.053***	0.183***	0.108***	0.094***	0.050***
	(7.131)	(5.423)	(9.442)	(7.909)	(12.085)	(10.952)	(10.288)	(7.474)
Past Per-Share Sales Growth	-0.007	-0.012***	-0.020**	-0.015**	-0.002	-0.018*	0.010	-0.015*
	(-1.233)	(-2.781)	(-2.009)	(-2.073)	(-0.100)	(-1.904)	(0.949)	(-1.852)
Past Per-Share Asset Growth	-0.003	-0.000	-0.014**	-0.012***	-0.020**	-0.017**	-0.019**	-0.005
	(-0.836)	(-0.139)	(-2.202)	(-2.709)	(-2.505)	(-2.615)	(-2.609)	(-0.808)
Momentum	0.028***	0.022***	0.058***	0.037***	0.064***	0.039***	0.026***	0.016***
	(7.393)	(7.845)	(8.589)	(8.857)	(7.606)	(7.553)	(3.471)	(3.427)
Return on Equity	1.535	1.178	-22.568***	-16.832***	-60.990***	-44.674***	-20.344***	-13.723***
	(1.430)	(1.123)	(-9.418)	(-7.803)	(-13.000)	(-12.018)	(-9.493)	(-7.076)
PP&E/Asset	-1.695	-2.601	1.272	-2.767	9.714**	9.247**	-1.539	-2.383
	(-0.825)	(-1.239)	(0.337)	(-0.938)	(2.129)	(2.598)	(-0.461)	(-0.844)
R&D/Sales	26.012***	21.839***	80.789***	52.404***	68.937***	32.683***	120.367***	79.799***
	(5.755)	(5.530)	(6.665)	(6.044)	(4.235)	(3.372)	(12.985)	(11.960)
SG&A/Sales	11.247***	8.585***	30.957***	22.007***	34.985***	20.415***	7.530**	6.931**
	(5.798)	(4.824)	(7.452)	(7.232)	(7.162)	(5.249)	(2.450)	(2.614)
Merger	-0.029	-0.035	0.233	0.140	0.392	0.186	0.655	0.504*
	(-0.138)	(-0.207)	(0.630)	(0.510)	(0.794)	(0.536)	(1.622)	(1.748)
HP ProdMktFluid	-0.079	-0.096	-0.073	-0.054	-0.054	0.082	0.083	-0.020
	(-1.103)	(-1.491)	(-0.569)	(-0.572)	(-0.339)	(0.705)	(0.585)	(-0.192)
HP HHI	0.687	0.769	0.483	1.226	1.204	1.890*	1.068	0.392
	(1.234)	(1.572)	(0.528)	(1.582)	(0.952)	(1.934)	(1.121)	(0.472)
Constant	14.798***	17.420***	26.390***	29.476***	27.921***	30.462***	8.074**	18.219***
	(8.312)	(10.765)	(7.233)	(11.237)	(6.061)	(8.987)	(2.394)	(6.687)
Observations	80,304	67,612	70,166	59,037	68,138	57,445	73,140	61,250
Adjusted R-squared	0.473	0.569	0.364	0.477	0.333	0.430	0.322	0.399
Method	Panel	Panel	Panel	Panel	Panel	Panel	Panel	Panel
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Quarter Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Life Cycle Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustered SE	Firm & Quarter	Firm & Quarter	Firm & Quarter	Firm & Quarter	Firm & Quarter	Firm & Quarter	Firm & Quarter	Firm & Quarter

Table OA4. Alternative Measures of Interest Rate Sensitivities

The table examines the robustness of the results in Tables 5 with respect to alternative measures of interest rate sensitivities. The dependent variable is annualized future growth rates in per-share per-share sales, EBITDA, earnings, and operating cash flows. The independent variables of interest are real interest rate sensitivities (*Real IRS*) and expected inflation sensitivities (*ExpInfSen*). Each quarter, we estimate the cross-sectional regression specified in equation (4). The table reports the average estimated coefficients derived from the quarterly cross-sectional regressions, and the corresponding t-statistics (in the parentheses) are computed using Newey-West standard errors with a lag of 12. The reported R-squared represents the average adjusted R-squared obtained from the cross-sectional regressions. In Panel A, interest rate sensitivities are estimated as specified in equation (2), excluding the S&P 500 returns as a control variable. In Panel B, interest rate sensitivities are estimated as specified in equation (2), adding weekly returns of the CBOE Volatility Index and changes in credit spreads (Baa-Aaa) as additional control variables. All variables are defined in Appendix B.

Panel A. Interest Rate Sensitivities Estimated without Control Variables

	(1) *3Yr Future Per-Share Sales Growth*	(2) *5Yr Future Per-Share Sales Growth*	(3) *3Yr Future Per-Share EBITDA Growth*	(4) *5Yr Future Per-Share EBITDA Growth*	(5) *3Yr Future OPEPS Growth*	(6) *5Yr Future OPEPS Growth*	(7) *3Yr Future Per-Share OCF Growth*	(8) *5Yr Future Per-Share OCF Growth*
Real IRS (No Controls)	-0.001	0.007	0.020	0.052	0.032	0.080*	0.019	0.031
	(-0.030)	(0.309)	(0.578)	(1.630)	(0.647)	(1.868)	(0.437)	(1.072)
ExpInfSen (No Controls)	-0.038**	-0.039***	-0.085**	-0.084***	-0.088***	-0.086***	-0.094***	-0.088***
	(-2.268)	(-3.333)	(-2.551)	(-4.845)	(-2.733)	(-2.823)	(-2.715)	(-2.890)
Market Beta	-0.538**	-0.550***	-0.283	-0.178	0.731	0.289	0.087	0.095
	(-2.652)	(-3.605)	(-0.714)	(-0.436)	(1.419)	(0.565)	(0.151)	(0.399)
Size Decile	0.228***	0.213***	0.412***	0.382***	0.545***	0.382***	0.027	0.092
	(3.363)	(3.553)	(3.218)	(4.200)	(2.950)	(3.325)	(0.304)	(1.494)
Book-to-Mkt	-3.841***	-3.161***	-3.265***	-2.149***	1.018	1.549	-1.147*	-1.006**
	(-11.178)	(-12.061)	(-5.300)	(-6.346)	(0.702)	(1.265)	(-1.992)	(-2.442)
Duration	0.042	0.074	0.248***	0.271***	0.882***	0.635***	1.454***	1.058***
	(0.714)	(1.145)	(3.091)	(3.042)	(8.276)	(8.192)	(13.158)	(10.066)
Leverage	-1.511***	-1.453***	-0.782***	-0.797***	1.558***	1.075***	-0.237	-0.597***
	(-10.803)	(-8.536)	(-4.102)	(-3.763)	(7.944)	(7.216)	(-0.694)	(-2.905)
Accruals	0.291	-0.761	-5.931	-0.164	-25.107***	-15.527***	129.655***	85.381***
	(0.372)	(-1.049)	(-1.645)	(-0.058)	(-6.819)	(-3.787)	(21.865)	(33.663)
Consensus LTG Forecast	0.067***	0.062***	0.111***	0.110***	0.121***	0.136***	0.060***	0.069***
	(7.496)	(13.547)	(7.767)	(7.895)	(3.336)	(3.881)	(3.570)	(4.348)
FY2/FY0 Forecast	0.033***	0.024***	0.105***	0.068***	0.217***	0.141***	0.115***	0.067***
	(7.341)	(3.933)	(7.926)	(5.143)	(8.464)	(6.689)	(6.254)	(4.029)
Past Per-Share Sales Growth	0.051***	0.033***	0.027	0.021**	0.035	0.003	0.057***	0.026*
	(3.671)	(3.648)	(1.605)	(2.139)	(1.367)	(0.301)	(3.290)	(1.838)
Past Per-Share Asset Growth	0.023***	0.020***	-0.005	-0.001	-0.016**	-0.002	0.007	0.015**
	(5.071)	(6.368)	(-0.568)	(-0.123)	(-2.300)	(-0.239)	(0.990)	(2.254)
Momentum	0.058***	0.047***	0.090***	0.056***	0.065***	0.037***	0.043***	0.030***
	(17.518)	(16.466)	(10.934)	(14.732)	(8.427)	(9.687)	(4.936)	(5.522)
Return on Equity	2.677**	2.125**	-10.115***	-7.569***	-31.199***	-20.978***	-9.918***	-6.341***
	(2.440)	(2.085)	(-5.926)	(-6.112)	(-8.905)	(-10.213)	(-8.211)	(-5.140)
PP&E/Asset	1.748	1.344	0.821	0.174	-0.028	0.095	8.357***	5.402***
	(1.661)	(1.360)	(0.815)	(0.223)	(-0.018)	(0.109)	(5.559)	(5.810)
R&D/Sales	-4.841	-4.205	12.599**	5.743	15.219**	10.986*	8.758	5.503
	(-1.099)	(-1.131)	(2.191)	(1.159)	(2.623)	(1.857)	(1.422)	(1.376)
SG&A/Sales	1.336	1.266	3.677	3.691*	2.490	3.358	1.408	2.364
	(1.146)	(1.193)	(1.661)	(1.815)	(1.047)	(1.508)	(0.607)	(1.223)
Merger	-0.192	-0.160	0.171	0.156	-0.307	-0.153	0.513**	0.246
	(-1.480)	(-0.999)	(0.579)	(0.605)	(-0.700)	(-0.431)	(2.071)	(0.768)
HP ProdMktFluid	0.139**	0.112	-0.004	0.066	0.031	0.126	0.156	0.127
	(2.111)	(1.592)	(-0.044)	(0.681)	(0.235)	(1.374)	(1.194)	(1.158)
HP HHI	-0.693***	-0.667**	-1.685**	-0.965	-1.504	-0.728	-2.442***	-1.879***
	(-3.103)	(-2.428)	(-2.136)	(-1.613)	(-1.336)	(-0.780)	(-4.491)	(-3.031)
Intercept	0.057	-1.928	-6.217**	-8.445***	-24.046***	-20.437***	-17.196***	-13.674***
	(0.027)	(-0.644)	(-2.380)	(-3.171)	(-6.780)	(-6.234)	(-13.097)	(-5.787)
Observations	80,473	67,782	70,346	59,211	68,305	57,593	73,295	61,412
Number of quarters	88	81	88	81	88	81	88	81
Adjusted R-squared	0.225	0.222	0.169	0.160	0.172	0.170	0.189	0.185
Industry Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Life Cycle Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Panel B. Interest Rate Sensitivities Estimated with Additional Control Variables

	(1) *3Yr Future Per-Share Sales Growth*	(2) *5Yr Future Per-Share Sales Growth*	(3) *3Yr Future Per-Share EBITDA Growth*	(4) *5Yr Future Per-Share EBITDA Growth*	(5) *3Yr Future OPEPS Growth*	(6) *5Yr Future OPEPS Growth*	(7) *3Yr Future Per-Share OCF Growth*	(8) *5Yr Future Per-Share OCF Growth*
Real IRS (Add Controls)	0.006	0.017	0.028	0.067**	0.039	0.078**	0.032	0.039
	(0.261)	(0.725)	(0.810)	(2.363)	(0.853)	(2.230)	(0.751)	(1.507)
ExpInfSen (Add Controls)	-0.034**	-0.027**	-0.069**	-0.065***	-0.091***	-0.078***	-0.075**	-0.077**
	(-2.276)	(-2.471)	(-2.059)	(-3.743)	(-4.085)	(-3.724)	(-2.217)	(-2.612)
Market Beta	-0.604***	-0.659***	-0.402	-0.343	0.844	0.260	-0.054	0.008
	(-2.932)	(-4.805)	(-1.007)	(-0.863)	(1.599)	(0.661)	(-0.093)	(0.036)
Size Decile	0.226***	0.213***	0.417***	0.378***	0.542***	0.373***	0.026	0.088
	(3.423)	(3.666)	(3.335)	(4.320)	(2.958)	(3.304)	(0.301)	(1.502)
Book-to-Mkt	-3.839***	-3.161***	-3.288***	-2.166***	1.016	1.573	-1.155**	-1.004**
	(-11.358)	(-12.124)	(-5.456)	(-6.515)	(0.711)	(1.310)	(-2.018)	(-2.453)
Duration	0.042	0.073	0.250***	0.268***	0.885***	0.632***	1.451***	1.056***
	(0.705)	(1.137)	(3.144)	(2.992)	(8.257)	(8.252)	(12.916)	(9.923)
Leverage	-1.509***	-1.450***	-0.791***	-0.791***	1.574***	1.087***	-0.249	-0.597***
	(-10.863)	(-8.739)	(-4.148)	(-3.772)	(7.724)	(7.027)	(-0.728)	(-2.843)
Accruals	0.377	-0.689	-5.867	-0.135	-24.970***	-15.414***	129.724***	85.329***
	(0.488)	(-0.959)	(-1.660)	(-0.048)	(-6.774)	(-3.773)	(21.647)	(33.386)
Consensus LTG Forecast	0.067***	0.061***	0.109***	0.108***	0.119***	0.134***	0.057***	0.067***
	(7.353)	(13.318)	(7.508)	(7.543)	(3.216)	(3.852)	(3.394)	(4.226)
FY2/FY0 Forecast	0.033***	0.024***	0.104***	0.067***	0.216***	0.141***	0.115***	0.067***
	(7.492)	(3.920)	(8.032)	(5.116)	(8.519)	(6.750)	(6.362)	(4.085)
Past Per-Share Sales Growth	0.050***	0.032***	0.026	0.020**	0.033	0.002	0.055***	0.026*
	(3.655)	(3.568)	(1.555)	(2.052)	(1.315)	(0.204)	(3.235)	(1.813)
Past Per-Share Asset Growth	0.022***	0.020***	-0.005	-0.001	-0.016**	-0.002	0.007	0.015**
	(4.916)	(6.167)	(-0.621)	(-0.214)	(-2.285)	(-0.217)	(0.934)	(2.255)
Momentum	0.058***	0.048***	0.091***	0.056***	0.065***	0.038***	0.043***	0.030***
	(17.180)	(16.155)	(10.771)	(14.271)	(8.586)	(9.508)	(5.066)	(5.704)
Return on Equity	2.676**	2.144**	-10.098***	-7.540***	-31.204***	-20.969***	-9.906***	-6.331***
	(2.437)	(2.112)	(-5.988)	(-6.146)	(-9.070)	(-10.371)	(-8.203)	(-5.143)
PP&E/Asset	1.745	1.345	0.743	0.190	-0.104	0.107	8.339***	5.430***
	(1.658)	(1.369)	(0.735)	(0.243)	(-0.069)	(0.122)	(5.551)	(5.773)
R&D/Sales	-4.860	-4.277	12.315**	5.646	14.639**	10.697*	8.662	5.351
	(-1.108)	(-1.150)	(2.145)	(1.127)	(2.506)	(1.789)	(1.397)	(1.314)
SG&A/Sales	1.346	1.280	3.766*	3.728*	2.530	3.380	1.424	2.338
	(1.146)	(1.192)	(1.689)	(1.815)	(1.050)	(1.510)	(0.609)	(1.206)
Merger	-0.196	-0.161	0.175	0.153	-0.311	-0.164	0.524**	0.248
	(-1.528)	(-1.023)	(0.588)	(0.601)	(-0.707)	(-0.466)	(2.134)	(0.787)
HP ProdMktFluid	0.139**	0.113	-0.003	0.069	0.034	0.126	0.157	0.129
	(2.127)	(1.625)	(-0.036)	(0.701)	(0.255)	(1.356)	(1.201)	(1.173)
HP HHI	-0.688***	-0.654**	-1.673**	-0.949	-1.463	-0.710	-2.395***	-1.858***
	(-3.138)	(-2.402)	(-2.135)	(-1.595)	(-1.304)	(-0.765)	(-4.512)	(-3.011)
Intercept	-0.100	-2.085	-6.498**	-8.627***	-24.394***	-20.261***	-17.364***	-13.813***
	(-0.050)	(-0.718)	(-2.502)	(-3.219)	(-6.711)	(-5.985)	(-12.747)	(-5.708)
Observations	80,480	67,783	70,351	59,214	68,305	57,594	73,303	61,414
Number of groups	88	81	88	81	88	81	88	81
Adjusted R-squared	0.225	0.223	0.169	0.159	0.172	0.169	0.189	0.185
Industry Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Life Cycle Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table OA5. The Direction of Interest Rate Changes and Firm Growth Predictability

The table examines whether the association between expected inflation sensitivity and firm growth varies with respect to the direction of interest rate changes. The dependent variable is annualized future growth rates in per-share per-share sales, EBITDA, earnings, and operating cash flows. The independent variables of interest are real interest rate sensitivities (*Real IRS*) and expected inflation sensitivities (*ExpInfSen*). Each quarter, we estimate the cross-sectional regression specified in equation (4), adding the interaction of *ExpInfSen* and changes in the 10-year Treasury yield over the past two years (Δ*Treasury Yield*). The table reports the average estimated coefficients derived from the quarterly cross-sectional regressions, and the corresponding t-statistics (in the parentheses) are computed using Newey-West standard errors. The reported R-squared represents the average adjusted R-squared obtained from the cross-sectional regressions. All variables are defined in Appendix B.

	(1) *3Yr Future Per-Share Sales Growth*	(2) *5Yr Future Per-Share Sales Growth*	(3) *3Yr Future Per-Share EBITDA Growth*	(4) *5Yr Future Per-Share EBITDA Growth*	(5) *3Yr Future OPEPS Growth*	(6) *5Yr Future OPEPS Growth*	(7) *3Yr Future Per-Share OCF Growth*	(8) *5Yr Future Per-Share OCF Growth*
ExpInfSen	-0.068***	-0.051***	-0.096***	-0.077***	-0.130***	-0.099***	-0.092***	-0.092***
	(-4.180)	(-3.879)	(-3.607)	(-4.026)	(-4.338)	(-4.272)	(-3.715)	(-4.630)
*ExpInfSen**Δ*Treasury Yield*	-0.033**	0.010	-0.078***	0.011	-0.090***	-0.016	-0.048**	-0.017
	(-2.266)	(0.914)	(-3.074)	(0.697)	(-2.685)	(-0.714)	(-2.296)	(-0.985)
Market Beta	-0.928***	-0.738***	-0.906**	-0.563*	0.355	0.108	-0.498	-0.292
	(-4.243)	(-3.776)	(-2.288)	(-1.738)	(0.769)	(0.284)	(-1.308)	(-0.910)
Size Decile	0.195***	0.177***	0.405***	0.331***	0.568***	0.371***	-0.045	0.009
	(3.491)	(3.045)	(4.431)	(3.816)	(4.734)	(3.566)	(-0.452)	(0.099)
Book-to-Mkt	-3.744***	-3.182***	-3.084***	-2.242***	1.354	1.045	-1.317**	-1.371***
	(-7.608)	(-6.463)	(-4.586)	(-3.905)	(1.475)	(1.475)	(-2.051)	(-2.728)
Duration	-0.014	0.003	0.175**	0.175***	0.692***	0.416***	1.306***	0.871***
	(-0.320)	(0.057)	(2.336)	(2.720)	(6.673)	(4.874)	(14.856)	(10.633)
Leverage	-1.264***	-1.235***	-0.372*	-0.460**	2.284***	1.513***	0.281	-0.279
	(-8.942)	(-8.004)	(-1.717)	(-2.077)	(7.897)	(5.400)	(1.028)	(-1.174)
Accruals	-2.148	-2.579*	-9.125***	-3.213	-29.006***	-20.039***	126.583***	80.830***
	(-1.344)	(-1.672)	(-3.306)	(-1.311)	(-8.675)	(-6.886)	(28.091)	(24.320)
Consensus LTG Forecast	0.043***	0.047***	0.110***	0.112***	0.173***	0.183***	0.064***	0.072***
	(4.484)	(4.627)	(6.049)	(6.657)	(6.817)	(7.329)	(3.318)	(4.100)
FY2/FY0 Forecast	0.033***	0.024***	0.094***	0.059***	0.188***	0.118***	0.099***	0.058***
	(8.180)	(5.924)	(10.395)	(7.612)	(12.772)	(10.840)	(10.894)	(7.705)
Past Per-Share Sales Growth	0.037***	0.027***	0.017	0.020**	0.021	0.000	0.049***	0.023**
	(5.260)	(4.844)	(1.588)	(2.355)	(1.321)	(0.044)	(4.024)	(2.369)
Past Per-Share Asset Growth	0.020***	0.018***	-0.000	-0.002	-0.017*	-0.009	0.006	0.013*
	(4.395)	(4.460)	(-0.061)	(-0.389)	(-1.940)	(-1.198)	(0.674)	(1.845)
Momentum	0.049***	0.038***	0.076***	0.049***	0.062***	0.032***	0.037***	0.024***
	(7.930)	(7.523)	(8.140)	(7.249)	(5.654)	(4.123)	(3.919)	(3.517)
Return on Equity	2.327**	2.156**	-10.534***	-7.580***	-33.392***	-22.753***	-11.305***	-6.595***
	(2.513)	(2.270)	(-6.736)	(-5.406)	(-12.519)	(-11.008)	(-7.262)	(-4.541)
PP&E/Asset	1.536*	1.101	0.269	-0.656	-0.158	-0.524	7.637***	4.777***
	(1.978)	(1.405)	(0.235)	(-0.630)	(-0.110)	(-0.429)	(5.896)	(4.201)
R&D/Sales	-0.991	-0.753	17.407***	11.153**	18.019***	14.925***	14.536***	10.138**
	(-0.377)	(-0.284)	(3.605)	(2.615)	(3.399)	(3.204)	(2.688)	(2.000)
SG&A/Sales	2.046*	1.768	4.038**	3.573**	3.481*	4.132**	2.166	2.614
	(1.869)	(1.620)	(2.254)	(2.151)	(1.686)	(2.187)	(1.065)	(1.460)
Merger	-0.245	-0.187	0.209	0.136	-0.252	-0.070	0.334	0.271
	(-1.122)	(-0.921)	(0.585)	(0.441)	(-0.547)	(-0.194)	(0.812)	(0.817)
HP ProdMktFluid	0.073	0.033	-0.061	-0.027	-0.070	0.005	0.039	0.024
	(1.260)	(0.564)	(-0.663)	(-0.325)	(-0.596)	(0.051)	(0.397)	(0.276)
HP HHI	-0.829*	-0.864*	-1.494**	-0.919	-1.139	-0.720	-2.071***	-1.686**
	(-1.929)	(-1.984)	(-2.040)	(-1.335)	(-1.161)	(-0.859)	(-2.840)	(-2.469)
Constant	4.567***	4.055***	0.458	0.084	-11.328***	-5.467**	-11.741***	-7.008***
	(3.147)	(2.746)	(0.222)	(0.045)	(-4.001)	(-2.283)	(-5.355)	(-3.361)
Observations	80,490	67,791	70,358	59,217	68,312	57,599	73,309	61,419
Adjusted R-squared	0.175	0.150	0.116	0.103	0.135	0.128	0.150	0.136
Method	Panel	Panel	Panel	Panel	Panel	Panel	Panel	Panel
Industry Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Quarter Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Life Cycle Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustered SE	Firm & Quarter	Firm & Quarter	Firm & Quarter	Firm & Quarter	Firm & Quarter	Firm & Quarter	Firm & Quarter	Firm & Quarter

Table OA6. Alternative Sample Constructions

The table examines the robustness of the association between expected inflation sensitivity and firm growth with respect to different sample constructions. The dependent variable is annualized future growth rates in per-share per-share sales, EBITDA, earnings, and operating cash flows. The independent variables of interest are real interest rate sensitivities (*Real IRS*) and expected inflation sensitivities (*ExpInfSen*). Each quarter, we estimate the cross-sectional regression specified in equation (4). The table reports the average estimated coefficients derived from the quarterly cross-sectional regressions, and the corresponding t-statistics (in the parentheses) are computed using Newey-West standard errors with a lag of 12. Panel A includes firms without analyst coverage and those with market capitalization between 10 and 100 million USD, while Panel B focuses on a subsample of large firms with market capitalization exceeding 1 billion USD. All variables are defined in Appendix B.

Panel A. Including Firms without Analyst Followings and Market Capitalization between 10 and 100 Million USD

	(1) *3Yr Future Per-Share Sales Growth*	(2) *5Yr Future Per-Share Sales Growth*	(3) *3Yr Future Per-Share EBITDA Growth*	(4) *5Yr Future Per-Share EBITDA Growth*	(5) *3Yr Future OPEPS Growth*	(6) *5Yr Future OPEPS Growth*	(7) *3Yr Future Per-Share OCF Growth*	(8) *5Yr Future Per-Share OCF Growth*
Real IRS	0.023	0.033**	0.010	0.033	0.011	0.039	0.047	0.030
	(1.390)	(2.182)	(0.287)	(1.167)	(0.237)	(1.461)	(1.234)	(1.250)
ExpInfSen	-0.039**	-0.027*	-0.049***	-0.041***	-0.068**	-0.050**	-0.047***	-0.054***
	(-2.559)	(-1.955)	(-2.937)	(-5.037)	(-2.613)	(-2.558)	(-3.022)	(-2.935)
Market Beta	-0.547***	-0.546***	0.075	-0.074	1.546***	0.849***	0.274	0.404
	(-3.863)	(-3.992)	(0.198)	(-0.207)	(3.137)	(2.745)	(0.707)	(1.557)
Size Decile	0.508***	0.512***	0.107	0.246**	-0.203	-0.074	-0.380***	-0.143
	(6.484)	(6.516)	(0.873)	(2.219)	(-1.364)	(-0.603)	(-3.098)	(-1.282)
Book-to-Mkt	-3.461***	-2.759***	-2.183***	-1.414***	0.455	0.841	-0.879	-1.409***
	(-8.455)	(-10.907)	(-3.111)	(-3.279)	(0.330)	(0.980)	(-1.522)	(-3.385)
Duration	-0.179***	-0.139***	0.464***	0.349***	1.088***	0.823***	1.524***	1.058***
	(-4.165)	(-3.006)	(6.051)	(6.400)	(10.356)	(11.357)	(11.081)	(9.890)
Leverage	-1.345***	-1.323***	-0.972***	-1.097***	2.357***	1.598***	-0.283	-0.463**
	(-7.405)	(-6.001)	(-3.319)	(-3.814)	(14.433)	(10.362)	(-0.854)	(-2.358)
Accruals	0.751	0.259	-7.746***	-1.973	-29.412***	-17.999***	134.140***	86.692***
	(0.640)	(0.425)	(-2.958)	(-0.725)	(-7.125)	(-5.501)	(25.870)	(33.860)
Past Per-Share Sales Growth	0.041***	0.031***	0.025	0.010	0.029	-0.005	0.044**	0.015
	(3.449)	(3.613)	(1.258)	(1.273)	(1.144)	(-0.550)	(2.578)	(1.209)
Past Per-Share Asset Growth	0.035***	0.028***	-0.021**	-0.007	-0.037***	-0.007	-0.018**	0.006
	(6.644)	(7.220)	(-2.584)	(-1.080)	(-5.316)	(-0.781)	(-2.374)	(1.270)
Momentum	0.063***	0.051***	0.095***	0.062***	0.095***	0.059***	0.062***	0.037***
	(15.861)	(12.675)	(10.342)	(8.739)	(9.399)	(8.072)	(9.871)	(6.499)
Return on Equity	4.281***	3.990***	-19.936***	-13.523***	-46.181***	-32.199***	-18.199***	-12.789***
	(6.577)	(4.820)	(-8.152)	(-12.462)	(-8.874)	(-12.040)	(-23.217)	(-15.358)
PP&E/Asset	2.712***	2.024***	0.964	0.466	-1.185	-0.251	8.024***	5.137***
	(3.182)	(2.702)	(0.999)	(0.427)	(-0.646)	(-0.210)	(5.888)	(5.698)
R&D/Sales	0.442	-0.116	20.019***	12.281**	22.786***	15.783**	18.082***	14.648***
	(0.227)	(-0.062)	(3.752)	(2.231)	(4.579)	(2.645)	(2.762)	(3.259)
SG&A/Sales	2.953***	2.294***	6.186***	5.810***	3.763*	4.583**	5.467**	5.057**
	(3.780)	(3.783)	(3.032)	(3.187)	(1.800)	(2.383)	(2.337)	(2.495)
Merger	-0.257	-0.316*	0.168	-0.040	-0.371	-0.359	0.161	0.274
	(-1.146)	(-1.862)	(0.587)	(-0.124)	(-0.956)	(-0.855)	(0.565)	(0.746)
HP ProdMktFluid	0.055	0.051	0.048	0.091	0.145	0.206**	0.209	0.167
	(1.194)	(1.487)	(0.427)	(0.882)	(1.021)	(2.079)	(1.587)	(1.418)
HP HHI	-0.039	-0.137	-1.583**	-0.684	-1.453	-0.727	-1.673**	-1.469***
	(-0.113)	(-0.396)	(-2.351)	(-1.175)	(-1.507)	(-0.842)	(-2.622)	(-3.342)
Intercept	3.055***	1.333*	-4.161**	-5.342***	-17.134***	-16.674***	-11.412***	-9.308***
	(3.506)	(1.951)	(-2.275)	(-4.948)	(-6.121)	(-7.156)	(-5.798)	(-4.926)
Observations	133,630	110,069	100,668	83,674	90,168	75,305	104,264	86,238
Number of quarters	88	81	88	81	88	81	88	81
Adjusted R-squared	0.198	0.201	0.119	0.116	0.121	0.126	0.153	0.161
Industry Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Life Cycle Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Panel C. Large Firms with Market Capitalization Greater than 1 Billion USD

	(1) *3Yr Future Per-Share Sales Growth*	(2) *5Yr Future Per-Share Sales Growth*	(3) *3Yr Future Per-Share EBITDA Growth*	(4) *5Yr Future Per-Share EBITDA Growth*	(5) *3Yr Future OPEPS Growth*	(6) *5Yr Future OPEPS Growth*	(7) *3Yr Future Per-Share OCF Growth*	(8) *5Yr Future Per-Share OCF Growth*
Real IRS	0.016	0.033	0.007	0.056	0.033	0.083*	0.035	0.041
	(0.488)	(0.958)	(0.165)	(1.307)	(0.652)	(1.987)	(0.663)	(0.946)
ExpInfSen	-0.044***	-0.032***	-0.072**	-0.089***	-0.062*	-0.092***	-0.080**	-0.082**
	(-2.789)	(-4.550)	(-2.121)	(-6.552)	(-1.748)	(-4.261)	(-2.378)	(-2.431)
Market Beta	-0.692*	-0.644**	-0.359	-0.371	0.638	-0.242	0.247	-0.157
	(-1.987)	(-2.549)	(-0.495)	(-0.777)	(0.755)	(-0.625)	(0.372)	(-0.441)
Size Decile	-0.077	0.029	0.349**	0.399***	0.771**	0.648***	-0.018	-0.011
	(-0.786)	(0.256)	(2.010)	(2.818)	(2.501)	(3.198)	(-0.097)	(-0.114)
Book-to-Mkt	-6.354***	-5.327***	-6.381***	-4.910***	-1.506	-1.157	-2.634**	-3.029***
	(-8.500)	(-12.452)	(-4.850)	(-7.907)	(-0.802)	(-0.897)	(-2.536)	(-3.144)
Duration	-0.060	-0.003	0.132*	0.178***	0.948***	0.581***	1.306***	0.874***
	(-1.116)	(-0.056)	(1.849)	(3.071)	(7.789)	(6.413)	(15.005)	(10.731)
Leverage	-1.544***	-1.477***	-0.772***	-0.839***	1.340***	0.769***	-0.448	-0.735***
	(-13.877)	(-14.150)	(-4.905)	(-5.843)	(6.931)	(5.396)	(-1.030)	(-3.191)
Accruals	-0.741	-0.830	-5.861	1.383	-22.206***	-12.766**	119.281***	78.586***
	(-0.707)	(-0.968)	(-1.498)	(0.463)	(-4.497)	(-2.630)	(20.945)	(24.571)
Consensus LTG Forecast	11.095***	10.469***	15.991***	13.898***	17.542***	17.250***	9.530***	10.749***
	(5.504)	(6.787)	(7.983)	(7.702)	(4.274)	(4.640)	(4.097)	(6.378)
FY2/FY0 Forecast	3.988***	3.141***	10.993***	7.328***	22.951***	15.195***	12.377***	8.017***
	(5.101)	(3.194)	(6.360)	(4.300)	(6.797)	(7.115)	(5.861)	(4.174)
Past Per-Share Sales Growth	0.056***	0.037***	0.027	0.019*	0.012	-0.005	0.053***	0.024*
	(3.593)	(4.063)	(1.417)	(1.764)	(0.407)	(-0.433)	(3.427)	(1.824)
Past Per-Share Asset Growth	0.025***	0.023***	-0.002	0.008	-0.007	-0.002	0.009	0.018***
	(4.293)	(5.297)	(-0.219)	(1.130)	(-0.999)	(-0.203)	(1.109)	(2.833)
Momentum	0.056***	0.042***	0.095***	0.059***	0.075***	0.042***	0.047***	0.032***
	(16.661)	(12.482)	(10.082)	(15.719)	(8.287)	(8.934)	(5.596)	(4.909)
Return on Equity	1.277	0.690	-9.524***	-7.418***	-25.446***	-17.845***	-7.939***	-5.587***
	(1.126)	(0.621)	(-4.500)	(-5.966)	(-8.745)	(-9.592)	(-4.851)	(-3.856)
PP&E/Asset	1.289	1.008	0.605	0.499	-0.146	0.117	9.457***	6.402***
	(1.188)	(0.986)	(0.666)	(0.661)	(-0.096)	(0.144)	(5.209)	(6.582)
R&D/Sales	-5.196	-4.481	10.488*	5.979	15.916**	13.594**	9.783	9.279**
	(-1.328)	(-1.374)	(1.950)	(1.251)	(2.580)	(2.344)	(1.583)	(2.109)
SG&A/Sales	0.286	0.186	1.670	1.959	0.658	0.864	0.112	0.813
	(0.203)	(0.126)	(0.643)	(0.821)	(0.226)	(0.348)	(0.042)	(0.322)
Merger	-0.109	-0.217	-0.047	-0.161	-0.340	-0.382	0.308	-0.023
	(-0.500)	(-0.893)	(-0.140)	(-0.399)	(-0.706)	(-0.888)	(0.938)	(-0.066)
HP ProdMktFluid	0.134*	0.092	0.036	0.080	0.119	0.135	0.144	0.092
	(1.924)	(1.329)	(0.401)	(1.040)	(0.894)	(1.418)	(0.895)	(0.775)
HP HHI	-1.154***	-1.009***	-1.619***	-0.810*	-2.032**	-0.966	-2.469***	-2.193***
	(-3.437)	(-3.076)	(-2.754)	(-1.692)	(-2.612)	(-1.262)	(-4.650)	(-4.484)
Intercept	5.631***	3.250	-3.395	-5.469**	-27.175***	-18.397***	-17.079***	-10.082***
	(5.600)	(1.655)	(-1.413)	(-2.015)	(-6.641)	(-8.576)	(-6.426)	(-4.514)
Observations	56,781	48,026	51,024	43,104	50,538	42,663	53,594	45,085
Number of groups	88	81	88	81	88	81	88	81
Adjusted R-squared	0.270	0.277	0.206	0.205	0.204	0.198	0.200	0.203
Industry Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Life Cycle Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table OA7. Using Quintile Ranks of Interest Rate Sensitivities

The table examines the robustness of the predictive association between expected inflation sensitivity and firm growth using quintile ranks of expected inflation sensitivity. The dependent variable is annualized future growth rates in per-share per-share sales, EBITDA, earnings, and operating cash flows. The independent variable of interest is the quintile ranks of real interest rate sensitivities (*Real IRS*) and expected inflation sensitivities (*ExpInfSen*). Each quarter, we estimate the cross-sectional regression specified in equation (4). The table reports the average estimated coefficients derived from the quarterly cross-sectional regressions, and the corresponding t-statistics (in the parentheses) are computed using Newey-West standard errors with a lag of 12. The reported R-squared represents the average adjusted R-squared obtained from the cross-sectional regressions. All variables are defined in Appendix B.

	(1) *3Yr Future Per-Share Sales Growth*	(2) *5Yr Future Per-Share Sales Growth*	(3) *3Yr Future Per-Share EBITDA Growth*	(4) *5Yr Future Per-Share EBITDA Growth*	(5) *3Yr Future OPEPS Growth*	(6) *5Yr Future OPEPS Growth*	(7) *3Yr Future Per-Share OCF Growth*	(8) *5Yr Future Per-Share OCF Growth*
Real IRS Quintile	0.004	0.041	-0.024	0.201	-0.045	0.181	-0.110	0.030
	(0.040)	(0.486)	(-0.155)	(1.550)	(-0.223)	(1.011)	(-0.573)	(0.200)
ExpInfSen Quintile	-0.256***	-0.178***	-0.356**	-0.341***	-0.543***	-0.461***	-0.431**	-0.414**
	(-2.941)	(-2.864)	(-2.307)	(-3.703)	(-3.668)	(-3.423)	(-2.203)	(-2.588)
Market Beta	-0.619***	-0.682***	-0.451	-0.408	0.769	0.178	-0.142	-0.052
	(-2.926)	(-5.125)	(-1.111)	(-1.021)	(1.361)	(0.476)	(-0.232)	(-0.224)
Size Decile	0.226***	0.214***	0.411***	0.379***	0.541***	0.377***	0.026	0.089
	(3.369)	(3.678)	(3.230)	(4.306)	(2.911)	(3.340)	(0.301)	(1.544)
Book-to-Mkt	-3.850***	-3.173***	-3.288***	-2.168***	1.028	1.572	-1.170**	-0.989**
	(-11.298)	(-12.216)	(-5.386)	(-6.499)	(0.716)	(1.317)	(-2.039)	(-2.434)
Duration	0.039	0.071	0.252***	0.268***	0.887***	0.634***	1.451***	1.055***
	(0.664)	(1.108)	(3.165)	(2.997)	(8.272)	(8.314)	(13.002)	(9.842)
Leverage	-1.511***	-1.455***	-0.794***	-0.790***	1.581***	1.094***	-0.261	-0.591***
	(-10.788)	(-8.613)	(-4.122)	(-3.760)	(7.801)	(7.223)	(-0.752)	(-2.805)
Accruals	0.288	-0.711	-5.938	-0.149	-25.101***	-15.550***	129.683***	85.231***
	(0.371)	(-0.991)	(-1.659)	(-0.053)	(-6.781)	(-3.808)	(21.813)	(33.379)
Consensus LTG Forecast	0.067***	0.061***	0.108***	0.109***	0.120***	0.135***	0.058***	0.068***
	(7.376)	(13.210)	(7.572)	(7.818)	(3.252)	(3.898)	(3.507)	(4.334)
FY2/FY0 Forecast	0.033***	0.024***	0.104***	0.067***	0.216***	0.141***	0.115***	0.067***
	(7.455)	(3.941)	(7.980)	(5.088)	(8.464)	(6.774)	(6.330)	(4.052)
Past Per-Share Sales Growth	0.050***	0.032***	0.026	0.020*	0.033	0.002	0.055***	0.025*
	(3.677)	(3.589)	(1.581)	(1.992)	(1.308)	(0.214)	(3.257)	(1.781)
Past Per-Share Asset Growth	0.022***	0.020***	-0.006	-0.002	-0.017**	-0.002	0.006	0.015**
	(4.875)	(6.081)	(-0.641)	(-0.256)	(-2.343)	(-0.270)	(0.882)	(2.182)
Momentum	0.058***	0.048***	0.090***	0.056***	0.065***	0.038***	0.043***	0.031***
	(17.296)	(16.336)	(10.565)	(13.839)	(8.467)	(9.538)	(5.077)	(5.989)
Return on Equity	2.651**	2.149**	-10.188***	-7.558***	-31.352***	-21.012***	-9.914***	-6.354***
	(2.450)	(2.115)	(-6.144)	(-6.151)	(-9.139)	(-10.428)	(-8.223)	(-5.165)
PP&E/Asset	1.777*	1.369	0.788	0.200	-0.028	0.100	8.382***	5.423***
	(1.687)	(1.388)	(0.792)	(0.259)	(-0.019)	(0.116)	(5.596)	(5.840)
R&D/Sales	-4.941	-4.315	12.292**	5.570	14.713**	10.708*	8.639	5.345
	(-1.120)	(-1.156)	(2.140)	(1.108)	(2.523)	(1.809)	(1.395)	(1.320)
SG&A/Sales	1.323	1.266	3.738*	3.738*	2.599	3.413	1.410	2.319
	(1.134)	(1.191)	(1.688)	(1.835)	(1.081)	(1.551)	(0.611)	(1.207)
Merger	-0.195	-0.159	0.182	0.145	-0.334	-0.180	0.536**	0.252
	(-1.498)	(-1.011)	(0.609)	(0.568)	(-0.760)	(-0.499)	(2.162)	(0.804)
HP ProdMktFluid	0.140**	0.114	-0.003	0.070	0.036	0.127	0.156	0.130
	(2.125)	(1.633)	(-0.032)	(0.725)	(0.269)	(1.367)	(1.171)	(1.164)
HP HHI	-0.682***	-0.656**	-1.694**	-0.953	-1.480	-0.713	-2.433***	-1.879***
	(-3.144)	(-2.437)	(-2.185)	(-1.632)	(-1.341)	(-0.777)	(-4.507)	(-3.033)
Intercept	0.581	-1.757	-5.518**	-8.255***	-22.713***	-19.849***	-15.967***	-12.863***
	(0.265)	(-0.594)	(-2.033)	(-3.180)	(-5.979)	(-6.175)	(-10.676)	(-5.239)
Observations	80,491	67,792	70,359	59,218	68,313	57,600	73,310	61,420
Number of quarters	88	81	88	81	88	81	88	81
Adjusted R-squared	0.224	0.222	0.168	0.158	0.171	0.169	0.188	0.184
Industry Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Life Cycle Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes