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Equity Returns and Monetary Policy Surprises: Evidence from Sweden

Heterogeneity Across Sectors, Firm Sizes, and Forms of Central Bank Communication

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This thesis examines how Swedish equity returns respond to the unanticipated component of Riksbank policy communication, and whether the response differs across sectors, firm size segments, and between regular policy announcements and the publication of meeting minutes. The question matters because monetary policy affects discount rates, expected cash flows and financing conditions at the same time, and the Swedish evidence on how different parts of the market are affected is limited. Policy surprises are measured as 30-minute changes in Swedish swap rates from the Riksbank's event study database, with the 10-year rate as the preferred horizon and the 1-month rate as a short horizon extension. A pooled interacted regression on 30-minute OMXSPI returns uses 265 scheduled events (2004-2025), and separate regressions on daily index returns use 33 screened regular announcements (2016-2025), with 57 unscreened announcements as a robustness sample. At regular announcements the 30-minute broad market response is negative and significant, whereas the response at minutes publications is indistinguishable from zero, and the difference between event types is significant only at the 10-year horizon. Measured on daily returns, the aggregate response is negative but insignificant. Significant responses appear in Real Estate, Telecommunications and Consumer Staples, and in the small and mid cap segments, so the pattern seem to follow rate sensitivity and firm size rather than revenue cyclicality, which points to the discount rate and credit channels rather than the cash flow channel. The thesis widens the Swedish evidence to a broader cross-section and tests announcements against minutes directly.

Bachelor’s thesis in Economics, 15 credits
Spring Semester 2026
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1. Introduction

Monetary policy communication is a central determinant of financial market outcomes. Central bank policy decisions and statements move asset prices in real time, and a large body of international evidence shows that equity prices react primarily to the unexpected component of policy news rather than to the policy action itself, since expected outcomes are already reflected in prices (Kuttner, 2001; Rosa, 2011). Monetary surprises associated with changes in the policy rate of the Swedish central bank are interesting because they affect discount rates, expected cash flows, and financing conditions simultaneously. For investors, these affect the exposure of portfolios to central bank risk. For policymakers, they determine whether the transmission of a given rate decision is uniform across sectors of the economy or concentrated in particular industries and firm types. A growing literature documents that this transmission is far from uniform, with rate sensitive sectors, financially constrained firms, and smaller companies typically reacting more strongly than the broad market (Akarsu et al., 2025; Baek et al., 2025).

Despite extensive international evidence (for example Bernanke & Kuttner, 2005; Rosa, 2011; Chebbi & Derbali, 2019; Pal & Garg, 2019), the Swedish equity market has received relatively little direct attention. This is despite Sweden's interesting combination of a small open economy, an explicit inflation target, and a published policy rate forecast, which makes it a distinctive case where evidence from other countries may not apply directly (Almerud et al., 2024). This thesis examines how unexpected monetary policy communication by Sveriges Riksbank affects Swedish equity returns, and in particular whether the response differs across sectors, across firm size segments, and between regular policy announcements and the published meeting minutes. Within this broader question, we ask whether cyclical sectors exhibit stronger reactions than the broad market and defensive sectors weaker ones, whether small cap indices respond more strongly than large cap indices, and whether announcements generate larger responses than minutes.

To answer these questions, an event study is conducted using high frequency Swedish swap rate data to identify monetary policy surprises. The surprise associated with a given event is measured as the change in the swap rate in a narrow window around the Riksbank's announcement. This proxies the unanticipated component of the policy news as perceived by financial market participants. The data combines surprise measures from the Riksbank's public event study database with daily return data for a broad market index and eleven sectoral indices,

as well as for three firm size segments, over the period from July 2016 to November 2025. The Riksbank database records three types of events, namely regular policy announcements, the publication of meeting minutes, and extraordinary announcements.

For the sectoral and firm size analysis, the event sample is constrained by the availability of daily index data, which limits the analysis to events for which corresponding index returns can be observed. After excluding extraordinary events and dates contaminated by major concurrent macroeconomic releases, 33 out of 57 regular announcements remain. The comparison between regular announcements and minutes does not require sectoral index data and can therefore instead use the 30-minute market index returns given by the Riksbank. This allows the analysis to use the Riksbank's full event sample, including 131 regular announcements and 134 minutes publications, and avoids the shorter historical coverage of the daily index data.

Three samples are used throughout. These are referred to by the same names throughout the paper. The main sample consists of the 33 screened regular announcements and is used for the sectoral, sector group, firm size and aggregate results, while the robustness sample consists of the 57 unscreened regular announcements. Every one of the specifications is re-estimated on this sample. The full event sample consists on the other hand of the 265 scheduled events in the Riksbank database, 131 regular announcements and 134 minutes publications, and is used only for the comparison between the two forms of communication. The 10-year surprise is the preferred specification in every part of the analysis, for the reasons written about in Section 4.1. The 1-month surprise is reported alongside it as a short horizon extension.

The results indicate that Swedish equity prices respond to the unanticipated component of Riksbank communication, but that the response is concentrated in regular policy announcements and also in particular parts of the market. Within the 30-minute event window, a contractionary surprise (unexpected increase) at a regular announcement is associated with a significant decline in the broad market index. The response at minutes publications is close to zero at the 1-month horizon and positive but insignificant at the 10-year horizon. At the 10-year horizon the difference between the two event types is significant at the five percent level. The aggregate response is negative at both horizons but cannot be distinguished from zero. Heterogeneity is present. Real Estate, Telecommunications and Consumer Staples, together with the small and mid cap segments, respond significantly and by roughly two to four times the aggregate estimate, while the large cap segment behaves essentially like the broad market.

Estimated responses are larger at the 10-year than at the 1-month horizon for sixteen of the eighteen index series.

The closest related studies to this paper are Blomberg and Forell (2019), who use an event study of 75 Riksbank repo rate announcements between 2007 and 2019 to examine abnormal returns in Swedish banking and real estate, and Brosgård and Lindblom (2025), who study short term reactions of Swedish bank stocks to both rate decisions and Riksbank communication tonality over 2020-2025. Both find limited, asymmetric effects and draw the conclusion that rate decisions appear to be largely anticipated. In this study, a regression based event study framework is applied, similar to that of McCredie et al. (2016), who study the equity market effects of policy announcements and meeting minutes as separate event types for Australia.

This thesis contributes to the literature in three ways. First, the unanticipated component of Riksbank policy decisions is isolated using swap rate movements rather than the realised repo rate change. This is different compared to Blomberg and Forell (2019), who measure equity reactions around repo rate announcements without separating the anticipated and unanticipated components. It is also different to Brosgård and Lindblom (2025), who proxy policy surprises with the rate decision dummy and a tonality score. Second, where Blomberg and Forell (2019) and Brosgård and Lindblom (2025), examine mainly banking and real estate, the scope is here widened to eleven sectoral indices and three firm size segments. This makes it possible to test whether the responses differ across sectors and firm sizes. Third, it compares regular announcements and meeting minutes within a single pooled specification in which the policy surprise is interacted with an indicator for minutes. This delivers a direct test of whether the two forms of central bank communication have effects of different magnitude and/or significance on equity prices.

The rest of the thesis proceeds as follows: Section 2 reviews the empirical literature, Section 3 develops the theoretical framework and states the predictions that then motivate the empirical analysis, Section 4 describes the data; Section 5 presents the methodology and Sections 6-8 present the results, discussion, and conclusion.

2. Literature Review

The existing literature is organised into four themes. These are the aggregate market responses to monetary policy surprises, sectoral heterogeneity in those responses, firm size effects, and the role of central bank communication (in particular the difference between announcements and minutes). Within each theme, methodological choices vary across mainly high frequency event studies, vector autoregressions (VAR), and textual tonality analysis.

The first strand of literature concerns the aggregate equity market reaction to monetary policy surprises. The overall finding across the international literature is that unexpected monetary tightening has a negative effect on stock returns (Rosa, 2011; Basistha & Kurov, 2008). Rosa (2011) studies the US over 1999-2009 using an intraday event study approach with futures-based surprise measures around FOMC (Federal Open Market Committee) announcements and finds that contractionary monetary policy surprises lead to a statistically significant decline in aggregate equity prices. Basistha and Kurov (2008) increase this evidence using US data over 1990-2004 by analysing the combined effect of both policy surprises and proxies for the macroeconomic state. Their event study regressions show that the negative response of equity returns to monetary tightening is significantly stronger during recessions and periods of tight credit conditions.

The aggregate effect may not be limited to domestic markets. Chebbi and Derbali (2019) examine if there are any potential spillovers from the US to the euro area over 2004-2008, by trying to isolate the unanticipated component of policy with federal funds futures. They find that US monetary policy surprises have a strong effect on the volatility of European equity returns. They also report that the responsiveness is similar across the European markets they study.

Furthermore, the aggregate market response to monetary policy shocks may not only be consistent in developed economies such as the US. For instance, Pal and Garg (2019) study the Indian equity market over 2004-2016 in an event study framework complemented by a structural VAR. Their results show that monetary policy surprises have a negative and statistically larger impact on equity returns than other macroeconomic shocks. This is largely consistent with the US evidence.

There seems to be an asymmetry in the aggregate market response to policy surprises, which is a central finding in the literature. As previously noted, the equity response appears to depend on the state of the economy (Basistha & Kurov, 2008). Also, contractionary surprises tend to give larger absolute responses compared to expansionary surprises. Tan et al. (2010) document a real output asymmetry across four ASEAN (Association of Southeast Asian Nations) economies over 1980-2006 using a Markov-switching model, finding that contractionary policy shocks have a bigger absolute impact than expansionary shocks. Though output is studied (and not equity returns), the equity response might inherit this asymmetry. This would mean that contractionary surprises may generate larger absolute equity responses than expansionary surprises of similar magnitude.

A second strand documents that monetary policy surprises affect sectors unequally. Sengupta (2014) studies India over 1996-2012 using a structural VAR on monthly sectoral output data. He finds that construction and manufacturing are among the most sensitive sectors to monetary policy shocks, reflecting their capital intensity, leverage, and dependence on rate sensitive funding. Baek et al. (2025) also do this kind of analysis on equity returns. Using US monthly data from 2019-2022 with a similar VAR-based approach, they show that cyclical sectors such as oil and gas, retail, and durables exhibit the strongest equity responses to monetary policy shocks. Firms oriented around services and essential goods are instead more resilient.

Within this strand, Blomberg and Forell (2019) analyse 75 Riksbank repo rate announcements over 2007-2019 in an event study framework, focusing on a limited number of large firms within banking and real estate. Their abnormal return analysis (additional returns over that predicted by a model) indicates sectoral asymmetries. Rate decreases generate significant positive abnormal returns in both sectors, while rate increases produce significant effects only for banking. Brosgård and Lindblom (2025) study short term reactions of Swedish bank stocks to both rate decisions and the tone of Riksbank monetary policy reports over 2020-2025, using a daily event study regression. They find that the impact of repo rate announcements on bank stock returns is statistically significant but however quite small, which suggest that rate decisions are largely anticipated and already priced in before the announcement.

A third strand is about heterogeneity by firm size. Chava and Hsu (2020) study US firms over 1991-2008 using an event study. They find that financially constrained firms respond significantly more strongly than unconstrained firms to monetary policy surprises, attributing the difference to greater dependence on external financing. Akarsu et al. (2025) reach a similar

conclusion in a panel data setting, using Turkish firm level data over 2017-2024. They find that smaller, more constrained firms exhibit larger responses to monetary policy announcements.

A fourth strand examines how the type and tone of central bank communication affect the equity market responses. Gu et al. (2022) use textual sentiment analysis to FOMC minutes for the US over 2005-2018, showing that a more optimistic tone is associated with higher equity returns, particularly during periods of high monetary policy uncertainty. In the literature, an asymmetry seems to emerge between policy announcements and the publication of meeting minutes. McCredie et al. (2016) study Australia over 2003-2013 using an event study within narrow windows around Reserve Bank of Australia announcements and minutes. They find that both announcements and minutes releases have a significant effect on Australian equity returns and volatility, and that the two effects are of comparable size, although the results for minutes are somewhat weaker. They interpret this as evidence that the initial announcement carries more novel informational content. Minutes on the other hand, are less likely to contain genuinely unexpected information.

3. Theoretical Framework

Understanding how monetary policy surprises affect equity prices requires a framework that connects central bank actions to asset valuation through economic mechanisms. This section develops that framework in three steps. First, the channels of transmission from policy rates to equity prices are derived from the dividend discount model, and the resulting predictions about sectional heterogeneity are made. Second, the role of expectations and the efficient market hypothesis is examined to motivate why only the unanticipated component of policy news should move prices at the time of the announcement. Third, the information effect and the distinction between policy announcements and meeting minutes are discussed, leading to predictions about which form of communication should generate the largest equity response.

3.1 The Dividend Discount Model and the Channels of Transmission

The standard framework for relating monetary policy to equity prices is the dividend discount model. The price of a stock equals the present value of all expected future cash flows to shareholders (Gordon, 1962):

$$P_{i,t} = \sum_{s=1}^{\infty} \frac{E_t[D_{i,t+s}]}{(1 + r_{i,t+s})^s} \quad (1)$$

where $P_{i,t}$ is the price at time t of the stock (or sector index) i, $E_t[D_{i,t+s}]$ means expected future dividends or, more broadly, cash flows accumulating to that sector at horizon $t + s$, and $r_{i,t+s}$ is the required rate of return for sector i at horizon $t + s$. This rate of return includes a risk-free component and a sector specific equity risk premium. Although the equation is written for a single sector i, every term on the right-hand side (expected cash flows, the risk-free rate, and the sector specific risk premium) can in theory differ across sectors. The transmission channels discussed below operate on these three components in different ways, and it is the cross-sectional differences in these components that create the heterogeneity predictions stated below. Equation (1) shows the two fundamental routes through which a monetary policy surprise can affect stock prices, namely by altering the discount rate in the denominator, or by revising expected future cash flows in the numerator. These two routes correspond to distinct transmission channels (Mishkin, 1996).

The discount rate channel is the most direct channel. An unexpected increase in the policy rate raises the risk-free component of the required return on equity, increases the denominator in Equation (1), and reduces the present value of future cash flows. This means that contractionary surprises decrease equity valuations, and expansionary surprises raise them. This mechanism underlines the prediction that equity returns, and monetary policy surprises should be negatively correlated (Bernanke & Kuttner, 2005; Rosa, 2011). The prediction that follows for the empirical analysis is that contractionary (expansionary) monetary policy surprises are negatively (positively) associated with equity returns in the Swedish equity market.

The risk premium channel acts through the denominator of Equation (1), through the sector specific equity risk premium component of $r_{i,t+s}$. An unexpected tightening may raise market uncertainty and reduce risk appetite, which in turn increases the demanded equity premium resulting in further reduction of prices. The total equity response to a surprise may therefore exceed what the discount rate change alone would predict, because changes in the risk premium amplify the effect. Bernanke and Kuttner (2005) find that most of the US equity response to policy surprises reflects changes in expected excess returns rather than in the risk free rate or expected dividends. Because risk premiums differ across sectors, with defensive sectors having lower risk premiums than cyclical sectors, this channel contributes to the heterogeneity that the

analysis is designed to detect. The risk premium channel therefore predicts that there will be sectoral heterogeneity in the response to monetary policy surprises.

The cash flow channel operates through the numerator of Equation (1). Higher interest rates raise borrowing costs for firms and households, reduce consumption and investment and reduce aggregate demand (Mishkin, 1996). Lower expected economic activity means lower expected corporate cash flows. This lowers equity valuations further. The channel therefore depends on the sensitivity of an individual firm's revenue, meaning its impact may therefore differ across firms. Those whose earnings are tightly linked to macroeconomic cycles should be more exposed than firms providing inelastic essential goods and services (Baek et al., 2025; Sengupta, 2014). The sectoral prediction that follows from this channel, taken together with the credit channel below, is stated at the end of this section.

The credit channel, developed by Bernanke and Gertler (1995), operates alongside the dividend discount equation rather than directly through any single one of its components. It consists primarily of two sub-channels, namely the balance sheet channel and the bank lending channel. Through the balance sheet channel, a surprise rise in interest rates weakens the balance sheets of borrowing firms. The external finance premium they face then increases. Through the bank lending channel, monetary tightening reduces the supply of bank credit directly, making external financing more difficult for firms that depend heavily on bank lending. As a result, firms that are more dependent on external debt financing are expected to be more strongly affected by monetary policy surprises. The credit channel also has direct implications for firm size. Smaller firms are typically more financially constrained and rely more heavily on external bank credit, with fewer alternative funding options (Bernanke & Gertler, 1995). When monetary policy tightens unexpectedly, the balance sheet and bank lending channels may therefore affect smaller firms way more than the aggregate market. The prediction that follows is that small cap equity indices exhibit stronger responses to monetary policy surprises than large cap indices.

The channels described above do not operate uniformly across firms because of differences in sectors, the cyclicality of their revenues and their dependence on external financing. The revenues of cyclical sectors are closely tied to aggregate economic activity, which means that unexpected tightening simultaneously reduce expected cash flows through reduced demand and raises financing costs through the credit channel. This increases the equity response relative to the broad market (Baek et al., 2025). The revenues of defensive sectors are on the other hand

largely isolated from macroeconomic fluctuations, which limits their exposure to the cash flow channel. Their financing structures tend to rely less heavily on debt, which reduces their sensitivity to the balance sheet and bank lending channels (Baek et al., 2025; Bernanke & Gertler, 1995). The predictions that follows are that cyclical sectors exhibit stronger equity responses to monetary policy surprises than the broad market, while defensive sectors exhibit weaker responses.

3.2 Expectations and the Efficient Market Hypothesis

The transmission channels described above operate on equity prices if a given policy event contains genuinely new information for the market. The role of expectations in determining how these channels transmit monetary surprises therefore needs to be examined.

Central banks influence financial conditions primarily through their control over short term interest rates, borrowing costs, and expectations about future economic activity (Mishkin, 1996). This influence goes beyond rate decisions themselves to include communication about the future direction of monetary policy. Woodford (2003) argues that, because financial markets are forward looking, statements about future rates can move long term expectations and asset prices independently of any policy action. There is therefore a distinction between what central banks do and what they signal. In addition, markets may have already anticipated a given action, so that only an unexpected component arrives as news. This insight has a direct implication for asset prices. Under the semi-strong form of the efficient market hypothesis (EMH), asset prices at any point in time already reflect all publicly available information (Fama, 1970). Events that are fully anticipated by market participants should therefore not change equity prices at the time they occur, because the information has already been incorporated into valuations. Only the unanticipated component of a policy event should move prices. Applied to monetary policy, this implies that the policy rate change itself is of less relevance than the monetary policy surprise, defined as the difference between the actual announced policy and the policy change priced in prior to the announcement (Kuttner, 2001). Gürkaynak et al. (2005) show that the surprise content of a single policy event has two dimensions, namely a target factor capturing news about the current policy rate, and a path factor capturing news about its future trajectory. This distinction matters for this study because different forms of central bank communication can update the two factors in different proportions, as discussed below.

3.3 The Information Effect and Central Bank Communication

Monetary policy surprises may contain different types of information simultaneously, which complicates interpretation of equity responses. For instance, if a central bank raises rates by more than what was expected by financial markets, the surprise may reflect a stronger than expected intention to tighten financial conditions, which under the discount rate channel should compress valuations. A larger than expected tightening may however also reveal that the central bank expects stronger growth or inflation than the market did, so that the surprise carries information about the state of the economy as well as about policy. In this case the same surprise communicates both a negative signal via the discount rate channel and a stronger than expected positive signal about future cash flows. This might partially offset (or even reverse) the negative discount rate effect. This mechanism, often referred to as the information effect, implies that the relationship between tightening surprises and equity returns does not necessarily need to be negative. Coefficients may be zero or even positive when the information content of policy events is large. This information effect also has direct implications for comparing announcements with meeting minutes, to which we now turn.

With forward looking market participants, communication about future monetary policy can be more important for moving asset prices than the actual rate change. The informational content of a policy event, and therefore its effect on equity prices, depends on whether it resolves uncertainty about the current rate decision or about future policy expectations. Policy announcements primarily resolve uncertainty about the current policy rate decision and therefore tend to be associated with the target according to Gürkaynak et al. (2005). Their surprise content is large because they directly reveal a decision that had previously been unknown. Meeting minutes published after the policy decision contain less new information about the current rate. Instead, their informational content lies in the detail they provide about the Riksbank's view of future economic conditions, which means they are more likely to update the path factor than the target factor. The prediction that follows is that regular policy announcements generate stronger immediate equity market responses than the meeting minutes.

4. Data

This study combines monetary policy surprise measures from Sveriges Riksbank's event study database with equity market data for the Swedish stock market. The Riksbank database contains monetary policy events from 2004 onwards together with interest rate and market index data, while the equity index series used to examine sectoral and firm size heterogeneity are available from 2016 onwards. The analyses of sectoral, cyclicality group, firm size and aggregate responses use these daily index returns and are therefore restricted to the overlap between the two sources. The comparison between regular policy announcements and the meeting minutes uses the 30-minute return on the OMXSPI supplied directly by the Riksbank, and can therefore use the full event history from 2004 onwards. Section 4.1 describes the Riksbank event database, Section 4.2 the equity index data, and Section 4.3 the construction of the samples and of the variables used in the comparison between event types.

4.1 Riksbank Event Database

The Riksbank event database (Almerud et al., 2024; Sveriges Riksbank, 2025) observes movements in Swedish swap rates around monetary policy communication. For each event the database reports the event date, the event type, and the change in the swap rate over a 30-minute window that runs from ten minutes before to twenty minutes after the communication. This is computed as the difference between the median in the post-window and the median in the pre-window. This is done separately for each of the seven reported maturities. It also has the return on the OMXSPI over the same window. The database contains three event types, namely regular policy announcements at which the policy rate decision is published, the minutes publications from the monetary policy meeting, and extraordinary announcements (meaning announcements made outside the schedule). Extraordinary announcements are excluded from the analysis throughout, as they occur under circumstances that are not comparable to those of scheduled communication. In total the Riksbank database contains 289 events. Of these 131 are regular policy announcements, 134 are minutes publications, and 24 are extraordinary announcements. The used version of the database was downloaded on December 22, 2025.

Of the seven maturities that are in the database, one long horizon is used as the main specification and one short horizon as an extension. The 10-year swap rate (the longest available) is used as the main horizon. This choice comes from the dividend discount framework of Section 3.1. Because the price of an equity claim is the present value of cash

flows over a long horizon, its value is affected by long term discount rates rather than by the current level of the policy rate. Because much of the Riksbank's communication works through expected future policy rather than the current setting, a longer maturity surprise measure is best suited for capturing the component of policy news that equity prices incorporate (Gertler & Karadi, 2015). The 1-month swap rate (the shortest available) is used as a short horizon extension. It does a better job at isolating the immediate target component of the surprise and follows the short horizon approach established in the earlier literature (Kuttner, 2001; Bernanke & Kuttner, 2005). Investigating both horizons indicates how much of the equity response reflects the current policy setting and how much reflects the expected policy path.

Table 1. Descriptive Statistics for Scheduled Riksbank Monetary Policy Events, 2004-08-20 to 2025-11-11

Variable	Mean	Median	SD	Min	P25	P75	Max	Skew.	Ex. kurt.	Zeros (%)	t (μ = 0)
All scheduled policy events (n = 265)											
Change in 1-month interest rate (bp)	-0,23	0,00	5,13	-51,00	-0,50	1,00	15,00	-4,66	39,66	25,3	-0,73
Change in 10-year interest rate (bp)	-0,33	-0,20	1,79	-8,00	-1,00	0,50	7,20	-0,42	4,11	3,4	-2,98
OMXSPI return, 30-minute event window (%)	0,000	0,015	0,315	-1,567	-0,113	0,130	1,550	-0,36	5,67	0,8	0,00
Regular policy announcements (n = 131)											
Change in 1-month interest rate (bp)	-0,65	0,00	6,90	-51,00	-0,96	1,45	15,00	-3,69	22,74	20,6	-1,08
Change in 10-year interest rate (bp)	-0,57	-0,50	2,33	-8,00	-1,85	0,50	7,20	-0,10	1,81	2,3	-2,81
OMXSPI return, 30-minute event window (%)	0,025	0,040	0,338	-1,136	-0,105	0,154	1,550	0,19	4,23	0,0	0,83
Publication of policy meeting minutes (n = 134)											
Change in 1-month interest rate (bp)	0,18	0,00	2,30	-15,64	-0,48	0,58	9,25	-1,40	19,13	29,9	0,93
Change in 10-year interest rate (bp)	-0,09	-0,05	0,98	-3,53	-0,59	0,42	3,00	-0,35	3,05	4,5	-1,07
OMXSPI return, 30-minute event window (%)	-0,024	0,002	0,291	-1,567	-0,114	0,097	0,963	-1,28	7,70	1,5	-0,95

Notes: The table reports descriptive statistics for scheduled monetary policy events published by Sveriges Riksbank. Extraordinary (unscheduled) announcements are excluded, as they are not used in the empirical analysis. Change in 1-month interest rate and Change in 10-year interest rate are changes in Swedish interest rate swaps of the stated maturity over the event window (ten minutes before to twenty minutes after the event), expressed in basis points (1 bp = 0.01 percentage point). OMXSPI return is measured over the same 30-minute event window, expressed in percent. All variables are taken from the Riksbank's monetary policy event study database. P25 and P75 denote the first and third quartiles and Ex. kurt. excess kurtosis, which equals zero for a normally distributed variable. Zeros (%) is the percentage of events at which the recorded change is exactly zero. t (μ = 0) is the t-statistic of a two-sided test that the population mean equals zero (absolute values above 1.96 indicate significance at the 5% level). Source: Sveriges Riksbank (2025); own calculations.

4.2 Equity Index Data

The equity data consist of Swedish sector and firm size indices at the daily frequency, collected from the Nasdaq Nordic website, covering 16 May 2016 to 13 May 2026 (Nasdaq, 2026). Ten years is the maximum history available from this source, which is what determines the starting point of the daily sample. The downloaded series extend past the last monetary policy event recorded in the Riksbank database. Because only trading days on which a scheduled policy event takes place enter the regressions, the estimation sample ends with the final regular announcement on 5 November 2025. The observations between that date and 13 May 2026 are not used. The unconditional return statistics in Table A1 are cut at the same date for comparability. Where the thesis refers to the sample period of the heterogeneity analysis, the period meant is therefore 6 July 2016 to 5 November 2025, not the full span of the downloaded series. Closing prices are used, from which event day log returns are calculated. These are used, following standard practice in empirical finance, as they treat positive and negative price changes symmetrically. Using log returns is therefore well suited for linear regression analysis.

Industries are classified according to the Industry Classification Benchmark (FTSE Russell, 2026), which Nasdaq adopts as its sector classification framework. One equity index is selected for each of the eleven ICB sectors. For most sectors Nasdaq publishes an index carrying the name of the sector itself, and that index is used. Where the corresponding index lacks sufficient history over the sample period, the largest available index consisting entirely of firms belonging to that sector is used instead. The resulting mapping is reported in Table 2. Worth noting is that Utilities consists of only a single listed company over the sample period, and results for that series are because of this less reliable than for the other ten.

The eleven sector indices are further grouped into cyclical, sensitive and defensive sector groups, following the industry group definitions in Morningstar Global Equity Classification Structure (Morningstar, 2019). Morningstar classifies its own sector categories rather than the ICB sectors used here, so the grouping is applied by matching each ICB sector to the closest corresponding Morningstar category (see Table 2). The cyclical group contains Basic Materials, Consumer Discretionary, Financials and Real Estate. The sensitive group contains Energy, Industrials, Technology and Telecommunications, and the defensive group contains Consumer Staples and Health Care. Utilities is not assigned to a group. Since the index consists of a single listed company, including it would give one firm a third of the weight in the defensive portfolio. The estimated defensive response would largely reflect that firm rather

than the sector group, which would not be fair. Group returns are constructed as equally weighted averages of the underlying sector indices. Three firm size segments, Small Cap, Mid Cap and Large Cap, are included in order to test the firm size prediction stated in Section 3.1.

Gross Index (GI) variants are used for the sector and size indices rather than Price Index (PI) variants, since gross indices reinvest dividends and therefore avoid mechanical price movements on dividend dates that are unrelated to monetary policy. This improves the consistency of the event day return measure. OMXSGI is a value weighted index of all stocks listed on Nasdaq Stockholm and is the standard broad market benchmark for the Swedish equity market. It is used as the dependent variable in the aggregate market specification, which provides a benchmark against which the sectoral and size segment results can be compared.

Table 2. Mapping Between ICB Sectors, Nasdaq OMX Stockholm Sector Indices, and Morningstar Classifications

ICB Sector	Matched Nasdaq Index	Approx. Morningstar Sector Classification
Basic Materials	OMX Stockholm Basic Materials GI	Cyclical *(Basic Materials)*
Consumer Discretionary	OMX Stockholm Consumer Products and Services GI *(Insufficient history: OMX Stockholm Consumer Discretionary GI)*	Cyclical *(Consumer Cyclical)*
Consumer Staples	OMX Stockholm Food, Beverage and Tobacco GI *(Insufficient history: OMX Stockholm Consumer Staples GI)*	Defensive *(Consumer Defensive)*
Energy	OMX Stockholm Energy GI	Sensitive *(Energy)*
Financials	OMX Stockholm Financials GI	Cyclical *(Financial Services)*
Health Care	OMX Stockholm Health Care GI	Defensive *(Healthcare)*
Industrials	OMX Stockholm Industrials GI	Sensitive *(Industrials)*
Real Estate	OMX Stockholm Real Estate GI	Cyclical *(Real Estate)*
Technology	OMX Stockholm Technology GI	Sensitive *(Technology)*
Telecommunications	OMX Stockholm Telecommunications GI	Sensitive *(Communications Services)*
Utilities	OMX Stockholm Utilities GI *(Note: index consists of a single company)*	Defensive *(Utilities) - not assigned to a group*

Notes: The table maps ICB industry sectors to the closest available Nasdaq OMX Stockholm sector indices used in the empirical analysis. Where a direct sector index lacked sufficient historical observations over the sample period, the largest Nasdaq index consisting fully of companies belonging to that specific sector was used instead. The final column provides an approximate classification into cyclical, defensive, and sensitive sectors based on Morningstar's sector grouping methodology. The sector names reported in parentheses is the original Morningstar sector categories, which were mapped as closely as possible to the corresponding ICB sectors used in the analysis. Utilities is classified as defensive by Morningstar but is not included in the defensive portfolio used in the analysis, because the index consists of a single listed company. The three groups therefore cover ten of the eleven sectors. Sources: FTSE Russell (2026), Nasdaq (2026) and Morningstar (2019); the mapping between classifications is our own.

4.3 Sample Construction and Screening

A matched dataset is constructed by mapping each Riksbank event to the corresponding trading day return for each equity index. Across the overlap between the two sources, 128 Riksbank events can be matched to the daily index data, spanning 6 July 2016 to 11 November 2025. The remaining 161 events in the database happen before the daily index series begin. The matched sample contains 57 regular policy announcements, 59 minutes publications and 12 extraordinary announcements. The heterogeneity analysis is restricted to only regular policy announcements.

Because the returns are measured over the full trading day, the measured response on an announcement day may reflect any other news released on that day rather than the policy surprise alone. To identify such days, the 57 announcement dates are compared with calendar data from FXStreet's economic calendar (FXStreet, 2026). Every announcement date on which the calendar reports at least one other announcement denominated in SEK is excluded, irrespective of the stated impact level of that release. The screen is therefore mechanical rather than based on our judgement. It removes 24 of the 57 dates and leaves a main sample of 33 regular announcements, spanning 6 July 2016 to 5 November 2025. The 24 excluded dates are removed from the main sample only. The unfiltered set of 57 regular announcements is keept as a robustness sample, and every specification estimated on the main sample is re-estimated on that as well.

For the comparison between regular announcements and minutes, the 30-minute event-window return on the OMXSPI is used as the dependent variable instead of the daily index returns. It comes directly from the Riksbank event database. Two considerations motivate this choice. First, the series is available for every event in the database, so the comparison is not constrained by the ten-year coverage of the daily indices. It uses all scheduled events (131 regular announcements and 134 minutes publications) spanning 20 August 2004 to 11 November 2025. Second, the return and the surprise are measured over the same 30-minute window, which is short enough that no screening for concurrent releases is required. The difference is that the OMXSPI is a price index rather than a gross index, and that its returns are measured over 30 minutes rather than over a full trading day, both of which differ from the daily index series used in the previous sample.

Two further variables are constructed on this sample and are used only in the comparison between the two forms of communication. The first, $Minutes_t$, is an indicator that equals one when event t is the publication of a minute and zero when it is a regular policy announcement. Extraordinary announcements belong to neither category and are removed before the indicator is formed, so that the pooled sample consists of the 265 scheduled events described above. The second variable is the interaction between the surprise measure and that indicator, $\Delta s_t \times Minutes_t$, which equals the 30-minute swap rate change on minutes days and zero on announcement days. Descriptive statistics for the two event types are reported separately in Table 1.

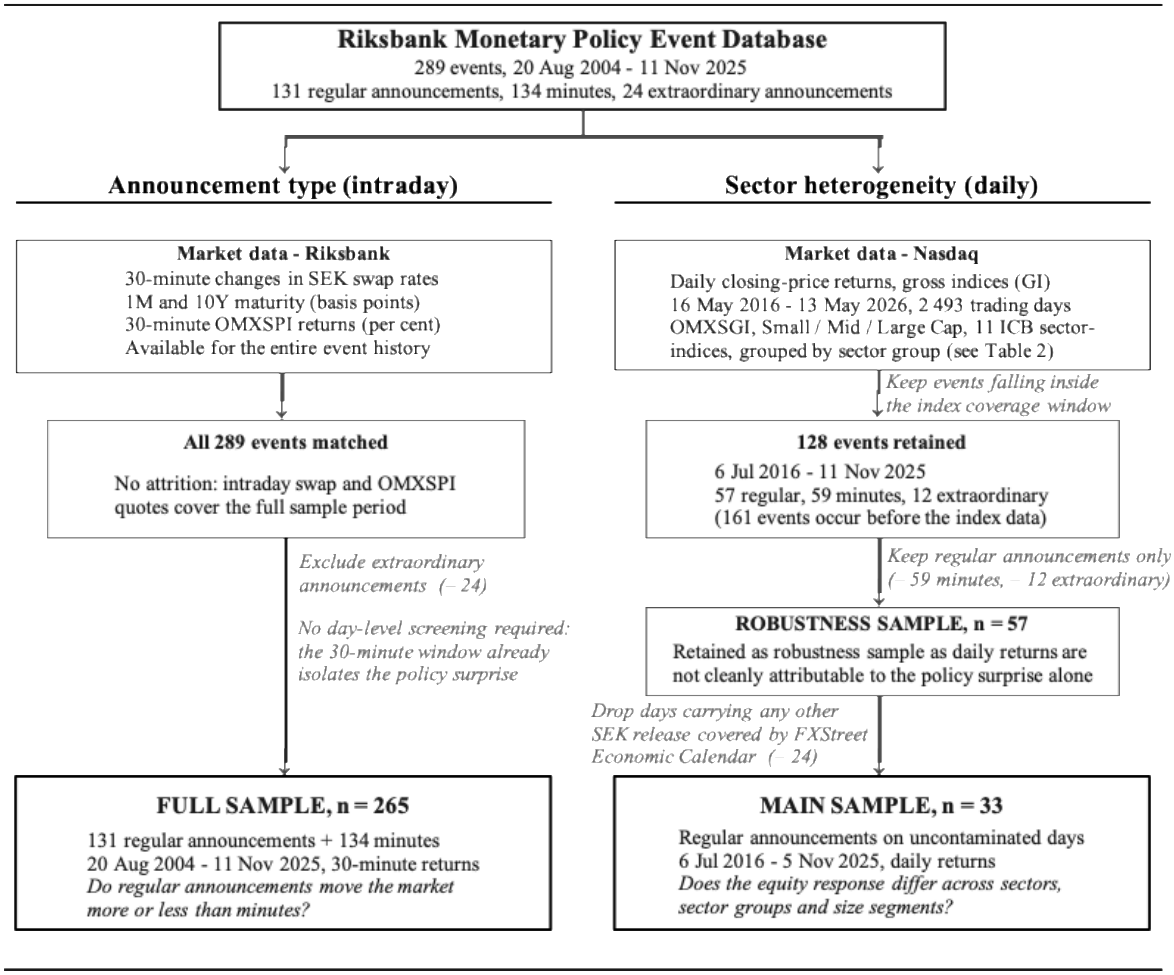

Figure 1. Construction of the Estimation Samples

Notes: The figure summarises how the two estimation samples used in the empirical analysis are constructed from a common set of Riksbank policy events. Extraordinary announcements are excluded from every regression. The left-hand branch draws on the Riksbank's own event database, which provides swap rate and OMXSPI quotes over a 30-minute window for the full sample period. The window runs from ten minutes before to twenty minutes after the release, and within it the policy surprise is plausibly isolated from other news. This branch pools both scheduled event types, 131 regular announcements and 134 minutes publications, and the event type enters the specification as an indicator variable and through its interaction with the surprise measure, as described in Section 4.3. The right-hand branch instead uses Nasdaq gross indices (GI), because sector and size indices are only published on a gross basis and only at daily closing prices. Since the returns here are

observed over the full trading day, the estimated response may be contaminated by other news released on the same day. Every announcement day on which the FXStreet Economic Calendar reports another SEK-denominated release is therefore removed, irrespective of the release's stated impact level. Minutes are not screened in this way, as they do not enter the main sample. The 57 unscreened regular announcements are retained as a robustness sample. Sources: Sveriges Riksbank (2025), Nasdaq (2026) and FXStreet (2026).

Table 3. Descriptive Statistics for Swedish Equity Index Returns and Policy Surprises around Regular Riksbank Policy Announcements, 2016-07-06 to 2025-11-05 (main sample in black, n = 33; robustness sample in light grey italics, n = 57)

Variable	Mean	Median	SD	Min	P25	P75	Max	Skew.	Ex. kurt.	t (μ = 0)
Basic Materials	-0,353	0,071	1,55	-5,12	-0,55	0,76	1,49	-1,56	2,19	-1,31
	-0,057	*0,099*	*1,42*	*-5,12*	*-0,50*	*0,92*	*2,44*	*-1,27*	*2,75*	*-0,30*
Consumer Discretionary	-0,110	0,138	1,37	-3,59	-0,68	0,67	2,67	-0,73	0,70	-0,46
	0,289	*0,253*	*1,40*	*-3,59*	*-0,38*	*0,98*	*3,70*	*-0,40*	*0,82*	*1,55*
Consumer Staples	-0,154	-0,099	1,35	-4,10	-0,49	0,70	2,53	-1,06	2,54	-0,66
	0,085	*0,089*	*1,30*	*-4,10*	*-0,48*	*0,88*	*3,36*	*-0,63*	*2,31*	*0,49*
Energy	0,193	0,171	1,46	-3,17	-0,51	1,28	2,46	-0,48	-0,24	0,76
	0,205	*0,171*	*1,48*	*-3,17*	*-0,69*	*1,28*	*3,58*	*-0,03*	*-0,42*	*1,04*
Financials	-0,155	-0,032	0,88	-2,66	-0,56	0,46	1,31	-1,10	1,44	-1,01
	0,043	*0,054*	*0,84*	*-2,66*	*-0,26*	*0,60*	*1,90*	*-0,79*	*1,76*	*0,39*
Health Care	0,046	-0,059	1,03	-2,27	-0,56	0,64	2,63	0,30	0,71	0,26
	0,102	*0,093*	*1,06*	*-2,52*	*-0,61*	*0,81*	*2,63*	*-0,05*	*0,12*	*0,73*
Industrials	-0,288	-0,290	1,04	-2,89	-0,64	0,49	1,71	-0,58	0,48	-1,59
	0,040	*0,034*	*1,04*	*-2,89*	*-0,50*	*0,60*	*2,40*	*-0,37*	*0,76*	*0,29*
Real Estate	-0,366	-0,129	1,67	-5,95	-0,92	0,41	2,92	-1,09	2,98	-1,26
	-0,047	*0,091*	*1,60*	*-5,95*	*-0,72*	*0,96*	*2,92*	*-1,17*	*2,80*	*-0,22*
Technology	-0,365	-0,501	1,05	-2,60	-1,11	0,40	1,79	0,02	-0,51	-1,99
	-0,056	*0,067*	*1,06*	*-2,60*	*-0,79*	*0,75*	*1,79*	*-0,40*	*-0,46*	*-0,40*
Telecommunications	-0,041	0,408	1,09	-2,60	-0,61	0,78	1,82	-0,84	-0,09	-0,22
	0,077	*0,287*	*1,05*	*-2,60*	*-0,55*	*0,81*	*2,41*	*-0,57*	*0,25*	*0,56*
Utilities	-0,577	-0,617	2,74	-8,79	-1,85	1,09	6,35	-0,30	2,12	-1,21
	-0,311	*-0,330*	*2,51*	*-8,79*	*-1,59*	*1,09*	*6,35*	*-0,40*	*1,79*	*-0,93*
Cyclical	-0,246	-0,033	1,14	-2,95	-0,52	0,61	1,21	-1,24	0,80	-1,24
	0,057	*0,150*	*1,04*	*-2,95*	*-0,34*	*0,64*	*2,10*	*-1,20*	*1,97*	*0,41*
Sensitive	-0,125	0,004	0,95	-2,41	-0,54	0,60	1,22	-0,93	0,45	-0,76
	0,066	*0,080*	*0,86*	*-2,41*	*-0,36*	*0,76*	*1,60*	*-0,95*	*1,24*	*0,58*
Defensive	-0,054	-0,199	0,86	-1,94	-0,53	0,45	1,73	0,18	-0,07	-0,36
	0,094	*0,036*	*0,90*	*-1,94*	*-0,53*	*0,77*	*2,11*	*0,08*	*-0,45*	*0,78*
Small cap	-0,089	-0,121	0,65	-2,34	-0,48	0,37	0,83	-1,25	3,14	-0,79
	0,088	*0,128*	*0,71*	*-2,34*	*-0,37*	*0,59*	*1,36*	*-0,60*	*1,01*	*0,93*
Mid cap	-0,146	0,126	0,88	-3,12	-0,46	0,50	1,11	-1,39	2,55	-0,95
	0,088	*0,144*	*0,84*	*-3,12*	*-0,33*	*0,62*	*1,37*	*-1,21*	*2,61*	*0,79*
Large cap	-0,211	-0,056	0,88	-2,48	-0,39	0,43	0,85	-1,11	0,61	-1,37
	0,072	*0,147*	*0,83*	*-2,48*	*-0,22*	*0,60*	*1,65*	*-1,12*	*1,82*	*0,66*
OMXSGI	-0,206	-0,085	0,86	-2,39	-0,43	0,46	0,82	-1,14	0,65	-1,37
	0,073	*0,155*	*0,81*	*-2,39*	*-0,20*	*0,59*	*1,62*	*-1,13*	*1,86*	*0,68*
Memorandum: variables measured over a 30-minute window around the announcement										
Δ 1 M interest rate (bp)	-0,14	0,01	3,15	-13,35	-0,65	0,92	5,45	-2,22	9,53	-0,25
	0,21	*0,00*	*3,07*	*-13,35*	*-0,50*	*1,00*	*9,90*	*-0,85*	*7,65*	*0,52*
Δ 10 Y interest rate (bp)	0,23	-0,05	2,10	-3,90	-0,90	0,60	7,20	1,35	3,52	0,63
	-0,01	*-0,20*	*2,02*	*-3,90*	*-1,10*	*0,50*	*7,20*	*1,34*	*2,81*	*-0,04*
OMXSPI return (%)	0,046	0,062	0,286	-0,750	-0,125	0,162	0,859	0,24	2,56	0,93
	0,036	*0,062*	*0,253*	*-0,750*	*-0,100*	*0,159*	*0,859*	*-0,06*	*3,05*	*1,07*

Notes: The table shows descriptive statistics for the sample of regular Riksbank monetary policy announcements. For each variable the numbers in black is the main estimation sample (n = 33) and the numbers in grey italics reports the wider robustness sample (n = 57). The main sample is a subset of the robustness sample and both cover the same calendar period. The first eighteen variables are daily (close-to-close) returns on Nasdaq Stockholm GI indices on the announcement day, expressed in percent. These are eleven sector indices, followed by three sector groups, three size segments and also the OMXSGI. Cyclical is the equal-weighted average of Basic Materials, Consumer Discretionary, Financials and Real Estate. Sensitive is the average of Energy, Industrials, Technology and Telecommunications. Defensive is the average of Consumer Staples and Health Care. Utilities is excluded from Defensive since it includes only one listed firm. The memorandum items are measured over the 30-minute event window around the announcement and are therefore not comparable in magnitude to the daily returns above. The changes in the 1-month and 10-year Swedish market interest rates are expressed in basis points (1 bp = 0.01 percentage points) and are taken from the Riksbank's monetary policy

event study database, and the OMXSPI return is in percent. P25 and P75 are the first and third quartiles and Ex. kurt. is excess kurtosis, which equals zero for a normally distributed variable. t (μ = 0) is the t-statistic of a two-sided test that the population mean equals zero (absolute values above 2.04 (main sample) and 2.00 (robustness sample) indicating significance at the 5% level). Sources: Nasdaq (2026) for the index returns and Sveriges Riksbank (2025) for the memorandum items; own calculations.

5. Methodology

The empirical methodology is based on a regression event study which links equity returns to 30-minute monetary surprises around Riksbank communication. For the heterogeneity analysis the returns are measured over the event day, and for the comparison between announcements and minutes over the same 30-minute window as the surprise. To study heterogeneity, separate regressions are made for each sectoral and firm size index. To test whether cyclical sectors respond more strongly than defensive sectors, the sector indices are grouped into equally weighted portfolios which are then regressed on separately. To compare the equity responses caused by regular announcements and minutes, the baseline specification is extended into a pooled regression estimated on both event types, in which the policy surprise is interacted with an indicator for minutes. The difference between the two responses is then obtained as a single coefficient which could be tested directly.

5.1 Baseline Regression Model

Swap rate movements are used as a proxy for the unexpected component of monetary policy decisions, and the empirical strategy is similar to the regression-based event study of McCredie et al. (2016). The baseline specification has the general form:

$$R_{i,t} = \alpha_i + \beta_i \Delta s_t + \varepsilon_{i,t} \quad (2)$$

Here $R_{i,t}$ denotes the event day log return on index i at time t and Δs_t is the change in the Swedish swap rate over the 30-minute event window around the Riksbank announcement on date t. The coefficient of interest, β_i, is the response of the event day equity percentage returns on index i for every basis-point of monetary policy surprise. Equation (2) is used for the analysis below. What changes is the dependent variable and the sample on which the equation is estimated.

5.2 Heterogeneity and Sector Group Analysis

Equation (2) is estimated separately for each sectoral and firm size index, with the change in the 10-year swap rate as the regressor. The specification is then re-estimated using the 1-month swap rate as an extension. Robust standard errors are used. Each of the regressions are estimated on the main sample of 33 observations and on the robustness sample of 57 observations.

To also test the prediction that cyclical sectors might respond more strongly than defensive sectors, equally weighted portfolio returns are made for the three sector groups defined in Section 4.2:

$$R_{g,t} = \frac{1}{N_g} \sum_{i \in g} R_{i,t}\,, g \in \{cyc, sens, def\} \tag{3}$$

where $R_{g,t}$ is the event day return on each sector group g, $R_{i,t}$ is the event day log return on sector index i, and N_g is the number of sector indices that are in group g. Equation (2) is first estimated separately on each sector group, which gives one coefficient for the cyclical group, β_{cyc}, one for the sensitive group, β_{sens}, and one for the defensive group, β_{def}. Each sector group regression is estimated on both the main sample of 33 regular announcements and the robustness sample of 57. The 10-year swap rate is used as the preferred regressor and the 1-month rate as an extension. Robust standard errors are used throughout here as well.

5.3 Regular Announcements versus Meeting Minutes

To test whether announcements and minutes create equity responses of different magnitude, the baseline specification (Equation (2)) is extended into a pooled regression estimated on both event types (announcements and minutes) together. The surprise measure is interacted with the minutes indicator:

$$R_t = \alpha + \beta_1 \Delta s_t + \beta_2 Minutes_t + \beta_3 (\Delta s_t \times Minutes_t) + \varepsilon_t \tag{4}$$

For this specification, the dependent variable R_t is the 30-minute event window OMXSPI return. This means that the full Riksbank event sample (2004-2025) can be used rather than the shorter overlap sample in the heterogeneity analysis. The sample pools the 131 regular policy announcements and the 134 minutes publications, so that there are 265 observations in total. Extraordinary announcements are excluded. Because $Minutes_t$ equals zero at regular announcements, β_1 represents the equity response to a surprise at a regular policy

announcement. The coefficient β_2 is any difference between the two event types that can be said to be unrelated to the size of the surprise. The coefficient of interest is β_3, which is the difference in the surprise response between minutes publications and regular announcements. The response at minutes publications is therefore $\beta_1 + \beta_3$. Testing $H_0: \beta_3 = 0$ would test the prediction that regular announcements generate stronger equity responses than minutes.

Equation (4) is estimated once with the 10-year surprise and once with the 1-month surprise, using robust standard errors throughout.

5.4 Identification

Identification of β_i in Equation (2) requires Δs_t to be uncorrelated with the equation error term $\varepsilon_{i,t}$. Under EMH, all publicly available information about the policy decision is incorporated into swap rates prior to the announcement. The 30-minute change in the swap rate around the announcement should therefore capture only the unanticipated component of the policy news and should thus be exogenous to other determinants of event day equity returns. The window is short enough that no other scheduled Swedish release falls inside it.

The main threat to this identification is contemporary omitted news. If a major event (for example an important macroeconomic announcement) occurs on the same trading day, this would enter the equation error term $\varepsilon_{i,t}$ and could in principle be correlated with the swap rate movement Δs_t. This might be the case if both react to the same underlying news for example. This is the reason for the screening described in Section 4.3, which removes every announcement day on which a further SEK-denominated release is scheduled. Since the screen removed 24 of the 57 available announcements, the specification is re-estimated on the unfiltered sample of 57 as a robustness check.

A further qualification concerns inference rather than identification. The analysis estimates a large number of specifications on overlapping data. These include eighteen index series at two surprise horizons on two samples in the heterogeneity analysis, in addition to the pooled comparison of event types. When many hypotheses are tested on the same sample, the probability that at least one coefficient appears significant only by chance rises far above the nominal size of the individual tests, and no formal correction for multiple testing is applied here. One reason is that the eighteen series are far from independent since they are correlated

with one another and with the broad market, as reported in Table A1 and Table A2, so the effective number of independent tests is smaller than the nominal number.

6. Results

This section reports the results from the specifications in Section 5. Section 6.1 reports the pooled comparison between regular policy announcements and the subsequent publication of meeting minutes, estimated on the 30-minute returns. Sections 6.2 to 6.5 report the results from daily index returns. This covers the 11 sector indices, the three sector groups, the three firm size segments, and the broad market index. Section 6.6 compares these results with those that were obtained on the unfiltered robustness sample. All coefficients reported below measure the response of the percentage return to a one basis point monetary policy surprise. A negative coefficient indicates that contractionary surprises are associated with lower equity returns. Standard errors are robust and are reported as grey italics in parentheses. Results are reported at both surprise horizons throughout. As mentioned previously, the 10-year horizon is the preferred specification, and the 1-month horizon is used as a short horizon extension.

6.1 Regular Announcements and Meeting Minutes

Table 4 reports the estimates of Equation (4), gotten from the 265 scheduled events in the Riksbank event database between August 2004 and November 2025. The dependent variable is the 30-minute return on the OMXSPI.

Table 4. Monetary Policy Surprises, Policy Minutes, and 30-minute OMXSPI Returns, 2004-2025 (n = 265)

Regressor	1-month	10-year
Swap rate change	-0,0205***	-0,0509***
	(0,0057)	*(0,0161)*
Minutes	-0,0003	-0,0002
	(0,0004)	*(0,0004)*
Swap rate change × Minutes	0,0137	0,0792**
	(0,0101)	*(0,0341)*
Implied slope, minutes (Swap + Swap × Minutes)	-0,0068	0,0284
	(0,0084)	*(0,0301)*

Notes: The table reports OLS estimates from interacted event study regressions of the 30-minute event window OMXSPI return on the change in the Swedish swap rate. Both series (swap rate change and the OMXSPI) are taken from the Riksbank event database, and the window runs from ten minutes before to twenty minutes after the communication. Each column is a separate regression, so that the monetary policy surprise is measured by the change in the 1-month swap rate in the first column and by the change in the 10-year swap rate in the second column. "Minutes" is equal to one for publications of the meeting minutes and zero for regular policy announcements. The sample consists of 131 regular announcements and 134 minutes publications. Extraordinary (unscheduled) announcements belong to neither category and are excluded. The interaction term "Swap rate change x Minutes" measures the difference in the sensitivity of index returns to interest rate surprises between the two event types, and the coefficient on "Swap rate change" gives that slope at regular policy announcements. The lower panel (below the dotted line) reports the slope at minutes publications ($\beta_1 + \beta_3$ from Equation (4)). The coefficient of -0.0205 means that a one basis point increase in the 1-month rate is associated with an index return that is 0.0205 percent lower. Because both the index return and the surprise are measured within the same narrow event window, this specification is not constrained by the 2016-2025 coverage of the daily equity index data and is not screened for concurrent macroeconomic releases. Robust standard errors are reported in parentheses below the coefficients. Significance is marked by *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Source: Sveriges Riksbank (2025); own calculations.

At regular policy announcements the surprise coefficient is negative and significant at the one percent level for both horizons. The result is -0.0205 at the 1-month horizon, with a standard error of 0.0057, and -0.0509 at the 10-year horizon, with the standard error of 0.0161. At the preferred 10-year horizon this means that a contractionary surprise of 10 basis points is linked with an OMXSPI return approximately 0.51 percent lower over the event window, against approximately 0.21 percent at the 1-month horizon.

For minutes publications neither response is significant. The result at the 1-month horizon is -0.0068 with a standard error of 0.0084. It has a negative sign, but its magnitude is close to zero. It is a third of the corresponding announcement estimate and smaller than its own standard error, so the response at minutes publications is economically but also statistically the same as no response. At the 10-year horizon the implied slope is 0.0284 with a standard error of 0.0301, so the result does not only shrink but also changes sign relative to regular announcements. Though it remains insignificant. At both horizons the standard errors at minutes publications

exceed those at regular announcements, by approximately 50 percent at the 1-month horizon and by approximately 90 percent at the 10-year horizon.

The interaction term ("Swap rate change x Minutes") tests whether the two event types differ. At the 1-month horizon the coefficient on the interaction variable is 0.0137 with a standard error of 0.0101 and is not significant, so the difference between the two event types cannot be distinguished from zero at the short horizon. At the 10-year horizon the interaction is 0.0792 with a standard error of 0.0341 and is significant at the five percent level. The response of the broad market to a policy surprise is therefore significantly weaker at minutes publications than at regular policy announcements at the preferred horizon. The estimated difference, 0.0792, is larger in absolute value than the announcement response itself, which is what gives the change of sign in the implied minutes coefficient. The coefficient on the minutes indicator, which is capturing any difference that is unrelated to the size of the surprise, is -0.0003 with a standard error of 0.0004 and -0.0002 with a standard error of 0.0004. It is insignificant at both horizons. The prediction stated in Section 3.3 is supported at the 10-year horizon, but is however not supported at the 1-month horizon.

6.2 Overview of the Broad Market Index

Table 5 reports the results of the coefficient in Equation (2) for all eighteen index series, where columns 1 and 2 are estimated on the main sample of 33 regular announcements at the 1-month and the 10-year horizon respectively, and columns 3 and 4 show the same results for the robustness sample of 57 announcements. This and the following three sections concern columns 1 and 2, while section 6.6 is about columns 3 and 4.

Table 5. OLS Regressions of Event Day Index Returns on Monetary Policy Surprises, by the Sector, Sector Group and Firm Size Segment, 2016-2025

	Main sample, n = 33		Robustness sample, n = 57	
Index	**1-month**	**10-year**	**1-month**	**10-year**
Basic Materials	-0,0748	-0,1274	-0,0311	-0,0687
	(0,0847)	*(0,1125)*	*(0,0820)*	*(0,1054)*
Consumer Discretionary	-0,0180	-0,0209	0,0652	0,0238
	(0,0684)	*(0,1347)*	*(0,0696)*	*(0,1130)*
Consumer Staples	-0,0673	-0,1881**	0,0305	-0,1299
	(0,0479)	*(0,0906)*	*(0,0675)*	*(0,0906)*
Energy	-0,1267	-0,1798	-0,0474	-0,0617
	(0,0807)	*(0,1227)*	*(0,0822)*	*(0,1113)*
Financials	-0,0803*	-0,0582	-0,0373	-0,0540
	(0,0445)	*(0,0529)*	*(0,0455)*	*(0,0456)*
Health Care	0,0093	-0,1414	-0,0335	-0,1542**
	(0,0635)	*(0,0914)*	*(0,0520)*	*(0,0679)*
Industrials	-0,0463	-0,0334	-0,0168	-0,0109
	(0,0439)	*(0,0962)*	*(0,0581)*	*(0,0804)*
Real Estate	-0,0655	-0,3636**	-0,0648	-0,2900**
	(0,0734)	*(0,1554)*	*(0,0591)*	*(0,1297)*
Technology	-0,0318	-0,1449	-0,0067	-0,1078
	(0,0373)	*(0,0918)*	*(0,0386)*	*(0,0730)*
Telecommunications	-0,0478	-0,2509**	-0,0233	-0,2546***
	(0,0561)	*(0,0951)*	*(0,0513)*	*(0,0743)*
Utilities	-0,2162**	-0,4496**	-0,0959	-0,3425**
	(0,1023)	*(0,1940)*	*(0,0963)*	*(0,1647)*
Cyclical	-0,0597	-0,1425	-0,0170	-0,0972
	(0,0621)	*(0,0985)*	*(0,0574)*	*(0,0815)*
Sensitive	-0,0632	-0,1522*	-0,0235	-0,1088
	(0,0514)	*(0,0885)*	*(0,0498)*	*(0,0712)*
Defensive	-0,0290	-0,1647***	-0,0015	-0,1421***
	(0,0516)	*(0,0556)*	*(0,0412)*	*(0,0515)*
Small cap	-0,0198	-0,1822***	-0,0115	-0,1448**
	(0,0304)	*(0,0580)*	*(0,0346)*	*(0,0547)*
Mid cap	-0,0114	-0,1930**	0,0033	-0,1452**
	(0,0399)	*(0,0868)*	*(0,0374)*	*(0,0701)*
Large cap	-0,0579	-0,0918	-0,0243	-0,0637
	(0,0450)	*(0,0737)*	*(0,0465)*	*(0,0614)*
OMXSGI	-0,0544	-0,0977	-0,0225	-0,0689
	(0,0438)	*(0,0735)*	*(0,0453)*	*(0,0612)*

Notes: The table reports OLS estimates of the coefficient in Equation (2). Columns 1-2 use the main sample of n = 33 regular announcements, which excludes dates contaminated by other macroeconomic news. Columns 3-4 use the robustness sample (which is unfiltered) of n = 57 regular announcements. Within each of the samples, results are reported for two surprise horizons, namely the 10-year swap rate, and the 1-month swap rate. The first eleven rows are the sectoral indices, mapped to ICB sectors according to Table 2. Cyclical, Sensitive and Defensive are equally weighted portfolios of the sector indices assigned to each Morningstar classification in

Table 2, constructed as in Equation (3). Utilities is excluded from the defensive portfolio because the index consists of a single listed company. Small Cap, Mid Cap and Large Cap are the three firm size segments, and OMXSGI is the broad market benchmark working as a comparison against the sectoral and size results. All indices are Gross Index (GI) variants. The intuition behind the coefficients is that they measure the response of the event day return to a one basis point monetary policy surprise, so that a negative coefficient indicates that contractionary surprises reduce equity returns. Robust standard errors are given in grey italics in parentheses. Significance is marked by *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Sources: Nasdaq (2026) and Sveriges Riksbank (2025); own calculations.

The result for OMXSGI is -0.0544 at the 1-month horizon. The standard error is 0.0438. For the 10-year horizon, -0.0977 is the result, with a standard error of 0.0735. Neither is significant, both are negative, and the result on the long horizon is bigger in absolute value than the result at the short horizon. For sixteen of the eighteen series in Table 5, the 10-year coefficient is larger in absolute value than the 1-month coefficient. The two exceptions are Financials and Industrials.

The numbers in Table 5 and the numbers for regular announcements and minutes in Table 4 are not directly comparable as they are constructed from different index series (sector indicies vs OMXSPI respectively), have returns measured at different time points, and have samples of different size.

6.3 Sector Indices

At the 1-month horizon, one of the eleven sector estimates is significant at the five percent level. This is Utilities, with a coefficient of -0.2162 and a standard error of 0.1023. The estimate for Financials, -0.0803 with a standard error of 0.0445, is significant at the ten percent level. The remaining nine estimates are not significant. Ten of the eleven results are negative, except for Health Care (which is at positive 0.0093). That result is close to zero in magnitude but also insignificant. It is around a seventh of its own standard error of 0.0635, so it could be read as the absence of a measurable response rather than as evidence of a positive one.

At the 10-year horizon, all eleven estimates are negative and four are significant at the five percent level. Utilities at -0.4496 with a standard error of 0.1940, Real Estate at -0.3636 with a standard error of 0.1554, Telecommunications at -0.2509 with a standard error of 0.0951, and Consumer Staples at -0.1881 with a standard error of 0.0906. The remaining seven results are not significant.

Ranked by size (absolute value) at the 10-year horizon among the sector indices, it turns out that the four significant estimates are also the four largest, in the order Utilities, Real Estate, Telecommunications and Consumer Staples. They are followed by Energy at -0.1798,

Technology at -0.1449, Health Care at -0.1414 and Basic Materials at -0.1274, none of which are significant. The three smallest estimates are Financials at -0.0582, Industrials at -0.0334 and Consumer Discretionary at -0.0209. None of these are significant either.

Financials and Industrials are the two series for which the 1-month estimate exceeds the 10-year estimate in absolute value. For Financials the coefficients are -0.0803 and -0.0582, and for Industrials -0.0463 and -0.0334. Worth mentioning is also that financials is the only sector whose 1-month estimate is significant while its 10-year estimate is not.

The standard error for Utilities is the largest in the column at both horizons, at 0.1023 and 0.1940. As stated in Section 4.2, it should be noted that the underlying index consists of a single listed company over the sample period. This coefficient should therefore be interpreted with caution.

6.4 Sector Groups

At the 1-month horizon none of the three group estimates is significant. Coefficient results are -0.0597 for the cyclical portfolio with a standard error of 0.0621, -0.0632 for the sensitive portfolio with a standard error of 0.0514, and -0.0290 for the defensive portfolio with a standard error of 0.0516.

At the 10-year horizon all three estimates are negative, but also larger in absolute value. The result for the defensive portfolio is -0.1647 with a standard error of 0.0556 (significant at the one percent). The estimate for the sensitive portfolio is -0.1522 with a standard error of 0.0885 and is significant at the 10 percent level. The result for the cyclical portfolio is -0.1425 with a standard error of 0.0985, with no significance.

The three estimates at the 10-year horizon lie within 0.022 of one another. This very small range (smaller than any of the three standard errors), implies that the differences in significance across the three groups follow from differences in the precision of the estimates rather than from actual differences in their size.

6.5 Firm Size Segments

At the 1-month horizon none of the three size segment results is significant. The estimates are -0.0198 for small cap (standard error: 0.0304), -0.0114 for mid cap (standard error of 0.0399),

and -0.0579 for large cap (standard error of 0.0450). The large cap estimate is the biggest of the three at this horizon.

At the 10-year horizon the coefficient for small cap is -0.1822 with a standard error of 0.0580 and is significant at the one per cent level. The coefficient for mid cap is -0.1930 with a standard error of 0.0868 and is significant at the five percent level. The coefficient for large cap is -0.0918 with a standard error of 0.0737 (not significant). The mid cap estimate is the largest of the three in absolute value, followed by small cap, followed by large cap. The large cap estimate is close to the estimate for OMXSGI, at -0.0918 against -0.0977. Its standard error is of similar size, at 0.0737 against 0.0735.

6.6 The Robustness Sample

Columns 3 and 4 of Table 5 is a report of the same eighteen specifications but estimated on the unfiltered sample of 57 regular announcements instead. This includes the 24 announcement dates removed by the screening which is written about in Section 4.3.

The general pattern is the same, although the size of the effects differ. The signs and the dominance of the 10-year horizon over the 1-month horizon is mostly the same for the robustness sample. What changes is that most results move toward zero, and the amount of significant results at the 10-year horizon becomes slightly smaller along with their respective standard errors. The rest of this section is about the individual differences.

At the 1-month horizon not a single result in the robustness sample is significant, which means that the two estimates that were significant in the main sample are now insignificant. Utilities fall in absolute value from -0.2162 to -0.0959, and Financials from -0.0803 to -0.0373. Though, three estimates are positive in this column. Consumer Discretionary at 0.0652, Consumer Staples at 0.0305 and mid cap at 0.0033, against one positive estimate in the same column of the main sample.

At the 10-year horizon, six of the eight estimates that were significant in the main sample remain significant in the robustness sample, which is the majority. These are Utilities at -0.3425, Real Estate at -0.2900, Telecommunications at -0.2546, the defensive portfolio at -0.1421, mid cap at -0.1452 and small cap at -0.1448. The two that lose significance are Consumer Staples which falls in value from -0.1881 to -0.1299, and the sensitive portfolio from -0.1522 to -0.1088. Only Health Care moves in the opposite direction. It rises in absolute value

from -0.1414, where it is not significant, to -0.1542, where it becomes significant (five percent level). Telecommunications is significant at one percent in the robustness sample against the five percent level in the main sample, so it gains one step of significance. Small cap is now at the five percent level against the one percent level before.

Fifteen of the eighteen 10-year results are smaller in absolute value in the robustness sample than in the main sample, with the three exceptions being Telecommunications, Health Care and Consumer Discretionary. The last one, Consumer Discretionary, changes sign from -0.0209 to 0.0238. All eighteen standard errors in the 10-year column are across the board smaller in the robustness sample than in the main sample, or equal in the case of Consumer Staples. In the 1-month column the standard errors are mixed, being smaller for ten of the eighteen series and larger for the remaining eight.

The pattern across horizons is the same as the main sample. In the robustness sample the 10-year estimate exceeds the 1-month estimate in absolute value for sixteen of the eighteen series. This is like the main sample, however the two exceptions (Consumer Discretionary and Industrials) are different. It was Financials and Industrials before. OMXSGI, the cyclical portfolio, large cap, Basic Materials, Consumer Discretionary, Energy, Financials and Industrials are not significant in either sample or at either horizon.

7. Discussion

The results in Section 6 support some of the predictions stated in Section 3 but contradict others. This section interprets the results through the framework of Section 3, relates them to the literature reviewed in Section 2, and closes with the limitations of the analysis and a note on research ethics.

The equity response is concentrated in the unanticipated component of regular policy announcements. The results are consistent with the prediction of the discount rate channel and the semi-strong form of the EMH, where the prediction was that equity prices fall when the Riksbank tightens by more than expected, and also that they respond to the surprise rather than to the decision itself (Fama, 1970; Kuttner, 2001; Bernanke & Kuttner, 2005; Rosa, 2011). The announcement coefficient of -0.0509 at the 10-year horizon means economically that a contractionary surprise of 10 basis points is associated with a broad market decline of about

half a percent. At the same time, the 1-month rate is unchanged at about one in five regular announcements (Table 1). This result may be interpreted as meaning that a large portion of what the Riksbank announces is fully priced before it is announced, and this is exactly what should be expected from a central bank that publishes its own policy rate forecast. The results are in line with Blomberg and Forell (2019) and Brosgård and Lindblom (2025), who conclude that Riksbank rate decisions are largely anticipated. They measure the response to the rate decision itself, which is small on average because most of the decision is already priced before it is announced. The coefficient estimated here instead measures the response per unit of surprise, and only the surprise carries news. Because the surprises themselves are small, a large response per unit of surprise still only produces a small move on the average announcement day.

The response is stronger for the long surprise horizon than for the short one. The 10-year coefficient is larger than the 1-month coefficient in absolute value for sixteen of the eighteen daily series. All significant daily coefficients in the robustness sample, and eight of the ten in the main sample, are at the 10-year horizon. This pattern might be explained by Gürkaynak et al. (2005), namely that the equity-relevant content of a policy event is mainly the path factor (news about where policy is heading in the future). This longer term path factor might be better captured in the longer maturities. It also fits Woodford's (2003) argument that with forward-looking markets, communication about future policy is itself an instrument. In the Swedish setting the published rate path should compress target surprises in particular, so the remaining news content of an announcement is concentrated in path revisions. Equities price cash flows over horizons for which the 10-year rate and not the 1-month rate is the relevant discount rate, which might explain why the result is stronger for the long surprise horizon than for the short one.

Part of the horizon pattern is however built into Equation (1), because a movement in the 10-year rate represents a persistent shift in the discount path and lowers the present value in Equation (1), whereas a movement in the 1-month rate re-prices discounting over a single month and does not move the present value by almost anything. Larger coefficients at the long horizon are therefore expected from any discounting model, regardless of the informational content of the communication. This mechanical argument has on the other hand nothing to do with precision. The 1-month surprise is the more volatile regressor in the announcement sample (Table 3), but it produces almost no reliable estimate anywhere in Table 5, and the

announcement and minutes responses in Table 4 differ most at the 10-year horizon. Those two facts, instead of the raw size of the coefficients, are the evidence that the equity-relevant news in Riksbank communication is news about the path.

The two exceptions to the horizon pattern, Financials and Industrials, do not carry much weight. The coefficients are small, and only Financials is significant at the ten percent level. For banks, a larger short horizon result would make sense, since funding costs depend mainly on short-term rates. However, the data do not provide clear evidence of this.

The prediction that regular announcements generate stronger responses than minutes is supported at the preferred horizon. The interaction coefficient is significant at the five percent level. The implied minutes slope is not statistically different from zero. Though at the 1-month horizon the difference cannot be distinguished from zero, so the support for the prediction only applies to the long horizon. The result can be interpretated with the help of EMH. Minutes are published with a time lag and contain little news about a change in the current rate, so their target-factor content is close to zero. So whatever forward-looking content they contain appears to be largely priced in when they are publicated.

On the other hand, the sign of the implied minutes slope at the 10-year horizon (positive but insignificant), deserves a comment. This may reflect the information effect. The content of minutes is the Riksbank's reasoning and their assessment of the economy. An optimistic path revision in the minutes window therefore signals that the Riksbank thinks that the economy is stronger than markets believed. This raises expected cash flows at the same moment as it raises discount rates (Sellin, 2001). Gu et al. (2022) point the same way from the tonality literature. The estimate might be too imprecise to establish a clear positive response, but the point is rather that a zero/positive coefficient at minutes publications may appear if the information component dominates. That the difference coefficient for the two information types appears significantly only at the 10-year horizon is itself consistent with Section 3.3, since minutes relates to the future path, and the path is reflected in the longer maturities.

The cross-section of significant responses does not follow the cyclical and defensive distinction, but seem instead to follow rate sensitivity and firm size. The cash flow channel predicted that cyclical sectors should respond stronger than the broad market and defensive sectors weaker, but this prediction is not supported. The significant sectors at the preferred horizon are Real Estate, Telecommunications, Utilities and Consumer Staples, which are

(Table 2) one cyclical sector, one sensitive and two defensive. Looking at only the sector groups, the defensive portfolio is the only one significant at the one percent level, while the cyclical portfolio is insignificant, which is the opposite of the prediction.

This does, however, not mean that defensive sectors respond stronger than cyclical sectors. Because the three group estimates lie within 0.022 of one another, which is less than any of their standard errors, the sample cannot rank the groups at all. The differing significance reflects the lower variation in the defensive portfolio's event day returns (Table 3), which is exactly what makes its estimate the most precise of the three. The ordering that the cash flow channel implies does not really appear, at either horizon or in either sample.

The individual sector results also show a consistent pattern, but not actually in regard to cyclicality. Real Estate is a heavy leveraged sector and the textbook example for the balance sheet channel. An unexpected rise in rates directly raises the external finance premium of property firms with debt (Bernanke & Gertler, 1995). Utilities, Telecommunications and Consumer Staples share stable, predictable cash flows. For those firms, nearly all policy news arrive through the denominator of Equation (1). What unites the four sectors is therefore rate sensitivity, through leverage and duration, rather than revenue cyclicality. So, the cross-section suggests that the discount rate and credit channels are the main channels of monetary policy transmission in Sweden, while the cash flow channel is too weak to have a clear effect.

The information effect can maybe to some extent explain why the cash flow channel is invisible where it should be the strongest (for cyclical). If a contractionary surprise signals a currently stronger economy than the market thought, cyclical earnings expectations increase at the moment their discount rate rises, and the two effects offset each other. Sectors whose valuations are close to only discounting receive no such offset. Given this, the near-zero cyclical coefficients may reflect offsetting channels rather than that they are not affected at all. Therefore, the two channels may cancel for cyclical firms, while only one operates on the rate-sensitive sectors. The present design cannot test this, since it would require separating the information component of each surprise. It also fits Baek et al. (2025) and Sengupta (2014), who explain sectoral differences by financing structure rather than by demand.

Financials deserves attention since there is some Swedish literature on banks. The sector is insignificant at the preferred horizon in both samples, in contrast to Blomberg and Forell (2019), who find significant abnormal returns in banking around repo rate announcements.

Their event variable is the rate decision itself, not its unanticipated component. Banks may also be affected by offsetting channels, gaining net interest margin from tightening while losing on asset values, which would compress the coefficient toward zero. Finally, the Utilities coefficients are the largest in Table 5 at both horizons, but as previously said it contains only one firm and should thus be interpreted with caution.

The firm size prediction of Section 3.1 is partly supported in the predicted direction. Small as well as mid cap respond significantly at the 10-year horizon, at around twice the OMXSGI result, while large cap does not differ from the broad market. The large cap result is close to mechanical because the correlation to OMXSGI is very close, so the interesting comparison is between the smaller segments and the market. It goes the way the balance sheet and bank lending channels predict for firms with fewer financing alternatives (Bernanke & Gertler, 1995), matching Chava and Hsu (2020) and Akarsu et al. (2025). The credit channel predicts a response that declines with increasing size but the small and mid cap coefficients are basically equal, at -0.1822 and -0.1930. In fact mid cap is the larger of the two in absolute value. So, the distinction in the data is between the large segment and everything else. The results may be interpreted in line with the prediction that small cap indices respond more strongly than large cap indices, though there seems to be little difference between the small and middle segments of equity.

The first limitation concerns the daily samples. 33 observations unfortunately gives low power, as the aggregate results above illustrate. Even with our screening, the event day returns can unfortunately be contaminated by news happening in the same day. It is at least reassuring that the robustness estimates move toward zero with smaller standard errors, because that is the pattern that adding contaminated data “should” produce. The screen also covers only SEK-denominated releases, so same day news from the Federal Reserve or the ECB is not removed. These bigger actors might create spillovers that move European (and the Swedish) equity markets (Chebbi & Derbali, 2019). One asymmetry in the screening should be clearly noted, which is that it is applied to announcements only. Minutes are entirely unscreened. This follows from the design rather than from an oversight though. The narrow window is itself works as an identification in the announcement versus minutes analysis. Because both event types in Table 4 are treated identically, it is assumed that unrelated news falls inside or outside the specific 30-minute window equally rarely for announcements and for minutes.

Another limitation concerns inference. Many specifications are regressed without a correction for multiple testing. Significant results mainly showing up at one horizon across both samples argues against pure chance. However, any individual coefficient should be read with caution. The design tests a difference between coefficients directly only once (in the pooled announcement and minutes regression), and that is also the only analysis that uses a formal test. Everywhere else, statements about which sectors or segments respond more strongly are based on comparing separately estimated regressions. This is unfortunately a weaker form of evidence compared to more elaborate statistical tests.

The used measurements can also be a limitation. The pooled comparison uses 30-minute returns on a price index while the heterogeneity analysis uses daily returns on gross indices. This means that magnitudes are not comparable across the two parts of the analysis. The daily specification also relies on the EMH in another way, namely that measuring the surprise over a 30-minute window but the return over the full trading day assumes both that the swap change within the window captures the entire news-value of the event and also that nothing later in the day changes the market's reaction to that event.

The last limitation which will be discussed is the sample period. The years 2016 to 2025 span negative policy rates, quantitative easing, and a pandemic. The literature documents both state dependence (Basistha & Kurov, 2008) and sign asymmetry (Tan et al., 2010). None of these differing conditions are taken into consideration. This is mainly because 33 observations make meaningful sample splits impossible, so the estimates should be interpreted as averages over very different conditions. Finally, Sweden's small open economy with a central bank that publishes an explicit rate path limits how far the results can be generalised to other countries.

A final point concerns research ethics rather than method. This study raises few of the ethical questions that arise in most empirical work. It uses no personal data. All sources are public. There is nobody to obtain consent from and nobody who can be identified from the results, so questions of confidentiality and harm to research subjects do not apply here. The one area where an ethical consideration can be raised is how results are selected and presented. A study that estimates 72 regressions and reports only the significant ones would give a misleading picture of what the data support, and the same holds for a screening rule chosen after seeing which dates were convenient to drop. Neither is done in this thesis. Every regression is reported, the screened and the unscreened samples are shown side by side, and the screen is mechanical rather than subjective.

8. Conclusion

This thesis asks how unexpected monetary policy communication by the Riksbank affects Swedish equity returns, and whether the response differs across sectors, firm size segments, and forms of communication. Using swap rate changes to isolate the unanticipated component of 265 scheduled policy events, and daily sector and size index returns for the heterogeneity analysis, three findings emerge.

First, Swedish equity prices respond to the surprise component of regular policy announcements, negatively and significantly within the 30-minute window, while the response at minutes publications is indistinguishable from zero. The difference between the two event types is significant at the preferred 10-year horizon. Riksbank communication moves the equity market when it contains news while minutes largely do not. Second, the response is most noticeable on the long surprise horizon. For sixteen of the eighteen index series the 10-year coefficient exceeds the 1-month coefficient in absolute value, so it is news about the path of policy, rather than about the current setting, that equity prices incorporate. Third, the transmission is uneven, but not along the predicted cyclical and defensive groups. The responding parts of the market are the leveraged and long-duration sectors, Real Estate, Telecommunications and Consumer Staples, together with the small and mid cap segments, with estimates roughly two to four times the aggregate. The pattern points to the discount rate and credit channels as the operative mechanisms, while the cash flow channel leaves no visible trace, possibly because information effects offset it where it should matter most.

Natural extensions include intraday sector data to remove the contamination problem of daily returns, formal tests of differences between sector and size coefficients, and specifications that separate the information component of surprises or allow the response to vary across monetary regimes.

The societal relevance of these findings is great for policymakers, investors and households. The results suggest that a policy surprise is not absorbed evenly across the economy, but rather concentrates where leverage and duration are highest. So the broad index underestimates what a surprise does to the parts of the market that are most sensitive to financing conditions. The publication of minutes has little impact on equity, which is what a central bank that already publishes its own rate path should expect. For investors, exposure to Riksbank risk turns out to be a question of leverage, duration and firm size rather than of revenue cyclicality, which is

not how equity portfolios are usually described. For households, the exposure is indirect through housing, pension savings and the equity market. A surprise that moves real estate and smaller firms while leaving the largest companies broadly unchanged reaches households through channels that an aggregate index return does not show.

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Appendix

Table A1. Unconditional Daily Return Distributions of Swedish Equity Indices, 2016-07-06 to 2025-11-05 (2332 trading days)

Variable	Mean	Median	SD	Ann. SD	Min	Max	Skew.	Ex. kurt.	Corr. OMXSGI
Basic Materials	0,046	0,070	1,36	21,6	-12,25	9,50	-0,39	4,80	0,788
Consumer Discretionary	0,006	0,038	1,39	22,1	-11,06	8,51	-0,52	4,88	0,783
Consumer Staples	0,057	0,067	1,27	20,2	-12,80	15,81	0,29	17,96	0,487
Energy	0,044	0,037	2,13	33,8	-24,45	14,35	-0,64	13,49	0,496
Financials	0,058	0,091	1,25	19,8	-13,91	6,76	-1,21	12,39	0,931
Health Care	0,042	0,090	1,10	17,5	-10,11	5,58	-0,73	5,85	0,720
Industrials	0,059	0,089	1,31	20,7	-10,45	8,78	-0,41	5,29	0,946
Real Estate	0,026	0,076	1,62	25,7	-14,61	8,81	-0,43	6,41	0,708
Technology	0,037	0,060	1,59	25,2	-12,23	9,24	-0,52	6,02	0,800
Telecommunications	0,025	0,043	1,22	19,4	-13,40	9,63	-0,99	16,02	0,594
Utilities	0,018	-0,073	2,44	38,7	-15,09	15,25	0,29	3,80	0,403
Cyclical	0,034	0,084	1,18	18,8	-12,35	6,93	-0,81	8,57	0,944
Sensitive	0,041	0,075	1,20	19,1	-13,36	8,15	-1,03	11,67	0,892
Defensive	0,050	0,102	1,01	16,1	-11,46	8,43	-0,69	11,65	0,698
Small cap	0,041	0,099	1,02	16,1	-13,11	4,85	-1,96	19,52	0,752
Mid cap	0,050	0,104	1,07	17,0	-12,01	6,20	-1,33	12,04	0,887
Large cap	0,045	0,073	1,13	17,9	-11,77	7,10	-0,85	9,16	0,999
OMXSGI	0,045	0,078	1,11	17,6	-11,81	7,01	-0,91	9,72	–

Notes: The table reports unconditional daily (close-to-close) log-return statistics for Nasdaq Stockholm gross indices, expressed in percent. Eleven sector indices, followed by three sector groups, three size segments and the OMXSGI. The window is restricted to the period spanned by the sample of regular policy announcements, from the first to the last announcement date, which leaves 2332 trading days common to all indices. The underlying series themselves run from 2016-05-16 to 2026-05-13 and are truncated here for comparability with the event samples. Cyclical is the equal-weighted average of Basic Materials, Consumer Discretionary, Financials and Real Estate; Sensitive of Energy, Industrials, Technology and Telecommunications; Defensive of Consumer Staples and Health Care. Ann. SD is the daily standard deviation scaled by the square root of 252 trading days. Ex. kurt. is excess kurtosis, which equals zero for a normally distributed variable. Corr. OMXSGI is the contemporaneous correlation between the daily return of the index and that of OMXSGI. Series are matched by trading date. Source: Nasdaq (2026); own calculations.

Table A2. Pairwise Correlations of Daily Returns on Swedish Equity Indices, 2016-07-06 to 2025-11-05 (2332 trading days)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Basic Materials	**1,000**	0,574	0,360	0,493	0,693	0,499	0,774	0,473	0,586	0,440	0,330	0,800	0,734	0,497	0,595	0,672	0,790	0,788
2. Consumer Discretionary	0,574	**1,000**	0,382	0,320	0,695	0,577	0,710	0,601	0,656	0,468	0,330	0,847	0,671	0,554	0,588	0,733	0,779	0,783
3. Consumer Staples	0,360	0,382	**1,000**	0,247	0,434	0,452	0,430	0,377	0,385	0,340	0,186	0,459	0,440	0,874	0,400	0,468	0,484	0,487
4. Energy	0,493	0,320	0,247	**1,000**	0,458	0,306	0,469	0,294	0,340	0,314	0,285	0,457	0,763	0,322	0,419	0,433	0,497	0,496
5. Financials	0,693	0,695	0,434	0,458	**1,000**	0,634	0,830	0,679	0,699	0,544	0,364	0,899	0,798	0,618	0,705	0,817	0,931	0,931
6. Health Care	0,499	0,577	0,452	0,306	0,634	**1,000**	0,624	0,542	0,621	0,461	0,314	0,665	0,628	0,828	0,645	0,744	0,711	0,721
7. Industrials	0,774	0,710	0,430	0,469	0,830	0,624	**1,000**	0,588	0,740	0,479	0,364	0,850	0,846	0,610	0,672	0,804	0,949	0,946
8. Real Estate	0,473	0,601	0,377	0,294	0,679	0,542	0,588	**1,000**	0,522	0,429	0,348	0,833	0,572	0,531	0,584	0,731	0,699	0,708
9. Technology	0,586	0,656	0,385	0,340	0,699	0,621	0,740	0,522	**1,000**	0,437	0,336	0,724	0,793	0,579	0,626	0,734	0,797	0,800
10. Telecommunications	0,440	0,468	0,340	0,314	0,544	0,461	0,479	0,429	0,437	**1,000**	0,240	0,554	0,668	0,464	0,437	0,519	0,595	0,594
11. Utilities	0,330	0,330	0,186	0,285	0,364	0,314	0,364	0,348	0,336	0,240	**1,000**	0,407	0,398	0,288	0,451	0,450	0,395	0,403
12. Cyclical	0,800	0,847	0,459	0,457	0,899	0,665	0,850	0,833	0,724	0,554	0,407	**1,000**	0,814	0,650	0,729	0,873	0,940	0,944
13. Sensitive	0,734	0,671	0,440	0,763	0,798	0,628	0,846	0,572	0,793	0,668	0,398	0,814	**1,000**	0,618	0,686	0,785	0,893	0,892
14. Defensive	0,497	0,554	0,874	0,322	0,618	0,828	0,610	0,531	0,579	0,464	0,288	0,650	0,618	**1,000**	0,602	0,699	0,691	0,698
15. Small cap	0,595	0,588	0,400	0,419	0,705	0,645	0,672	0,584	0,626	0,437	0,451	0,729	0,686	0,602	**1,000**	0,823	0,736	0,752
16. Mid cap	0,672	0,733	0,468	0,433	0,817	0,744	0,804	0,731	0,734	0,519	0,450	0,873	0,785	0,699	0,823	**1,000**	0,868	0,887
17. Large cap	0,790	0,779	0,484	0,497	0,931	0,711	0,949	0,699	0,797	0,595	0,395	0,940	0,893	0,691	0,736	0,868	**1,000**	0,999
18. OMXSGI	0,788	0,783	0,487	0,496	0,931	0,721	0,946	0,708	0,800	0,594	0,403	0,944	0,892	0,698	0,752	0,887	0,999	**1,000**

Notes: Entries are contemporaneous Pearson correlation coefficients between daily close-to-close logarithmic returns on gross (total-return) indices listed on Nasdaq Stockholm, matched by trading date over the same window as Table A1, 2016-07-06 to 2025-11-05. Series 1-11 are ICB sector indices, followed by three equal-weighted sector-group portfolios (12-14), three firm size segments (15-17) and the OMXSGI (18). The sector groups are equal-weighted averages of the constituent ICB sector indices: Cyclical is the equal-weighted average of Basic Materials, Consumer Discretionary, Financials and Real Estate; Sensitive of Energy, Industrials, Technology and Telecommunications; and Defensive of Consumer Staples and Health Care. Utilities consist of only one listed company and is thus not assigned to a group and enters the table only as an individual sector index. Correlations between an individual sector index and a sector group containing it, and between a size segment and OMXSGI, are mechanically elevated because the series share components. Source: Nasdaq (2026); own calculations.