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Macroeconomic Conditions and Corporate Mergers: A study on the Swedish M&A market

Bachelor Thesis

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Abstract

This thesis examines the relationship between the aggregate merger and acquisition (M&A) transactions and macroeconomic variables of Sweden spanning from January 2001 to April 2024. The study aims to explore how macroeconomic factors, such as interest and unemployment rates might influence the M&A activity of the Swedish market and corporations willingness to engage in mergers and acquisitions. This is done with the utilization of a multiple linear regression analysis, where three different time lags also are incorporated. The inclusion of the time lags will account for delays between planning and the announcement of M&A deals. The research indicates that there is a statistically significant and negative relationship between the Swedish policy rate and the monthly M&A transaction volume. This finding indicates that lower interest rates may encourage an increase in the number of M&A transactions due to valuation and leveraging reasons. Interestingly, the findings, furthermore, show a positive relationship between unemployment rates and M&A activity. This may suggest that firms will engage in more mergers and acquisitions opportunistically during economic downturns. These results contribute to the understanding of a more complex interplay of the macroeconomic conditions and the corporate merger strategies in Sweden.

Acknowledgments

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Contents

1 Introduction and Background

Mergers and acquisitions often plays a crucial role in a company's business strategy, allowing companies to achieve synergies, expand their market presence, and enhance their competitiveness (McCarthy and Dolfsma 2013). Since the late 1980s, there have been approximately 30,435 M&As in Sweden, with a total value that exceeds 1.49 trillion dollars. During these three decades, the trend shows several significant spikes in the number of M&A transactions (IMAA 2024).

In the wake of the dot-com crash of the early 2000s, Sweden experienced a remarkable economic recovery, with GDP growth rates surpassing the average pace of the two preceding decades (NIER 2019). During this time, Sweden witnessed a surge in M&A activity. Approximately 1100 Swedish M&A deals were announced in 2000, a 17% increase compared to the previous year (IMAA 2024). This growth persisted until the financial crisis of 2008, when the M&A market spiked once again and increased by 25% from 2006 to 2007 (IMAA 2024). The financial crisis of 2008 led to an economic recession, resulting in a prolonged period of unemployment as well as low interest rates. The low interest rate would subsequently be increased again as a consequence of the COVID-19 pandemic (The Riksbank 2024).

In 2019, Sweden was struck by the coronavirus, which significantly affected the whole economy, especially the production and labor markets (Ekholm et al. 2020). Despite this, the M&A market set a record high in both value and trading volume in 2021, with 1 933 transactions valued at 229 824 billion dollars. This record number of transactions was followed by a decline in the next year (IMAA 2024). Since 2021, the policy rate has risen sharply from 0% to 4%, and Sweden is now experiencing an economic downturn with increasing unemployment and high inflation (The Riksbank 2024).

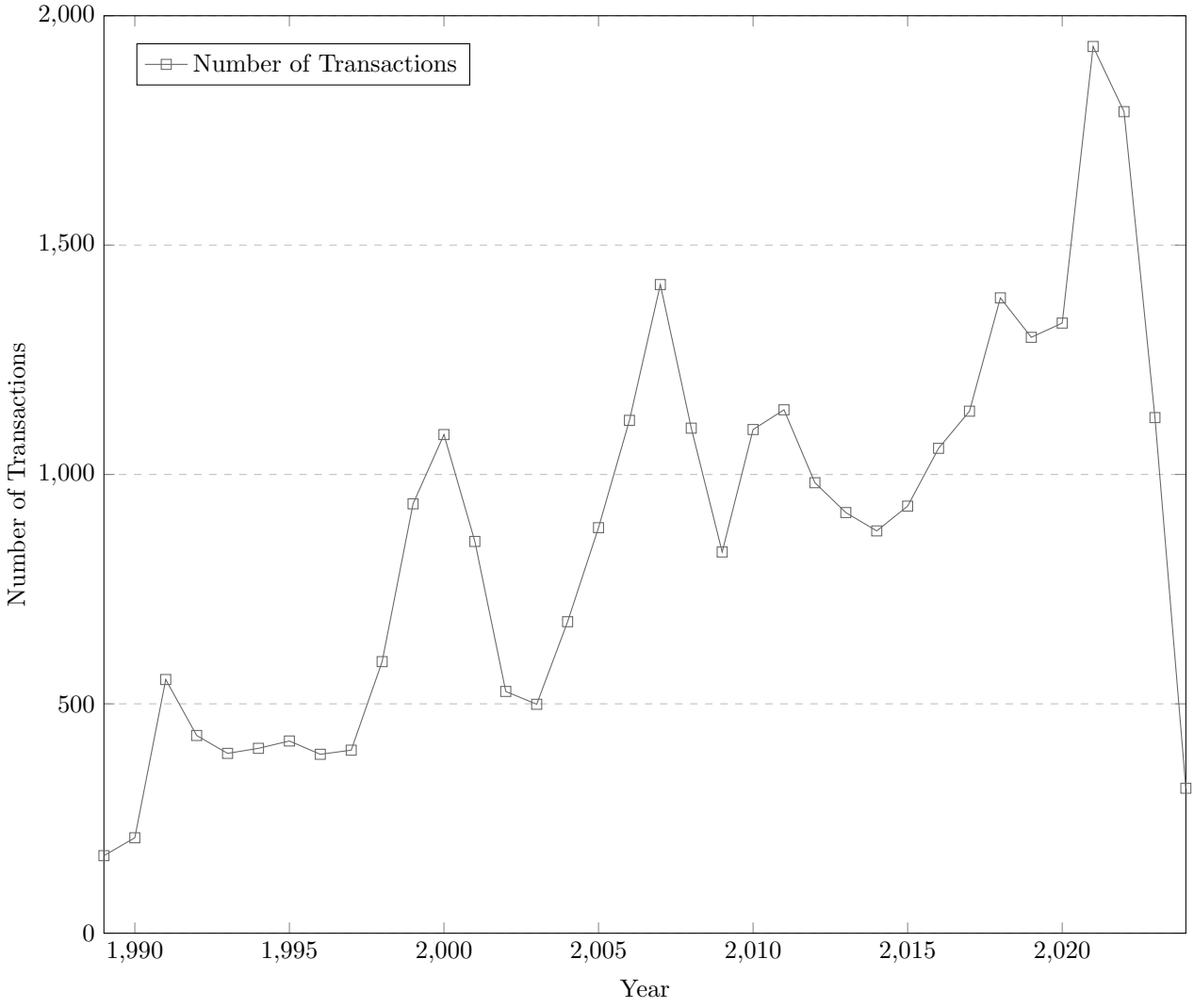
What is interesting about these spikes is that they coincide with significant economic events. These findings contrast some of the previous research regarding M&A as something that is often looked at on the individual firm level (Choi and Jeon 2011).

At the same time, these three spikes suggest that M&A activity, indeed, is affected by macroeconomic influences. This raises the question of how macroeconomic factors influence companies' decisions to engage in M&A.

For example, it could be reasoned that low interest rates encourage M&A activity since it lowers the cost of borrowing and enables companies to leverage higher amounts of debt to use in the context of M&A, this tactic is more commonly known as a leveraged buyout (LBO) which saw a surge in the 1970s and 1980s (Gaughan 2007). On the contrary, high interest rates can result in increased costs for companies, which can cause companies with certain capital structures to struggle financially. This scenario can provide opportunities for financially healthy companies with relatively high amounts of liquidity to acquire competitors through M&A (Faulkner et al. 2012).

The same economic reasoning can also be found for other macroeconomic variables. Unemployment, for example, is often used in economics to determine the health of an economy. A high unemployment rate may indicate a slowing economy, which in turn may reduce firms' willingness to engage in M&A investments due to uncertainty about future performance and demand. Conversely, low unemployment typically indicates a strong economy which could potentially increase M&A activity as companies seek to grow and expand their operations.

It is these contrasts that this paper seeks to investigate further to find conclusive evidence regarding how different macroeconomic variables affect the M&A environment in Sweden.



The graph shows the number of M&A transactions in Sweden per year from 1989 to 2024.

2 Literature Review

The academic literature on M&A is extensive, with numerous studies analyzing the factors influencing aggregated M&A activity. In this sub-field of M&A research, four perspectives on the drivers of M&A have emerged. These are the stock market perspective, industry-level perspective, firm-specific factors, and macroeconomic factors. This literature review aims to explore and analyze some of the research on how various macroeconomic factors affect M&A activity. Interest rates, Gross Domestic Product, or Gross National Income are often the focus of these studies, but variables such as money supply and Consumer Price Index have also been examined.

In the paper "Corporate Mergers and the Business Cycle" Becketti (1986) examines the relationship between M&A activity and the business cycle. By studying M&A transactions in the US over 25 years, Becketti finds that M&A activity has a pro-cyclical character, meaning that merger activity increases with economic expansions and decreases during economic downturns. To investigate this observed merger pro-cyclicality, Becketti analyzes the relationship between M&A activity and a set of macroeconomic variables.

The study uses two statistical models, where the first includes current values of M&A (frequency and deal value) and historical values of macroeconomic variables. These variables are, for example, S&P500, the 3-month T-Bill, Domestic Debt, M1, and GNP. In the second model, the same variables are used, but in this case, the model is reversed. The second model sets current values of the macroeconomic variables as endogenic and the historical values of M&A activity as exogenic. Noteworthy here is that, in both models, lagged values are used for the macroeconomic variables to better capture the effects these variables have on merger activity. This is done as Becketti believes that there is a real lag in how companies respond to changes in the macroeconomic environment.

Becketti finds that the macroeconomic variables explain approximately one-third of M&A activity during the examined period. Among all the included variables, interest rates had a significant impact on merger activity, while GNP had a relatively significant impact. However, changes in M&A activity appeared to have no impact on the macroeconomic variables included in the model (Becketti 1986).

Benzing (1991) also studied the determinants of M&A activity in her article "The determinants of aggregate-merger activity — Before and after Celler-Kefauver".

In this article, Benzing studies the manufacturing and mining sector in the United States pre and post-1950s antitrust regulations.To examine the determinants of M&A activity Benzing utilizes a regression model that includes the annual number of completed mergers in the U.S from 1919-1979 as a dependent variable and past merger activity, stock prices, interest rates, and unemployment as independent variables Benzing (1991).

When studying the entire period Benzing found a negative relationship between interest rate and M&A activity, a positive relationship between M&A activity and stock prices, and unemployment was found to be insignificant. When testing the period from 1919 to 1950, the positive relationship between stock prices and M&A was confirmed, in contrast to the first regression, the relationship between interest rates and M&A was also found to be positive. The regression analysis furthermore showed that the coefficient for unemployment was significant and negative. The results from the period 1951 to 1979 again showed a positive relationship between stock prices and M&A, as well as a negative relationship between interest rate and M&A. Unemployment was found to be insignificant (Benzing 1991).

Benzing finds that the results regarding stock prices and unemployment after 1950 might be explained by the tightening of antitrust regulations in the period following 1950. However, the most interesting conclusion Benzing finds concerns interest rates, where the relationship changes direction when examining different periods. One explanation, as suggested by Benzing, is that interest rates became more volatile following the Treasury Accord of 1951, which ended the practice of pegging interest rates. Based on this result, Benzing suggests that conflicting results in previous studies may be due to the different periods that were studied (Benzing 1991).

Another study that examines macroeconomic variables and their impact on M&A activity is "The Impact of the Macroeconomic Environment on Merger Activity: Evidence from US Time-Series Data" published in 2011 by Seung Hee Choi and Bang Nam Jeon. This study uses several statistical models to investigate the relationship between M&A activity and common macroeconomic variables from 1980 to 2004, both in the short and long term. Some of the macroeconomic variables included are the 10-year Treasury bond rate, Real GDP, S&P 500 close, effective Fed funds rate, and corporate net cash flow, as well as two dummy variables indicating the up and down phases of the business cycle (Choi and Jeon 2011).

What sets this study apart from other similar studies is that it not only includes the frequency and deal value of M&A transactions as dependent variables, but it also includes four different indicators for aggregated merger activity. In addition to the frequency and transaction value of the M&As, two additional measures are included, transaction value/S&P 500 trading volume and transaction value/total assets. The purpose of this inclusion is to perform robustness checks and investigate whether differing measures of M&A activity carries different information (Choi and Jeon 2011).

The authors find a long-term equilibrium relationship between macroeconomic factors and M&A activity, indicating that the macroeconomic environment significantly influences M&A. Key macroeconomic determinants include real income, stock market conditions, and monetary policy (Choi and Jeon 2011). The study also highlights that the upward phase of the business cycle is the most favorable for M&A activity. Additionally, there is evidence that shocks from the previously mentioned macroeconomic variables affect mergers in the short term due to reactive adjustments in the market. When using traditional measures for M&A activity the authors find that GDP and stock market are the most important determinants, which is consistent with previous literature. When adding additional measures of M&A activity the authors find that the bond market, monetary policy, and corporate liquidity are relevant determinants in M&A activity (Choi and Jeon 2011).

While many studies suggest that M&A activity is procyclical, some propose a countercyclical relationship. In the article "Are Bank Mergers Procyclical or Countercyclical?" Wen-Chung Guo and Chih-Ching Yang examine the determinants of M&A activity in Taiwan's banking sector and provide an alternative perspective on the economic conditions surrounding merger activity. Guo and Yang (2013) state that while previous research suggests that merger activity and merger waves coincide with economic expansion, the banking sector in Taiwan demonstrates the opposite. Historically, most bank mergers in Taiwan have occurred during economic downturns or under poor financial conditions (Guo and Yang 2013). Guo and Yang argue that during a recession, banks operate in highly competitive markets, where they compete for reduced revenue. In this challenging environment, many banks turn to mergers as a way to reduce competition by acquiring less stable banks. In the case of Taiwan, the government also played a role by using its stimulus to facilitate mergers, along with a more favorable stock market.

The authors, furthermore, mention two additional examples of this phenomenon, namely the bank mergers in Japan during the 1990s and Bank of America's acquisition of Merrill Lynch in the USA during the credit crisis in 2008 (Guo and Yang 2013).

The study covers the period from 1996 to 2007 and includes 41 commercial banks. A so-called probit model is used to analyze the factors contributing to bank mergers in Taiwan. The model includes various financial variables such as a stock price index, ROE, interest spread, overdue loans, capital adequacy ratio, and a legal dummy variable.

The results showed, among other things, that economic factors like the financial price index and interest spread had a significantly negative correlation with mergers, which supports the authors' hypothesis and indicates that mergers tend to occur during economic downturns (Guo and Yang 2013).

3 Purpose and Research Question

The purpose of this paper is to test how different macroeconomic variables affect the mergers and acquisitions activity in Sweden. Our research will gather data on the number of monthly M&A transactions, interest rate, and unemployment rate in Sweden. The aim is to explore how changes in these variables affect the activity of mergers and acquisitions.

- Is there a significant relationship between M&A activity and the interest rate as well as the unemployment rate?
- How do interest rates and unemployment rates affect firms' decision to get involved in mergers and acquisitions?

4 Theoretical Framework

4.1 Mergers and Acquisitions

Mergers and acquisitions, commonly known as M&A, refers to the process of buying or merging with another company. M&A can take various forms depending on the motives, but horizontal, vertical, concentric, and conglomerate are the most common types. Mergers and acquisitions has its roots in the late 19th century and has since become a common strategy and a widely applicable tool for many companies. It can be used to expand, enter new industries, and acquire technical expertise. An M&A is a complex and lengthy process that involves many steps, such as letters of intent, valuations, negotiations, and due diligence. Depending on the size and complexity of the transaction, the process can take anywhere from a few months to several years in order to reach completion. However, considering the massive sums of capital involved in these deals, every step is important to ensure a successful closure of an M&A deal (Faulkner et al. 2012).

4.2 Merger Strategies

In the fourth edition of his book "Mergers Acquisitions, and Corporate Restructurings", Patrik A. Gaughan (2007) provides a comprehensive guide for the various aspects and concepts which are found in the field of mergers and acquisitions. To narrow down the vast amounts of concepts into something more digestible that can contextualize, and perhaps explain the empirical results, this thesis will have a specific focus on the strategies employed for mergers and acquisitions.

In chapter four: Merger Strategy, Gaughan showcases three main types of merger strategies along with a list of residuals, these strategies are viewed as the motives behind a corporate decision to engage in mergers and acquisitions. They are as follows: Growth, Synergy, Diversification, and Other Economic Motives. These main strategies also possess subcategories.

Growth, which Gaughan describes as "one of the most fundamental M&A motives", is self-explanatory in the sense that corporations have an inherent wish to grow. They are able to do this either organically, that is, by expanding the internal operations of the company, or perhaps more relevant here, inorganically through mergers and acquisitions.

Both options have their pros and cons, but what is certain is that inorganic growth happens at a faster pace than organic growth (Gaughan 2007). This edge may be key in certain situations where Gaughan gives the example of limited opportunity. Sometimes a "window of opportunity" will present itself to corporations to expand and gain market shares. Here, the slower organic growth may be out-competed by other competitors who are better positioned in the market. Thus, mergers and acquisitions become a viable option to capture the resources needed to capitalize on the opportunity that has presented itself. A sub-strategy to this motive may occur in the context of a slower industry. Gaughan explains that managers of corporations have a constant expectation on them to perform and grow by the shareholders. This pressure can become hard to meet when the demand for the corporation's goods, for one reason or another, is reduced. Mergers and acquisitions thus become a solution to the problem by offering stable and relatively fast growth both in the form of increased revenue from the acquired company but, hopefully also through increased synergy (Gaughan 2007).

Synergy here is, at the same time, the next strategy that Gaughan showcases. The concept has a similar connotation to the natural sciences in that the combination of the merged corporations are expected to generate a higher value than the sum of its parts. This strategy is then broken into two sub-strategies, namely operating synergies and financial synergies (Gaughan 2007).

Operation synergies come in the form of revenue enhancements and the reduction of costs. Revenue enhancements usually come from new marketing opportunities or when two companies with differing specializations are able to play off each others strengths (Gaughan 2007). Cost reduction synergy instead focuses on the concept of economies of scale. Economies of scale can be explained as operations becoming cheaper when the now combined output of products and services share the same overhead costs; as opposed to the alternative of having separate fixed costs each to deal with as it is before the merger. Gaughan refers to this as "spreading overhead" (Gaughan 2007).

Financial synergy comes in the form of a lowered cost of capital, while at the same time not being the consensus, Gaughan cites the concept of debt coinsurance which is when two companies with differing income streams merge so that it becomes one diversified stream which is deemed to be less risky by creditors and thus lessens creditor demand for risk-premiums, this in turn is supposed to lower the cost of capital (Gaughan 2007).

The sheer size of a merged corporation is also deemed to be enough in order to create financial synergies as larger corporations also enjoy perks that smaller ones do not. They are for example perceived as less risky since they have a larger stream of income and may be "too big to fail" (Gaughan 2007).

The last main strategy which drives M&A is, according to Gaughan, diversification. Diversification is defined as an expansion much like the growth strategy, the key difference is that diversification targets expansions into new, uncharted, industries and segments(Gaughan 2007). Gaughan explains that this strategy was very prominent during the 1960s when companies sought to become "conglomerates" by acquiring multiple market leaders within diverse segments. Among them, General Electric would prove to be one of the most successful companies that used this strategy (Gaughan 2007). The motive behind diversification is, for example, to increase growth corporate as well as revenue by entering new and growing markets. Another reason could be to increase its stock attractiveness; by having a diverse set of operations, the company creates a portfolio of companies that becomes more attractive investment-wise (Gaughan 2007).

Gaughan finishes the chapter with perhaps less prominent strategies. Here tax, research and development, as well as a plethora of other motives are showcased (Gaughan 2007). Among these strategies is the motive of market power. This motive can take various shapes, but in the end centers around acquiring or merging with competitors to gain market shares and lessen the market competition. An interesting variant of the market power motive is the Roll-up acquisition strategy (Gaughan 2007). Gaughan explains a roll-up acquisition as typically having a large company buying up a series of smaller competitors, which then increases the acquirer's market power through consolidation. Gaughan, furthermore, mentions the 1990s as a prominent time for roll-up acquisitions. During this period, industries like bus transportation and funeral homes saw extensive roll-ups. These owners usually found themselves in illiquid situations for one reason or another and thus the acquiring companies that appeared were seen as a way out to regain liquidity (Gaughan 2007).

4.3 Distressed Acquisitions

Another variant that can relate to roll-ups and market power, depending on the perspective, is distressed acquisitions which is showcased by Faulkner et al. (2012).

Distressed acquisitions occur when a company acquires a struggling, or perhaps more relevant here, distressed company as a means of either saving or salvaging it for valuable parts. This is seen by the authors as a useful alternative to liquidation or corporate restructuring with Faulkner noting its predominance starting from the 1990s to the present during times of economic downturn and financial crisis (Faulkner et al. 2012).

4.4 Interest Rate

In its simplest form, the interest rate refers to the rate at which someone pays for a loan, it can thus be seen as the cost of borrowing money. A higher interest rate means that a loan is relatively expensive compared to one with lower interest rates (Hayes 2024). The interest rates that banks offer depend in turn on the policy rate which is set by the designated central bank of the country. The policy rate is often a macroeconomic tool that central banks use to stimulate demand and control inflation. When interest rates are low, the economy is often stimulated as businesses and individuals gain access to cheap loans, leading to economic growth. This economic growth also tends to bring with it increased inflation. Thus, higher interest rates may need to be implemented to reduce access to cheap loans and in turn slow down the economy, as individuals and businesses, at the same time receive higher premiums for saving money in bank accounts instead of spending and investing (The Riksbank 2023). This staggered growth leads to a decrease in inflation and may at the same time lead to a higher unemployment rate as corporations initiate layoffs in the face of reduced demand for goods and increasing borrowing costs (Fredert and Jonung 2018).

The policy rate, furthermore, has a linkage to mergers and acquisitions in the form of valuation. As the policy rate is said to influence all interest rates it also influences the discount rate, which is a central concept in M&A valuation (Gaughan 2007). A lower interest rate is thus said to lower the utilized discount rate for valuing a target acquisition and vice versa (Gaughan 2007). The lowering of interest rates will therefore increase the net present value and return of the acquisition (Gaughan 2007). Higher net valuations on M&A investments will in turn promote the aggregate M&A activity as they appear more profitable.

4.5 Unemployment Rate

The unemployment rate measures the proportion of a nation's workforce that is unemployed and is often used to determine the health of an economy (Fredert and Jonung 2018). During an economic downturn, the unemployment rate increases as production slows down and job opportunities diminish. On the contrary, the economy will see production surges in times of prosperity, thus creating more job opportunities, which decreases the unemployment rate. Noteworthy here is also that an extremely low unemployment rate can indicate an overheated economy with high inflation and a lack of production capacity (Chen 2023).

5 Methodology

This study will use a quantitative research approach to analyze the relationship between M&A activity and macroeconomic variables of interest and unemployment rate in Sweden. All variables that are included in the study will be collected in the format of monthly observations spanning the time period from January 2001 to between February and April 2024, the difference in the end period depends on practical circumstances that will be explained further down.

From this dataset, and much like in both (Becketti 1986) as well as (Benzing 1991), regression analysis will be applied to measure the relationship and statistical significance of the collected variables on the number of merger and acquisition. Regression analysis is one of the most widely used instruments for analysis in fields of more natural leaning sciences like engineering as well as more social leaning sciences such as business and economics (Jaggia and Kelly 2021). It was thus a rather straightforward decision to use regression analysis for the study as it is a widely used tool for both causal and correlation analysis (Jaggia and Kelly 2021). More specifically, the multiple linear regression is employed because it can account for multiple variables at once, which will be relevant here with regards to the control variables. The model will be fitted using the Ordinary Least Squares (OLS) method, which is commonly used and widely regarded as the standard approach for fitting regression models (Jaggia and Kelly 2021).

The data will initially be sorted in Microsoft Excel where it will be cleaned to meet the proper criteria of the study. The dataset will then be imported into the statistical program Stata where the regression analyses will be conducted. The significance levels in the analysis will be measured at three different different levels, namely 10, 5, and 1 percent. These levels will be noted by *, **, and *** respectively. The study will furthermore require the independent variable coefficients to possess a minimum of at least five percent significance in order to be interpreted.

Since this paper has a main focus on the relationship between interest and unemployment rate against M&A activity, the following regression will be used as an initial regression model:

$$\text{Number of transactions} = \beta_0 + \beta_1 \text{Policy rate} + \beta_2 \text{Unemployment rate} + \epsilon \tag{1}$$

From this, the study will, furthermore, add additional controls for other variables that may exert an influence on M&A transaction volume. The model is thus developed equivalently:

$$\text{Number of transactions} = \beta_0 + \beta_1 \text{Policy rate} + \beta_2 \text{Unemployment rate} + \gamma \text{Control Variables} + \epsilon \quad (2)$$

In the additional variables, the model will control for other macroeconomic measures such as the Consumer price index excluding mortgage costs. This exclusion is motivated on the basis of multicollinearity, as the model otherwise would capture the interest rate twice in both the policy rate and the consumer price index. Furthermore, the Swedish GDP indicator, the fiscal expenditure of the Swedish government, and the change in money supply will also be controlled for. Due to the high numbers of both the Swedish GDP indicator and the Money supply; a percentage change which measures the increase in the numbers from the same month in the year prior, will be used instead. These measurements give a more accurate representation as they smooth out any cyclical noise that may be present, especially in GDP but also in money supply. The fiscal expenditure will at the same time be logged in the model as there is a heavy inter-month variance which will be explained more in the data section.

The second set of variables is supposed to capture the circumstances of Sweden's aggregate industry and exports. Here the model will control for the financial stress, which can be regarded as a proxy for financial crisis, the aggregate business confidence, and the number of corporation or limited liability bankruptcies in Sweden. The financial stress index is a measurement brought forth by the European Central Bank to measure times of high risk and uncertainty in the financial markets. The business confidence index is an index which is issued by National Institute of Economic Research, a government agency in Sweden. The business confidence index is based of qualitative data such as interviews. Additionally, the KIX index, which is a weighted average of the Swedish currency against a portfolio of foreign currency will also be controlled for as Sweden is a nation that relies heavily on exports to foreign nations (SCB 2024). These two control sets will also be combined into one large control set to apply on the regression model, additionally, all the control observations are collected on a monthly basis and showcased as such.

Since it has been used in previous literature such as (Becketti 1986), as well as being logical, the study has also decided to create 4 variations of the original regression model and its controls. Previous authors have found that the inclusion of a time lag may be necessary to better capture the effects of the variables on M&A transaction volume (Becketti 1986). This makes intuitive sense as well when considering that the planning of a merger or acquisition takes a long time from its start date to the announcement date. Smaller ones may take months and the extremely large ones may even take more than a year (Gallant 2024). Thus an M&A that is announced today may have been started on the foundational circumstances that were present 6 months ago. Another argument for the lags comes in the form of economic inertia. It usually takes time for businesses to react to certain events in the environment which gives the company a lag period between the macroeconomic circumstances changing and the businesses acting on it. The model takes these factors into account by lagging the effects of the chosen variables on transaction volume. These lags will be 3 months, 6 months and 9 months. This will furthermore also increase the significance of the study by changing the time horizons of the relationships between the variables and M&A activity to see if they still hold.

6 Data

6.1 Data Collection

The data included in this study will be collected from various databases and sources online. The number of monthly merger transactions announced in Sweden is retrieved from S&P Capital IQ. In Captial IQ, one was able to retrieve the number of merger transactions in the screening tool. In this study, the following criteria was utilized to retrieve the target data:

- Transaction screening
- Geographic location (Buyers/Investors): Sweden (Primary)
- M&A Announced Date: [All History]

Additionally, it can be noted that the geographic location filter is limited to the buyers/investor. This filtering is chosen to only apply to buyers/investors since these actors and companies are directly affected by Swedish macro variables. An American company, for example, will not be as heavily affected (if at all) by a change in the unemployment rate as a Swedish company would. This is because it does not operate within the Swedish market and is thus not subject to Swedish market conditions. Noteworthy here is that companies, which are headquartered elsewhere in the world, but still have significant operations and subsidiaries in Sweden (such as LIDL), are at the same time included in the dataset as they are subject to the Swedish market conditions.

When considering M&A announced date, it is logical to have all the M&A observations available in Sweden to get as accurate of a representation as possible, hence the reasoning behind the inclusion of [All History] in the screening tool. Upon further inspection, however, it became apparent that the frequency of mergers declined to the point where there were months without any reported M&A announcements. Thus, January 1996 became a fitting demarcation as a point where M&A announcements occurred on a consistent and monthly basis.

Captured from this data was thus the monthly amount of merger announcements in which the buying companies or investors involved in the M&A were Swedish, or had a direct linkage of operation in Sweden, such as a subsidiary, for example.

Moving on with the collection of independent variables and control variables. The collection of policy rate as well as the Kix-index came from the Swedish Central Bank: The Riksbank. The Riksbank has a statistics service for collecting data on different variables of interest which is related to the central bank itself. In the screening Policy rate and Kix-index was collected on a monthly basis. The service allowed for easy access to the data in a relevant format.

The remaining variables are mainly collected from Statistics Sweden, or Statistiska Centralbyrån in Swedish. The collection from Statistics Sweden was rather uncomplicated with files of interest being readily available to download or accessed directly in the statistical service database. GDP, Unemployment rate, Business confidence indicator, and LTD Bankruptcies were retrieved using Statistics Sweden. Some additional variables were retrieved from other credible sources online such as Ekonomifakta which cites the European Central Bank, Trading Economics which cites Statistics Sweden, as well as Thomson Reuters Refinitiv Eikon.

When the collection was set and done 11 variables were gathered. These variables span different areas and are explained further in the table on the next page.

Table 1: List of Variables

Variable name	**Definition**	**Source**
NumberofTransactions	Number of M&A transactions for each month from 2001-2024	S&P Capital IQ
PolicyR	The average policy rate in Sweden per month from 2001-2024	The Riksbank
UnemploymentR	Percentage of the population aged 15 to 74 that is unemployed. The observations are monthly and collected from 2001-2024	Statistics Sweden
M2Growth	The monthly money supply growth as compared to the same month in the year prior	Refinitiv Eikon
CPIFRate	The Consumer Price Index Fixed Interest Rate in Sweden per month collected from 2001-2024 This CPI excludes interest rate cost on mortgages	Statistics Sweden
GDPIndicator	The preliminary estimate of the growth in GDP for a given month as compared to the same month in the prior year	Statistics Sweden
FiscalExpenditure	The total government expenses per month, this includes buying goods and services, investment, and transfer payments	Trading Economics
FinStressIndex	A proxy for financial crisis	Ekonomifakta
LTDbankruptices	Monthly bankruptcies of limited liability companies in Sweden	Statistics Sweden
BusinessConfidence	Business confidence measurement is a metric collected by the National Institute of Economic Research through qualitative sampling	National Institute of Economic Research
KixIndex	An exchange rate denominated in SEK against a weighted portfolio of foreign currencies	The Riksbank

Table 1 presents the variable names, their definitions, and their sources of collection.

6.2 Data Cleaning

Due to the data being created, sorted, and summarized already by the organizations which they were retrieved from, there was not much that actually needed to be cleaned and sorted. There were monthly observations for virtually every variable. An exception that did need to be modified, however, was the fiscal expenditure of the Swedish government. This variable showcased high inter-month fluctuations. This variable thus became log-transformed in order to smooth out the variance. Another thing that needed to be done was the implementation of another time demarcation so that the data began in January 2001 instead of 1996. This was done as certain variables did not stretch that far back in time and thus would not have been able to be included in the study otherwise. An additional thing that needed to be done was the implementation of the time lags, which was mentioned in the method section. As stated before the reasoning is that mergers take time to both initiate and execute and there is thus a time lag between the effects of say a change in interest rates and the change M&A activity. This implementation was rather simple and included just shifting the explanatory variables' time series back a given number of months. In this way, June 2023 would interact with January 2023 in the dataset, for example. This shift caused a drop in observations from 278 to 271 as the number of previously relevant months became omitted.

6.3 Descriptive Statistics

Table 2: Descriptive Statistics

Variable name	**Mean**	**St.Dev**	**Min**	**Max**
NumberofTransactions	99.79	39.48	12	212
PolicyR	1.45	1.62	-0.5	4.67
UnemploymentR	7.41	0.89	5.89	9.3
M2Growth	0.58	3.37	-10.71	9.70
CPIFRate	2.05	1.78	-0.4	10.2
GDPIndicator	2.03	3.57	-12.73	11.87
FiscalExpenditure	74.45	26.41	20.1	186
FinStressIndex	0.12	0.11	0.02	0.63
LTDbankruptices	493.26	112.97	273	1052
BusinessConfidence	99.91	10.55	57.2	120.1
KixIndex	114.50	6.48	100.75	131.18

Table 2 summarizes the statistics for the variables. Fiscal expenditures are reported in BSEK, KIX, and business confidence are reported in absolute values, while all other variables are expressed as percentages.

6.4 Empirical expectations

The expected results of this study are to be in line with the previous studies that found a negative relationship between the policy rate and merger activity. The expectation is built partly on the results of the previous studies, but also on the connection between merger valuation interest rate which is mentioned in the theoretical framework. There is at, the same time, a merger motive which contrasts this negative relationship expectation, which is financial synergy. As the cost of capital is increased by the interest rate, there may be an increased motive to merge as companies seek to lower their now higher cost of capital. The overall expectation, however, remains in favor of the negative relationship, that is, when the policy rate increases, the number of monthly M&As transactions decreases.

When considering the relationship between unemployment and M&A the expectations are less clear. On the one hand, there are previous studies who point to a procyclical character in M&A, in the sense that M&A activity tends to increase during economic prosperity. On the other hand there is there are merger strategies and motives which points to a more countercyclical nature such as roll-up and slow-growth acquisitions where M&As are favored during an economic downturn. This expectation is also backed up by the findings of Guo and Yang (2013) who saw a countercyclical relationship in the Taiwanese banking sector. The chosen expectation for this study, however, lands in a procyclical one as economy upturns should intensify all types of economic activity on the aggregate level, including mergers and acquistions.

7 Empirical Results

Table 3: Regression results from models with no lag

	1	2	3	4
Variable				
PolicyR	-10.0208***	-9.3118***	-5.3023***	-3.8241***
	(1.472)	(1.432)	(1.411)	(1.400)
UnemploymentR	4.7280*	3.6837	6.9168***	4.6786**
	(2.667)	(2.446)	(2.532)	(2.258)
M2Growth		0.3677**		-0.0470
		(0.158)		(0.147)
CPIFRate		3.9354***		3.7447***
		(1.180)		(1.163)
GDPIndicator		2.0407***		-1.9391***
		(0.546)		(0.629)
FiscalExpenditure		37.8355***		41.8385***
		(6.083)		(5.884)
FinStressIndex			26.9278	28.9784
			(21.432)	(19.547)
LTDbankruptices			0.0626***	0.0302*
			(0.019)	(0.017)
BusinessConfidence			2.0428***	2.2265***
			(0.229)	(0.264)
KixIndex			-0.1911	-1.2234***
			(0.352)	(0.358)
Adj R-squared	0.2164	0.3779	0.4084	0.5466

Standard errors in parentheses

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

In table 3, policy rate is shown to be statistically significant with and without controls. There is a strong negative relationship between the number of transactions and the policy rate. For every increase in the percentage unit of the Swedish policy rate, the number of monthly M&A transactions will decrease by between approximately 10 and 3.8 transactions depending on the number of controls. This relationship is also diminishing as the increase of control weakens the strength of the relationship. The choice of controls also affects the strength differently as showcased in the difference between models 2 and 3.

In contrast, the unemployment rate is found to not have enough statistical significance in models 1 and 2 to be interpreted. In regression 3 the unemployment rate becomes heavily significant by adding financial stress, bankruptcies, business confidence, and KIX index. In this regression, the relationship is found to be positive, that is, for every percentage increase in unemployment the number of monthly M&A transactions will increase by approximately 7 transactions. In model 4, where all the controls are accounted for, there is a weaker statistical significance at the 5% level which, once again, shows that there is a positive relationship between the number of monthly M&A transactions and the unemployment rate. For a percentage point increase in the unemployment rate, the number of monthly M&A transactions will increase by approximately 4.7 transactions.

In the table, one can also observe the adjusted R-squared values for all the models. Here it can be noted that the explanatory power increases from 0.2164 to 0.5466 as more variables are added. This is to say that in the most reduced model namely number one, 38.24% of the dependent variable is explained by the model. This percentage rises to 53.28% in model four.

Table 4: Regression results from models with 3-month lag

	1	2	3	4
Variable				
PolicyR	-10.096***	-10.8869***	-5.4629***	-5.2819***
	(1.398)	(1.468)	(1.351)	(1.465)
UnemploymentR	9.1447***	8.8719***	14.8068***	13.439***
	(2.526)	(2.485)	(2.412)	(2.343)
M2Growth		0.5270***		0.0874
		(0.160)		(0.151)
CPIFRate		3.4078***		3.4653***
		(1.193)		(1.204)
GDPIndicator		1.4203**		-1.6011***
		(0.552)		(0.650)
FiscalExpenditure		8.8477		19.3671***
		(0.552)		(6.070)
FinStressIndex			-4.7098	-9.1546
			(20.361)	(20.199)
LTDbankruptices			-0.0663***	-0.0809***
			(0.018)	(0.018)
BusinessConfidence			1.3227***	1.4578***
			(0.229)	(0.264)
KixIndex			0.3454	-0.3200
			(0.335)	(0.371)
Adj R-squared	0.2956	0.3552	0.4606	0.5100

Standard errors in parentheses

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

Table 4 showcases a 3-month lag for the explanatory variables. Here, the policy rate has statistical significance across all models. Its impact on the number of monthly mergers remains negative, with it possessing a coefficient of about -10.9 and -5.3 depending on the model. This means that a decrease in the policy rate of 1 percentage point will correspond to a decrease in merger transaction volume by between 10.9 and 5.2 depending on the model being utilized. Noteworthy is also that the relationship strength is at its lowest when in model 4 where the most number of variables are controlled for. The strongest relationship is found in model 2 which controls for other macroeconomic variables.

The unemployment rate also shows high statistical significance across all models. The relationship between unemployment and M&A transaction volume is positive and exhibits a strong coefficient where if unemployment rises by one percent the number of monthly M&A transactions will increase by between 8.9 and 14.8 depending on the model utilized. There is also no linear pattern in which coefficient strength increases or decreases with the number of added controls. The highest coefficient of 14.8 is found in model 3 which controls for the corporate circumstances in Sweden and the lowest of 8.9 is found in model 2 which controls for other macroeconomic variables.

Table 4 shows an adjusted R-squared between 0.29 and 0.51 depending on the model. Model one showed the least amount of explanatory power where 29.56% of the dependent variable was explained by the model, whereas the fourth model showed the highest explanatory power with 51% of the dependent variable being explained by it. Notable here is also that model three has a higher adjusted R-squared of 0.1054 more than model two despite the models having the same number of explanatory variables.

Table 5: Regression results from models with 6-month lag

	1	2	3	4
Variable				
PolicyR	-10.0402***	-9.4309***	-6.0937***	-4.5973***
	(1.344)	(1.407)	(1.370)	(1.504)
UnemploymentR	13.1962***	11.9821***	16.3684***	14.6313***
	(2.403)	(2.315)	(2.395)	(2.310)
M2Growth		0.4675***		0.2157
		(0.148)		(0.147)
CPIFRate		0.8719		-0.2084
		(1.098)		(1.195)
GDPIndicator		1.2804**		-1.6478**
		(0.506)		(0.636)
FiscalExpenditure		25.7205***		27.9523***
		(6.219)		(6.017)
FinStressIndex			-13.4158	0.6207
			(20.048)	(19.829)
LTDbankruptices			0.0249	0.0169
			(0.019)	(0.019)
BusinessConfidence			1.3199***	1.7009***
			(0.217)	(0.274)
KixIndex			0.0813	-0.05389
			(0.330)	(0.365)
Adj R-squared	0.3824	0.4551	0.4791	0.5328

Standard errors in parentheses

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

Table 5 showcases a 6-month lag for the explanatory variables. Similar to the previous tables, the coefficient for the policy rate is significant and shows a negative relationship with M&A transactions. When examining the first regression in this table, the coefficient for the policy rate can be interpreted as follows: when the interest rate increases by one percentage point, the number of M&A transactions decreases by approximately 10 transactions per month. When controlling for additional variables, the relationship continues to be significant, but the coefficients decrease as more variables are added.

In contrast, the unemployment rate shows a strong positive relationship with M&A transactions across all models, with coefficients ranging from 11.9 to 16.4. This can be interpreted as, when unemployment rises by one percent, the number of monthly M&A transactions will increase by 11.9 to 16.4, depending on the model utilized.

In Table 5, the adjusted R-squared values are 0.3824, 0.4551, 0.4791 and 0.5328. Which is to say that model one, two, three, and four explain 38.24%, 45.51%, 47.91%, and 53.28% of the dependent variable respectively. These values also indicate that the explanatory power increases as more variables are included in the model.

Table 6: Regression results from models with 9-month lag

	1	2	3	4
Variable				
PolicyR	-9.9463***	-9.8930***	-7.4796***	-6.3915***
	(1.292)	(1.418)	(1.342)	(1.542)
UnemploymentR	15.5371***	14.6058***	19.2211***	18.2939***
	(2.283)	(2.290)	(2.329)	(2.334)
M2Growth		0.3682*		0.1647
		(0.146)		(0.145)
CPIFRate		-0.1624		-0.9086
		(1.071)		(1.179)
GDPIndicator		0.9392*		-0.8456
		(0.494)		(0.627)
FiscalExpenditure		10.9924*		16.8279***
		(6.124)		(5.939)
FinStressIndex			-19.7901	-8.6235
			(19.089)	(19.572)
LTDbankruptices			-0.0661***	-0.0690***
			(0.019)	(0.019)
BusinessConfidence			0.7033***	0.9477***
			(0.206)	(0.272)
KixIndex			0.3907	0.4755
			(0.327)	(0.372)
Adj R-squared	0.4469	0.4727	0.5256	0.5407

Standard errors in parentheses

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

Table 6 showcases a 9-month lag for the independent variables. Similar to all other models presented in the previous tables, the policy rate is significant and has a negative relationship with the number of M&A transactions across all models. The coefficients range from -9.9463 to -6.3915 as more control variables are added.

The coefficients for the unemployment rate again show a strong positive relationship with M&A transactions across all models, with coefficients ranging from 14.6058 to 19.2211. It is worth noting that the coefficients become more positive when the explanatory variables are lagged over a greater number of months, in this case, nine months, compared to when they are lagged six or three months.

In table 6, featuring regressions with a 9-month lag, all models demonstrate relatively high adjusted R-squared values, ranging between 0.4469 and 0.5407. Which is to say that approximately half of the dependent variable is explained by the models with a varying spread of about 6%. It is at the same time, even in this table, noticed that the adjusted R-squared increases when all control variables are included, suggesting that Model 4 provides a better explanation of the data.

8 Discussion

8.1 The Results

This thesis aimed to investigate the impact of macroeconomic variables, with a specific focus on the policy and unemployment rate in Sweden, on the volume of mergers and acquisitions transactions in Sweden between January 2001 and April 2024. The empirical analysis showed that our selected macroeconomic factors had a highly significant relationship with the Swedish M&A activity. This holds for all the time-lagged models with adjusted R-squared ranging from 0.2956 to 0.5407 for the lagged models and 0.2164 to 0.5466 for the unlagged models.

8.2 Policy Rate

The empirical results of the study suggest a significant negative relationship between the Swedish policy rate and monthly M&A transaction volume. With statistically significant coefficients that range from between negative 3.82 and negative 10.88 depending on the table and model, the relationship can be deemed to be highly relevant. This finding is in line with the expected results of the study. Lower policy rates reduce borrowing costs, making financing more accessible for companies that are considering mergers and acquisitions. Noteworthy here, however, is that the strength of the relationship is reduced by the number added control variables. This suggests an overestimation of the initial effects that policy rate has on the number of monthly merger announcements, nevertheless, this is partly adjusted for when adding the controls, when added policy rate still shows a significant and negative relationship.

The empirical results also support Becketti's (1986) findings, indicating that a decrease in interest rate increases M&A activity. A contextual explanation behind this occurrence may be found in the valuation of merger deals. As mentioned before, there is an observed phenomenon of lowering of aggregate interest rates directly affecting the discount rates by lowering them as well. This lessening of the discount rates used in the valuation process increases the value and ultimate profitability of the M&A deal. Conversely, a higher interest rate would rate the discount rate which would make the valuations of M&A deals less profitable (Gaughan 2007).

Another possible explanation behind the observed relationship is that the cost of conducting an M&A deal decreases due to lower the cost of borrowing brought on by the lower policy rate. Just as higher policy rates, conversely, would increase the cost of borrowing, which would in turn deter M&A transactions as firms may become more cautious about taking on debt in an environment with a high cost of debt (Gaughan 2007).

This empirical result is, furthermore, partly in line with Benzing's paper, which also found a negative relationship between interest rates and M&A activity in the majority of the studied period between 1919 to 1979 in the US manufacturing and mining sectors.Benzing (1991) also draws upon idea of the cost of capital as well as tighter monetary policy discouraging mergers and acquisitions.

8.3 Unemployment Rate

Contrary to the empirical expectations, the unemployment rate exhibited a positive and significant relationship against merger activity. This relationship holds statistical significance at the 1% level throughout all the tables except one model in the no-lag table. The lack of significance in the no lag table can possibly be attributed to economic inertia, which refers to the resistance to change in economic systems or behaviors. When changes appear in the economy, companies seldom adapt instantaneously instead, there is a time lag in the adaptation. Another interesting finding was that the positive relationship increased in strength for all tables in model 3 and model 4 where certain control variables that relate to the business circumstances were added. This may suggest that the initial effect of the unemployment rate is underestimated and that the additional controls reduce the negative omitted variable bias which suggests that the unemployment rate actually may be stronger than initially shown. This result, in turn, suggests that higher unemployment rates increase in tandem with the number of mergers and acquisitions in Sweden.

This counter-cyclical behavior of Swedish merger activity is in line the findings of Guo and Yang (2013), who observed similar trends in the Taiwanese banking sector during economic downturns where Taiwanese banks capitalized on downturns to acquire their competitors and increase their market share. This finding challenges the conventional view that M&A activity is primarily pro-cyclical and underscores the complex motives behind corporate mergers and acquisitions.

At the same time, it is worth noting that Guo and Yang (2013) only focus on the banking industry in Taiwan, this sector faces in front of its own unique challenges and opportunities which may not be shared across other industries. Meanwhile, this study seeks to examine common effects across all industries and thus the explanation provided may not hold for all industries as the other industries can be intrinsically different from the banking sector. Further explanations behind the relationship between the number of mergers and the unemployment rate.

Since the unemployment rate, once again, is indicative of an economic downturn, one explanation may be found in the concept of distressed acquisitions. As the economy, due to one reason or another, slows down, so does the demand for goods and services. This in turn puts certain companies in financially stressful situations. These companies now find themselves struggling and become financially distressed which presents the opportunity for financially stronger and healthier companies to step in with distressed acquisitions and offer an exit opportunity for the struggling company. Thus increasing the number of mergers and acquisitions.

Another closely related explanation to the distressed acquisitions, which many times can be applied interchangeably, is the roll-up strategy which is utilized by some companies. As mentioned before, roll-ups, were historically presented to smaller businesses that suffered from illiquidity, the targeting of smaller firms also allowed larger corporations to conduct a series of this type of M&A in a rapid fashion. The economic downturn that unemployment represents would at the same time bring lower demand and induce lower revenue streams to smaller businesses which in turn puts them in the illiquid position where a roll-up acquisition program now seems to be a viable exit strategy. This explanation also takes into account the strength of the relationship between the variables as roll-ups are serial acquisitions with a high number of smaller transactions which will be registered more strongly in the number of M&A transactions as compared to larger and fewer transactions which may be found in the other explanations.

A third explanation for the relationship between the unemployment rate and the number of mergers and acquisitions can be found in the growth motive or more accurately the sub-strategy of slow-growth acquisitions. As mentioned previously, there sometimes exists a rather heavy pressure on corporate managers to perform and show growth as well as revenue for the corporate shareholders.

In times of a slower-moving economy such as when there is a downturn, corporate managers may start to engage in mergers and acquisitions in an effort to meet shareholder pressure and deliver the growth and revenue increases that are expected.

8.4 Limitations

Despite the statistically significant findings, it is at the same time good and reasonable to acknowledge the limitations that might affect the scope and interpretation of the results.

The data used in this study spans from January 2001 to April 2024. A period of approximately 23 years, which allows for an analysis of trends and patterns over time, which provides a more significant result of the relationship between M&A activity and the macroeconomic factors of choice. However, (Benzing 1991) notes in her study that the relationship findings become contradictory when the study period is split into two parts. She speculates, for example, that the underlying reason could be a long period of unchanged interest rates. Our dataset shows a similar trend, with a relatively longer period of zero and even negative interest rates between November 2014 and May 2022. Further studies of a second period, alternatively a segmentation of the current period in the data might provide a different picture of the relationships and thus results.

Furthermore, the lags of 3, 6, and 9 months indeed showed statistical significance in the relationship between the variables and M&A activity. At the same time, the findings may have been different if other lags were chosen instead. The varying nature of mergers and acquisitions makes it hard to pinpoint a time lag which can be deemed to be representative as some smaller mergers may only need a month from planning to announcement and some of the larger, more complex ones, may need more than a year to go from start to announcement. Mergers that thus have longer or shorter timelines than the lags of the study may end up showing differing results from the findings of this study.

The control variables in our study, which include GDP growth, inflation rate, fiscal expenditure, business confidence, and financial stress et cetera, are used in the study to more accurately capture the relationships of macroeconomic factors influencing M&A activity. At the same time, the thesis still acknowledge that there may be other unobserved factors that influence M&A activity that have not been accounted for.

Variables such as political stability, regulatory changes, and international conditions were not explicitly controlled for in this study. This exclusion may partly be because of the national focus as well as the difficulty in quantifying certain aspects. As a consequence of this exclusion, there may be a bias towards more quantitative as well as national measurements, which potentially may skew the results.

The thesis is also geographically limited to Sweden, which gives insights into the Swedish merger market. However, this geographical focus also limits the applicability of the findings to Sweden only. Other regions of the world, let alone bordering nations, might possess different economic structures, regulatory environments, and other underlying characteristics. This makes the generalizability of this study limited to the national border of Sweden. To validate whether the observed relationships are held in regions a similar study would have to be conducted there. Another limitation of the study comes in the form of granularity. Unlike many other studies that focus on specific sectors, our research examines the aggregate merger market as a whole. This aggregation removes any inter-industry variations that may be present in the market, something which might itself carry valuable insights, and thus may be of interest for further research. This is also applicable with regards to the merger types, as this study has not differentiated between different types of mergers such as growth, synergy, and diversification there are also insights to be gained here from conducting further research. One example would be how many roll-up acquisitions have taken place in Sweden as compared to distressed acquisitions.

There is, furthermore, a limitation in the form of the one-sidedness of the dependent variable. This thesis exclusively measured the M&A activity in the form of the volume of M&A transactions that were announced per month. Previous studies such as (Choi and Jeon 2011) as well as (Benzing 1991) not only used the number of M&A transaction, but they also used merger deal value as a measurement of M&A activity as the inclusion of this measurement gives a more nuanced and therefore more representative picture of M&A activity. This idea can be reinforced with regards to the roll-up acquisitions as the tend to be overrepresented in the number of transaction. Which may create a sort of skew in the study. This thesis did, at the same time, not exclude the deal value dimension on the basis of any bias.

Rather, the data for Swedish M&A deal value was not as readily available as the deal volume so the inclusion of it would not be representative of the actual deal values that have taken place in Sweden. If this data becomes readily available in the future, or already is available to others, one suggestion would be to re-create this study with that dimension included.

A final limitation of this thesis is the lack of inverse regression for the number of M&A transactions on the macroeconomic variables similar to the paper from (Becketti 1986). In this way Becketti gains additional robustness as the inverse relationship is tested to search for any potential effect of M&A transactions might have on the macro variables. From the findings of this paper one interesting study of interest may be that if there is a potential relationship between M&A activity and unemployment Gaughan (2007) mentions that one of the main merger strategies would be the achievement of cost reduction through economies of scale. It would thus not be too far of a fetch to assume that these synergies of cost reduction would come at the expense of layoffs where personnel that once served a purpose in the separate organizations are made redundant by spreading the overhead, which in turn would increase the unemployment rate as they lose their jobs.

9 Conclusion

This bachelor thesis investigates how macroeconomic variables, with a particular focus on interest and unemployment rates, affect the M&A transaction volume in Sweden. The findings show a statistically significant and negative relationship between interest rates and M&A activity. Which suggests that companies may be discouraged from participating in M&A when interest rates are high.

This finding is in line with both previous studies and reasonable given the intricacies behind mergers and acquisitions. An example of this complexity being found in the decrease in perceived investment profits and the higher cost of debt during high interest rates. At the same time, and contrary to what was the expected result, higher unemployment rates were associated with an increase in the volume of monthly M&A transactions. This finding may once again point to the intricacies of mergers and acquisitions with certain merger strategies being benefited by an economic downturn, something which could suggest a corporate seizure of opportunities during times of economic downturn by engaging in M&A.

While this thesis provides evidence of a significant relationship between the macroeconomic variables of policy and unemployment rate against the M&A activity over multiple time lags. It also highlights a need for further research to explore the possible effects of economic events, more obscure variables, and different dimensions, which were not covered in this analysis. Future research could also benefit from the inclusion of a broader set of control variables and the examination of the macroeconomic effects in different countries, or in the same country across differing industries.

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