

**From private to public: Examining the impact of wealth tax,
interest and GDP growth on IPO durations and frequencies in
Norwegian and Swedish companies**

By
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Abstract

This thesis examines the influence of wealth tax, interest rates, and GDP growth on IPO durations and frequencies in Sweden and Norway. While the GBM and SVM models showed predictive accuracy in assessing IPO duration, their limitations prevented a definitive conclusion on the specific impact of wealth tax. In the analysis of IPO frequencies, although OLS regression suggested a moderate link with wealth tax, robustness challenges and mixed results from machine learning models led to inconclusive findings. These outcomes necessitate cautious interpretation and further research to address complexities in the economic indicators' influence on IPOs.

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1.0 Introduction and motivation

The primary aim of this thesis is to explore whether economic variables such as wealth tax, interest rates, and GDP growth significantly influence companies' decisions to go public through Initial Public Offerings (IPOs) in Sweden and Norway. It seeks to understand if these factors are significant determinants of the duration from a company's founding to its IPO and the overall frequency of IPOs in these two countries. The literature review provides a backdrop, revealing how economic conditions, fiscal policies, and corporate decision-making processes are intricately linked, thereby influencing the timing and occurrence of IPOs. This study further examines the impact of wealth tax, along with other variables like interest rates and GDP growth, on IPO Duration and the annual number of IPOs. The analysis, conducted using various econometric models, reveals a notable influence of these economic indicators on IPO activities. Particularly, the SVM (Support Vector Machine) and GBM (Gradient Boosting Machine) models exhibited good predictive accuracy for the average IPO duration. However, the findings also bring to light challenges such as heteroskedasticity and influential outliers, necessitating a cautious approach to interpreting the data. These challenges underscore the complexity of establishing clear correlations between macroeconomic variables and corporate decisions regarding IPOs. The outcomes of our analysis led to the rejection of both hypotheses, and as a result, we are unable to definitively determine the influence of wealth tax on the IPO activities.

In conclusion, the thesis identifies significant relationships between the economic factors studied and IPO activities, but the robustness issues encountered in the analysis call for a nuanced interpretation of these results.

2.0 Literature review

2.1 The IPO Decision

(Draho, 2004) delves deeply into the reasons behind a company's decision to go public, examining benefits like increased capital and market visibility against challenges such as regulatory compliance and shareholder scrutiny. The book crucially highlights the importance of timing and accurate valuation, influenced by market dynamics and investor sentiment, in determining IPO success.

2.2 Impact of Interest Rates on IPOs

(Rousseau, Interest Rates and Initial Public Offerings, 2004) study underscores a nuanced relationship between interest rates and IPO timing, emphasizing that lower interest rates may lead companies to postpone going public. This relationship is complex and multifaceted, influenced by a range of economic and market factors beyond mere interest rates.

2.3 Impact of Wealth Taxes on Corporate Decision-Making and Investment Behavior

(Ormazabal, 2023) investigates the significant impact of wealth taxes on corporate decision-making in closely held companies, particularly family firms. The study finds that changes in wealth tax liabilities, often tied to stock value increases, lead to adjustments in dividend policies, which can affect long-term growth and investment strategies.

2.4 Effect of Sweden's Abolishment of Wealth Tax on Public Listings

(Tilley, 2021) research on the abolishment of Sweden's wealth tax demonstrates a clear increase in the number of public listings post-abolishment. The study concludes that the removal of this tax burden made the public market more accessible and attractive for companies, influencing their growth and public offering strategies.

3.0 Hypothesis

Building upon existing literature, I aim to delve deeper into the impact of various factors on IPO activities, with a particular focus on understanding the influence of wealth tax. This extension of my research seeks to uncover more nuanced insights into how these variables shape IPO activities.

3.1 Role of Wealth Tax in Determining IPO Duration

This hypothesis posits that the wealth tax significantly influences the 'IPO Duration,' defined as the time from a company's founding to its IPO, in Sweden and Norway. The study aims to explore the extent to which the presence and level of wealth tax, in conjunction with other economic indicators like interest rates and GDP growth, predict the IPO Duration in these countries.

3.2 Impact of Wealth Tax on Annual IPO Frequency

The presence and level of wealth tax are key determinants in the annual frequency of IPOs within Sweden and Norway. This analysis aims to examine how wealth tax, along with other economic indicators such as interest rates and GDP growth, affects the total number of IPOs occurring annually in these countries.

4.0 Data and Limitations

4.1 Data collection

Variable	Explanation
Interest rates	The cost for borrowing money or the reward for saving it, set by central banks to influence economic activity.
GDP growth	The rate at which a country's economy grows or shrinks, reflected in the value of all goods and services produced.
Wealth tax	A tax on an individual's net worth to redistribute wealth and support public spending.

Period: Q1-1961 to Q4-2022	Frequency: Annual
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Figure 1 – Data summary

4.2 Company selection and limitations

I personally selected companies for this study using Nordnet (Nordnet, n.d), known for its compliance with EU regulatory standards and reliable financial data. This platform offers essential information like founding and IPO dates, important for this research. Despite my intentional selection, there's a potential selection bias that should be acknowledged in interpreting the results. Additionally, the analysis only includes companies founded after 1961. This criterion was created because of Sweden, where there is a significant presence of very old companies. Including such longer-established firms could potentially distort the analysis, especially for our “average IPO duration” where our dependent variable is the Average IPO duration. By focusing on companies founded post-1961, the study aims to provide a more contemporary perspective on the factors influencing the journey to an IPO in these two Nordic countries, ensuring the findings are relevant to the current economic landscape and business practices. To simplify our analysis, all companies' founding dates were standardized to January 1st. This approach was chosen to avoid the complex and resource-intensive process of determining exact founding dates, considering the challenges in accessing and verifying such historical data.

4.3 GDP growth

The Gross Domestic Product (GDP) growth data for both Norway (Macrotrends, n.d) and (Macrotrends, n.d) Sweden was sourced from the website Macrotrends, which is a third party source which sources its data from the World Bank, which is a primary and authoritative source in the field of global economic data. The yearly variations in GDP growth are presented in the appendix, under Figure 24 and 25.

4.3.1 Why include GDP growth?

Incorporating GDP growth in my study is vital for understanding the transition from founding to IPO in Sweden and Norway. GDP growth, indicating economic health, impacts business expansion and investor confidence. Rising GDP typically fosters favorable conditions for companies' growth and public offerings, influencing investor sentiment and increasing capital access. This enhanced economic activity may accelerate company growth, leading to more IPOs. Comparing Sweden and Norway's GDP growth offers insights into their distinct economic climates and their influence on corporate IPO decisions.

4.4 Wealth tax

4.4.1 Limitations

In Norway from 1961 to 2007, the exact tax rates are not known, posing a challenge in historical fiscal analysis. Here the assumption is that the tax rate was 1,1% from 1991 to 2007, and 2,2% from 1961 to 1990. The ambiguity of these rates makes it difficult to ascertain with precision how they compared to those in Sweden during the same period. It is conceivable, however, that Norwegian wealth tax rates might have been higher than what is generally assumed, especially when considering what Swedish wealth tax rates were at the same time. This hypothesis stems from the broadly similar tax structures within the Scandinavian countries, (Daniel Bunn, 2023).

In the period following 1990, both corporations and individuals in Norway were subject to wealth tax (Zimmer, 2022). However, the detailed rates applied during this time are not precisely known. Our analysis operates under the assumption that the wealth tax rate was 1.1%, and then doubled due to the concurrent tax liabilities borne by both companies and individuals.

The ambiguity in historical wealth tax rates, particularly in comparative analyses with Sweden, underscores a significant gap in the historical fiscal records of Norway. This gap

poses challenges for conducting a comprehensive and accurate analysis of Norway's wealth tax regime during the specified decades and must be considered when drawing conclusion.

4.4.2 Wealth tax, Norway and Sweden

Norway's wealth tax history, the period from 2007 to 2022 is known and sourced directly from the Norwegian Tax Administration (Skatteetaten, n.d). The wealth tax rates for Sweden were documented in a working paper produced by the Research Institute of Industrial Economic (Henrekson, 2015). For the exact wealth tax rates for our study look in the appendix, figure 24 and 25.

4.4.3 Assumption of Maximum Wealth Tax Thresholds

In our analysis, we have adopted an Assumption of Maximum Wealth Tax Thresholds primarily because it simplifies the economic modeling. This assumption allows for a consistent application of tax rates across different wealth segments, thereby reducing the complexity inherent in dealing with variable tax brackets.

4.4.4 Why Include Wealth Tax?

Including wealth tax is crucial for understanding its long-term effects on business growth and IPO readiness in Sweden and Norway. This variable allows for a nuanced examination of how changes in wealth tax, like Sweden's abolition in 2007, have influenced investment behaviors, capital accumulation, and entrepreneurial activities over the years. Comparing Sweden's policy changes with Norway's consistent wealth tax regime provides a broader perspective on the wealth tax's impact on the IPO activities.

4.5 Interest rates

4.5.1 Limitations

The limitations in our interest rate data from 1961 to 1993 arise from the use of different types of interest rates due to the unavailability of a consistent type for the entire period. This

variance, while not significant, may affect the uniformity of the data. Additionally, from December 1985 to May 1994, Sweden utilized the Riksbank's marginal rate as the policy rate, which was then replaced by the repo rate (Sveriges Riksbank, 2023). However, specific data for the marginal rate during this period were not found.

4.5.2 Interest rates, Norway and Sweden

In 1993, Sweden officially launched its repo rate, set by the Central Bank (Sveriges Riksbank, 2023). This marked a significant shift in the country's approach to determining interest rates. Prior to this, the interbank rate was used primarily due to its availability as a comprehensive data source, despite not being the standard measure (Fred Economic data, n.d). This transition to the Central Bank's repo rate provided a more standardized and authoritative benchmark for interest rates in Sweden. Norway's approach, until 1986, involved averaging various interest rates annually (Norges Bank, n.d). The introduction of the repo rate in 1986 led to the adoption of the median interest rate for each year to mitigate distortions caused by sporadic spikes in monthly rates, ensuring a more accurate annual rate representation (Norges Bank, n.d).

4.5.3 Data Availability and Quality

The period from 1961 to 1993 may have limitations in terms of data quality and availability. Historical financial data might not be as accurate or detailed, potentially leading to gaps in analysis. Given the limited availability of historical repo rates, using interbank rates and average interest rates is a pragmatic approach. It allows for the utilization of the available data to analyze trends and patterns in the financial sector during this period.

Despite their limitations, these rates can provide valuable insights into the historical monetary policy and financial environment in Sweden and Norway. They can shed light on how banks and financial institutions reacted to economic conditions of the time.

4.5.4 Why include interest rates?

Interest rates are pivotal in determining borrowing costs, influencing companies' growth, and decisions to go public. Lower rates reduce debt costs, potentially accelerating IPOs, while higher rates might shift preferences towards equity financing. Investors' choices are also guided by interest rates; lower rates drive them towards higher-return investments like stocks and IPOs. Additionally, interest rates reflect economic health and policy, affecting business cycles and growth opportunities. Analyzing interest rates in Sweden and Norway offers insights into their monetary policies' impact on business environments and IPO trends, crucial for understanding corporate decision-making.

5.0 Empirical Methodology

5.1 Average IPO duration

5.1.1 Objective and Data Composition

The primary goal of this analysis is to determine if certain economic indicators—interest rates, GDP growth, and wealth tax—can effectively predict the 'IPO Duration.' This term is defined as the period from a company's founding until its IPO. The dataset is divided into two sets, one for Sweden and another for Norway, each containing the mentioned economic variables and the target variable, IPO Duration.

The Average IPO Duration for each year is determined by calculating the mean of these durations for companies going public within that year. For years lacking data, an average of the IPO durations from the adjacent preceding and following years is used as an estimate. However, if a year lacks IPO data and adjacent year data is also unavailable, it is excluded from the dataset, leading to some years being omitted from the analysis, see figure 2.2.

The study focuses on companies with a minimum of 7 years to IPO, including 108 from Norway and 122 from Sweden. This approach aims to understand companies spending

considerable time privately before going public. The dataset includes Norwegian firms founded between 1961-2014 and Swedish firms from 1961-2013. The average durations are 23.784 years for Norway and 22.826 years for Sweden.

5.1.2 Data Preprocessing

In the methodology for Random Forest, feature scaling was essential to normalize data attributes, ensuring a consistent scale. Standardization, crucial for regression models like Random Forest, was used to transform the data to have zero mean and unit standard deviation. This step is key to avoiding biases due to scale differences. Additionally, missing values were imputed using the median, selected for its resistance to outliers, ensuring a more representative value for missing data points. For GBM and SVM models, distinct preprocessing pipelines for Sweden and Norway datasets integrated imputation and standardization. These pipelines used a median-based imputer for missing values and standard scaling to normalize features. This uniform preprocessing across training and testing subsets maintained consistency and reliability in data preparation.

5.1.3 Modeling

In the modeling section, linear regression, supplemented by Ordinary Least Squares (OLS) regression, was used as the primary method. The OLS model, integrating a wealth tax dummy variable, focused on minimizing discrepancies between observed values and predictions. Two linear regression models were formulated, each incorporating wealth tax, GDP growth, and interest rates as variables.

$$Y = \beta_0 + \beta_1 \text{ Wealth Tax Dummy} + \beta_2 \text{ GDP Growth} + \beta_3 \text{ Interest Rates} + \epsilon$$

$$Y = \beta_0 + \beta_1 \text{ Wealth Tax} + \beta_2 \text{ GDP Growth} + \beta_3 \text{ Interest Rates} + \epsilon$$

Figure 2 – Linear regressions sentence

Empirical analysis also involved Gradient Boosting Machine (GBM), Support Vector Machine (SVM), and Random Forest Regression models. GBM models were set with 100 estimators, balancing complexity and efficiency. SVM models employed the default kernel function, and Random Forest models used 100 trees, optimizing performance while managing computational demands. All models were trained on data processed with median imputation and standard scaling. The datasets were split into training and testing sets in a 70-30% ratio, ensuring robust training and reliable performance evaluation of the models, with a random state included for reproducibility. This balanced approach was critical for assessing the true predictive power of each model.

5.1.4 Robustness

In the robustness analysis, a comprehensive approach was used for both Swedish and Norwegian datasets. The machine learning models (Random Forest, GBM, SVM) underwent a five-fold cross-validation to assess predictive accuracy, using measures like R-squared and Mean Squared Error. For linear regression models, the Breusch-Pagan test identified heteroskedasticity, and Cook's Distance pinpointed influential data points, ensuring variance stability and the reliability of predictions. These robustness checks across all models validated their effectiveness and confirmed the integrity of the findings, enhancing confidence in the overall analysis.

5.2 Number of IPOs

5.2.1 Objective and Data Composition

The primary aim of this analysis is to ascertain if specific economic indicators—interest rates, GDP growth, and wealth tax—have a discernible impact on the frequency of IPOs in these countries. The dataset is bifurcated into two distinct segments, one for Sweden and another for Norway, each containing the economic variables in question alongside the target variable, which is the annual count of IPOs.

In this analytical exploration, the frequency of Initial Public Offerings (IPOs) is delineated as the yearly count of companies transitioning to public ownership. The study encompasses a comprehensive dataset, aggregating the data of 300 entities from both Norway and Sweden. This holistic approach facilitates a nuanced understanding of IPO trends across these two countries, capturing the temporal dynamics of companies electing to go public in a given year. Such an inclusive dataset provides a robust foundation for examining the macroeconomic and sector-specific factors influencing the propensity of firms to initiate IPOs within this regional context. Figure 21 in the appendix illustrates the annual distribution of IPOs between Norway and Sweden.

5.2.2 Data Preprocessing

The data preprocessing for linear regressions and machine learning models in this study involved distinct approaches for each method. Linear regression analysis included outlier detection and removal using the Interquartile Range method, leading to slight adjustments in sample sizes for Swedish and Norwegian datasets. For machine learning models (Random Forest, SVM, GBM), feature standardization was key. This process ensured balanced contributions from each feature, with different treatments of outliers in the Swedish and Norwegian datasets. Median imputation was used for missing values, chosen for its robustness against outliers. These tailored preprocessing steps optimized model performance and data integrity.

5.2.3 Modeling

In the modeling section, a similar methodology to previous analyses was used, focusing on linear regression and OLS regression with a wealth tax dummy variable for assessing its impact on IPO duration. This approach was crucial for exploring linear relationships within the economic data. Additionally, non-linear models like Random Forest, SVM, and GBM were employed, each with specific configurations (e.g., GBM with 100 estimators) to

efficiently handle data complexities. The datasets were divided into training and testing sets in a 70-30% ratio, ensuring robust model training and accurate performance evaluation.

$$Y = \beta_0 + \beta_1 \text{ Wealth Tax Dummy} + \beta_2 \text{ GDP Growth} + \beta_3 \text{ Interest Rates} + \epsilon$$

$$Y = \beta_0 + \beta_1 \text{ Wealth Tax} + \beta_2 \text{ GDP Growth} + \beta_3 \text{ Interest Rates} + \epsilon$$

Figure 3 – Linear regressions sentence

5.2.4 Robustness

In the robustness analysis for machine learning models, 5-fold cross-validation was used for Random Forest, GBM, and SVM models to assess stability and performance, evaluating MSE and R2 values. For linear regression models in Sweden and Norway, Cook's Distance identified influential points affecting predictions, and the Breusch-Pagan test checked for heteroskedasticity in residuals, informing about variance uniformity. This comprehensive approach, combining cross-validation and specific tests, ensured the reliability of all models by verifying assumptions and identifying key influences.

6.0 Empirical results

6.1 Average IPO Duration

Model	Mean Squared Error	R-Squared
Sweden GBM	33.997	0.802
Sweden SVM	61.394	0.642
Norway GBM	56.917	0.769
Norway SVM	88.926	0.640
Sweden RandomForest	26.564	0.845
Norway RandomForest	52.977	0.785
Sweden OLS	48.043	0.726

Sweden OLS, Dummy	43.348	0.753
Norway OLS	44.513	0.800
Norway OLS, Dummy	71.791	0.678

Figure 4 – Mean Squared Error and R-Squared for Average IPO Duration

6.1.1 Linear regression (without Dummy) for Sweden

Exhibited a robust explanatory power with an R-squared of 0.726, suggesting that about

72.6% of the variability in IPO Duration is accounted for by the model.

OLS Regression Results						
Dep. Variable:	IPO Duration		R-squared:	0.726		
Model:	OLS		Adj. R-squared:	0.719		
Method:	Least Squares		F-statistic:	103.5		
Date:	Fri, 08 Dec 2023		Prob (F-statistic):	9.08e-33		
Time:	18:46:52		Log-Likelihood:	-405.95		
No. Observations:	121		AIC:	819.9		
Df Residuals:	117		BIC:	831.1		
Df Model:	3					
Covariance Type:	nonrobust					
	coef	std err	t	P> t	[0.025	0.975]
const	0.9299	0.772	1.205	0.231	-0.599	2.459
Wealth tax	558.7126	191.234	2.922	0.004	179.984	937.441
GDP growth	213.1083	42.878	4.970	0.000	128.191	298.025
Interest rates	92.3063	57.630	1.602	0.112	-21.826	206.439
Omnibus:	43.099		Durbin-Watson:	0.859		
Prob(Omnibus):	0.000		Jarque-Bera (JB):	116.690		
Skew:	1.340		Prob(JB):	4.58e-26		
Kurtosis:	6.995		Cond. No.	311.		

Figure 5 – OLS Regression Results for linear regression without Dummy (Sweden)

The Adjusted R-squared at 0.719 indicates a slight adjustment considering the number of predictors. The model's significance is reinforced by an F-statistic of 103.5 and a practically zero p-value. Wealth tax coefficient was significant at 558.7126, implying a positive correlation with IPO Duration, and GDP growth's coefficient at 213.1083 also suggested a positive relationship. Interest rates, though, displayed a non-significant trend (p-value: 0.112). Model diagnostics indicated positive autocorrelation (Durbin-Watson: 0.859) and non-normality in residuals (Omnibus and Jarque-Bera tests).

6.1.2 Linear regression with Dummy for Sweden

The R-squared value improved to 0.753. The wealth tax dummy's coefficient was significant at 14.6076, pointing to its substantial impact on IPO Duration. GDP growth and interest rates also showed significant relationships, with coefficients of 144.6200 and 94.5336, respectively. The model diagnostics highlighted potential issues like positive autocorrelation (Durbin-Watson: 0.756) and non-normal distribution of residuals, necessitating cautious interpretation.

on: 0.753) and non-normal distribution of residuals, necessitating cautious interpretation.

OLS Regression Results

Dep. Variable:	IPO Duration	R-squared:	0.753
Model:	OLS	Adj. R-squared:	0.747
Method:	Least Squares	F-statistic:	118.9
Date:	Fri, 08 Dec 2023	Prob (F-statistic):	2.26e-35
Time:	18:40:25	Log-Likelihood:	-399.73
No. Observations:	121	AIC:	807.5
Df Residuals:	117	BIC:	818.6
Df Model:	3		
Covariance Type:	nonrobust		

	coef	std err	t	P> t	[0.025	0.975]
const	0.5285	0.741	0.713	0.477	-0.940	1.997
Wealth tax dummy	14.6076	3.105	4.704	0.000	8.458	20.757
GDP growth	144.6200	45.037	3.211	0.002	55.426	233.814
Interest rates	94.5336	39.475	2.395	0.018	16.355	172.712

Omnibus:	40.943	Durbin-Watson:	0.756
Prob(Omnibus):	0.000	Jarque-Bera (JB):	105.585
Skew:	1.290	Prob(JB):	1.18e-23
Kurtosis:	6.780	Cond. No.	83.0

Figure 6 – OLS results for linear regression with dummy (Sweden)

6.1.3 Random Forest, GBM, and SVM Models for Sweden

For Sweden, the analysis revealed high accuracy in the Random Forest model with an MSE of 25.80 and an R-squared of 0.850. The GBM model followed closely with an MSE of 33.997 and an R-squared of 0.802, while the SVM model showed lower accuracy with an MSE of 61.394 and an R-squared of 0.642.

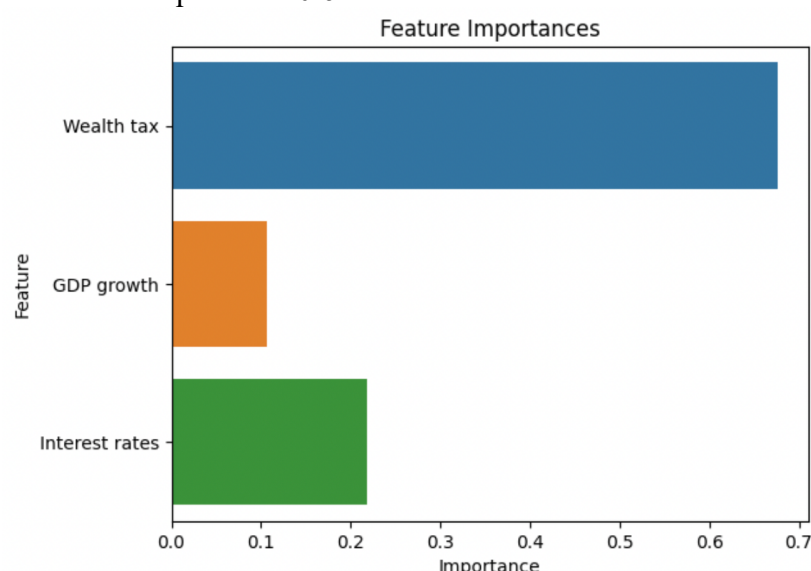


Figure 7 – Random forest feature importance's for Average IPO Duration (Sweden)

6.1.4 Linear regression (without Dummy) for Norway

Presented an R-squared of 0.800, denoting the model's strong capability to explain IPO Duration variability.

OLS Regression Results

Dep. Variable:	IPO Duration	R-squared:	0.800
Model:	OLS	Adj. R-squared:	0.794
Method:	Least Squares	F-statistic:	137.4
Date:	Fri, 08 Dec 2023	Prob (F-statistic):	7.23e-36
Time:	18:46:52	Log-Likelihood:	-354.90
No. Observations:	107	AIC:	717.8
Df Residuals:	103	BIC:	728.5
Df Model:	3		
Covariance Type:	nonrobust		

	coef	std err	t	P> t	[0.025	0.975]
const	-0.1124	0.867	-0.130	0.897	-1.831	1.606
Wealth tax	1621.9022	169.472	9.570	0.000	1285.795	1958.010
GDP growth	79.1266	54.702	1.446	0.151	-29.362	187.615
Interest rates	-89.5943	31.262	-2.866	0.005	-151.595	-27.594

Omnibus:	21.293	Durbin-Watson:	0.891
Prob(Omnibus):	0.000	Jarque-Bera (JB):	51.140
Skew:	0.702	Prob(JB):	7.85e-12
Kurtosis:	6.082	Cond. No.	265.

Figure 8 – OLS results for linear regression without dummy (Norway)

The wealth tax's coefficient at 1621.9022 was significant, suggesting a positive impact on IPO Duration. Conversely, interest rates showed a significant negative relationship (coefficient: -89.5943). The diagnostics raised concerns regarding positive autocorrelation (Durbin-Watson: 0.891) and non-normality in residuals.

6.1.5 Linear regression with Dummy for Norway

The model's R-squared was 0.678. The wealth tax dummy had a significant coefficient of 14.1644, indicating a positive effect on IPO Duration. GDP growth (coefficient: 241.5452) also showed a significant relationship, while interest rates were not significant (p-value: 0.344). Similar to the Swedish model, diagnostics revealed positive autocorrelation and non-normality in residuals.

OLS Regression Results						
Dep. Variable:	IPO Duration	R-squared:	0.678			
Model:	OLS	Adj. R-squared:	0.668			
Method:	Least Squares	F-statistic:	72.14			
Date:	Fri, 08 Dec 2023	Prob (F-statistic):	3.27e-25			
Time:	18:40:25	Log-Likelihood:	-380.47			
No. Observations:	107	AIC:	768.9			
Df Residuals:	103	BIC:	779.6			
Df Model:	3					
Covariance Type:	nonrobust					
	coef	std err	t	P> t	[0.025	0.975]
const	-1.304e-15	1.144	-1.14e-15	1.000	-2.269	2.269
Wealth tax dummy	14.1644	3.371	4.202	0.000	7.478	20.850
GDP growth	241.5452	66.874	3.612	0.000	108.916	374.174
Interest rates	33.4159	35.152	0.951	0.344	-36.299	103.131
Omnibus:	48.958	Durbin-Watson:	0.664			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	159.174			
Skew:	1.604	Prob(JB):	2.73e-35			
Kurtosis:	8.041	Cond. No.	90.5			

Figure 9 – OLS results for linear regression with dummy (Norway)

6.1.6 Random Forest, GBM, and SVM Models for Norway

In Norway, the Random Forest model achieved an MSE of 56.06 and an R-squared of 0.773. The GBM model presented an MSE of 56.917 and an R-squared of 0.769, and the SVM model reported an MSE of 88.926 and an R-squared of 0.640, indicating lower predictive accuracy.

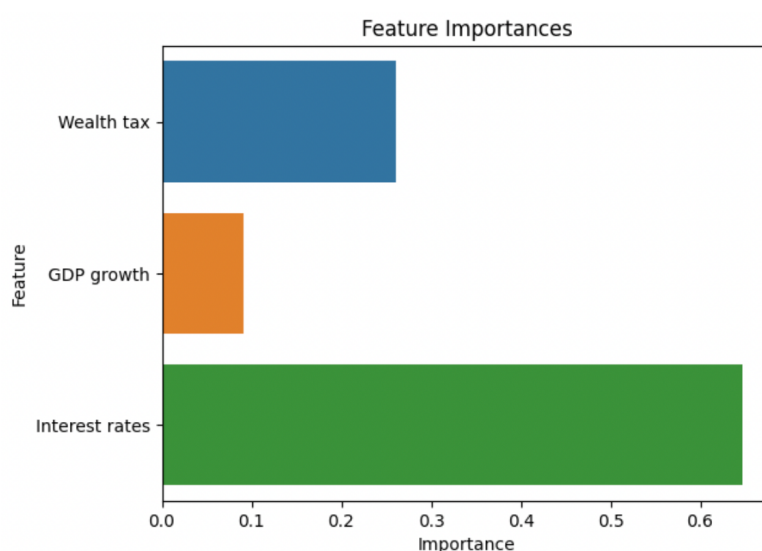


Figure 10 – Random forest feature importances for Average IPO duration (Norway)

6.2 Number of IPOs

Model	Mean Squared Error	R-Squared
Sweden GBM	10.23	0.57
Sweden SVM	21.36	0.11
Norway GBM	6.93	0.66
Norway SVM	17.16	0.15
Sweden RandomForest	6.814	0.715
Norway RandomForest	1.946	0.903
Sweden OLS	8.992	0.465
Sweden OLS, Dummy	9.415	0.531
Norway OLS	12.489	0.369
Norway OLS, Dummy	13.153	0.293

Figure 11 - Mean Squared error and R-squared for "Number of IPOs"

6.2.1 Linear Regression (Without Dummy)

The model's R-squared of 0.465 indicates a moderate level of explanatory power for 'IPO Count SE'. Wealth tax presented a negative relationship with the IPO count, as reflected in its significant coefficient of -1.7735. GDP growth, with a coefficient of 0.1966, did not show statistical significance (p-value: 0.640), indicating a less clear impact. Interest rates, with a coefficient of -1.1690 and a borderline significant p-value of 0.07, suggested a potential negative effect. The model diagnostics pointed to non-normality in residuals (Omnibus and Jarque-Bera tests) and a moderate level of autocorrelation (Durbin-Watson: 1.351).

OLS Regression Results						
Dep. Variable:	IPO Count SE		R-squared:	0.465		
Model:	OLS		Adj. R-squared:	0.435		
Method:	Least Squares		F-statistic:	15.91		
Date:	Wed, 06 Dec 2023		Prob (F-statistic):	1.44e-07		
Time:	16:54:33		Log-Likelihood:	-148.51		
No. Observations:	59		AIC:	305.0		
Df Residuals:	55		BIC:	313.3		
Df Model:	3					
Covariance Type:	nonrobust					
	coef	std err	t	P> t	[0.025	0.975]
const	2.3220	0.404	5.743	0.000	1.512	3.132
Wealth tax SE	-1.7735	0.611	-2.902	0.005	-2.998	-0.549
GDP growth SE	0.1966	0.418	0.471	0.640	-0.641	1.034
Interest rates SE	-1.1690	0.624	-1.872	0.067	-2.420	0.082
Omnibus:	20.271		Durbin-Watson:		1.351	
Prob(Omnibus):	0.000		Jarque-Bera (JB):		26.717	
Skew:	1.362		Prob(JB):		1.58e-06	
Kurtosis:	4.858		Cond. No.		2.73	

Figure 12 – OLS results for linear regression without dummy (Sweden)

6.2.2 Linear Regression with Wealth Tax Dummy

The R-squared value was 0.439. The wealth tax dummy negatively impacted the IPO count, with a coefficient of -2.7160 ($p < 0.05$). Interest rates also showed a significant negative relationship (coefficient: -1.5590, $p < 0.05$).

However, GDP growth's impact, with a p-value of 0.545, was not significant. The diagnostics indicated non-normality in residuals (Omnibus and Jarque-Bera tests) and moderate autocorrelation (Durbin-Watson: 1.247).

OLS Regression Results						
Dep. Variable:	IPO Count SE	R-squared:	0.439			
Model:	OLS	Adj. R-squared:	0.409			
Method:	Least Squares	F-statistic:	14.37			
Date:	Mon, 11 Dec 2023	Prob (F-statistic):	4.99e-07			
Time:	18:25:09	Log-Likelihood:	-149.87			
No. Observations:	59	AIC:	307.7			
Df Residuals:	55	BIC:	316.0			
Df Model:	3					
Covariance Type:	nonrobust					
	coef	std err	t	P> t	[0.025	0.975]
const	3.7491	0.733	5.117	0.000	2.281	5.217
Wealth tax SE Dummy	-2.7160	1.151	-2.360	0.022	-5.022	-0.410
GDP growth SE	0.2646	0.434	0.609	0.545	-0.605	1.135
Interest rates SE	-1.5590	0.589	-2.646	0.011	-2.740	-0.378
Omnibus:	21.026	Durbin-Watson:	1.247			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	29.322			
Skew:	1.348	Prob(JB):	4.29e-07			
Kurtosis:	5.158	Cond. No.	4.04			

Figure 13 - OLS results for linear regression with dummy (Sweden)

6.2.3 Random Forest, GBM, and SVM Models

For Sweden's IPO Count, the Random Forest model demonstrated high predictive accuracy, with an MSE of 4.76 and an R-squared of 0.820, identifying interest rates as the most significant factor. The GBM model also showed good performance with an MSE of 10.23 and an R-squared of 0.57, while the SVM model had an MSE of 21.36 and an R-squared of 0.11.

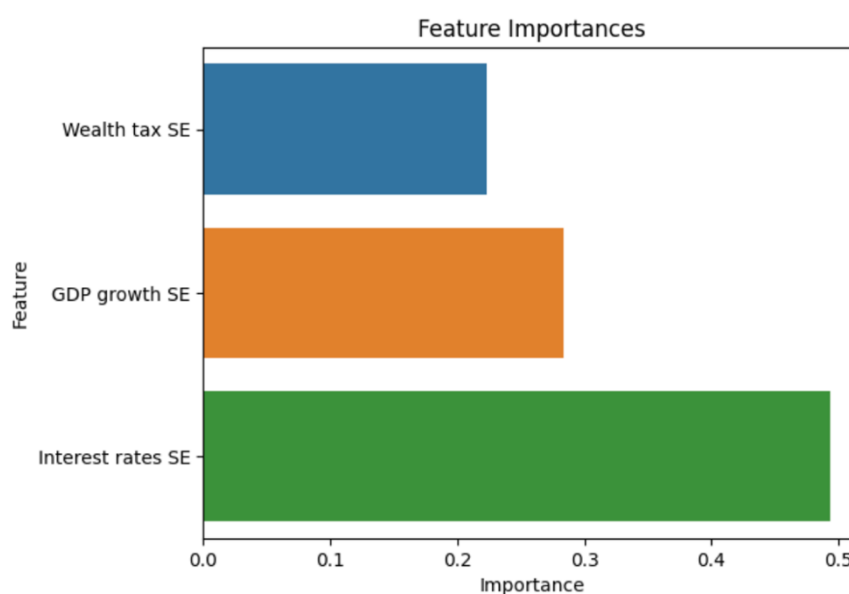


Figure 14 – Random forest feature importances for “Number of IPOs” (Sweden)

6.2.4 Linear Regression (Without Dummy) for Norway

Exhibited an R-squared of 0.369, suggesting moderate explanatory power for 'IPO Count NO'.

Wealth tax showed a significant negative effect (coefficient: -1.5497, $p < 0.05$). GDP growth,

however, with a coefficient of -0.2357 and a p-value of 0.654, was not significant. Interest

rates also indicated a significant negative relationship (coefficient: -1.3932, $p < 0.05$). The

diagnostics raised concerns about non-normal residuals and low to moderate autocorrelation

(Durbin-Watson: 1.057).

Watson: 1.057).

OLS Regression Results						
Dep. Variable:	IPO Count NO	R-squared:	0.369			
Model:	OLS	Adj. R-squared:	0.336			
Method:	Least Squares	F-statistic:	11.13			
Date:	Wed, 06 Dec 2023	Prob (F-statistic):	7.46e-06			
Time:	16:54:33	Log-Likelihood:	-163.56			
No. Observations:	61	AIC:	335.1			
Df Residuals:	57	BIC:	343.6			
Df Model:	3					
Covariance Type:	nonrobust					
	coef	std err	t	P> t	[0.025	0.975]
const	2.3770	0.468	5.078	0.000	1.440	3.314
Wealth tax NO	-1.5497	0.632	-2.451	0.017	-2.816	-0.284
GDP growth NO	-0.2357	0.523	-0.451	0.654	-1.283	0.812
Interest rates NO	-1.3932	0.577	-2.413	0.019	-2.549	-0.237
Omnibus:	61.540	Durbin-Watson:	1.057			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	424.469			
Skew:	2.782	Prob(JB):	6.73e-93			
Kurtosis:	14.664	Cond. No.	2.27			

Figure 15 – OLS results for linear regression without dummy (Norway)

6.2.5 Linear Regression with Wealth Tax Dummy for Norway

The model's R-squared stood at 0.336. The wealth tax dummy exhibited a marginal negative

effect on the IPO count (coefficient: -2.0871, p-value: 0.098). Interest rates were significantly

negative (coefficient: -1.6964, $p < 0.01$), while GDP growth's coefficient of -0.4259 was not

significant (p-value: 0.425). The model diagnostics indicated non-normal residuals (Omnibus

and Jarque-Bera tests) and low to moderate autocorrelation (Durbin-Watson: 1.055).

OLS Regression Results						
Dep. Variable:	IPO Count NO	R-squared:	0.336			
Model:	OLS	Adj. R-squared:	0.301			
Method:	Least Squares	F-statistic:	9.614			
Date:	Mon, 11 Dec 2023	Prob (F-statistic):	3.12e-05			
Time:	18:25:09	Log-Likelihood:	-165.14			
No. Observations:	61	AIC:	338.3			
Df Residuals:	57	BIC:	346.7			
Df Model:	3					
Covariance Type:	nonrobust					
	coef	std err	t	P> t	[0.025	0.975]
const	3.3693	0.761	4.430	0.000	1.846	4.892
Wealth tax NO Dummy	-2.0871	1.240	-1.683	0.098	-4.571	0.397
GDP growth NO	-0.4259	0.530	-0.804	0.425	-1.486	0.634
Interest rates NO	-1.6964	0.571	-2.969	0.004	-2.841	-0.552
Omnibus:	62.384	Durbin-Watson:	1.055			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	440.924			
Skew:	2.823	Prob(JB):	1.80e-96			
Kurtosis:	14.900	Cond. No.	3.59			

Figure 16 – OLS results for linear regression with dummy (Norway)

6.2.6 Random Forest, GBM, and SVM Models

In Norway, the Random Forest model for IPO Count exhibited high accuracy and explanatory power, with an MSE of 2.14 and an R-squared of 0.910, highlighting interest rates as the influential factor. The GBM model's performance was notable with an MSE of 6.93 and an R-squared of 0.66, and the SVM model recorded an MSE of 17.16 and an R-squared of 0.15.

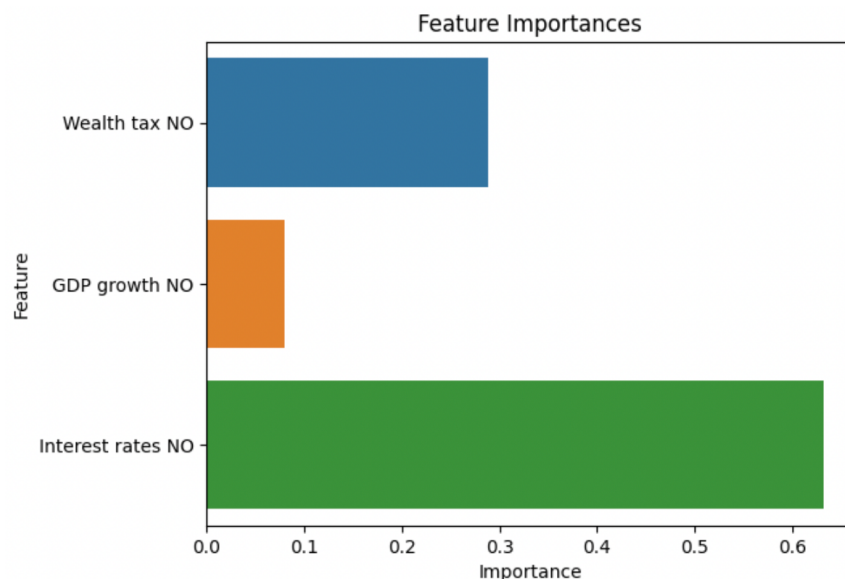


Figure 17 – Random forest feature importances for “Number of IPOs” (Norway)

7.0 Robustness results

7.1 Average IPO duration

Model	Cross validation (MSE)	Cross validation (R-Squared)
Sweden GBM	36.125	0.625
Sweden SVM	86.040	0.584
Norway GBM	25.417	0.864
Norway SVM	78.057	0.676
Sweden RandomForest	118.226	-0.682
Norway RandomForest	91.026	0.097

Figure 18 – Result of cross validation for Average IPO duration

7.1.1 Linear regression

In the standard linear regression models for Sweden and Norway, Cook's Distance results show significant influence from specific observations. For Sweden, observations 3 and 13 are notably influential, possibly skewing regression estimates. In Norway, observations 0, 3, 9, 20, and 21 significantly impact the model. Both models exhibit heteroskedasticity, with extremely low p-values in the Breusch-Pagan test, indicating inconsistent error variances. Shown in appendix Figure 33, suggest sensitivity to certain data points and the need for cautious interpretation and potential model refinements.

7.1.2 Linear regression with Dummy

In the linear regression analysis with dummy variables, the Swedish model revealed significant Cook's Distance values for observations like 3, 13, 20, and 21, indicating their strong influence. The Norwegian model also showed higher values for observations 0, 1, 3, and 20, suggesting their impact on the model. Breusch-Pagan test results pointed to

heteroskedasticity in both models, with low p-values in the Swedish model indicating variable error variances, appendix figure 33. This necessitates careful consideration of the models' reliability and possible refinements due to the impact of these influential points and heteroskedasticity.

7.1.3 Cross-Validation for machine learning models

In the analysis of Average IPO Duration, cross-validation for machine learning models revealed distinct performances. The GBM model in Sweden and Norway showed moderate error and good explanatory power, while the SVM model had slightly higher errors. The RandomForest model, particularly in Sweden, indicated poor fit and predictive ability. These variations in model effectiveness underscore GBM's relative strength in prediction and RandomForest's limitations in capturing IPO Duration complexities.

7.2 Number of IPOs

Model	Cross validation (MSE)	Cross validation (R-Squared)
Sweden GBM	13.109	-0.416
Sweden SVM	11.762	0.196
Norway GBM	22.376	-1.989
Norway SVM	18.319	0.092
Sweden RandomForest	16.579	-1.445
Norway RandomForest	19.939	-0.378

Figure 19 – Result of cross validation for Number of IPOs

7.2.1 Linear regression

The Breusch-Pagan test and Cook's distance for the standard linear regression models for Norway and Sweden provide key insights. Norway's model shows no strong evidence of

heteroskedasticity with a p-value of about 0.116. Sweden's model, however, indicates heteroskedasticity with a lower p-value of 0.003. Cook's distance results vary, with Norway showing mostly low values, but observations 58 and 59 have values over 0.5. Sweden has several observations with high Cook's distance, notably 22, 36, 49, 52, and 57. These results, can be observed in the appendix, Figure 28, suggest the need for cautious interpretation and potential adjustments.

7.2.2 Linear regression with Dummy

The Cook's distance results for linear regression models with dummy variables in Sweden and Norway, coupled with Breusch-Pagan test findings, offer detailed insights. The Swedish model displays several observations, like 36, 49, 52, 53, 54, 57, 58, and 59, with high Cook's distance values, indicating substantial influence. The Breusch-Pagan test suggests heteroskedasticity with a low p-value of 0.0017. Conversely, the Norwegian model shows lower Cook's distance values, with few exceptions like Observations 47, 58, and 59. Its Breusch-Pagan test, with a p-value around 0.1517, implies more consistent error variances. These results highlight the need for careful analysis due to potential influences and heteroskedasticity in the models. These detailed results can be seen in appendix Figure 28

7.2.3 Cross-Validation for machine learning models

The cross-validation results for machine learning models in predicting IPO numbers in Sweden and Norway indicated varying effectiveness. The GBM model in Sweden and Norway showed significant prediction errors with negative R-squared values. The SVM model demonstrated slightly better results, but with limited explanatory power. In contrast, the Random-Forest model performed inadequately in both countries, marked by high inaccuracies and negative R-squared values. These findings suggest the limited capability of these models in accurately predicting IPO frequencies, possibly due to the complex nature of the influencing factors.

8.0 Conclusion

8.1 Average IPO Duration

In the analysis, the GBM and SVM models demonstrated strong significance for “Average IPO duration” in Sweden and Norway. Their performance in cross-validation indicates a strong potential for prediction and significance of the variables. The limitations of the SVM and GBM models hinder our ability to pinpoint the most impactful variable, such as wealth tax, on average IPO duration. This constraint, therefore, leads to our hypothesis about the specific role of wealth tax being rejected. Also, these results should be approached with caution due to data limitations and the lack of robustness in other models we used. The Random-Forest model, in particular, demonstrated inadequate fit and reliability, underscoring its limited significance. This emphasizes the need for careful consideration of model robustness and data constraints in econometric analysis.

8.2 IPO Numbers

The analysis investigated the impact of economic indicators like wealth tax on IPO frequencies in Sweden and Norway. While OLS regression indicated a moderate relationship, with wealth tax being significant, robustness issues like influential outliers and heteroskedasticity raised concerns about model reliability. The mixed outcomes of the machine learning models, characterized by significant predictive errors and occasionally negative R-squared values, highlight the challenges in determining IPO frequencies. This complexity in the analysis led to inconclusive results regarding the impact of wealth tax. Consequently, we could not confirm that wealth tax is the most influential factor, leading to the rejection of our original hypothesis. Consequently, the initial findings require careful interpretation, suggesting a need for further research with more sophisticated methods to address these analytical challenges.

9.0 Future research

Future research could focus on a more detailed analysis of the data to address existing limitations, ensuring a comprehensive understanding of the variables' impact. Additionally, expanding the study to include countries like Denmark and Finland would provide a broader perspective, enabling a comparison of different fiscal environments and their influence on IPO activities. This approach would not only enrich the findings but also offer a more nuanced understanding of the relationship between economic policies and corporate decision-making across various national contexts.

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10 Appendix

10.1 Norwegian and Swedish “Avg IPO Duration for each year” – Figure 20

Year	Norway Avg IPO Duration	Sweden Avg IPO Duration
1961	NaN	48.04106776180698
1962	57.79329226557152	47.18868355007985
1963	57.94387405886379	46.336299338352724
1964	33.659137577002056	47.723933378964176
1965	57.70294318959617	NaN
1966	25.678302532511978	NaN
1967	27.706365503080082	49.111567419575636
1968	29.734428473648187	30.803559206023273
1969	28.65160848733744	38.20123203285421
1970	23.557837097878167	39.158110882956876
1971	18.464065708418893	
1972	21.25530458590007	40.114989733059545
1973	44.59548254620123	26.580424366872005
1974	NaN	22.67488021902806
1975	NaN	18.76933607118412

1976	45.67488021902806	29.182067077344286
1977	46.75427789185489	39.59479808350445
1978	NaN	20.67898699520876
1979	43.7056810403833	NaN
1980	40.6570841889117	NaN
1981	28.245493953912845	NaN
1982	29.47296372347707	NaN
1983	13.760438056125942	NaN
1984	17.838010495094682	22.940451745379875
1985	14.876568560346794	22.33538672142368
1986	11.915126625598905	26.611909650924026
1987	21.698836413415467	18.715035363906
1988	26.901437371663242	23.8466803559206
1989	32.10403832991102	11.119324663472506
1990	25.989733059548254	18.794954532120858
1991	21.43463381245722	22.001368925393567
1992	22.631074606433952	21.61487565594342
1993	13.561259411362082	21.22838238649327
1994	24.265571526351813	12.38466803559206
1995	22.739676020990192	18.819986310746064

1996	18.036960985626283	24.477754962354553
1997	20.25051334702259	16.218343600273787
1998	22.464065708418893	20.69979466119096
1999	14.507871321013006	13.256673511293634
2000	15.656399726214923	17.0611127407842
2001	18.1201916495551	13.076659822039698
2002	15.852156057494867	13.899726214921285
2003	10.929500342231348	14.722792607802873
2004	18.507871321013006	14.105407255304586
2005	13.74674880219028	14.959616700889802
2006	13.831622176591376	11.233401779603012
2007	7.950718685831622	10.777549623545516
2008	13.289527720739219	10.47296372347707
2009	10.600958247775498	11.329226557152635
2010	11.433264887063656	8.68993839835729
2011	9.389915582934064	9.39356605065024
2012	7.772758384668036	9.906913073237508
2013	8.651608487337441	8.799452429842573
2014	7.2470910335386725	NaN

10.2 Swedish and Norwegian “IPO count” – Figure 21

Year	IPO Count SE	IPO Count NO
1981	NaN	1.0
1985	NaN	2.0
1988	1.0	1.0
1993	NaN	1.0
1995	NaN	2.0
1996	NaN	1.0
1997	1.0	7.0
1998	13.0	2.0
1999	2.0	1.0
2000	5.0	1.0
2001	5.0	1.0
2002	NaN	4.0
2003	3.0	NaN
2004	2.0	3.0
2005	NaN	4.0
2006	4.0	5.0

2007	6.0	6.0
2008	4.0	2.0
2009	3.0	NaN
2010	4.0	2.0
2011	4.0	1.0
2012	1.0	1.0
2013	3.0	5.0
2014	5.0	11.0
2015	16.0	5.0
2016	13.0	3.0
2017	15.0	8.0
2018	7.0	8.0
2019	5.0	10.0
2020	7.0	18.0
2021	14.0	25.0
2022	4.0	4.0
2023	2.0	4.0

10.3 Norwegian companies from Euronext – Figure 22

Company Name	IPO Date NO	Founding date
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Aker Solutions	29/09/2014	2008
AKVA Group	10/11/2006	1982
Argeo AS	23/04/2021	2014
Asetek	20/03/2013	2000
Atea	28/03/1985	1968
Atlantic Petroleum	12/12/2013	1995
Austevoll Seafood	11/06/2006	1981
Autostore Holding LTD	19/10/2021	1996
Avance Gas Holding	15/04/2014	2007
Awilco Drilling	04/09/2018	2009
Bakkafrost	26/03/2010	1968
BerGenBio	07/04/2017	2007
Biotec Pharmacon	04/11/2005	1990
Bouvet ASA	30/11/2010	2005
BW Offshore Limited	31/05/2006	1982
Byggma	27/08/1997	1969
Carasent	08/04/2002	1997
ContextVision	17/03/1997	1983
Crayon Group Holding	08/11/2017	2002
Data Respons	01/12/1997	1986
DNO	16/11/1981	1971
DOF Group ASA	22/06/2023	1981
Dolphin Drilling	15/09/2022	1965
Edda Wind ASA	25/11/2021	2015
Electromagnetic Geoservices	30/03/2007	2002
Endúr	30/06/2008	1991
Entra	17/10/2014	2000

Equinor	18/06/2001	1972
Europris	19/06/2015	1992
Fjordkraft Holding	21/03/2018	2001
FLEX LNG	18/07/2017	2006
Frontline Ltd.	09/11/1998	1984
Funcom	13/12/2005	1993
Golden Ocean Group	15/12/2004	1996
Grieg Seafood	21/06/2007	1992
Havila Kystruten AS	29/07/2021	2017
Havila Shipping	24/05/2005	2003
Havyard Group	01/07/2014	2000
Hexagon Purus ASA	11/12/2020	1963
IDEX ASA	11/05/2015	1996
Infront	29/09/2017	1998
Kahoot	10/10/2019	2012
Kitron	16/01/1998	1960
Kongsberg Gruppen	13/12/1993	1987
Link Mobility Group	21/10/2020	2001
Magnora	13/12/2004	2001
Medistim	28/05/2004	1984
Mowi	01/07/1997	1964
MPC Container Ships	31/07/2015	1994
Napatech	06/12/2013	2003
Navamedic	31/03/2006	1999
NEXT Biometrics Group	25/06/2014	2000
Nordic Semiconductor	25/04/1996	1983
Norske Skog	18/10/2019	1962

Norwegian Air Shuttle	28/01/2002	1993
NRC Group	11/01/1988	1966
Oceanteam Shipping	08/02/2007	2005
Odfjell Drilling	27/09/2013	1973
OKEA	18/06/2019	2015
Otovo ASA	07/10/2019	2016
Pareto Bank	07/03/2014	2007
PCI Biotech Holding	27/04/2018	2000
Pexip ASA	14/05/2020	2011
Photocure	29/05/2000	1993
poLight	01/10/2018	2005
Protector forskning	25/05/2007	2004
Q-Free	03/04/2002	1984
Questerre Energy Corporation	17/06/2005	2000
Rana Gruber	25/02/2021	1982
Salmar	08/05/2007	1991
Salmon Evolution AS	18/09/2020	2017
Sats	23/10/2019	1995
Scana	04/12/1995	1987
Scatec ASA	02/10/2014	2007
SeaBird Exploration	11/04/2006	2000
Self Storage Group	27/10/2017	1993
Selvaag Bolig	14/06/2012	2008
Sogn Sparebank	20/01/1997	1971
Solstad Offshore	27/10/1997	1964
TGS	30/10/1997	1981
Tomra Systems	18/01/1985	1972

Ultimovacs	03/09/2019	2011
Vår Energi	16/02/2022	2018
Vistin Pharma	03/10/2018	2015
Webstep	11/10/2017	2000
XXL	03/10/2014	2000
Zalaris	20/06/2014	2000
ENSURGE MICROPOWER		
ASA	30/01/2008	2005
OMDA AS	09/10/2020	1999
ELMERA GROUP ASA	21/03/2018	2001
Bewi	28/08/2020	1980
Nekkar ASA	02/05/1995	1966
CYVIZ AS	17/12/2020	1992
VOW	11/04/2014	2007
Norbit	20/06/2019	1995
NORDIC UNMANNED ASA	14/12/2020	2013
HOFSETH BIO CARE	02/12/2011	2000
AIRTHINGS	30/10/2020	2008
Cambi ASA	08/02/2021	1989
ANDFJORD SALMON	27/08/2019	2014
Komplett ASA	18/06/2021	1991
CIRCA GROUP AS	01/03/2021	2006
ELEKTROIMPORTØREN AS	15/12/2020	1994
CAPSOL TECHNOLOGIES		
ASA	17/02/2021	2014
WEBSTEP	11/07/2017	2000
DESERT CONTROL AS	13/04/2021	2017

HORISONT ENERGI AS	27/01/2021	2019
GENTIAN DIAGNOSTICS		
ASA	14/12/2016	2001
MÅSØVAL AS	16/06/2021	1973
BEERENBERG AS	04/10/2023	1977
AYFIE GROUP	07/07/2020	2016
OBSERVE MEDICAL	04/11/2019	2009
TECHSTEP	12/06/2002	1996
TEKNA HOLDING ASA	29/03/2021	1990
HUDDLY AS	24/04/2018	2013
THOR MEDICAL ASA	23/03/2015	2009
SMARTCRAFT ASA	23/06/2021	1987
MORROW BANK ASA	10/11/2017	2012
PIONEER PROPERTY		
GROUP	19/06/2015	1990
ININ GROUP AS	17/07/2020	2013
CIRCIO HOLDING ASA	08/07/2016	2010
ARRIBATEC GROUP ASA	10/03/2023	1998
EAM SOLAR	26/03/2013	2011
HYON AS	11/02/2022	2017
BIOFISH HOLDING AS	02/08/2021	2016
NORDIC AQUA PARTNERS		
AS	02/12/2020	2016
SMARTOPTICS GROUP AS	02/06/2021	1990
STATT TORSK ASA	22/04/2021	2014
EQVA ASA	01/07/2014	2000
CODELAB CAPITAL AS	23/10/2020	2014

SPOTLIO AS	17/12/2020	2016
SKANDIA GREENPOWER AS	19/02/2021	2016
ITERA	27/01/1999	1995
ZWIPE	28/01/2019	2009
ARCTIC FISH HOLDING AS	18/02/2021	2011
Genetic Analysis	01/10/2021	2008
ICELANDIC SALMON	27/10/2020	2009
MATVAREEXPRESSEN AS	28/09/2023	2013
NORDHEALTH AS	02/06/2021	2001
NORDIC TECHNOLOGY		
GROUP	05/07/2022	2004
QUESTBACK GROUP AS	20/08/2021	2000
RECREATE ASA	08/06/2021	2010
ROMREAL	11/06/2007	2005
ELLIPTIC LABORATORIES		
ASA	16/10/2020	2006
GIGANTE SALMON AS	02/07/2021	2001
NORCOD	15/10/2020	2018
HUDDLY AS	23/04/2018	2013
B2 Impact ASA	08/06/2016	2011
ECIT AS	19/05/2021	2013

10.4 Swedish companies from Nasdaq – Figure 23

Company Name	IPO date SE	Founding date
SSAB AB	12/03/1998	1978
NIBE industrier AB	06/10/1998	1989

Bravida Holding AB	16/10/2015	2000
Vestum AB	19/05/2008	1999
Byggmax Group AB	02/06/2010	1993
BioArctic AB	12/10/2017	2003
Surgical Science Sweden AB	19/06/2017	1999
Genovis AB	14/09/2006	1999
SynAct Pharma AB	11/07/2016	2012
Annehem fastigheter AB	11/12/2020	2005
Np3 fastigheter AB	04/12/2014	2007
Castellum AB	06/10/1998	1993
Sagax AB	09/11/2016	1995
Platzer fastigheter ab	29/11/2013	1969
Mycronic AB	09/03/2000	1989
Dometic Group AB	25/11/2015	2001
HMS Networks AB	19/10/2007	1988
Invisio AB	29/05/2006	1999
AddNode Group AB	10/06/1999	1987
Note AB	23/06/2004	1999
Hanza AB	19/06/2014	2008
Exsitec Holding AB	16/09/2020	2000
Tobii AB	24/04/2015	2001
Nordnet AB	25/11/2020	1998
Svolder AB	06/10/1998	1993
Resurs Holding AB	29/04/2016	1977
Medcap AB	23/06/2003	2001
Hoist Finance AB	25/03/2015	1994
Tethys AB	06/04/2004	2001

Systemair AB	12/10/2007	1972
OEM international Ab	06/10/1998	1973
Teqinon AB	04/04/2019	2006
Medicover AB	23/05/2017	1998
Vitrolife AB	26/06/2001	1994
Camurus AB	03/12/2015	1991
Biotage AB	30/06/2000	1969
Bonesupport Holding AB	21/06/2017	1999
Catena AB	11/02/2016	1967
Hexagon AB	11/10/1988	1975
Hexatronic AB	23/06/2011	1993
NCAB AB	06/06/2018	1993
Lime Technologies AB	06/12/2018	1990
Dustin Group AB	13/02/2015	1984
TF Bank AB	14/06/2016	1972
VNV Global AB	29/06/2020	2007
Catella AB	16/01/2009	1961
Knowit AB	11/11/1997	1990
Arctic Blue Beverages AB	12/05/2022	2017
Evolution AB	20/03/2015	2006
Sinch AB	08/10/2015	2008
Rusta AB	19/10/2023	1986
Fortnox AB	14/05/2007	2001
Kindred Group AB	30/10/2006	1997
Powercell AB	19/12/2014	2008
Bufab AB	21/02/2014	1977
Inwido AB	26/09/2014	2004

Truecaller AB	08/10/2021	2009
Resurs Holding AB	29/04/2019	1977
Stilfront Group Ab	08/12/2015	2010
Loomis AB	09/12/2008	1997
Hemnet Group AB	27/04/2021	1998
Betsson AB	22/06/2000	1963
Ewok Group AB	18/02/2010	2000
Attendo AB	30/11/2015	1985
Sagax AB B	08/04/2013	1995
Cereno Scientific AB ser B.	22/06/2022	2012
B3 Consulting Group AB	13/06/2016	2003
Instalco AB	11/05/2017	2014
New Wave Group AB ser B.	06/10/1998	1990
Sectra AB ser B	03/03/1999	1978
Vitrolife AB	26/06/2001	1994
Nyfosa AB	23/11/2018	2009
Camurus AB	03/12/2015	1991
Xvivo Perfusion AB	08/10/2012	1998
HMS Network AB	19/10/2007	1988
NCAB Group AB	05/06/2018	1993
BioGaia AB ser. B	06/10/1998	1990
Fastpartner AB ser. A	06/10/1998	1984
Seafire AB	25/07/2019	2016
Boozt AB	31/05/2017	2011
Cint Group AB	15/02/2021	1998
Orron Energy AB	02/10/2003	2001
OX2 AB	23/06/2021	2004

Embracer Group AB	22/11/2016	2011
Smart eye AB	07/11/2016	1999
Yubico AB	25/03/2021	2007
Meko AB	27/05/2000	1973
G5 Entertainment AB	19/11/2008	2001
Skistar AB	06/10/1998	1975
Swedencare AB	14/06/2016	1993
Xspray Pharma AB	28/09/2017	2003
C-RAD AB	23/07/2007	2004
Fingerprint cards AB	19/04/2000	1997
Stayble Therapeutics AB	09/03/2020	2015
Linc AB	28/05/2021	1991
Biovent International Ab	02/06/2001	1996
Humana AB	22/03/2016	2001
OssDsign AB	24/04/2019	2011
Intellego Technologies AB	24/06/2021	2011
Cellavision AB	08/05/2007	1994
Corem Property Group AB	09/03/2010	1993
RugVista Group AB	18/03/2021	2005
Clinical Laserthermia Systems AB	16/04/2009	2006
Engcon AB	17/06/2022	1990
Minesto AB	09/11/2015	2007
Transtema Group AB	21/05/2015	1997
Checkin.com Group AB	20/05/2021	2017
Fasadgruppen Group AB	09/12/2020	1963
Dedicare AB	04/05/2011	1995
Moberg Pharma AB	26/05/2011	2006

Prevas AB	06/10/1998	1985
Eolus Vind AB	28/05/2009	1990
QleanAir AB	12/12/2019	1988
Norion Bank AB	10/06/2015	1999
Netel Holding AB	15/10/2021	2000
Bredband2 i Skandinavien AB	01/06/2001	1989
BTS Group AB	06/06/2001	1986
CTEK AB	24/09/2021	1997
LumenRadio AB	08/12/2022	2008
MedCap AB	23/06/2003	2001
Senzime AB	18/06/2008	1999
Pricer AB	06/10/1998	1991
MAG Interactive AB	08/12/2017	2010
Isofol Medical AB	04/04/2017	2008
Zinzino AB	20/09/2020	2005
Enea AB	21/10/1998	1968
Oncopeptides AB	22/02/2017	2000
Fractal Gaming Group AB	11/02/2021	2010
Combigene AB	25/05/2015	1990
Egetis Therapeutics AB	07/04/2011	2006
AcouSort AB	09/01/2017	2010
Navigo Invest AB	24/05/2015	2007
Observit AB	21/06/2023	1996
Flat Capital AB	20/10/2021	2013
Cell Impact AB	20/02/2013	1999
Metacon AB	11/10/2018	2007
Stockwik Förvaltning AB	06/10/1998	1987

Episurf Medical AB	05/11/2010	2008
DevPort AB	07/12/2017	2008
SpectraCure AB	04/12/2018	2003
Scout Gaming Group AB	11/12/2017	2013
CAG Group AB	12/12/2018	1987
Svenska Aerogel Holding AB	20/12/2016	2000
Quartiers Properties AB	21/06/2017	2014
AAC Clyde Space AB	21/12/2016	2005
Alligator Bioscience AB	23/11/2016	2000
Agtira AB	27/06/2017	1996
Drillcon AB	07/08/2006	1963
Goobit Group AB	05/05/2021	2012

10.5 Swedish economic variables – Figure 24

Year	Wealth tax	GDP growth	Interest rates
1961	1,80%	6%	5,00%
1962	1,80%	4%	4,00%
1963	1,80%	5%	4,00%
1964	1,80%	7%	5,00%
1965	1,80%	4%	5,50%
1966	1,80%	2%	6,00%
1967	1,80%	3%	6,00%
1968	1,80%	4%	5,00%
1969	1,80%	5%	7,00%
1970	1,80%	7%	7,00%
1971	2,50%	1%	5,00%

1972	2,50%	2%	5,00%
1973	2,50%	4%	5,00%
1974	2,50%	3%	7,00%
1975	2,50%	3%	6,00%
1976	2,50%	1%	8,00%
1977	2,50%	-2%	8,00%
1978	2,50%	2%	6,50%
1979	2,50%	4%	9,00%
1980	2,50%	2%	10,00%
1981	2,50%	0%	11,00%
1982	2,50%	1%	10,00%
1983	4,00%	2%	8,50%
1984	3,00%	4%	9,50%
1985	3,00%	2%	10,50%
1986	3,00%	3%	7,50%
1987	3,00%	3%	7,50%
1988	3,00%	3%	8,50%
1989	3,00%	3%	10,50%
1990	3,00%	1%	11,50%
1991	2,50%	-1%	8,00%
1992	1,50%	-1%	10,00%
1993	1,50%	-2%	5,00%
1994	1,50%	4%	7,00%
1995	1,50%	4%	8,00%
1996	1,50%	2%	3,50%
1997	1,50%	3%	2,50%
1998	1,50%	4%	2,00%

1999	1,50%	4%	1,50%
2000	1,50%	5%	2,00%
2001	1,50%	1%	2,00%
2002	1,50%	2%	4,50%
2003	1,50%	2%	2,85%
2004	1,50%	4%	2,10%
2005	1,50%	3%	1,60%
2006	1,50%	5%	2,93%
2007	1,50%	3%	4,10%
2008	0,00%	0%	2,78%
2009	0,00%	-4%	0,35%
2010	0,00%	6%	1,10%
2011	0,00%	3%	2,02%
2012	0,00%	-1%	1,28%
2013	0,00%	1%	1,02%
2014	0,00%	3%	10,00%
2015	0,00%	4%	-0,25%
2016	0,00%	2%	-0,40%
2017	0,00%	3%	-0,40%
2018	0,00%	2%	-0,40%
2019	0,00%	2%	-0,15%
2020	0,00%	-2%	0,00%
2021	0,00%	5%	2,00%
2022	0,00%	3%	3,00%

10.6 Norwegian economic variables – Figure 25

Year	Wealth tax	GDP growth	Interest rates
1961	2,20%	6%	4%
1962	2,20%	3%	4,10%
1963	2,20%	4%	4,10%
1964	2,20%	5%	4,20%
1965	2,20%	5%	4%
1966	2,20%	4%	4,10%
1967	2,20%	6%	4,30%
1968	2,20%	2%	4,60%
1969	2,20%	5%	4,90%
1970	2,20%	2%	5,00%
1971	2,20%	6%	5,20%
1972	2,20%	6%	5,30%
1973	2,20%	5%	5,70%
1974	2,20%	4%	6,00%
1975	2,20%	5%	6,40%
1976	2,20%	6%	6,90%
1977	2,20%	4%	7,30%
1978	2,20%	4%	7,50%
1979	2,20%	4%	8,00%
1980	2,20%	5%	8,50%
1981	2,20%	2%	9%
1982	2,20%	0%	9,50%
1983	2,20%	4%	10%
1984	2,20%	6%	11,00%
1985	2,20%	6%	12%
1986	2,20%	4%	15,15%

1987	2,20%	2%	14,20%
1988	2,20%	0%	12,60%
1989	2,20%	1%	11%
1990	2,20%	2%	10,50%
1991	1,10%	3%	10%
1992	1,10%	4%	11%
1993	1,10%	3%	8%
1994	1,10%	5%	4,75%
1995	1,10%	4%	4,50%
1996	1,10%	5%	4,25%
1997	1,10%	5%	3,25%
1998	1,10%	3%	5%
1999	1,10%	2%	6,50%
2000	1,10%	3%	6,50%
2001	1,10%	2%	7%
2002	1,10%	1%	6,50%
2003	1,10%	1%	3,50%
2004	1,10%	4%	1,75%
2005	1,10%	3%	2%
2006	1,10%	2%	2,75%
2007	1,10%	3%	4,63%
2008	1,10%	0%	5,38%
2009	1,10%	-2%	1,50%
2010	1,10%	1%	2%
2011	1,10%	1%	2,25%
2012	1,10%	3%	1,50%
2013	1,10%	1%	1,50%

2014	1,00%	2%	1,50%
2015	0,85%	2%	0,88%
2016	0,85%	1%	0,50%
2017	0,85%	2%	0,50%
2018	0,85%	1%	0,50%
2019	0,85%	1%	1,25%
2020	0,85%	-1%	0,00%
2021	0,85%	4%	0%
2022	1,10%	3%	1,50%

10.7 Average IPO Duration for Norway – Figure 26

(Blue is the estimated average for that year)

Year	Wealth tax	GDP growth	Interest rates	IPO Duration
1962	2,20%	3%	4,10%	57,79329227
1963	2,20%	4%	4,10%	57,94387406
1964	2,20%	5%	4,20%	33,65913758
1965	2,20%	5%	4%	57,70294319
1966	2,20%	4%	4,10%	25,67830253
1967	2,20%	6%	4,30%	27,7063655
1968	2,20%	2%	4,60%	29,73442847
1969	2,20%	5%	4,90%	28,65160849
1970	2,20%	2%	5,00%	23,5578371
1971	2,20%	6%	5,20%	18,46406571
1972	2,20%	6%	5,30%	21,25530459

1973	2,20%	5%	5,70%	44,59548255
1976	2,20%	6%	6,90%	45,67488022
1977	2,20%	4%	7,30%	46,75427789
1979	2,20%	4%	8,00%	43,70568104
1980	2,20%	5%	8,50%	40,65708419
1981	2,20%	2%	9%	28,24549395
1982	2,20%	0%	9,50%	29,47296372
1983	2,20%	4%	10%	13,76043806
1984	2,20%	6%	11,00%	17,8380105
1985	2,20%	6%	12%	14,87656856
1986	2,20%	4%	15,15%	11,91512663
1987	2,20%	2%	14,20%	21,69883641
1988	2,20%	0%	12,60%	26,90143737
1989	2,20%	1%	11%	32,10403833
1990	2,20%	2%	10,50%	25,98973306
1991	1,10%	3%	10%	21,43463381
1992	1,10%	4%	11%	22,63107461
1993	1,10%	3%	8%	13,56125941
1994	1,10%	5%	4,75%	24,26557153
1995	1,10%	4%	4,50%	22,73967602
1996	1,10%	5%	4,25%	18,03696099
1997	1,10%	5%	3,25%	20,25051335
1998	1,10%	3%	5%	22,46406571
1999	1,10%	2%	6,50%	14,50787132
2000	1,10%	3%	6,50%	15,65639973
2001	1,10%	2%	7%	18,12019165
2002	1,10%	1%	6,50%	15,85215606

2003	1,10%	1%	3,50%	10,92950034
2004	1,10%	4%	1,75%	18,50787132
2005	1,10%	3%	2%	13,7467488
2006	1,10%	2%	2,75%	13,83162218
2007	1,10%	3%	4,63%	7,950718686
2008	1,10%	0%	5,38%	13,28952772
2009	1,10%	-2%	1,50%	10,60095825
2010	1,10%	1%	2%	11,43326489
2011	1,10%	1%	2,25%	9,389915583
2012	1,10%	3%	1,50%	7,772758385
2013	1,10%	1%	1,50%	8,651608487
2014	1,00%	2%	1,50%	7,247091034

10.8 Average IPO Duration for Sweden – Figure 27

(Blue is the estimated average for that year)

Year	GDP			IPO Duration
	Wealth tax	growth	Interest rates	
1961	1,80%	6%	5,00%	48,04
1962	1,80%	4%	4,00%	47,19
1963	1,80%	5%	4,00%	46,34
1964	1,80%	7%	5,00%	47,72
1967	1,80%	3%	6,00%	49,11
1968	1,80%	4%	5,00%	30,80
1969	1,80%	5%	7,00%	38,20
1970	1,80%	7%	7,00%	39,16

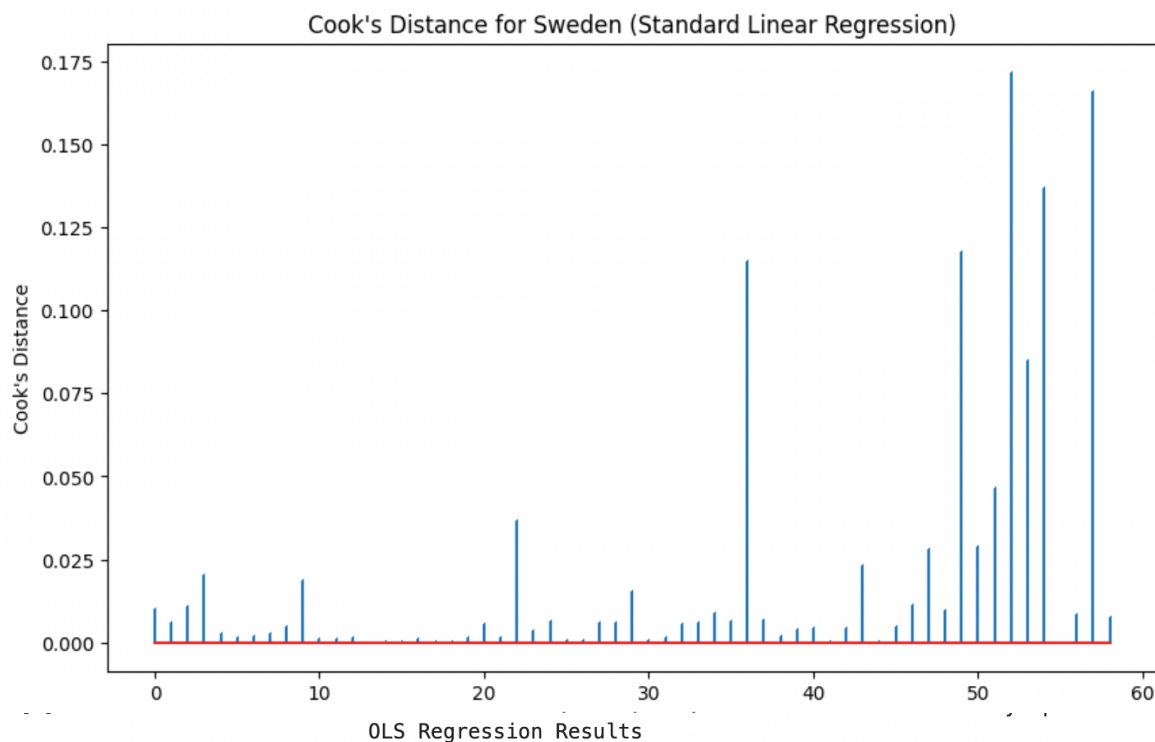
1972	2,50%	2%	5,00%	40,11
1973	2,50%	4%	5,00%	26,58
1974	2,50%	3%	7,00%	22,67
1975	2,50%	3%	6,00%	18,77
1976	2,50%	1%	8,00%	29,18
1977	2,50%	-2%	8,00%	39,59
1978	2,50%	2%	6,50%	20,68
1984	3,00%	4%	9,50%	22,94
1985	3,00%	2%	10,50%	22,34
1986	3,00%	3%	7,50%	26,61
1987	3,00%	3%	7,50%	18,72
1988	3,00%	3%	8,50%	23,85
1989	3,00%	3%	10,50%	11,12
1990	3,00%	1%	11,50%	18,79
1991	2,50%	-1%	8,00%	22,00
1992	1,50%	-1%	10,00%	21,61
1993	1,50%	-2%	5,00%	21,23
1994	1,50%	4%	7,00%	12,38
1995	1,50%	4%	8,00%	18,82
1996	1,50%	2%	3,50%	24,48
1997	1,50%	3%	2,50%	16,22
1998	1,50%	4%	2,00%	20,70
1999	1,50%	4%	1,50%	13,26
2000	1,50%	5%	2,00%	17,06
2001	1,50%	1%	2,00%	13,08
2002	1,50%	2%	4,50%	13,90
2003	1,50%	2%	2,85%	14,72

2004	1,50%	4%	2,10%	14,11
2005	1,50%	3%	1,60%	14,96
2006	1,50%	5%	2,93%	11,23
2007	1,50%	3%	4,10%	10,78
2008	0,00%	0%	2,78%	10,47
2009	0,00%	-4%	0,35%	11,33
2010	0,00%	6%	1,10%	8,69
2011	0,00%	3%	2,02%	9,39
2012	0,00%	-1%	1,28%	9,91
2013	0,00%	1%	1,02%	8,80

10.9 Breusch-Pagan results for «Number of IPOs»- Figure 28

Category	LM Statistic	p-value	f-value	f p-value
Breusch-Pagan Test for Norway (Linear Regression with Dummy)	5.290337120355382	0.15173063102749332	1.804290316814666	0.15666409335028617
Breusch-Pagan Test for Sweden (Linear Regression with Dummy)	15.057459608005676	0.001768198324889131	6.282145358101862	0.0009618229489694981
Breusch-Pagan Test for Sweden (Standard Linear Regression)	13.739646321977254	0.0032818359428419324	5.565434103649731	0.0020825439944983167
Breusch-Pagan Test for Norway (Standard Linear Regression)	5.911889047887948	0.11597659674390659	2.0390223946418415	0.11858539607099403

10.11 Cook's distance for Sweden (Linear regression without Dummy) – Figure 29



```

=====
Dep. Variable:      IPO Duration      R-squared:          0.678
Model:              OLS                Adj. R-squared:     0.668
Method:             Least Squares      F-statistic:        72.14
Date:               Fri, 08 Dec 2023   Prob (F-statistic): 3.27e-25
Time:               18:40:25           Log-Likelihood:     -380.47
No. Observations:   107                AIC:                768.9
Df Residuals:       103                BIC:                779.6
Df Model:           3
Covariance Type:    nonrobust
=====

```

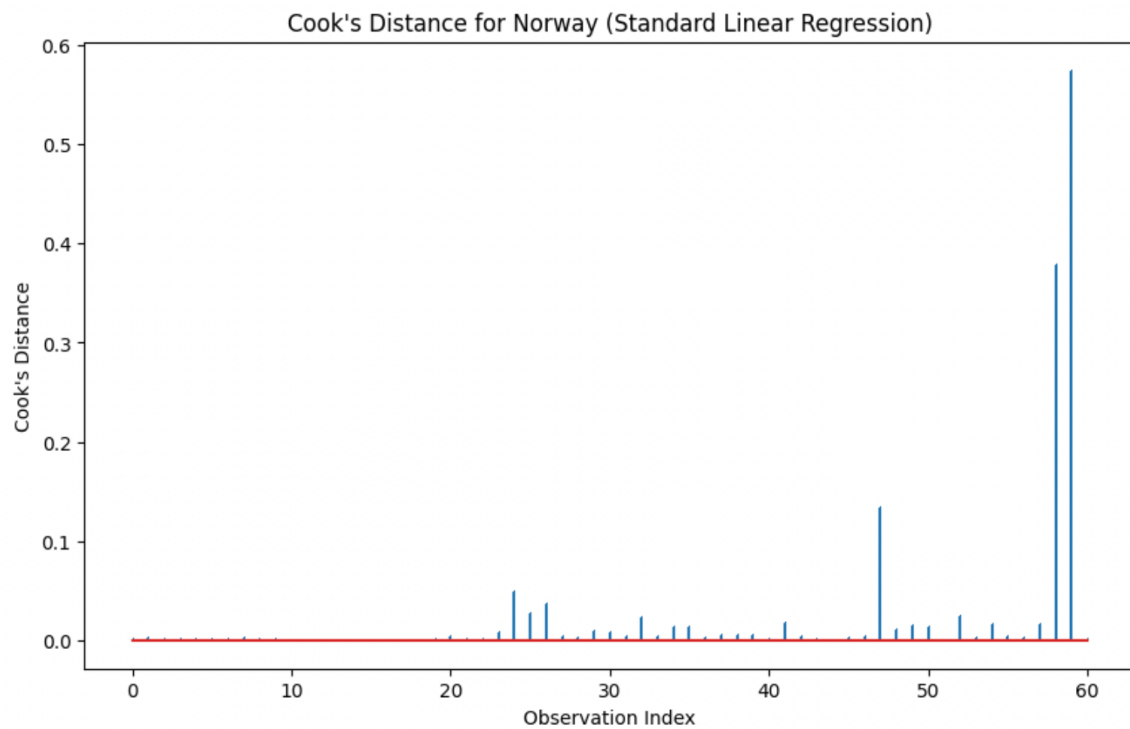
	coef	std err	t	P> t	[0.025	0.975]
const	-1.304e-15	1.144	-1.14e-15	1.000	-2.269	2.269
Wealth tax dummy	14.1644	3.371	4.202	0.000	7.478	20.850
GDP growth	241.5452	66.874	3.612	0.000	108.916	374.174
Interest rates	33.4159	35.152	0.951	0.344	-36.299	103.131

```

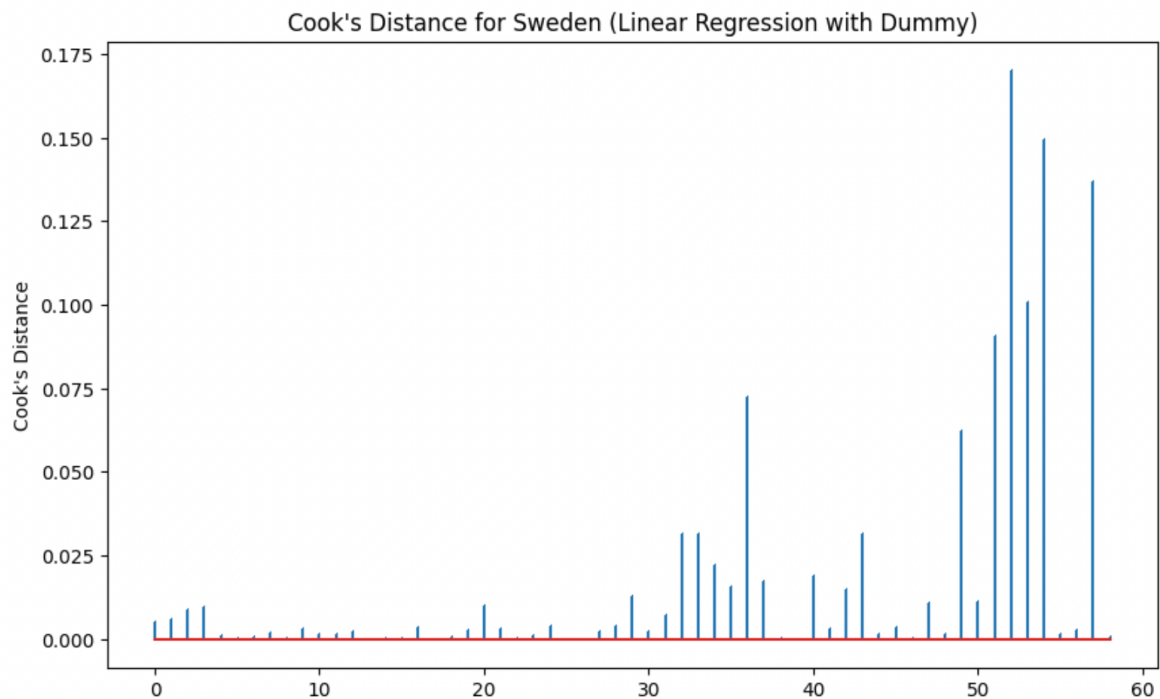
=====
Omnibus:              48.958      Durbin-Watson:          0.664
Prob(Omnibus):        0.000      Jarque-Bera (JB):       159.174
Skew:                 1.604      Prob(JB):               2.73e-35
Kurtosis:             8.041      Cond. No.                90.5
=====

```

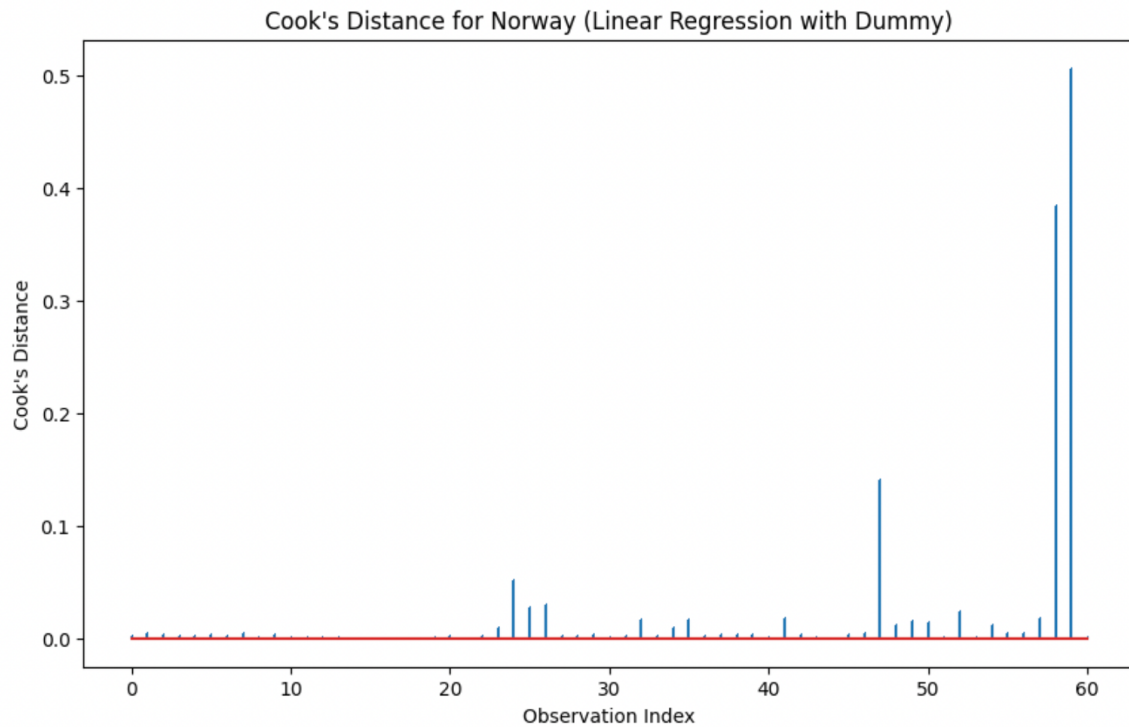
10.12 Cook's Distance for Norway (Linear regression without Dummy) – Figure 30



10.13 Cook's distance for Sweden (Linear regression with Dummy) – Figure 31



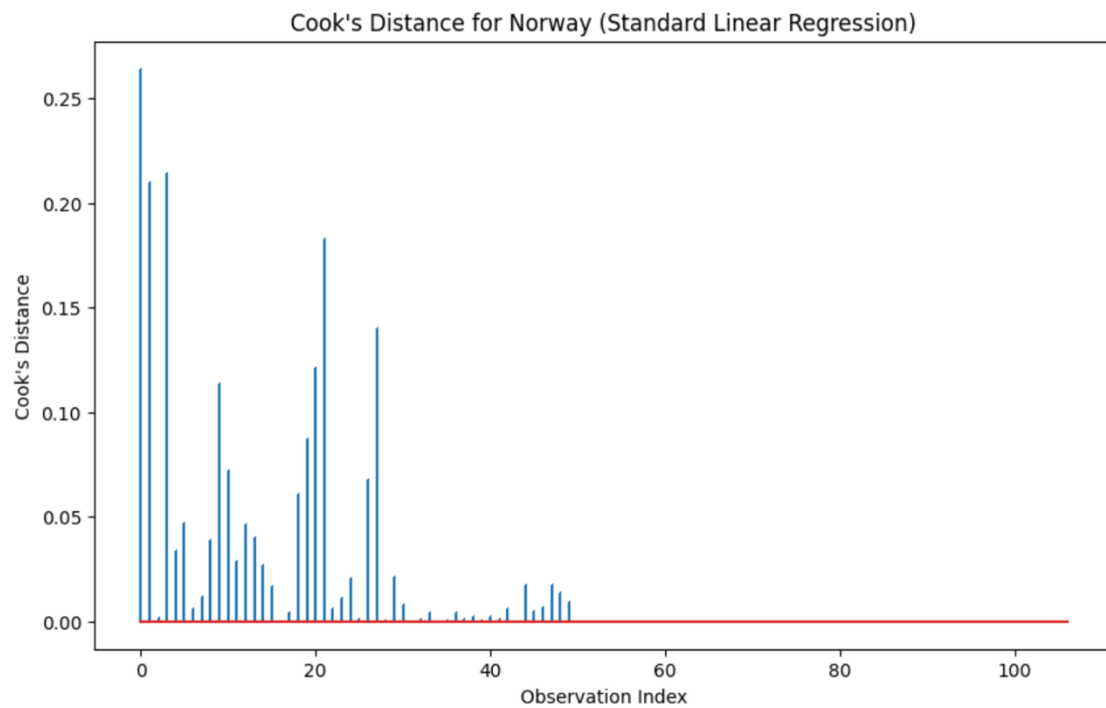
10.14 Cook's distance for Norway (Linear regression with Dummy) – Figure 32



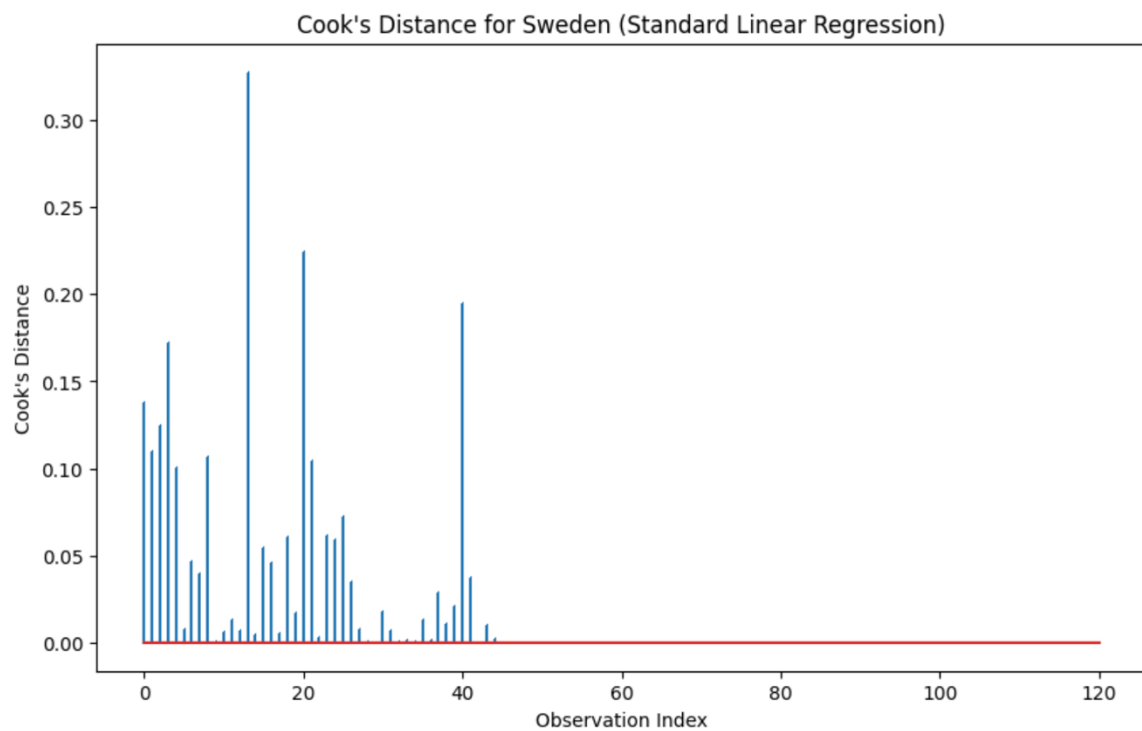
10.15 Breusch-Pagan results for «Average IPO duration»

Category	LM Statistic	p-value	f-value	f p-value
Breusch-Pagan Test for Sweden (Linear Regression with Dummy)	34.2306450352957	1.7710484626817867e-07	15.385560454143937	1.6791101348957828e-08
Breusch-Pagan Test for Norway (Linear Regression with Dummy)	21.35076535402454	8.901436224109191e-05	8.558663096657968	3.974208477087153e-05
Breusch-Pagan Test for Sweden (Standard Linear Regression)	31.872221316897917	5.568231669072626e-07	13.94645586062031	7.794837115967147e-08
Breusch-Pagan Test for Norway (Standard Linear Regression)	44.05859373317257	1.4665434246851124e-09	24.033120239262363	7.187541290597132e-12

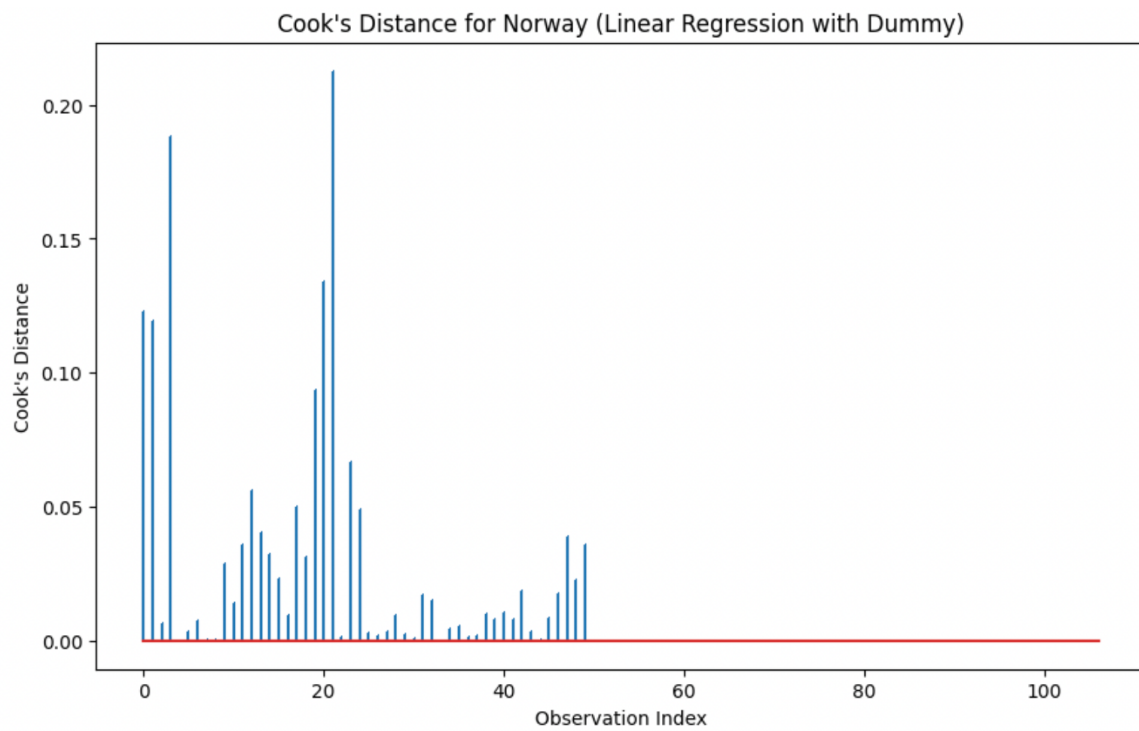
10.16 Cook's Distance for Norway "Average IPO duration" (Linear regression without Dummy) – Figure 34



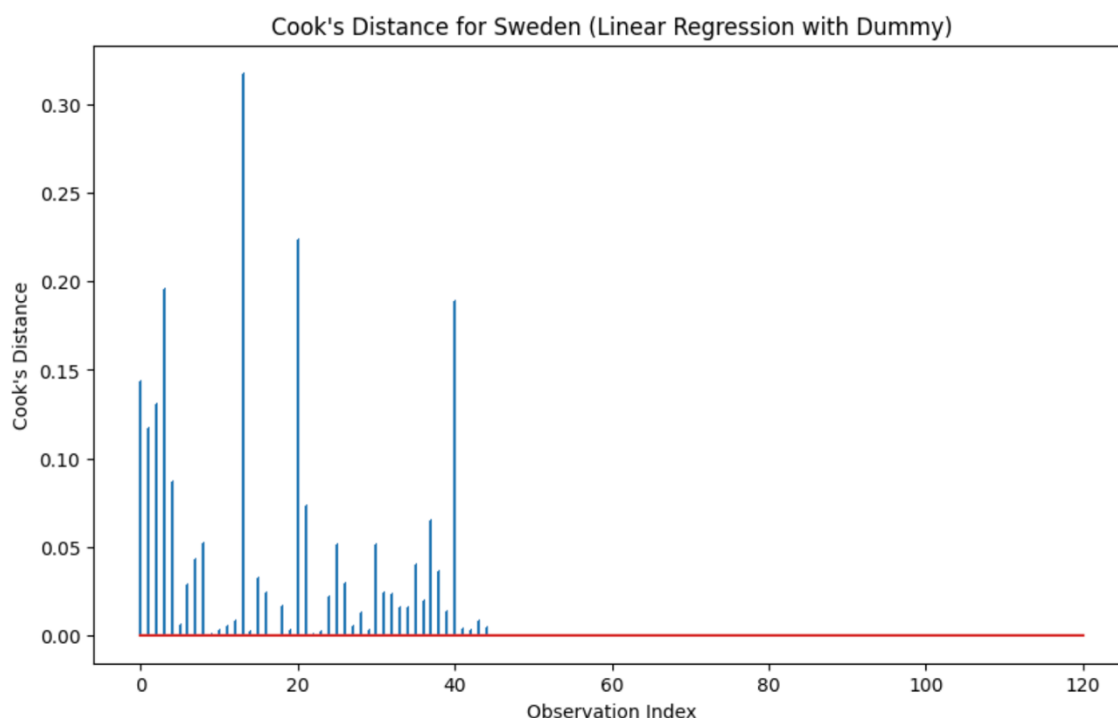
10.17 Cook's Distance for Sweden "Average IPO Duration" (Linear regression withoutDummy) – Figure 35



10.18 Cook's distance for Norway "Average IPO duration" (Linear regression with Dummy) – Figure 36



10.19 Cook's Distance for Sweden "Average IPO duration" (Linear regression with Dummy) – Figure 37



10.20 OLS regression results – "Number of IPOs" without Dummy, Sweden – Figure

OLS Regression Results						
Dep. Variable:	IPO Count	SE	R-squared:	0.465		
Model:	OLS		Adj. R-squared:	0.435		
Method:	Least Squares		F-statistic:	15.91		
Date:	Wed, 06 Dec 2023		Prob (F-statistic):	1.44e-07		
Time:	16:54:33		Log-Likelihood:	-148.51		
No. Observations:	59		AIC:	305.0		
Df Residuals:	55		BIC:	313.3		
Df Model:	3					
Covariance Type:	nonrobust					
	coef	std err	t	P> t	[0.025	0.975]
const	2.3220	0.404	5.743	0.000	1.512	3.132
Wealth tax SE	-1.7735	0.611	-2.902	0.005	-2.998	-0.549
GDP growth SE	0.1966	0.418	0.471	0.640	-0.641	1.034
Interest rates SE	-1.1690	0.624	-1.872	0.067	-2.420	0.082
Omnibus:	20.271		Durbin-Watson:	1.351		
Prob(Omnibus):	0.000		Jarque-Bera (JB):	26.717		
Skew:	1.362		Prob(JB):	1.58e-06		
Kurtosis:	4.858		Cond. No.	2.73		

10.21 OLS Regression results “Number of IPOs” with Dummy, Sweden – Figure 39

OLS Regression Results						
Dep. Variable:	IPO Count SE	R-squared:	0.531			
Model:	OLS	Adj. R-squared:	0.507			
Method:	Least Squares	F-statistic:	21.90			
Date:	Wed, 06 Dec 2023	Prob (F-statistic):	1.32e-09			
Time:	18:01:43	Log-Likelihood:	-151.26			
No. Observations:	62	AIC:	310.5			
Df Residuals:	58	BIC:	319.0			
Df Model:	3					
Covariance Type:	nonrobust					
	coef	std err	t	P> t	[0.025	0.975]
const	6.9995	0.842	8.315	0.000	5.315	8.684
Wealth tax SE Dummy	-4.6340	1.102	-4.205	0.000	-6.840	-2.428
GDP growth SE	31.8778	17.261	1.847	0.070	-2.673	66.429
Interest rates SE	-38.5238	13.690	-2.814	0.007	-65.927	-11.121
Omnibus:	22.361	Durbin-Watson:	1.360			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	33.926			
Skew:	1.325	Prob(JB):	4.30e-08			
Kurtosis:	5.472	Cond. No.	62.8			

10.22 OLS regression results “Number of IPOs” with Dummy, Norway – Figure 40

OLS Regression Results						
Dep. Variable:	IPO Count NO	R-squared:	0.336			
Model:	OLS	Adj. R-squared:	0.301			
Method:	Least Squares	F-statistic:	9.614			
Date:	Mon, 11 Dec 2023	Prob (F-statistic):	3.12e-05			
Time:	18:25:09	Log-Likelihood:	-165.14			
No. Observations:	61	AIC:	338.3			
Df Residuals:	57	BIC:	346.7			
Df Model:	3					
Covariance Type:	nonrobust					
	coef	std err	t	P> t	[0.025	0.975]
const	3.3693	0.761	4.430	0.000	1.846	4.892
Wealth tax NO Dummy	-2.0871	1.240	-1.683	0.098	-4.571	0.397
GDP growth NO	-0.4259	0.530	-0.804	0.425	-1.486	0.634
Interest rates NO	-1.6964	0.571	-2.969	0.004	-2.841	-0.552
Omnibus:	62.384	Durbin-Watson:	1.055			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	440.924			
Skew:	2.823	Prob(JB):	1.80e-96			
Kurtosis:	14.900	Cond. No.	3.59			

10.23 OLS regression results “Number of IPOs” without Dummy, Norway – Figure 41

OLS Regression Results						
Dep. Variable:	IPO Count NO	R-squared:	0.369			
Model:	OLS	Adj. R-squared:	0.336			
Method:	Least Squares	F-statistic:	11.13			
Date:	Wed, 06 Dec 2023	Prob (F-statistic):	7.46e-06			
Time:	16:54:33	Log-Likelihood:	-163.56			
No. Observations:	61	AIC:	335.1			
Df Residuals:	57	BIC:	343.6			
Df Model:	3					
Covariance Type:	nonrobust					
	coef	std err	t	P> t	[0.025	0.975]
const	2.3770	0.468	5.078	0.000	1.440	3.314
Wealth tax NO	-1.5497	0.632	-2.451	0.017	-2.816	-0.284
GDP growth NO	-0.2357	0.523	-0.451	0.654	-1.283	0.812
Interest rates NO	-1.3932	0.577	-2.413	0.019	-2.549	-0.237
Omnibus:	61.540	Durbin-Watson:	1.057			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	424.469			
Skew:	2.782	Prob(JB):	6.73e-93			
Kurtosis:	14.664	Cond. No.	2.27			

10.24 OLS regression results “Average IPO duration” with Dummy, Norway – Figure 42

OLS Regression Results						
Dep. Variable:	IPO Duration	R-squared:	0.678			
Model:	OLS	Adj. R-squared:	0.668			
Method:	Least Squares	F-statistic:	72.14			
Date:	Fri, 08 Dec 2023	Prob (F-statistic):	3.27e-25			
Time:	18:40:25	Log-Likelihood:	-380.47			
No. Observations:	107	AIC:	768.9			
Df Residuals:	103	BIC:	779.6			
Df Model:	3					
Covariance Type:	nonrobust					
	coef	std err	t	P> t	[0.025	0.975]
const	-1.304e-15	1.144	-1.14e-15	1.000	-2.269	2.269
Wealth tax dummy	14.1644	3.371	4.202	0.000	7.478	20.850
GDP growth	241.5452	66.874	3.612	0.000	108.916	374.174
Interest rates	33.4159	35.152	0.951	0.344	-36.299	103.131
Omnibus:	48.958	Durbin-Watson:		0.664		
Prob(Omnibus):	0.000	Jarque-Bera (JB):		159.174		
Skew:	1.604	Prob(JB):		2.73e-35		
Kurtosis:	8.041	Cond. No.		90.5		

10.25 OLS regression results “Average IPO duration” without Dummy, Norway – Figure 43

OLS Regression Results						
Dep. Variable:	IPO Duration		R-squared:	0.800		
Model:	OLS		Adj. R-squared:	0.794		
Method:	Least Squares		F-statistic:	137.4		
Date:	Fri, 08 Dec 2023		Prob (F-statistic):	7.23e-36		
Time:	18:46:52		Log-Likelihood:	-354.90		
No. Observations:	107		AIC:	717.8		
Df Residuals:	103		BIC:	728.5		
Df Model:	3					
Covariance Type:	nonrobust					
	coef	std err	t	P> t	[0.025	0.975]
const	-0.1124	0.867	-0.130	0.897	-1.831	1.606
Wealth tax	1621.9022	169.472	9.570	0.000	1285.795	1958.010
GDP growth	79.1266	54.702	1.446	0.151	-29.362	187.615
Interest rates	-89.5943	31.262	-2.866	0.005	-151.595	-27.594
Omnibus:	21.293		Durbin-Watson:	0.891		
Prob(Omnibus):	0.000		Jarque-Bera (JB):	51.140		
Skew:	0.702		Prob(JB):	7.85e-12		
Kurtosis:	6.082		Cond. No.	265.		

10.26 OLS regression results “Average IPO duration” with Dummy, Sweden – Figure 44

OLS Regression Results						
Dep. Variable:	IPO Duration	R-squared:	0.753			
Model:	OLS	Adj. R-squared:	0.747			
Method:	Least Squares	F-statistic:	118.9			
Date:	Fri, 08 Dec 2023	Prob (F-statistic):	2.26e-35			
Time:	18:40:25	Log-Likelihood:	-399.73			
No. Observations:	121	AIC:	807.5			
Df Residuals:	117	BIC:	818.6			
Df Model:	3					
Covariance Type:	nonrobust					
	coef	std err	t	P> t	[0.025	0.975]
const	0.5285	0.741	0.713	0.477	-0.940	1.997
Wealth tax dummy	14.6076	3.105	4.704	0.000	8.458	20.757
GDP growth	144.6200	45.037	3.211	0.002	55.426	233.814
Interest rates	94.5336	39.475	2.395	0.018	16.355	172.712
Omnibus:	40.943	Durbin-Watson:	0.756			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	105.585			
Skew:	1.290	Prob(JB):	1.18e-23			
Kurtosis:	6.780	Cond. No.	83.0			

10.27 OLS regression results “Average IPO duration” without Dummy, Sweden – Figure 45

OLS Regression Results						
Dep. Variable:	IPO Duration		R-squared:	0.726		
Model:	OLS		Adj. R-squared:	0.719		
Method:	Least Squares		F-statistic:	103.5		
Date:	Fri, 08 Dec 2023		Prob (F-statistic):	9.08e-33		
Time:	18:46:52		Log-Likelihood:	-405.95		
No. Observations:	121		AIC:	819.9		
Df Residuals:	117		BIC:	831.1		
Df Model:	3					
Covariance Type:	nonrobust					
	coef	std err	t	P> t	[0.025	0.975]
const	0.9299	0.772	1.205	0.231	-0.599	2.459
Wealth tax	558.7126	191.234	2.922	0.004	179.984	937.441
GDP growth	213.1083	42.878	4.970	0.000	128.191	298.025
Interest rates	92.3063	57.630	1.602	0.112	-21.826	206.439
Omnibus:	43.099		Durbin-Watson:	0.859		
Prob(Omnibus):	0.000		Jarque-Bera (JB):	116.690		
Skew:	1.340		Prob(JB):	4.58e-26		
Kurtosis:	6.995		Cond. No.	311.		

