# Patterns of Financialisation: A Multimethod Study of Banking Regulation in Canada

# Martin Instebø Jamne



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Department of Comparative Politics University of Bergen

### Abstract

In this thesis I ask if financialisation – the increasing influence of the financial sector – may cause a dual effect of increased economic growth and decrease wage share of total income. I operationalise financialisation as financial deregulation and test its effects utilising a nested analysis. The results from a regression on OECD-member states from 1991 to 2005 indicate that credit controls as a specific category of financial deregulation *decreases* economic growth and that deregulation of banking supervisory agencies *increases* the wage share of total national income. Canada's Bill C-67 of 1999, deregulating foreign bank entry, is selected as the case to be studied in-depth based on the regression results. I then conduct process tracing on theorised mechanisms of foreign bank entry in Canada. I find that foreign bank entry in Canada brought economic growth through foreign direct investment. I also find that the wage share of total national income was reduced from credit-led growth and finance-led growth, both of which were results of foreign bank entry.

# Foreword

Completing this thesis would not be possible without excellent supervision from Cornelius Cappelen. I also extend my gratitude to Michael Alvarez for not only assisting me on this project, but for believing in me and supporting me for four years. My education and experience at UiB would likely not been as enriching had it not been for the feeling of being taken seriously I got in sampol115 four years ago.

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Writing a thesis during a global pandemic has been challenging and has taught me a lot. Despite the challenges, I have been fortunate enough to work and study with far less consequences than many others.

This thesis is dedicated to the poor, sick and other victims of capitalism's inhumane conditions.

# Table of Contents

Abstract	ii
Foreword	iii
Chapter 1: Introduction	
Chapter 2: Conceptualisation	
2.1 The financial sector	
2.2 The real economy/productive sector	5
2.3 Financialisation	7
2.3.1 Dimensions of financialisation	9
2.4 Regulation and deregulation	10
2.5 Gross domestic product and wage share of total income	
2.6 Summary	
Chapter 3: Theoretical framework and literature review	14
3.1 A divided research field	14
3.2 Orthodox literature	16
3.3 Heterodox literature	
3.4 The background to financialisation	
3.4.1 Stagnation	
3.4.2 Instability	
3.4.3 Neoliberalism	
3.5 Theoretical specification for this thesis	
3.6 Deregulation	
3.7 Theoretical mechanisms	
3.7.1 Mechanisms of GDP	
3.7.2 Mechanisms of wage share	
3.8 Summary	
Chapter 4: Quantitative analysis and case selection	
4.1 A nested approach	
4.2 Quantitative data	41
4.2.1 Challenges with coding financialisation	
4.2.2 Data employed in the thesis	

4.3 Variables	45
4.3.1 Independent variables	
4.3.2 Control variables	
4.3.3 Dependent variables	
4.4 Data treatment	
4.5 Results	50
4.6 Case selection	54
4.7 Summary	58
Chapter 5: Process tracing	59
5.1 Mechanisms and steps	
5.2 Tools of process tracing	62
5.3 Structure of the analysis	63
5.4 Change in behaviour	65
5.5 Increased GDP	67
5.5.1 GDP Mechanism 1: Support apparatus	
5.5.2 GDP Mechanism 2: Employment in finance	
5.5.3 GDP Mechanism 3: Foreign direct investment	71
5.6 Decreased wage share	74
5.6.1 Wage share mechanism 1: Credit-led growth	
5.6.2 Wage share mechanism 2: Productive firms shift investment	
5.6.3 Wage share mechanism 3: Finance-led growth	
5.7 Summary	
Chapter 6: Interpretive analysis	
6.1 Quantitative findings	
6.2 Qualitative findings	
Chapter 7: Summary	
Bibliography	94
Appendix A: Quantitative data tests	
Multicollinearity	
Heteroskedasticity	
Autocorrelation	

## **Chapter 1: Introduction**

The last five decades of political and economic development have been characterised by financialisation – a process wherein the financial sector becomes ever more influential in the economy as a whole (Epstein 2005, 3). The Great Recession of 2008 revealed the devastating consequences of that process, shocking scholars, financiers and lay people alike. While financialisation has become a far more debated and researched issue the last years, this research has predominantly focused on the United States in general and the Great Recession in particular. In this thesis, I explore the effects of financialisation on a wider set of countries and in a wider timeframe.

The literature on financialisation explores many effects of financialisation, and this provides the springboard for my own research. Some of these effects appear to be contradictory in nature: While some research finds financialisation to cause economic growth, and thus to have a positive effect, others find that workers are worse off as a result of financialisation, and thus that it has a negative effect. Rather than viewing these consequences as *contradictory*, I argue in this thesis that what we are witnessing is in fact a *dual effect* wherein the degree to which workers benefit from the total potential rewards generated by economic growth is potentially quite different from the growth in the total income. Following this line of thinking, my research question thus becomes:

# Does financialisation cause a dual effect of increased economic growth alongside a decreased share of total income appropriated by labour?

This research question will guide every aspect and decision of this thesis. Using a multimethod approach, I conduct a regression analysis on OECD-member states utilising various categories of financial deregulations, representing one dimension of financialisation. These categorises are tested against two dependent variables reflecting the anticipated dual effect: economic growth and wage share of total income in the economy. I then proceed to use these results for case selection in a more focused analysis in which I separate categories of financial deregulation, the effects of which I analyse via process tracing. I then examine more closely the case of Canada and the introduction of Bill C-67 in 1999. This bill removed barriers for foreign banks to establish local branches. The contradiction between the quantitative findings on bank entry and the qualitative findings examining foreign bank entry is discussed in chapter four. By employing the toolset of process tracing, I test six unique mechanisms with respect to their explanatory power for understanding potential effects of this concrete case of deregulation, a key policy component of financialisation.

My findings show that there does indeed appear to be a dual effect, but in the opposite direction of that which is stated research question presented above. The regression results indicate that deregulating credit controls *decreases* economic growth, whereas deregulating banking supervisory agencies *increases* the wage share. Deregulating entry barriers for new banks does not show a statistically significant effect upon growth. In the qualitative analysis, I find that Canada's deregulation of foreign bank entry barriers contributed to economic growth through the foreign direct investment inflow that increases alongside the establishment of local branches by foreign banks establish local offices. When examining wage share, I find that it decreased as a result of widespread *use of credit to fund general consumption*. I also find the shift in investment to the financial sector to create economic growth without benefitting workers, thus decreasing the wage share. These findings primarily serve as a historical explanation of what happened in Canada in the years after 1999. They also give indications of where one might find an effect of financialisation in other cases, thus contributing to the wider financialisation literature as well as to Canada-specific literature.

This thesis is organised as follows. Chapter two engages in a conceptual discussion. Financialisation is a concept of notorious ambiguity and thus requires rigorous clarity in its definition as well as in its components. Other key terms of the research question are also discussed here. Chapter three presents an overview of the existing literature, a more detailed account of financialisation and its origins, a discussion of financial deregulation as a central dimension of financialisation, and finally the mechanisms of financial deregulation are considered. Chapter four outlines the nested framework guiding this thesis, conducts a regression analysis and employs the regression results in case selection. Chapter 5 introduces the methodological implications and assumptions of process tracing, and then conducts said process tracing on the previously outlined mechanisms. Chapter 6 analyses the findings of

both the regression and the process tracing against the research question and theoretical framework. Finally, the thesis is concluded with a summary.

## **Chapter 2: Conceptualisation**

In this chapter I discuss they key concepts of this thesis. They are introduced, problematised and defined in the order in which they will be used henceforth. Conceptualisation is an important task that should be conducted by all researchers as it helps the reader understand what the central concepts are. Furthermore, it contextualises the research. Some concepts may be uniquely fit to a certain place, time or other condition. In the words of Sartori, "We cannot measure unless we know first what it is that we are measuring" (Sartori 1970, 1038). The seminal work by Sartori on conceptualisation serves as a framework for this chapter.

#### 2.1 The financial sector

The first task is to clarify what the financial sector is. Given that the research question relates to the effect of financialisation – interpreted as financial deregulation – on economic growth and wage share, the financial sector occupies the space wherein half of this thesis takes place – the other half is situated in the political space. The financial sector can in its most basic form be defined as those individuals and corporations dealing with value items, or items that have no other purpose than to hold value (Krippner 2005, 174; Toporowski 2016, 119; "Financial Soundness Indicators: Compilation Guide" 2006). Value items include credit, stocks, securities, and currencies, among other things. Some examples of institutions dealing with these items are banks (commercial banks, investment banks and others), credit rating agencies, stock brokerages, insurance agencies and investment funds. For non-academic readers, the financial sector is typically identified by a limited geographical location, such as Wall Street, City of London and Kabutochō in the United States, the United Kingdom and Japan, respectively.

"Financial crisis" is a term used regularly throughout this thesis. It is an umbrella term of colloquial origin that covers economic depressions and recessions that originated in the financial sector. These two types of events are in turn terms with definitions that border between mathematical precision and arbitrary vagueness. Recessions are periods of minimum two quarters of a year in which GDP is reduced, whereas repressions are generally referred to as severe recessions, often defined by the decrease in GDP which should measure at least

10% (Mankiw 2018, 702). While both of these definitions can be measured with precision, the threshold at which we call them recessions and depressions are arbitrarily set. In the real world, there is no categorical difference between a 9% decrease of GDP versus a 10% decrease, other than that the latter has somewhat larger consequences. What complicates this picture more is the fact that crises, and especially severe ones, are historically limited. Conducting quantitative analyses on events at which GDP decreases more than 10% would likely be impossible due to lack of observations. For the sake of not being restricted by arbitrary thresholds, "financial crises" is employed in discussing macroeconomic events here. It is, however, insufficiently precise to be used in either analysis conducted later.

Though "sector" is used when discussing the financial sector, it cannot be equated with other economic sectors such as "the agricultural sector" which is defined by its products and services, or "the private sector" which is defined by the ownership model of a business. The agricultural sector is categorically comparable to "the construction sector", "the educational sector" and others. The private sector is equivalent and opposite to "the public sector", as well as sometimes "the non-profit sector". The main difference between finance on the one hand and the agricultural and private sectors on the other hand is that the colloquial use of "sector" implies that they are a part of something larger. In the same sense that urban districts are parts of a larger city, economic sectors are parts of a larger economy. This is not the case with the financial sector. This difference cannot be overstated and deserves its own discussion. The comparable equivalent to the financial sector is the real economy, or the productive sector.

#### 2.2 The real economy/productive sector

What is in most contexts referred to as simply "the economy" is the same as that which is here referred to as "the *real* economy". The approach employed here to understanding the economy is one mainly advanced in heterodox research – a group of research identified by, among other things, certain axioms about the economy (Rochon and Rossi 2016, 36). The heterodox approach and its challengers are discussed in more detail in the next chapter. However, this thesis can be characterised as belonging to the heterodox camp, and as such this should be clarified as soon as possible so there is no opacity regarding the framework employed here. That framework is the basis of the entire thesis. As long as there is

transparency of the chosen approach and this approach is being consistently followed one can freely disagree with the choice of conducting a heterodox analysis.

The emphasis on *real* is commonly found in this heterodox literature. The background for this distinction between real and finance originates in an understanding of financial products as not reflecting productive value (Bortis 2016, 45; Bresser-Pereira 2010, 522; Foster and McChesney 2012, 54; Stockhammer 2004, 719). Marx also touched upon this disconnection with his "Money  $\rightarrow$  Money" formula (Marx 1894, 219). This formula describes a closed circuit where money was used to create more money without ever touching on consumption or production of any type – a moneymaking model he saw as increasingly common.

Consider the price of a share in a company. A share – or a stock, which for all intents and purposes is the same as a share – represents a small fraction of ownership in a company and will thus reflect a fraction of that business' value. 1% of Google's total number of shares equals 1% of Google's value. This is exactly how shares work during an Initial Public Offering, when a company decides to sell stocks for the first time. However, as soon as the shares are sold for the second time, there is no fundamental process of evaluating them in line with the underlying company and so they are valued according to their independent demand. At this point they no longer reflect the value of the company's assets precisely and live a life of their own in the stock market, primarily reflecting supply and demand. It should be restated for the sake of clarity that this view of financial value is one advocated primarily by Marxist scholars.

This does not mean that the demand and thus also the price of a share is unaffected by the company's value. It is very likely investors will buy shares and drive up the prices when they receive news that the company's value increases, such as if they made an innovative breakthrough. However, it is the perception of increased value that increase the value (Cassidy 2009, 171). The share price has not increased because of the innovation, but because it is *thought* to increase because of innovation. Any connection between the share price and company value is secondary. Describing this process requires extremely fine precision, but it is vital to understanding financialisation and is therefore worth spending time on.

There are numerous examples that illustrates this. The most (in)famous of these are the recent events surrounding the "GME" stock of GameStop which saw a price increase of approximately 7.800% over the span of half a year, and 1.700% in the last month before it peaked in January 2021. If this increase was to reflect the real value of GameStop they would have to had increase their tangible assets by the same percentage. If we enter the volume of shares available for trading into the equation, that would make GameStop worth 261.853.000 USD in August of 2020 and 22.692.403.000 USD in January 2021. One does not need to subscribe to a Marxist world view to understand that GameStop did not acquire that 22 billions of capital in 5 months. Claims that this wealth was "created" by this event (Frank 2021) are simultaneously both wrong and correct. They are wrong because nothing tangible was created and no materialistic value has been added to the world. Nothing had changed at GameStop. Yet, they are correct because GameStop indeed was worth more than 22 billion at its peak in January 2021. This contradiction illustrates how absurdly disconnected the financial sector is from the real economy. While mainstream (not heterodox) economists did take note of this event, it was simply brushed off as an exception without further analysis (Bezek 2021; Orland 2021). In reality, there is no fundamental law that connects stock prices directly the value of the company that the stocks belong to.

#### **2.3 Financialisation**

The single concept which this entire thesis revolves around is financialisation. While conceptualisation should be conducted in all research, financialisation is a field where that is particularly important. Conceptual clarity is vital to ensuring that one is measuring what one intends to measure, and to ensure that conclusions drawn correspond to the conclusions than *can* be drawn based on the conceptualisation (Gerring 2012, 163).

Financialisation is an infamously vague concept with no single meaning that all, or even most, of its proponents agree on (Aalbers 2019, 2; Epstein 2016, 321; Sawyer 2014, 6). The most fruitful attempt at defining this and the one that is most often referred to is that by Epstein where he defines it as "the increasing role of financial motives, financial markets, financial actors and financial institutions in the operations of the domestic and international economies" (Epstein 2005, 3). Another definition that has played an important role in shaping

this research field is provided by Krippner: "I define financialization as a pattern of accumulation in which profits accrue primarily through financial channels rather than through trade and commodity production" (Krippner 2005, 174). A key similarity between these two is that they both see the extension of financialisation as a *process*, not as historic snapshot nor as a goal for the future. Beyond that, they differ somewhat on financialisaton's intensions, where Epstein is more concerned about the financial sector as a whole, and Krippner narrows it down to sources of profit. Both serve as useful guidelines for this thesis. Another takeaway from both definitions is that they do not set any temporal or spatial criteria to what can be considered financialisation. They both consider financialisation as high level category (Sartori 1970, 1044). This thesis will employ a slightly adjusted definition of financialisation.

I rely on Epstein's understanding of financialisation as a wide process which allows for multiple subdimensions to be identified and studied. Temporal and spatial properties are added to this definition by viewing financialisation as financialisation originating in stagnation – a process which will be outlined in detail in the next chapter. For now, it suffices to know that stagnation started in the 1970s and is a result of highly developed, "mature" capitalism (Foster 2007, 2).

Clarifying the scope of stagnation is important to determine the time and place to be studied. Highly developed, mature capitalist societies are here interpreted as those with a large economy and a correspondingly large financial sector. This is conceptually highly similar to the criteria for joining the OECD. The conditions of a large economy and financial sector are met by OECD-member states. The coverage of the empirical work in this thesis is thus limited to the OECD-member states in the period 1970 until today. This has implications for whenwhere financialisation can plausibly be found, what data should be used and the scope of my conclusions. By imposing additional elements to the definition of financialisation – in other words, by restricting it in time and space – we move down the ladder of abstraction to a medium level category (Sartori 1970, 1044). This also has implications for how generalisable the results of my empirical investigations are. This definition allows for viewing financialisation in terms of five key processes that are widely agreed upon in the literature as being manifestations of financialisation. These processes, or dimension, are financial sector size, household involvement in finance, shift in productive sector investment, debt levels and deregulation of the financial sector. All of these will be further engaged with in the theoretical chapter. They are nevertheless introduced and unpacked here to provide a clear picture of what financialisation is.

#### 2.3.1 Dimensions of financialisation

Perhaps the most intuitive approach to identifying financialisation is to look at the *size of the financial sector*. This is most commonly measured relative to GDP, exemplified by scholars such as Foster and McChesney (2012, 18), Deutschmann (2011, 353) and Brenner (2002, 92). Looking at descriptive data, there is no doubt whatsoever that the size of the financial sector has multiplied several times in the last decades. The *involvement of finance in households* can be seen in the amount that is paid by households to the financial sector in the form of rents and interests, as well as in the share of households' savings that is sourced in the financial sector (Epstein 2016, 326). Reduced purchasing powers due to i.e., stagnant wages in combination with ballooning house prices has reduced the number of households that are able to buy their own home in some countries. The reliance on finance as a source of savings is largely a result of dismantled public pension schemes, as well as the fact that pension funds based on financial products have the potential to see a high rate of return (Aalbers 2017, 545; A. Davis and Walsh 2017, 31). They also have the potential to disappear entirely as the result of a financial crash.

A third dimension of financialisation is the *shift in investment*. As the financial sector becomes increasingly profitable, investments from the productive sector will shift towards the financial sector (Aalbers 2019, 5; Stockhammer 2004, 720). This dimension in particular highlights the importance of the distinction between the financial sector and the productive sector. Investments in the productive sector will produce something of fundamental value, whereas investments in the financial sector contributes to a gamble of money transfers in the hope of winning that gamble. Consequently, the effects of investments in the productive sector versus the financial sector are profoundly different, only the former can have any direct impact on people's quality of life. *Debt levels* constitute the fourth dimension. If we are to study financialisation as increased debt we want to examine the increased use of debt to fund what had previously been funded my more stable sources such as income for households (ties in with *involvement of finance in households*), profit for businesses and taxes for governments

(Brenner 2002, 284; Gemzik-Salwach 2017, 155; Magdoff and Sweezy 1987, 15; Palley 2007, 6). *Financial deregulation* is the one dimension of financialisation I explore in my empirical work. It is therefore of vital importance how deregulation is conceptualised. Hence, a separate section is dedicated to conceptualising deregulation.

#### 2.4 Regulation and deregulation

Deregulation refers to the removal of existing regulation. Such regulations are imposed in the first place by when public administrative offices, such as the department of finance and its suborganisations, sees dangers with letting the financial sector operate freely. A synonym to financial deregulation that is employed by some scholars is that of financial liberalisation. Deregulation, or liberalisation, occurs when those regulations are deemed redundant or damaging. This dimension has a single necessary and sufficient indicator, which is the event of removing regulation. This can reliably be detected from parliamentary or otherwise judicial documents that explicitly state the removal of some regulation regarding the financial sector. As this is a thesis of comparative politics engaging in political economy, the political element cannot be set aside.

Though regulation and deregulation can easily be interpreted as the two conditions of a binary phenomenon, an important caveat lies in the absence of regulation. Both regulation and deregulation are active decisions made by policy-makers or the enforcing bureaucracy with the goal of creating some envisioned ideal environment (Winston 1993, 1263). However, the absence of regulation may often create the same end-scenario as deregulation, while remaining far more demanding to detect by researchers and other interested parties (United States Financial Crisis Inquiry Commission 2011). Another way to put this is that if one wishes a certain level of aggregate freedom for the financial sector to operate, the financial sector will create more freedom for itself by inventing new financial products that circumvent existing regulation (Funk and Hirschman 2014, 696). The challenge with both regulating and measuring this is that the absence of regulation is essentially impossible to detect. Any data, regardless of whether it is quantitative or qualitative, would have to achieve the remarkable feat of detecting "what is legal".

This is not just an impossible task for a single researcher, but it is a task that policy-makers and bureaucrats are battling at all times. While new regulation must be suggested, accepted, implemented and enforced by an intentionally slow machinery, new financial products are constantly invented and produces by the financial sector. As long as regulation is created as responses rather than in a fore sighting, preventive manner, the financial sector will always be one step ahead. Even if the goal to create preventive regulation was present, one would still be partaking in a tug-of-war with the armies of lawyers and other specialised personnel employed by the financial actors. It is not unreasonable to assume that a financial product created in 2004 might not be regulated until 2005, at which point a new financial product may have emerged. This happened prior to the financial crisis of 2008, when "shadow banks" emerged parallel to the regular banking system and beyond the reach of the existing regulatory framework (Elson 2017, 21). Though no data on absence of regulation is available - nor will it likely be available in the near future, given coding challenges – we can translate this caveat into the assumption that the financial sector likely is more liberal than we can detect from data on deregulation. This assumption is of course not strong enough to be taken into consideration when analysing data, but it appears plausible and likely enough to keep it in mind when studying financial sector deregulation.

#### 2.5 Gross domestic product and wage share of total income

Finally, before turning to the theoretical framework, we should consider the two expected outcomes that are presented in the research question along with their operationalisations. For a brief moment, we should distinguish the expected outcomes from the dependent variables. The hypothesised outcomes are theoretical concepts, grounded in the wider literature. These are, respectively, economic growth and decreased share of that growth benefiting workers. The guiding principle for these two outcomes is the research question that guides this entire thesis: that financialisation has a dual effect on the economic system, one that benefits the wealthiest and detriments the workers. The wider economic growth and the workers' share of said growth are the intensions of the respective outcomes. For the sake of analysis, these outcomes must be operationalised.

Gross domestic product (GPD) is by far the most commonly utilised metric for general economic wellbeing at a societal level. The extant usage of GDP translates into a unique opportunity to achieve commensurability at levels that can be seen in few other variables of social science. GDP is also used extensively in the financialisation literature to indicate economic growth. It is, however, vital to remember what exactly it measures. GDP is an aggregation of the value of all products and services for a given country and year. This means that it does not say anything about unemployment, wages, purchasing power, the environment or any other metric that perhaps is more relevant individual workers. A closer discussion on the implications of financial products as externalities to GDP can be found in section 3.7.1 of the next chapter. Its extant use and theoretical proximity to economic growth renders GDP a fruitful operationalisation.

Key to the concept of workers' livelihood is its relation to the larger economy. The idea is not to measure their individual wages, their purchasing power or health. The research question specifies workers *share*. It can thus be operationalised as the wage share of total income, a measurement on which there exists data. Wage share of total income (henceforth "wage share") encompasses the proportion of total income that consists of wages to employed persons. Wage share perfectly captures the workers' piece of the pie ("AMECO Database" 2021). As it is measured as a share of total income, it measures the balance of total income's components within a country. A higher wage share in country A does not necessarily indicate that workers in Country A are better off than in country B. It does tell us that workers of country A are receiving a large piece of the pie than in country B (Dünhaupt 2013, 3). As total income is extremely closely correlated to GDP, the latter will be used for data purposes later in the thesis.

#### 2.6 Summary

Researching financialisation illustrates the importance of clear conceptualisation prior to analysis. This chapter has unpacked financialisation and its intensions as well as its various operationalisations. Five operationalisations are presented, where deregulation is discussed in more detail as it is the selected approach to measuring financialisation in this thesis. A clearer understanding of what financialisation is and what it is not guides the following chapter where the theoretical framework as well as the specific theoretical elements employed in this thesis are discussed.

## **Chapter 3: Theoretical framework and literature review**

As emphasised in the previous chapter, how to define financialisation is no easy undertaking. In this chapter I present an overview of the literature on financialisation, along with key authors and major distinctions in their interpretation of financialisation. I first give a general presentation of financialisation, before more specifically presenting my two dependent variables: GDP and wage share. Finally, this thesis is situated into that literature. The contributions of this chapter are multitude. New research should build upon and communicate with previous research (Gerring 2012, 68). By presenting that previous research, we can better judge to what extent this thesis has succeeded in communicating with the extant literature on this topic. A main objective with this chapter is to foster a better understanding of the meaning of conceptualisation. While the conceptualisation chapter initiated that process, this chapter displays how others have interpreted financialisation and how it is reflected in real events and facts. I depict the historic evolution of this field of research. Possessing that history will enhance the readers' ability to follow the rest of this thesis. With a better understanding of financialisation and the relevant literature, two hypotheses will be presented along with relevant causal mechanisms that may help explain the causal chain linking independent variables with dependent variables.

#### 3.1 A divided research field

In the aftermath of any financial crisis or other major economic downturns, research inevitably attempt to explain that event. The explanations are numerous. I divide them into two primary non-exhaustive camps: orthodox and heterodox, in line with meta-analytical literature (Bortis 2016, 44). These two camps can be identified in every aspect of the disciplines of economics and political economy, although they are more commonly pointed out by heterodox authors (Sawyer 2013, 10), presumably for the simple reason that heterodox authors are a minority arguing against the majority. These camps can be identified by their approach to analysing economics, wherein heterodox scholar generally conducts research more critical to the status quo economic system, while orthodox scholars to a greater extent accept established assumptions of how capitalism functions (Rochon and Rossi 2016, 25).

Different axioms of the fundamental mechanisms of economics divide them and create entirely opposing interpretations of economic and political events (Milonakis and Fine 2009, 9). Importantly, the two camps often employ different terminology. The term "financialisation" is largely reserved for the critical, heterodox authors. Orthodox authors studying the same phenomena generally refer to this as "financial development", "financial modernisation" or "financial reform" (Sawyer 2014, 12).

None of the abovementioned terms necessarily indicate whether or not the financial sector is getting more or less regulated. Naturally, academic terms should not imply whether a certain concept is wanted or not, but it should tell us precisely what it is. In research on regulation, the term "financial modernisation" does not tell us whether it encompasses stricter or looser regulation. This means that, if one were to study financial assets as a share of household savings for instance – one dimension of finance that is viewed to be increasing by scholars of financialisation – it is not clear from "financial modernisation" whether one should expect an increase or a decrease in the share of household savings that is dedicated to financial assets.

Despite this lack of terminological consistency, when surveying the literature I find that these terms "financial development", "financial modernisation" and "financial reform" are predominantly used to indicate deregulation, a larger financial sector, a greater societal penetration by the financial sector and otherwise the same phenomenon that "financialisation" describes. As such, these terms blur the literature from academic clarity. As will be evident in the next chapter, this can cause challenges when some authors seem to be confused by how to interpret their own results. Contrary to this ambiguity, the term "financialisation" is distinctly used to describe a larger financial sector and the greater influence of that sector. This thesis will exclusively refer to this process as financialisation, in order to secure commensurability with the part of the literature that has established a clear terminology.

The orthodox and heterodox approaches to financial crises and deregulation are presented in the following section. Note that there is residual research that does not fit into any of these two approaches. The following categorisation identifies schools of thought within each camp by their analysis of financialisation and crises, not by their analysis of the grand workings of the economy. A final cautionary note regards the intra-category divisions. Whereas heterodox authors characteristically differ widely in their interpretation of economic development – as the political left has historically been known to do – the orthodox authors are more united in their interpretation, for the same simple reason that defines them as orthodox: they believe the market functions as it should. After all, why bother fighting over how something fully functional works.

#### 3.2 Orthodox literature

Orthodox economic theory is the historically and contemporary dominant interpretation of economics. It is defined by, among other things, a range of established assumptions about the economy<sup>1</sup> and heavy use of mathematical modelling (Elson 2017, 59; Rochon and Rossi 2016, 37). The general expectancy among orthodox authors is a positive relationship between economic growth and financialisation (Sawyer 2014, 12; Schumpeter 1911, 126). The idea is that the financial sector moves money from unproductive areas (households' savings accounts) to productive investors via credit. Such transfers, where banks lend out the money deposited into savings accounts by users, secures that money is available where it has the greatest utility and can be used for productive investments, as opposed to sitting idle in someone's mattress. A larger financial sector – by definition, as savings accounts and lending are key elements of financial services – means more opportunities to transfer said savings and a more productive economy. These transfers facilitate investment that creates jobs in all the steps of investment, for instance in construction, employment in operation of newly constructed facilities, and in the production of materials. (ref)

This theoretical connection between financialisation and economic growth is supported by various empirical findings. Financialisation – or financial development, as it is dubbed in these papers – is understood by all these scholars as financial deregulation. Deregulation here refers to adjusting or removing regulatory policy that intends to restrict financial activity. A range of scholars find positive economic associations of deregulation, including lower

<sup>&</sup>lt;sup>1</sup> While a full overview of these assumptions would be better fit for a book dedicated to that purpose, some key assumptions are that money is neutral (i.e., not a variable to be analysed, just a mediator), that there always is full employment, that the market has perfect competition, that people possess perfect rationality and that all individuals have full access to all information in order to make informed decisions (Foster and McChesney 2012, 5; Rochon and Rossi 2016, 37).

inequality (Beck, Levine, and Levkov 2010) and increased stability in the financial sector (Kaufman, Mote, and Rosenblum 1984). Stankov (2010) finds support for the general orthodox presumption that financial deregulation causes economic growth, as does Clarke (2004), though with data limited to the United States. Other positive findings are made by Giuliano and Ruiz-Arranz (2005), and Loaza and Ranciere (2005). Chava et al. look more specifically at financial regulation and find mixed results: some findings indicate that interstate deregulation increases economic growth, while other findings indicate the opposite effect (2013). Some other scholars find more negative associations of deregulation, though these are limited in abundance. Feldmann finds that general, without specifying financial sector, deregulation has a negative effect on unemployment and consequently a positive effect on economic growth (2012).

All the empirical findings presented above are derived from some variation of quantitative analysis that, by the ontological nature of quantitative methods, is unable to prove the existence of a causal chain from independent to dependent variable. This is a key issue that will be further elaborated on and addressed later in this thesis. The conceptual challenge that these authors face lies in the interpretation of their own claim that "financialisation causes economic growth". While this is certainly an interesting dimension of financialisation and the one I employ in this thesis, it is a restricted conceptualisation and as such the results should be interpreted along that restriction. It should in other words only be interpreted as *financial* deregulation as a dimension of financialisation, not as financialisation as a whole. By not specifying which dimension(s) they focus on, the research presented above commits the fallacy of equating their findings with all dimensions of financialisation. On the contrary, while heterodox authors face other challenges, their research is generally based on a far wider understanding of financialisation with clearer conceptual scope. As can be observed here, orthodox empiricism appears to be broad, with the general conclusion that financialisation is a net positive for society. In addition, methodological choices limit the ability to make causal inferences. Heterodox scholars see the conceptual issues of orthodox literature as an invitation to compensate by producing large quantities of conceptual and theoretical research on financialisation.

#### **3.3 Heterodox literature**

Heterodox economists are characterised by a more critical approach to capitalism, a less formalised or purist approach to the discipline of economics, and by the inclusion of social and political dimensions such as power, inequality and justice in their analyses (Bortis 2016, 45; Rochon and Rossi 2016, 38). An important feature of the specific heterodox literature on financialisation is its largely theoretical nature. Few attempts have been employed to test heterodox theories. Influential scholars with this tradition are, among others, Epstein (2005), Toporowski (2018), Aalbers (2019), Magdoff and Sweezy (1987), Krippner (2005), and Stockhammer (2004) for their conceptual work. Financialisation as a concept is vague, broad and relatively young as a field of study. The fact that financialisation so recently has become a prominent field prompts conceptual clarifications before it can be studied empirically, which explains the narrow focus of research produced thus far (Sartori 1970, 1038). This also means that the amount of empiricism that has been conducted is strictly limited (Dünhaupt 2013, 8; Krippner 2005, 175; Kus 2012, 478).

The methodological distinctions between orthodox and heterodox authors highlighted is reflected in the existing literature on financialisation. Where orthodox authors have shown that financial deregulation associates positively with economic growth, heterodox authors ask more complex questions or questions of a more qualitative nature and thus make more descriptive conclusions. Studies have been conducted on such dimensions of financialisation as the shifting of firms' investments from the productive to the financial sector (Aalbers 2019; L. E. Davis 2018; Rabinovich 2019; Stockhammer 2017; 2004), financial profits as a share of national profits (Bakir and Bahtiyar 2017, 256; Bresser-Pereira 2010, 506; Elson 2017, 165) and household savings in the financial sector (Aalbers 2019, 6), all of which confirm the existence of financialisation. Although the mentioned literature is empirical, it is largely descriptive and without any form of causal inference. This is a major shortcoming of the field that this thesis seeks to address.

Another key gap found in the literature of both approaches is discovered as one delves into narrower research of the more specific dimensions of financialisation, such as deregulation. While multiple authors show that financial deregulation does occur and that it can be found

prior to decreases in wage share (Born 2011, 236; Bresser-Pereira 2010, 501; Glyn 2006, 54), a detailed description of the causal process and its components is still missing. Though the broad and complex topic of deregulation will be more thoroughly explored later in this chapter, it is quite obvious that regulation (and deregulation) tends to happen at a micro as well as a macro level. In other words, regulation concerns both grand activities such as foreign banks as a whole, as well as far smaller activities, such as the maximum permitted ratio of mortgage to income (Glyn 2006, 65). Additionally, the power of these regulations depends on many variables, such as bureaucratic funding, expertise of those working to enforce them, and even the precise wording of the regulation. The same challenges appear to anyone studying deregulation. If we are to determine if deregulation as a dimension of financialisation causes economic growth and decreased wage share, we need to identify which specific deregulations matter, and which do not. *This requirement to identify the type of financial deregulation that matters is the primary inspiration for the research design employed in this thesis*.

While heterodox authors share a scepticism towards the idea of a free market, and they all see financialisation as a part of a larger process as opposed to an isolated event, there is still much diversity and disagreement between heterodox authors. Some schools of thought within this approach that can be identified by their nuanced differences in interpreting the workings of capitalism are the Social Structure of Accumulation school, New Marxists, Minskyans and Structural Keynesians. The general disagreement comes from whether financialisation is a result of neoliberalism – the far-reaching ideological shift that took place worldwide during the 1970s and 1980s in the direction of favouring less economic regulation – or if it is inherent to capitalism, which is defined as the economic system of supply and demand that has existed in major parts of the globe since the industrial revolution. Supporters of the latter view see financialisation as a necessary development of capitalism as it matures. These supporters are often dubbed stagnationist and will be examined further in the next section.

Based on the literature review, the following are the main shortcomings of the extant literature of both camps. First, empiricism is limited to cross-case analyses that are unable to make causal inferences. Second, the empiricism that does exist lacks conceptual clarity, as conclusions are drawn beyond the scope that is measured. Thirdly, the theoretical literature

does not explore financialisation at a conceptual level lower than its intension, in the sense of Sartori (1970, 1041). The underlying mechanisms that tie individual dimensions of financialisation to various macroeconomic variables are largely missing. This thesis seeks to remedy all three of these shortcomings with a multimethodological approach. The literature on financialisation is divided into and defined by the heterodox-orthodox cleavage that is found in all political economy and that has implications for the above shortcomings. With a broad theoretical foundation in mind, the next section outlines the process of financialisation which assists in creating a research design.

#### 3.4 The background to financialisation

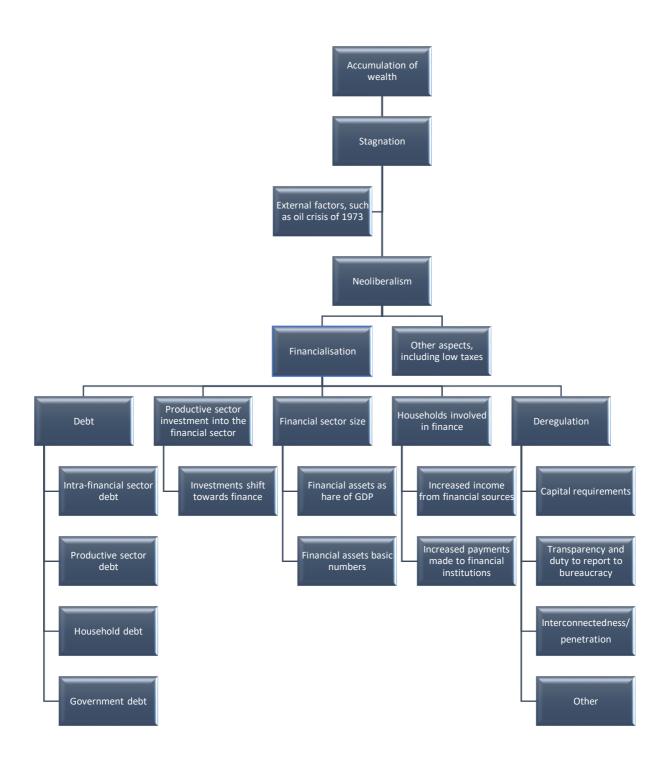
#### 3.4.1 Stagnation

Financialisation theory is rooted in the premise that post-19<sup>th</sup> century capitalism has a structural tendency towards stagnation, meaning that there will necessarily be underemployment of productive resources caused by insufficient effective demand and a dearth of profitable investment opportunities in the real economy (Magdoff and Sweezy 1987).

Stagnation occurs when either a market is satisfied and/or workers lose their ability to consume in that market, an inevitable development of capitalism (Bischoff, Krüger, and Lieber 2018, 154; Marx 1859). As the single rationale of capitalist behaviour is to accumulate wealth, this pushes capitalists to siphon as much profit as possible using one or more of the following methods: increasing market share, increasing prices or lowering costs (Foster and McChesney 2012, 30). The first of these has a fixed limit at 100% of the market. This is a challenging point to reach for a single business as it is generally reached through advertisements or acquisition of competitors, though it is far less challenging to come close to it, especially if one considers the common situations wherein a small number of businesses cooperate in controlling the market. As one approaches the finite limit that is 100% market share control, there is no more revenue to be made from this channel (Foster and McChesney 2012, 32). The option of increasing prices does not have the same fixed ceiling, but has a ceiling, nevertheless. There will be a point at which the prices are so high that a further

increase would deter consumers. This should be considered in conjunction with the option of reducing costs, which often means automatization and wage reduction, both of which reduce the purchasing power of workers. When wages are pushed down or removed entirely, while prices are simultaneously increased, one will inevitably reach a saturation point.

As capital continues to be concentrated into fewer hands, the purchasing power of the remaining population decreases (Aalbers 2019; Sawyer 2014, 6). A combination of the status quo inequality, increasing prices and decreasing or stagnant wages leave workers with a decreased ability to consume and thus also leave the owners of capital without profit. A change to any of these could increase consumption, but would simultaneously decrease profits per unit sold or per worker employed, and are therefore unwanted (Foster and McChesney 2012, 38). This entire process of continued accumulation of wealth can be seen in contrast to the familiar strategy of Fordist political economy as pursued by many developed economies in the post-WWII era, wherein capitalists would push workers' wages up so that they could purchase the same products they manufacture for the capitalist (Baccaro and Pontusson 2016, 184). Accumulation of wealth and stagnation are positioned relative to financialisation in figure 3.1 below.



*Figure 3.1*: Ancestry tree of financialisation, showing its origin, the dimensions it encompasses and central components or ways of measuring the dimensions.

To maintain their previous profit rates, the financial sector can innovate new financial products to encourage investment by non-financial firms into the financial sector rather than the more traditional form of investment into expanded productive business, such as by adding employees or adding industrial machinery (Bresser-Pereira 2010, 516; Foster and McChesney 2010, 30; Schumpeter 1911). A reminder is due that this narrative of stagnation is Marxist in nature. An (in)famous example of financial innovation from recent history is Collateralized Debt Obligations (CDO). This product allows financial institutions to sell not only individual debt papers to other financial institutions, but to sell them in large batches, which in turn are divided into three groups based on their risk level. The details of a CDO or any other specific financial product is unimportant for the time being – the point is that CDOs and other innovative financial products have allowed the financial institutions to broaden their market. CDOs first allowed banks to sell their mortgages much faster than previously. Then, as they added the risk tranches, they could again expand their market by capturing customers willing to take three different levels of risks. The result is more transactions and more revenue for the banks. A key feature of financial innovation is that the new products tend to be extremely complex and tailored around existing regulation. A parallel can be drawn to the manufacturing of synthetic narcotics which tend to be regulated by chemical composition, and which can be legally sold by introducing minor changes to that chemical composition. This is made possible with financial products by the armies of economists and lawyers that are involved in the innovation process, as a result of the absurd amounts of money that can potentially be made from new products.

Returning to the problem of falling profitability due to increasingly accumulated wealth, by issuing debt to individual consumers through tools such as credit cards, car loans and mortgages, the financial sector can acquire more profit from interest rates while simultaneously artificially boosting workers' purchasing power. This has the double effect of generating profit for the financial sector and for the productive businesses as they satisfy the debtors increased consumption (Glyn 2006, 53).

However, although the real economy grows from the boost in debt-financed consumption, the financial sector will become an increasingly more profitable arena relative to the productive sector, due to the increased income from interest rates and the increased trade of financial

products such as stocks or bonds. This incentivises investors to move their capital into the financial sector, for the simple reason that it has the potential to generate higher profits (Foster and McChesney 2010, 5). As the financial sector receives more investment from the productive sector and as households both carry more debt and place their savings in financial products, the financial sector can be said to penetrate society to a larger extent than before. This is a crucial point, because it means that whatever happens in the financial sector will have effects rippling through society.

#### **3.4.2 Instability**

The financial sector is inherently unstable (Bresser-Pereira 2010, 511; Rabionet 2016; Sawyer 2014, 10). It is a market characterised by speculation and gambling – a rather grim, but uncontroversial depiction among political economists, although stock traders and other likeminded professionals might argue the opposite (Moran 1991, 7). Profits from financial products are generally – with the exception of fees placed on a range of services – made from buying them at some point in time and selling them at another point in time, where the difference in price make out the profits (or loss) (Foster and McChesney 2012, 53). This is a process that depends on there being both winners and losers. As is commonly known from the casino industry, a continued gamble will eventually result in loss for the gambler and profits for the gamemasters. In the financial sector, this mechanism of margin maximisation translates into continued transactions that build up enormous wealth among few people, and then an inevitable collapse of said wealth's value at some later date. This is of course a natural part of the financial cycle that has historically been seen by outsiders as none of their business. However, financial penetration of the real economy makes this a problem for countless individuals, households, and businesses outside the financial centres.

#### 3.4.3 Neoliberalism

The narrative of financialisation presented above is championed by some scholars – those who view capitalism as a stagist process wherein financialisation manifests as the latest stage (although there are differences in how distinct that stage and the ones before it should be viewed, as some see the development of capitalism as more gradual (Foster 2007, 1; Sawyer 2014, 12–15)). It is not my objective to test every dimension of financialisation. The

presented narrative serves as historical context which helps us in understanding how deregulation as a dimension of financialisation has increased in frequency and scope in the past few decades.

The dangers of such instability in the financial sector and the possibility of a collapse has led to financial regulation being introduced to varying degrees all around the world, particularly so during the so called "Golden Age of Capitalism" from 1945 to 1970 (Bresser-Pereira 2010, 503). This period was marked by high fiscal intervention and strict market regulations, including regulations on financial activities. Consequently, the number of economic crises was low, relative to later periods (Shachmurove 2011, 224). This changed radically with the advent of neoliberalism – the ideological world view where free markets were supreme – in the 1970s (Crotty 2009, 564; A. Davis and Walsh 2017, 27). As neoliberal actors were elected into office around the globe, spearheaded by Ronald Reagan in the United States and Margaret Thatcher in the United Kingdom, financial regulations were eased at a large scale. Potentially as a consequence, the 1970s and 1980s saw an increase in the frequency of financial crises (Brenner 2002, 42; Bresser-Pereira 2010, 504).

The rise of neoliberal ideology in politics and in academia should not be seen as some event occurring in a vacuum. As capital accumulated into fewer hands and workers' purchasing powers diminished, numerous national economies witnessed stagnation and its consequences (Foster and McChesney 2012, 59). One of these consequences is seen in reduced GDP growth. However, recall from the discussion on conceptualisation that GDP does not necessarily measure best the quality of life for the general population. The inclusion of financial products disconnected from any productive value means that changes in GDP may potentially be better felt by wealthy individuals with large financial assets than by the median household (Sawyer 2014, 9).

As national economies started to enter the phase of stagnation in the 1979s to 1990s, financialisation in general and deregulation in particular became increasingly viable as a route to maintaining or returning to economic growth. However, financial deregulation is a wide term that covers highly diverging activities, from requiring reporting of transactions in order to avoid tax fraud, to preventing banks to engage in two kinds of financial activities at the same time. Whereas Sawyer, Foster and McChesney, and other scholars point to deregulation as a key component of financialisation, there is still uncertainty regarding which specific types of deregulations are relevant for financialisation. A discussion on the various aspects of deregulation that could potentially be fruitful for the analysis is provided next.

#### **3.5** Theoretical specification for this thesis

By now it should be clear that financialisation is a broad and rather vague concept. This section will clarify which specific aspect of financialisation is analysed further, why that choice is made and which contributions I make to the literature.

Out of the many elements of financialisation, I choose to study deregulation. This choice is based on the research gap that has been uncovered in conducting the literature review. Deregulation as a dimensions of financialisation has significantly poorer coverage of qualitative, empirical evidence That gap is the absence of qualitative research and the consequent absence of tested mechanisms linking deregulation to the dependent variables. We have seen that not only is empiricism limited, but theoretical development on a mechanistic level is also missing. This thesis contributes to filling that gap by studying financial deregulation with a methodological approach that has extremely limited history in financialisation literature, and by testing mechanisms that until now are purely theoretical with no case-specific empiricism. In addition to the ability to unpack the mechanisms, a small-N study such as is conducted in the second half of this thesis has the benefit of achieving high conceptual validity, meaning that the data better reflective the intended concepts than if one did a large-N study (George and Bennett 2005, 19). This is an important benefit when dealing with such complex concepts as financialisation.

This thesis builds on the excellent analyses conducted by Bresser-Pereira (2010) and Foster & McChesney (2012). While their contributions to the literature have been wide in the sense that they have touched upon multiple dimensions of financialisation, including deregulation, their primary role in this thesis is to serve as a conceptual framework for identifying financialisation. Bresser-Pereira provides a far more detailed discussion of deregulation specifically. In terms of the various schools of thought discussed earlier, both of these key

contributions to the literature can be positioned in the New Marxist school which bases its understanding of financialisation on the background of stagnation. This thesis makes that same presumption about the origin of financialisation – a key presumption on which the mechanisms introduced at a later stage is logically dependent on. For that reason, this thesis also fits in the New Marxist school.

Among the many consequences of financialisation, economic growth and decreased wage share are the focus of this thesis and thus also the dependent variables. They are selected for their role in financialisation theory as not only common consequences, but as highly impacting consequences. GDP is in many political and academic arenas the default macroeconomic metric that is sought to understand and to increase. Despite what has been said already about GDP not necessarily reflecting the life quality of workers, they are connected regardless. Achieving economic growth thus becomes a central theme for the general population and in elections. Given the backdrop of stagnation, financialisation can be viewed as a solution to the problem of stagnation (Foster and McChesney 2012, 30). On the other hand, many scholars – including those that view financialisation as a solution – also see a potential economic collapse in the long term. It is in other words seen as a V-shaped solution (Bresser-Pereira 2010, 511). The uncertainty of the effect of financialisation on GDP prompts a closer analysis. The first hypothesis thus becomes:

#### H1: Financial deregulation causes increased GDP.

Another central feature of financialisation that has been debated widely is its effect on wages (Bresser-Pereira 2010; Dünhaupt 2012, 484; Foster and McChesney 2012, 31; Stockhammer 2017). Multiple directions and mechanisms are discussed in the literature with indications that wages are negatively affected, but with little empirical attempts at making causal inferences of this relationship. Where GDP captures a grand trend reaching every aspect of society, including the wealthiest, wages are more directly relevant to the majority of the population. As such, it generates a second hypothesis for this thesis:

H2: Financial deregulation causes decreased wage share of total income.

My contribution to the literature on wage share is primarily methodological. Previous research has exclusively been theoretical or correlational. The field would benefit greatly from both the causal conclusions and the case-specific knowledge that can be generated from case studies, both of which are provided in this thesis. The two hypotheses researched here capture important potential effects of financialisation. These are not competing hypotheses, but complementary ones, meaning that the confirmation of one does not prompt automatic rejection of the other. Mechanisms for both hypotheses are found in section 3.7.

While an increased GDP is generally agreed upon by the broader population to be desired, the opposite can be said of a decrease in the wage share. The connection between the two dependent variables is complex. On the one hand, one can envision a scenario in which the increase in GDP negates the decrease in wage share, resulting in a larger purchasing power for labourers. On the other hand, as was touched upon in the conceptualisation of GDP, there is a possibility that the increase in GDP is purely beneficial to financiers. As such, many may view the theoretically grounded anticipated effects of financialisation to be generally undesirable. Scholars of financialisation should aspire for transparency of the normative element that necessarily exists in these macroeconomic trends (Bennett and Checkel 2014a, 264). Yet, the goal here is not to explain the advent of economic growth or wage share, nor is it to evaluate to what extent financialisation is desirable. Recall that financialisation is viewed by some New Marxists as a potential solution to the persistent threat of stagnation, while others look to a third alternative in entirely replacing the economic system with one that does not have the same level of fragility as capitalism. It is of course far beyond the scope of this thesis to address which economic system is the optimal one. However, this thesis should highlight one of the many issues of capitalism that has to be considered in the debate on how to organise the global and national economies. I do so by testing the effects of deregulation as a component of financialisation, and to enlighten its underlying mechanisms.

#### **3.6 Deregulation**

Financial deregulation necessarily implies opening up to some new form of financial activity that is seen as being risky to some extent or otherwise unwanted, hence why it had been regulated in the first place (Bresser-Pereira 2010, 513). In its most basic understanding,

financial deregulation refers to the removal of existing regulation. The perhaps most wellknown case of deregulation in recent history is the Gramm-Leach-Bliley Act in the United States which effectively repealed and thus deregulated the pre-existing Glass-Steagall Act (Cassidy 2009, 229). To illustrate the many forms deregulation may take, this section presents a few common categories of deregulation along with some potential effects of said changes.

In the following section I present three examples. First, reserve requirements for banks (Skidelsky 2018, 318). All banks are required to hold a certain ratio - usually of capital relative to that which they issue in loans. This ratio is usually found in the area of 5 - 20%, meaning that a minimum of said percentage of the lent amount must be held by the bank at all times (Lepers 2018, 4). Lower reserve requirements implies that banks are allowed to issue more loans based on the same capital they held prior to deregulation. This has three drastic consequences: (1) an increase in the total amount of issued debt in the economy, regardless of whether the debtor is another financial institution, a business, a household or a government, (2) the banks' now increased amount of issued loans may serve as leverage when they themselves get loans from other financial institutions and (3) they will thus have a lower leverage-to-loan ratio should their issued loans collapse (Glocker 2021). In other words: If bank A uses its mortgages as leverage to get bigger loans from bank B and those mortgages are not paid by the homeowners to whom they belong due to i.e. increased unemployment, bank A now has a greater debt than before the liberalisation and the same fixed capital. This, naturally, means that bank A will go bankrupt. Depending on the size of that bank and its interconnectedness with other financial and non-financial entities, this could cause a greater collapse beyond its own offices.

A second example of financial deregulation is the easing requirements of transparency in the financial institutions' activities. This ties in with the literature on tax evasion and tax havens. By loosening the requirements for institutions to provide reports and insight to legislators, bureaucrats, media and society at large, these institutions might commit to even riskier behaviour than prior to deregulation. In the aftermath of the Great Recession, it was discovered that many of the big banks in the United States had utilised so called shadow banks. These were clandestine, financial entities owned by the banks in order to transfer assets with particularly risky and essentially worthless contents out of their books. The large

banks themselves were required to be transparent, but avoided that requirement by utilising the shadow banking system and consequently also avoided reprimands for keeping these risky assets (Bresser-Pereira 2010, 506; Skidelsky 2018, 325). While this was not an example of deregulation, it shows the importance of transparency which itself is a key element in regulations and thus is also a potential target for deregulation. It also shows that a stagnant regulatory system should be considered as equivalent to deregulation, as the financial sector uncovers ways around existing regulation. Unfortunately for scholars of financialisation, measuring the absence of regulation in situations where the financial sector already has invented new financial products is essentially impossible.

Third, interconnectedness: financial institutions become more interconnected by e.g., increasing the frequency and size of loans to each other, or through common ownership as a result of acquisitions and mergers (OECD 2011, 29). This was one of the activities that was made legal by the repeal of the Glass-Steagall act (Funk and Hirschman 2014, 678). While these relationships concern the interconnectedness between banks, there is also increasing interconnectedness between the financial sector and society at large. Pension fund schemes, for instance, rely on financial products as a source of maintaining and increasing the fund value. As government-controlled schemes are dismantled and private savings become insufficient to secure a comfortable retirement, households are becoming more dependent on entering the financial sector in the hope for more lucrative gains on their savings.

A financial sector that decades ago was relatively isolated from the real economy would also isolate its own instability to only affect the individuals that actively chose to work with finance. Household savings and pension fund schemes interconnected with the financial sector cause more normal people to be affected by the normal booms and busts of the financial sector, which in turn means that a large part of the population is at a constant risk of losing their lifesavings and livelihood. As a cherry on top, the lack of income households may face as a result of a financial crisis and correspondingly unemployment also results in decreased consumption, which in turn leads to a worse off economy.

#### 3.7 Theoretical mechanisms

This section seeks to lay the groundwork for the later analysis, starting with a brief note on methodological considerations. Given the wide variety of mechanisms at play and uncertainty regarding their role in affecting GDP and wage share, a nested analysis is used to reduce said uncertainty. An isolated regression of deregulation or other dimensions of financialisation on the relevant independent variables can easily overlook important nuances that determine the scope and effect of financialisation. A preliminary regression on various categories of deregulation, followed by a within-case process tracing based on the regression results will go a long way in shedding light on the mechanisms of financialisation. The methodological design will be discussed in more detail in the next chapter.

Despite limitations in the literature, some mechanisms linking financialisation to GDP and wage share are proposed. It is the lack of empirical testing of these mechanisms that still render them "proposed". These are presented here so that their origins, content, and implications are better understood when they are examined in depth at a later stage. Keep in mind that nested nature of this analysis requires manoeuvring back and forth between research design, theory development and analysis. A central feature of nested analyses, and also one of the major benefits to such an approach, is the circularity or feedback loop that characterises the research design. A more detailed discussion on nested analysis is provided in section 4.1, but can be briefly summarised as a combined study employing both quantitative and qualitative analyses. The theoretical findings in sections 3.1 - 3.6 of this chapter are used in designing both the quantitative and qualitative analyses. That design does in turn require mechanisms which are accordingly discussed in section 3.7 (i.e., the present section). This thesis is nevertheless organised into themed chapters, rather than in the chronological order of the research process which would make for a less pleasurable reading experience. The mechanisms are discussed here as a part of the theoretical groundwork for the thesis, but could not be found until probing of the qualitative case had been conducted. Deregulation of entry barriers to foreign banks will thus be the key type of deregulation to be examined in depth.

A total of six mechanisms are employed (do you mean examined/explored?) in this thesis, half of which attempt to explain an increase in GDP and half of which attempt to explain a decrease in wage share. These are selected on the basis of their centrality in the literature and relevance to financial deregulation. The first five are adopted from central contributors to financialisation literature, while the final mechanism is a novel contribution by myself, though it is developed by combining mechanisms one and two of wage share.

### 3.7.1 Mechanisms of GDP

The first mechanism views financial support apparatuses as contributing to economic growth. According to Demirgüç-Kunt, Levine and Min, the entry of foreign banks into a country in which they previously could not operate requires an expansion of the support apparatus providing necessary services for foreign banks to operate (1998, 9). One such central business that foreign banks require is rating agencies (Skidelsky 2018, 328). In order for both foreign and domestic banks to have their products valued, they need to be rated by a rating agency. These are also a part of the umbrella term "financial sector", but are separated from banks to maintain legitimacy as a neutral, third-party evaluator, securing fair trade of financial products. Another service foreign banks will require is judicial counselling. This might manifest into lawyers hired directly by the banks themselves, or it could manifest into external law firms specialised in financial law. While some of these may already be present where the foreign banks establish their offices, the increased workload that new, large scale actors may be enough to observe expansions in the support apparatus.

Consider also the fact that foreign banks likely will bring with them a complexity different to that of domestic banks. The most apparent illustration of this is that foreign banks generally are regulated by separate law, and thus require expertise specifically on foreign banking. Any type of business whose services are directly required by the foreign banks to provide their own banking services should be considered when testing this mechanism. The expansion of the support apparatus represents a magnifying effect, where foreign banks lie at the centre and the support apparatus expands outwards as the needs of foreign banks can be profited from. Just how large of an expansion one could expect as an approximate ratio to the size of the foreign banks is not specified by Demirgüç-Kunt, Levine and Min. However, one can expect that foreign bank entry will see far greater contributions to economic growth than one can expect from just the bank itself. As the services of the support apparatus are used, they should contribute to increasing GDP. The values of financial products are generally extremely high and so the services discussed here should be costly. Consequently, they will have a larger

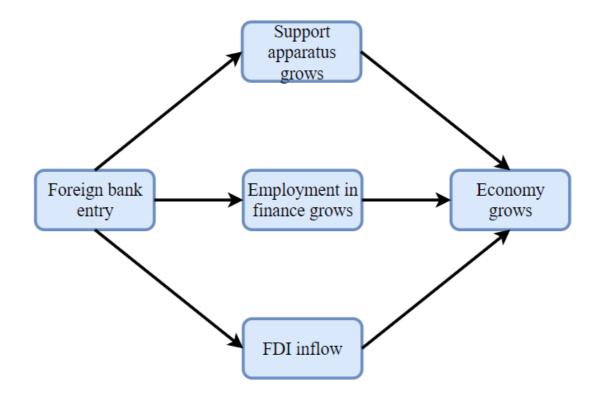
impact on GDP. Although some financial services are not included in the calculation of GDP, the type of services provided by the support apparatus are included<sup>2</sup> and can thus contribute to economic growth.

Demirgüç-Kunt, Levine and Min propose a second mechanism: employment in the financial sector (Demirgüç-Kunt, Levine, and Min 1998, 9). As with the introduction of any new business to the economy, foreign banks bring staff to operate their services. Herein lies an important distinction from the first mechanism: whereas the support apparatus is theorised to contribute through the value of their services, this second mechanisms concerns the employees of banks as well as of the support apparatus. These are related, yet distinct mechanisms. Hiring employees, particularly if their staff is international – which would mean entirely new, highly educated, and ready to work individuals from outside the domestic work pool – but also local employees would give a large number of man-years to the national economy (Foster and McChesney 2012, 58). This is essentially the classic argument of employment as a conductor of economic growth – an argument regularly associated with Keynes and now targeted to finance (Baccaro and Pontusson 2016, 176; Bortis 2016, 65). Workers earn an income from their jobs in the newly established or expanded financial sector, spend that income on general consumption in their lives and GDP rises as a result.

A third mechanism explaining the effect of foreign banks on GDP is through Foreign Direct Investment (FDI) (Levine 1996, 237). FDI refers to movement of capital from one country to another in the form of productive investments, not as simple bank account transfers. Foreign banks are presumably large actors internationally or at least in their country of origin, hence they should have both the ability and the desire to expand into foreign countries. As such, one can reasonably assume that these are firms with much available capital. Smaller banks will likely be preoccupied with securing a stable customer base in their domestic market with which they are familiar. While the direct transfer of capital from the headquarters to the newly established foreign bank does not contribute to GDP in the target country, investment made

<sup>&</sup>lt;sup>2</sup> The full list of financial services and products included in the calculation of GDP, with the exclusion of real estate and related revenue, are: Central bank business, bank business, banks' rent margins, securities funds, life insurances, other damage insurances, car insurances, reinsurances, pension funds, sucrities brokering, mediation profits, services tied to credit business, financing business and insurance business, and fund management services (Statistics Norway, e-mail correspondence to author, 28.08.2020)

possible by said available capital does contribute. New opportunities to acquire and more competition on the lending side which pushes down interest rates are two factors that will facilitate individuals and businesses to invest in the real economy. That investment may then be used in building factories, which creates jobs in both construction and factory operation. Though Levine does not express full support of his own suggested mechanism in the context of developing countries, that scepticism is dependent on conditions tied to the nature of developing countries and as such cannot necessarily be transferred to developed countries under examination here (1996, 238).



*Figure 3.2*: An overview of the proposed mechanisms linking foreign bank entry to economic growth.

Support apparatus, employment and foreign direct investment are three potential paths from financial deregulation allowing for foreign bank entry to an increase in GDP. That is not to say that they are only paths that could possibly exist. However, these are key mechanisms found in existing literature and as such should be strengthened by empirical support or

weakened by the lack of support. While a theory-oriented research design could contribute with novel mechanisms, that is beyond the scope of this thesis. The task at hand is to test existing mechanisms. Though these three are not mutually exclusive, they are still theoretically distinct, meaning that they should be possible to observe on independently. Rejection of one mechanism will strengthen the likelihood that another mechanism is more relevant.

#### 3.7.2 Mechanisms of wage share

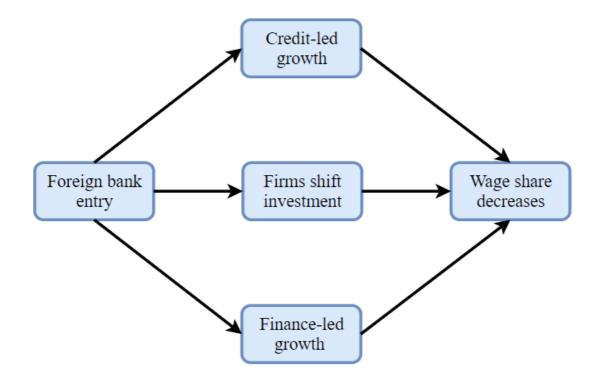
By utilising the framework of growth models, we can derive the first mechanistic relationship between foreign bank entry and a decreased wage share. Central contributions are made to the literature on growth models by Baccaro and Pontusson in their analysis that include the credit-led growth model (2016, 186). This describes a scenario where economic growth is a result of consumption which in turn is enabled by increased credit availability. Credit-led growth should not be confused with finance-led growth; the former is based on credit specifically and is employed here, whereas the latter is based on all financial products disconnected from consumption and otherwise the real economy. Finance-led growth will be discussed in detail later in this chapter (in section?).

Baccaro and Pontusson do not present their analysis explicitly as a mechanism of financial deregulation. However, they present a process containing the same variables as are employed here. They point to changes in the wage-to-credit ratio underlying consumption as a result of financialisation and a consequently larger financial sector. If foreign bank entry causes the financial sector to grow, Baccaro and Pontusson's work will be relevantly applied to this thesis. The theoretical framework provided by Foster and McChesney assist in situating credit-led growth in the financialisation literature, where it can clearly be seen as a component of financialisation with consequences for the wage share (Foster and McChesney 2012, 58).

A growing financial sector is theorised to accompany more opportunities for utilising loans in financing investment or basic consumption, not unlike the process described the third mechanism of economic growth (Skidelsky 2018, 54). However, the aim here is to continue that process and examine its consequences. As loans become increasingly defining of an economy, workers may maintain consumption despite wages not keeping up with the prices of

goods and services (Glyn 2006, 53; Skidelsky 2018, 303). The illusion that workers' standard of living is unaffected or even enhanced prevents them from organising and demanding higher wages. If they simultaneously continue consumption, the economy and total income will continue to grow. These two factors in conjunction foster an economy in which the wage share is reduced.

Stockhammer proposes the second mechanism regarding wage share by examening the shift in investment by the productive sector (2017, 10). Businesses will as a general rule seek to maximise their profit, and one central method of doing so is to invest revenue into new facilities as well as employees (Glyn 2006, 55; Skidelsky 2018, 310). This has historically been the default expansionary route. Certain businesses will expand onto other markets as they grow, at which point they are better known as conglomerates rather than businesses. However, regardless of whether they switch to new offices, add new offices at a new location or decide to get involved in another market than their original one, these are all options within the productive sector.



*Figure 3.3*: An overview of the proposed mechanisms linking foreign bank entry to increased wage share.

Contrasting this is the option of investing revenue in the financial sector. Key deterrents investing in finance in the first place are the instability of the financial sector and the specialised knowledge required to make profitable investments outside the area a business already is established in. However, should the financial sector become significantly more profitable than any opportunities in the real economy, deterrents would be swept away (Glyn 2006, 142). This chain of events generally dubbed a shift in investment by non-financial firms is a real phenomenon that other scholars have already shown to take place (L. E. Davis 2018, 271; Epstein 2016, 328). An anecdotal and somewhat well-known example is that of Tesla, the car manufacturing corporation that sources far more of its revenue from financial products than they do from selling cars (Ramey 2021). This process is partly a result of the stagnation tendencies of capitalism discussed earlier, as well as the ever-growing financial sector size which in turn generates highly profitable investment opportunities. In other words, it is the result of financialisation, in addition to being a component of continued financialisation itself.

The linking element between a shift in investment and a decreased wage share lies in businesses' dependency on workers. As financial assets become a more dominating source of revenue than productive business, workers may no longer possess the same powers through collective organisation as they used to before financialisation (Dünhaupt 2013, 3; Stockhammer 2017, 10). Redundant workers have strongly diminished opportunities to bargain their wages. As a result, the wage share is reduced.

Finally, a third and novel mechanism is constructed from combining the mechanisms one and two of wage share. Central to this mechanism is the assumption that a significant portion of financial products are disconnected from real value. If the calculation of GDP includes financial products and financial products are disconnected from the real economy – both of which we have already seen – then it should be possible to achieve economic growth purely as a result of financial growth while maintaining a stagnant real economy. In other words, it should be possible to encounter economic growth that workers simply do not experience the benefits of.

Consider for instance a pension fund relying on securities, bonds, and stocks to grow its value. If these products increase in price as a result of some collective psychological event – such as a national government endorsing it – the fund will be valued higher and will have contributed to GDP purely from a price speculations (Bresser-Pereira 2010, 505). This price increase does not contribute to society in any productive way whatsoever. Money will shift hands, but no productive value will be created. A rising GDP (and thus also gross domestic income) combined with stagnant wages is thus possible and would lead to a decrease in the wage. If this mechanism is found to be present, that would contribute to the already widespread critique against using GDP as a measure of wellbeing. More importantly for this thesis, it would link financial deregulation and foreign bank entry to decreased wage share.

#### 3.8 Summary

This chapter has presented a theoretical backdrop that explains the theme of the thesis, justifies the research design and contributes with vital components to parts of the upcoming analysis. An overview of the existing literature with key contributions has been presented to better situate this thesis into a larger field of research. In doing so, a research gap was uncovered which inspired and necessitated the research design employed here. That design is one that test causal mechanisms, as such testing is missing from the existing literature. The specific literature relevant to financial deregulation, economic growth and decreased wage share has been discussed, along with potential causal mechanisms tied to the foreign bank entry-dimension of deregulation that will be central to conducting process tracing at a later stage. In the next chapter I conduct a regression analysis on the various dimensions of financial deregulation and employ the results in case selection for the following process tracing.

# Chapter 4: Quantitative analysis and case selection

In this chapter I discuss some methodological choices, I present my quantitative data and analysis, and I present the process of data selection. The reason for this grouping of three moderately distinct topics lies in the nature of the multimethod approach. The method is chosen based on the needs of financialisation literature as presented in the previous chapter. This method requires further elaboration before any analysis is conducted, so that the analysis is seen in its wider context. That analysis then ties directly into case selection. Both the regression and the case selection are prerequisites for conducting process tracing at a later stage. This apparent interconnectedness between methodology, regression and case selection would make for a fragmented thesis with less clarity of all three components. A closer discussion of the multimethod approach is presented next.

#### 4.1 A nested approach

In this thesis I conduct a nested analysis, a variation of multimethod approaches. I first conduct a preliminary quantitative analysis and employ those results in case selection and in a qualitative process tracing analysis. This approach has multiple advantages which makes it a particularly suitable one for my thesis. The advantages and disadvantages of my approach will be outlined next, followed by an assessment of the technical details of my quantitative data and regressions. The regression results are then analysed and utilised in case selection, paving the way for process tracing.

A nested analysis is a joint, sequential analysis using both quantitative and qualitative tools (Lieberman 2005, 436). Though it is not a necessary condition, they are usually conducted in that order. A central element to this approach and also the basis for selecting nested analysis in this thesis is the way in which the two components (quantitative and qualitative) cover the other's shortcomings. Quantitative research excels at across-case validity and comparing cases to determine which one is more or less likely to contain the causal effect. Qualitative research excels at within-case validity. If one were to use a quantitative analysis. In combining the two, I can assess the general covariance between my independent and

dependent variables, I can select my qualitative case based on the presence or absence of covariance and I can test that covariance with high reliability on a single qualitative case.

All researchers experience scarcity of time, money and human capital. Employing multiple methods in a single project would require those resources to be allocated to a larger surface area. While some may view this as a negatively affecting the quality of the analyses, I argue that this is incorrect. As long as the research values academic integrity and displays honesty in the scope of the findings, there is no effect on the quality of the analyses. For the purpose of this thesis, a pure single-case study would perhaps allow for testing a higher number of dimensions of financialisation. That would certainly be valuable ceteris paribus. However, it would not make the quality of that analysis any better than the one conducted here. The result is that my findings can only draw conclusions on financialisation as deregulation in my case, which is an entirely valid conclusions if the analysis is conducted in accordance with academic standards. The sacrificed scope of that conclusion is accepted for the benefit of a preliminary quantitative analysis.

The advantages of nested analyses become visible in research fields where the theoretical foundation for qualitative research is unsatisfactory. Where theory development is still in its infancy, quantitative methods can be employed deductively to determine which aspects of a concept are worth looking into and it can help determine which cases are valuable for an in depth analysis (Lieberman 2005, 443). Both case selection and determination of concept dimension are valuable contributions of quantitative to qualitative research, independent of which criteria are set in determining case and dimension. A least-likely, most-likely case or some other case can be determined from quantitative research. Using this information, a researcher is well equipped for continuing onto a qualitative analysis (Gerring 2007, 185).

The process of conducting nested analysis is somewhat circular, depending on which results one gets. A state-of-the-art illustration of this is provided by Lieberman in figure 4.1. There we can see that the results of a preliminary quantitative analysis – or Large-N Analysis in the words of the original author – are assessed, employed in creating a qualitative analysis which is then assessed again relative to the quantitative results. This is exactly what is done in this thesis. However, the limitations in time and length of a master's thesis does not allow for

more than the left half of figure 4.1. If the findings from process tracing are in line with the statistical findings then we can safely end the analysis and strengthen the theory. If they findings do not match, we would have to re-state the quantitative model. The limitations of this thesis allows only for identifying such a mismatch and make recommendations for future scholars. As will be demonstrated in the rest of this thesis, I end up on "Do Model-building" and make recommendations on what a more accurate model may look like, in accordance with my findings.

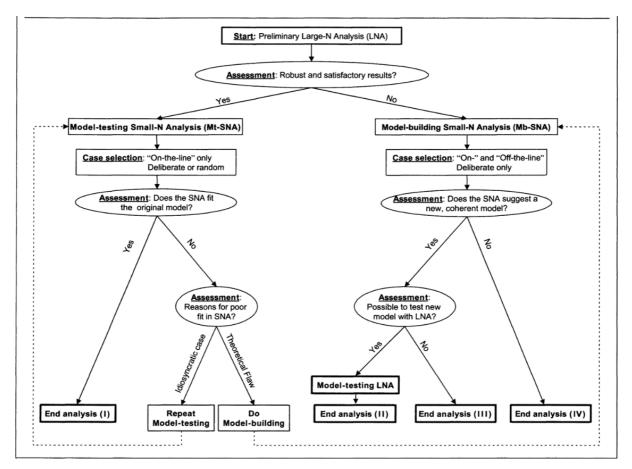


Figure 4.1: Overview of the nested analysis approach, adopted from Lieberman (2005, 437).

# 4.2 Quantitative data

This section presents the data used in the regression and discusses potential concerns regarding these. Transparency in data selection and manipulation gives readers the

opportunity to critically engage with my findings beyond simply accepting the conclusions I draw in the end.

#### 4.2.1 Challenges with coding financialisation

A key characteristic of the financialisation literature is how recently it has emerged, both as a political-economic phenomenon and as a research field. Being an immature research area associated with certain challenges addressed at different points of this thesis – such as the challenges with conceptualisation discussed earlier in this thesis and challenges with micro-level mechanisms explaining the effect of the financialisation. When studying financialisation as deregulation of the financial sector, it becomes apparent that few attempts have been made to decipher which types of deregulation matters. Regulation is a political tool which's targeted activities ranges from maximum or minimum transfers amounts of some financial product, to complete bans on certain activities. Consequently, deregulation comes in equally varied forms. This means that studies of deregulation as a single concept risk negating any positive effect on GDP from one type of deregulation with the negative effect of another.

One way to approach this challenge is to perform a regression analysis with different types of deregulations as independent variables. The result can help distinguish the different effects and point us to the most interesting type of deregulation, which in turn creates a good foundation from which to start process tracing. However, a regression analysis is only as good as its data, and the data related to deregulation are scarce and limited. Deregulations are difficult to categorise. The judicial documents that define them do not necessarily contain the terms "deregulation" or "financial liberalisation". This creates challenges in both tracking them down and in analysing their content. Coding the judicial documents requires high level knowledge of the respective national financial system, political system as well as the language in which the documents are written. The combination of a non-English language that might be foreign to the researcher and infamously vague financial language creates a barricade that few scholars have the funding to traverse. The result is that there exists little quantitative data on deregulation. If one should manage to collect information on deregulations across states, one would still have to create some form of index in order to make comparisons across time and space.

A final caveat to quantitative research on financialisation and deregulation is that regulation – as with many political topics – follows a global trend. The trend for financial regulation has been continuous deregulation since the 1970s and 1980s. Any dataset on this topic will thus contain limited variety, as a significant portion of country-years saw national deregulations.

#### 4.2.2 Data employed in the thesis

Despite the above challenges, Abiad, Detragiache and Tressel make a valiant effort at creating a cross-sectional time-series (also known as pseudo-panel) dataset on financial deregulation, entitled Financial Reform (2010). The Reform-dataset will be utilised in this paper to conduct a regression analysis where its various operationalisations of financial deregulation serve as independent variables. In addition to being the most suitable dataset of its kind for my thesis, this is also by far the most cited dataset on financial deregulation. Although that alone cannot tell us anything about its content or value, it does allow this thesis to better communicate with the existing literature. Comparisons between research are best done where the same data is used. Other existing datasets on financial deregulation are Nicoletti et al. (2001), Akinci and Olmstead-Rumsey (2018) and Cerutti et al. (2016). These are all rejected due to far inferior data coverage in comparison to the Reform-dataset. Data on growth of GDP ("GDP Growth (Annual %)" n.d.) and wage share of total income ("AMECO Database" 2021) are added from external datasets to serve as dependent variables, both of which are chosen in line with the theoretical foundation for this paper. The units for this dataset are country-years, created from every unique combination of countries and years, resulting in units such as Spain-2001, Spain-2002 and France-2001.

The studied sample is limited to OECD-member states<sup>3</sup>. This is primarily done for theoretical reasons; financialisation is a concept of late-stage capitalism (Foster and McChesney 2012, 39; Magdoff and Sweezy 1987, 10). Some authors explicitly point to OECD as an important arena for financialisation (Glyn 2006, 65). Recall from the theoretical chapter that financialisation is a phenomenon that emerged as a reaction to limited sources of income in

<sup>&</sup>lt;sup>3</sup> The complete list of included countries are: Australia, Austria, Belgium, Canada, Chile, Colombia, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea (South), Latvia, Lithuania, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States.

the real economy, as wages and prices hit a saturation point where an increase or decrease in either cannot bring new revenue to the capitalists. This situation can only emerge where capitalism has ravaged for a considerable time (Foster and McChesney 2012, 32). This description of a modern and deeply rooted capitalist structure is primarily reflected in OECDmember states. By definition of membership, OECD-members have highly developed economies and consequently a large financial sector. This can easily be confirmed by studying a list of states ranked by size of the financial sector relative to GDP ("Bank Assets to GDP - Country Rankings" 2021). The addition of control variables limits the temporal range of the data to 1991 to 2005. Though some range is sacrificed in the early end for the sake of better coverage of variables, the dataset does in fact end in 2005. It would be interesting to study the continued effect of financialisation into the Great Recession of 2008 and the years after, but no such dataset currently exists. The final count of units is n = 435.

Cross-sectional time-series data have the benefit of capturing more variation than any of its two dimensions can achieve on separately. Selecting this type of data can often be necessary when studying phenomena at a national level as an efficient way to achieve a sufficiently high number of units (Thomas, Vera E, and Philip 2005, 329). If we were studying Canada - as was not determined by the start of my regression, but rather chosen as a result of these analyses - one would be left with only 15 units after all variables are added. Instead, crosssectional time-series data generate 435 unites, allowing far more robust analyses. However, more importantly than securing a generous sample size, cross-sectional time-series is used in this dissertation for its unique ability to capture phenomena that might not be present in all states, at all times. This is particularly important with such a young research field that financialisation is. Though the temporal scope of financialisation has been somewhat established to be post-1970s, the spatial scope is still unclear. No existing findings allow us to conclude that "financialisation occurs independent of countries" or "financialisation does not at all occur in countries A and B". The only temporal scope is that which is deduced here from the term "highly developed countries" which is taken to mean OECD-member states. The absence of such limitations prompts a cross-sectional time-series analysis. If one were to study causes of Shinto-based nationalism, for instance, the step from time-series data of Japan to cross-sectional time-series data of the world would not be particularly beneficial as it is a phenomenon we know to be restricted to Japan. On the contrary, cross-sectional time-series

data on financialisation could show varying degree of presence across OECD-states. The Reform-dataset is unpacked next to highlight the strengths and weaknesses of this data.

# 4.3 Variables

#### 4.3.1 Independent variables

The included dimensions of financial deregulation are DIRECTEDCREDIT, CREDITCEILINGS, CREDITCONTROLS, INTRATECONTROLS, ENTRYBARRIERS, BANKINGSUPERV and SECURITYMARKETS. Capitalisation will be used henceforth to distinguish the digital variables from the broader concepts of the same name. All the independent variables capture the level of regulation in that dimension for each included year. By standardising values across countries, the authors facilitate cross-country comparisons that are essential to the type of analysis made in this thesis. The higher score any single unit receives, the less regulated it is country-year is. More than lack of variation, it is notable that there are extremely few instances where a country-year is found in the more regulated end of the spectrum (low score), regardless of which dimension one studies. Consequently, instances of little regulation of the financial sector (high score) are observed in the vast majority of country-years.

DIRECTEDCREDIT captures the presence of publicly imposed demands on which sector credit should be directed at on an index from 1 to 3. CREDITCEILINGS is coded as a dummy, where 0 indicates the presence of a ceiling on bank credit expansion and 1 indicating absence. This variable has no variation – every single country-year scores 1, meaning no such ceilings are found in the sample. The same can practically be said about INTRATECONTROLS measuring government-controlled interest rates, in which a single country-year (Portugal 1991) scores 2 and all other units recording 3, meaning close to all country-years had a fully free interest rate. This, naturally, renders both of these variables unfit for regression. Yet, it is worth deliberating for a moment on this finding. The homogeneity of values has been pointed out multiple times, illustrating the all-covering ideological wave of financial liberalisation that has characterised the entire OECD. Though the goal of this thesis is not to prove the existence of financialisation, in line with much

previous research, it does provide support for what by now is considered true – that financialisation is ongoing. The OECD financial sectors are increasingly left to conduct their business in peace, without government intervention. As seen in table 4.1, CREDITCEILINGS and INTRATECONTROLS are the only variables with zero or close to zero variation. Table 4.1 is highlighted for its role in both visually explaining the width of financial deregulation and in highlighting the limited variation that is seen in all the variables. Quantitative analyses require variation to perform well. If all the observations of ENTRYBARRIERS = 1 are found in two countries and neither of those saw changes in WAGE\_SHARE, there is no way we could use ENTRYBARRIERS to explain WAGE\_SHARE. This is clearly a shortcoming with this dataset, though this is still the dataset with the widest coverage and most nuanced data available. This prompts a more in-depth, qualitative analysis of financialisation in a single case.

,						
	0	1	1,5	2	2,5	3
DIRECTEDCREDIT		66		58		259
CREDITCEILINGS		252				
CREDITCONTROLS		2	64	28	40	259
INTRATECONTROLS				1		382
ENTRYBARRIERS		9		26		348
BANKINGSUPERV	11	55		138		179
SECURITYMARKETS		5		22		356

VALUE FREOUENCY

# INDEPENDENT VARIABLE ID

Table 4.1: Frequency of each unique value for all independent variables.

Continuing the variable descriptions, ENTRYBARRRIERS records barriers for both foreign and domestic actors to establish new banks on a scale from 1 to 3. BANKINGSUPERV scores 0 to 3, based on the number of legislations passed to deregulate the supervisory agencies that year. The description of BANKINGSUPERV provided by the author includes an unfortunate typographical error that – due to the values set to this variable and how they reflect real world events – can only be treated as an error. Despite the fact that the authors describe the values on BANKINGSUPERV as higher equalling more regulation (contrary to all other variables), it is treated as if higher values equal less regulation – identical to the other variables, thus achieving uniformity and comparability across the dataset. Lastly, SECURITYMARKETS captures the presence of a market for securities, a financial product. This is coded on a scale of 1 to 3.

#### 4.3.2 Control variables

Six control variables external to the Reform-dataset are added from a variety of sources to account for the effects of a few broadly reaching variables. This reduces the chances of experiencing omitted variable bias (Kellstedt and Whitten 2018). The value ranges can be seen in Table 4.2. These are INTERESTRATE, INFLATION, UNIONDENSITY, UNEMPPROTECTION, FEMLABOURFORCE and WARDUMMY. INTERESTRATE records the central bank interest rate and is assigned values equal to the actual interest rate it reflects. The values are in other words equal to some percentage level. Similarly, INFLATION records the real levels of inflation a country-year has experienced. UNIONDENSITY describes the percentage of the labour force that are members of a trade union. Percentages are also used in FEMLABOURFORCE, recording the percentage of the labour force that is female. Finally, WARDUMMY records 0 for years of peace and 1 for years of war. There are only 12 observations of war in this dataset, attributed to Australia, the United Kingdom, the United States and Turkey. Not surprisingly to those versed in global conflicts and geopolitics, the war observations in the anglophone countries are restricted to 2001 and 2003. All the control variables are show in table 4.2 for assisting in interpreting the regression results. The effect size – or coefficient – of the regressions are not comparable unless they are standardised, which in turn comes with drawbacks. Knowledge of the underlying values does not allow comparison between variables, but does allow for better interpretation of each individual variable.

# CONTROL

VARIABLE ID

#### VALUE CHARACTERISTICS

	Lowest	Mean	Median	Highest
INTERESTRATE	1.00	6.01	5.55	13.27

INFLATION	-1.13	5.72	2.43	105.22
UNIONDENSITY	8.60	38.72	31.80	97.2
UNEMPPROTECTION	0.09	2.15	2.32	4.83
FEMLABOURFORCE	23.30	52.47	51.60	78.3
WARDUMMY	0	0.03		1

Table 4.2: Descriptive statistics of the control variables included in the analysis.

#### 4.3.3 Dependent variables

Lastly, the two dependent variables are selected on the basis that they best reflect the theoretical conceptualisation of financialisation. GDP\_GROWTH captures the percentage at which GDP grows from the previous year, and WAGE\_SHARE captures the percentage of GDP that is dedicated to labour compensation for employed persons – otherwise known as wages. Both dependent variables capture perfectly the concept they represent, as discussed in the conceptual chapter. Table 4.3 displays descriptive statistics of the dependent variables which assists in creating a picture of the cases at hand and assists in interpreting the regression results. The table creates an impression of the magnitude of difference within each variable. In order to secure the highest level of validity of the data, a range of tests and modifications are made to the data. These will be discussed next.

#### DEPENDENT

VARIABLE ID	VALUE CHARACTERISTICS			
	Lowest	Mean	Median	Highest
GDP_GROWTH	-6.29	3.11	3.10	10.90
WAGE_SHARE	39.21	55.17	56.01	87.36

Table 4.3: Descriptive statistics of the dependent variables included in the analysis.

## 4.4 Data treatment

Fixed effects are applied to my data to avoid certain key countries or years to disproportionally influence the analysis. Though fixed effects have nearly become the default approach for political scientists (Bell and Jones 2015, 133; K. A. Clarke 2005, 341), it is employed in a conscious choice for the value it brings to this thesis by potentially controlling for some undetected variables. For instance, if the calculated effect of interest rate controls is entirely carried by Lithuania, we can test if the effect stays when excluding Lithuania. This contributes to reducing omitted variable bias. The same goes for years: extreme outlying years can be controlled for, thus generating regression results that better reflect trends. By applying two-ways fixed effects, we can simultaneously account for all individual countries and years, returning results that more accurately depict the effect of financial deregulation across the included countries and the included period (Bollen and Brand 2010, 2; Schmidheiny 2012, 9). The immediate result of using fixed effects is that CREDITCEILINGS,

INTRATECONTROLS and SECURITYMARKETS are automatically removed from the models as their variation can, in fact, be explained by a few countries or years. The two former are to be expected, as was touched upon earlier. SECURITYMARKETS does on the other hand have some variation, but its removal proves that it can be explained by a few countries and/or years. A glance at the data tells us that only five individual countries make up the values 1 and 2 for this variable, and Turkey can account for more than half of these observations.

A key condition of an fixed effects regression is that the variables do not correlate with each other, otherwise known as multicollinearity (Donald and Glauber 1967, 92). Using the variance inflation factor-tests and basic correlation models, multicollinearity is discovered in the data (Craney and Surles 2002, 400). DIRECTEDCREDIT and CREDITCONTROLS score near perfect multicollinearity. DIRECTEDCREDIT is thus removed. Heteroskedasticity and autocorrelation are two other common issues in cross-sectional time-series or panel data that must be accounted for (Thomas, Vera E, and Philip 2005, 329). Heteroskedasticity is tested first using a Breusch-Pagan test and is found to be present (Breusch and Pagan 1979, 1293). Autocorrelation is tested next using a Durbin-Watson test and is also detected (Durbin and Watson 1950, 409). The results of all tests conducted in this paragraph can be found in the appendix. Robust standard errors are then applied using the Arellano method to combat the effects of autocorrelation and heteroskadisticity (Arellano 1987, 431). Eight models are

finally generated: lagged versions of the two dependent variables at one through three years of lag are added in addition to the default unlagged versions. The multiple levels of lag are chosen based on the absence of theoretical expectations for a specific number of years of lag. As there are no guidelines on which lag to expect, multiple variations are used in spirit of the semi-explorative nature of this paper. A fixed effects linear model regression is then performed.

## 4.5 Results

The results are not overwhelmingly unidirectional, though some conclusions can be drawn without question. The most apparent effect is that of banking supervision on wage share which starts at a negative direction, but turns positive at the first lag and displays an increasingly strong coefficient. As if taken out of a textbook on lagged effects, there is no doubt that lag contributes to the effect of banking supervision, with longer lag giving the clearest effect. This relationship also shows the highest level of statistical significance, with significance at the 0.05 level for the first lag and the 0.01 level for the second and third lags. If financial deregulation has an effect, it should be found here. This is contrary to theoretical expectations which predicted a consistently negative relationship between banking supervision and GDP is also contrary to our expectations, though without statistical significance.

VARIABLE ID	Default	Lag t+1	Lag t+2	Lag t+3
DIRECTEDCREDIT				
CREDITCEILINGS				
CREDITCONTROLS	-1.436**	-0.987*	-1.237**	-1.153**
	(0.525)	(0.554)	(0.554)	(0.554)
INTRATECONTROLS				
ENTRYBARRIERS	-0.939	-0.117	0.484	0.356
	(0.357)	(0.676)	(0.676)	(0.676)
BANKINGSUPERV	-0.291	-0.313	-0.475	-0.306
	(0.235)	(0.313)	(0.313)	(0.313)

**GDP GROWTH** 

SECURITYMARKETS				
INTERESTRATE	-0.399*	-0.438*	-0.350	-0.190
	(0.130)	(0.229)	(0.229)	(0.229)
INFLATION	-0.155*	0.294***	0.477***	0.496***
	(0.090)	(0.086)	(0.086)	(0.086)
UNIONDENSITY	-0.006	-0.055	-0.048	-0.100**
	(0.036)	(0.047)	(0.047)	
UNEMPPROTECTION	-0.419	0.142	-0.101	-0.169
	(0.667)	(0.695)	(0.695)	(0.695)
FEMLABOURFORCE	-0.034	0.011	0.036	0.043
	(0.031)	(0.033)	(0.033)	(0.033)
WARDUMMY	1.700***	0.640	-0.741*	-1.675***
	(1.032)	(0.412)	(0.412)	(0.412)
Ν	278	277	276	275
ADJUSTED R <sup>2</sup>	-0.025	-0.085	-0.013	0.016
	0.01			

OF OLD TOXA & DIZE TO

\* p < 0.1, \*\* p < 0.5, \*\*\* p < 0.01

*Table 4.4*: Regression table with all models on GDP\_GROWTH.

The effect on GDP\_GROWTH as displayed in table 4.4 can best be observed from credit controls, where the coefficient direction is persistently negative and significant at 0.05 and 0.10 levels. There does appear to be some real correlation there, though it is not as apparent as that of banking supervision. Barriers to the establishment of new banks show diverging effect directions with no statistical significance to support them. The results of the WAGE\_SHARE models presented in table 4.5 show that BANKINGSUPERV has by far the most consistent statistical significance, at all three lagged models. While the effect direction changes from zero lag to the first lagged model, it is consistent throughout the lagged models. The change in direction can also be viewed as a consistent increase in the effect size from zero through three years of lag. The only other case of significance is seen in CREDITCONTROLS with one year lag. This variable shows no consistency in effect direction or size, making it challenging to conclude on. There does not seem to be any statistical relationship between bank entry

barriers and either economic growth or wage share in this sample. The goal for now is simply to present the findings, as they will be interpreted and analysed in a later chapter along with the findings from the process tracing.

	WAGE_SHARE			
VARIABLE ID	Default	Lag t+1	Lag t+2	Lag t+3
DIRECTEDCREDIT				
CREDITCEILINGS				
CREDITCONTROLS	0.564	-1.428*	-0.767	0.002
	(0.615)	(0.823)	(0.823)	(0.823)
INTRATECONTROLS				
ENTRYBARRIERS	-0.022	0.268	0.379	0.190
	(0.419)	(0.544)	(0.544)	(0.544)
BANKINGSUPERV	-0.096	0.641**	1.554***	2.469***
	(0.275)	(0.313)	(0.313)	(0.313)
SECURITYMARKETS				
INTERESTRATE	0.623*	0.512	0.368	0.226
	(0.153)	(0.322)	(0.322)	(0.322)
INFLATION	-0.339**	-0.327**	-0.500***	-0.427**
	(0.106)	(0.165)	(0.165)	(0.165)
UNIONDENSITY	0.004	0.158	0.298***	0.467***
	(.042)	(0.100)	(0.100)	(0.100)
UNEMPPROTECTION	1.498	1.012	2.127	3.212**
	(0.781)	(1.519)	(1.519)	(1.519)
FEMLABOURFORCE	-0.064	-0.118**	-0.097*	-0.040
	(0.036)	(0.056)	(0.056)	(0.056)
WARDUMMY	0.894	1.832	2.894**	3.155***
	(1.210)	(1.211)	(1.211)	(1.211)
Ν	278	277	276	275
ADJUSTED R <sup>2</sup>	-0.005	-0.045	0.010	0.084

# \* *p* < 0.1, \*\* *p* < 0.5, \*\*\* *p* < 0.01 *Table 4.5*: Regression table with all models on WAGE\_SHARE.

The control variables show varying results, though INFLATION is consistently significant across all models, although at the 0.1 and 0.05 level for some models and with minor inconsistency in the effect direction in the GDP\_GROWTH models. While these are interesting results that should be examined in more detail, they are beyond the scope of this thesis. The main takeaway here is that financial deregulation likely does not explain all variance in economic growth and wage share. This is entirely as expected. The goal of this thesis is to see if financialisation can contribute to explaining economic growth and wage share, not if it is the single cause. Few concepts studied in the social sciences have a single explanation.

The adjusted R<sup>2</sup> score is found to be negative in all models but GDP\_GROWTH t+3, WAGE\_SHARE t+2 and WAGE\_SHARE t+3. These scores do not tell us much on their own, they do tell us that the listed models have a somewhat better explanatory power than those with negative scores. The implication here is that the effect of financial deregulation likely is lagged. While it is tempting to conclude that the effect of deregulation can be anticipated at three and two years for the respective outcomes, such a conclusion would require far more rigorous theory development. Absence of a theoretical explanation or qualitative proof that the anticipated lag is three and two years renders such a task impossible with these findings alone.

This data is used for two purposes. First, it sheds light on the correlation between various dimensions of financial deregulation and both GDP and wage share. However, the discussion and interpretation of these results against the presented theory is saved until chapter 5 in order to achieve a holistic analysis including both the regression and the process tracing. For now, the regression results are simply presented descriptively.

The results differ according to which model and independent variable are scrutinised. They diverge in effect size, effect direction and significance. The conclusion to be drawn from this is that general financial deregulation has no clear, unidirectional effect on GDP and wage

share. That is not to say that deregulation has no effect at all, but that nuance is required to discover what that effect is and how it works. One way to obtain such nuance is to create a larger dataset with far more dimensions of financial deregulation included. This would be extremely demanding. Even if one had the funding and skillset to start such a project, there would still be limited variation in observations. As the two intertwining concepts of financialisation and globalisation increasingly define national politics, financial deregulation will likely continue without reversal in many states. However, a highly complex dataset on financial deregulation with great coverage of both states and years would bring many opportunities to expand the financialisation theory with more nuanced, quantitative analyses. In the meantime, other methodological approaches must be employed.

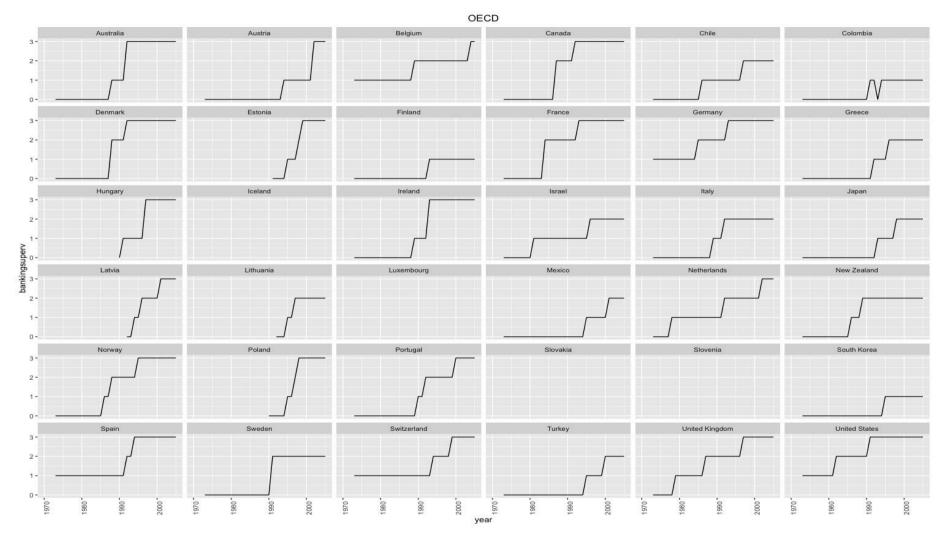
One approach to unpacking this black box that links financial deregulation to GDP and wage share is to do process tracing. The tools of process tracing have been developed precisely because of their utility for studying uncertain mechanisms. The need for a qualitative approach is particularly relevant when studying the financial sector as "cause and effect is nebulous in financial matters" (Cochrane 2014, 576). By diving deeper into a single case and observing real micro-events, one can attempt to conclude with more certainty the effects of financial deregulation while simultaneously gaining the ability to say *how* financial deregulation potentially causes economic growth and decreased wage share. Process tracing will be the focus of the next chapter.

#### 4.6 Case selection

Beyond the ordinary correlational conclusions, the regression results are used in aiding the case selection process. The case selection process is present in steps **A** through **E** for maximum clarity. As financialisation is a rather new research field with limited empiricism, a most-likely on-the-line case is chosen. While results supporting the theory from a least-likely case would be highly valuable to financialisation theory, absence of such support would not be particularly meaningful as the scope and extent of this concept is still under exploration. On the contrary, failing a most-likely case would significantly weaken the theory, whereas most-likely case support contributes moderately to the theory's validity (George and Andrew Bennett 2005, 121). (A) First, I choose BANKINGSUPERV as the basis for case selection

due to it being the single variable that has the clearest and most significant result. The direction or size of the coefficient is not regarded here. Clarity is valued to maximise the chance to discover meaningful results. While the effect direction of BANKINGSUPERV on both dependent variables is contrary to theoretical expectations, it is the consistency of that contradiction that is interesting. The effect of BANKINGSUPERV on WAGE\_SHARE shows a negative and unsignificant effect the same year the deregulation has taken place, followed by three years of highly significant result and a consistently increasing coefficient. Time-series evolution of BANKINGSUPERV is visually examined next for all the individual states in figure 4.2. The goal here is to detect a sudden increase in the value of BANKINGSUPERV. This increases the chances that the effect of financial deregulation is isolated from exogenous effects, which in turns creates a better foundation for a qualitative analysis.

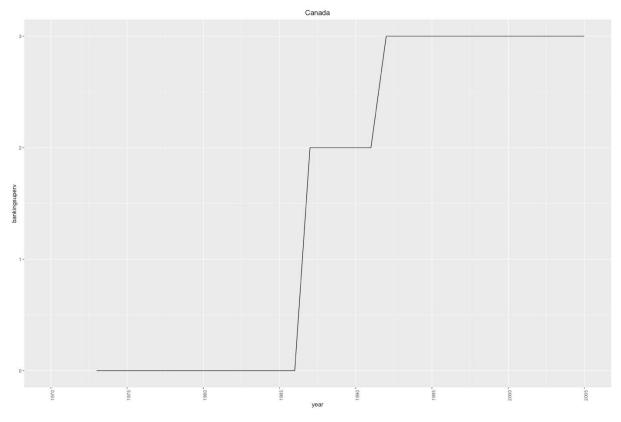
(**B**) By eliminating states that have had a less shock-driven increase in the value of BANKSUPERV by three units in less than ten years, we are left with a handful of states: Australia, Canada, Denmark, Estonia, Ireland, Latvia, Poland. This limitation is arbitrary, naturally, yet serves the purpose of detecting shock-effects while simultaneously leaving multiple cases and thus allowing flexibility to check data availability before committing to a single case. The non-English speaking states are eliminated next for data availability. While this contributes to the ever persistent language-restricted research gap that likely exists in all research fields, there is simply no feasible solution to that gap with the limited scope of this thesis. (**C**) Finally, with Australia and Canada as the only candidates left, a probe-examination is conducted on the remaining cases to see if financial deregulation really did happen. (**D**) Canada stands out for having clear evidence of such deregulation and is thus selected as the qualitative case for this thesis.



*Figure 4.2*: The evolution of deregulation of banking supervision in OECD-member states.

56

Canada has over the past decades produced a range of regulatory documents regarding the financial sector. Examining every single one would transform this paper into a book – there are simply too many. (D) Instead, I focus on the 1990s as this is the period where financial deregulation in Canada spikes. According to the data in Figure 4.3, this is the period when Canada deregulated their financial sector the most and is thus the period where it would be most likely to discover significant cases to examine. This is in line with the literature on financial sector regulation in Canada which also points to the 1990s as an active period for deregulation (Daniel 2003). This period saw a handful of deregulations introduced, though their scope and mandate vary. The only significant changes were made in 1992 and 1999, where the former deregulated a wide range of minor financial activities and the latter allowed foreign bank branches to be established in Canada. (E) The deregulation of 1999 is selected due to limited data availability on former instances of deregulation. The primary data necessary to initiate a qualitative analysis is the legislative document that make up the bill. Fortunately, Bill C-67 is satisfactory distant in time to the changes in 1992 that one could reasonably attribute events and situations of the early 2000s to Bill C-67 - or at least isolate them from the 1992-legislation. Though the qualitative case of 1999 concerns foreign bank entry and ENTRYBARRIERS displayed no statistical significance, recall that it was BANKINGSUPERV that guided the selection of Canada. The discovery of a coding error that there was in fact deregulation of bank entry despite this not being recorded in the dataset - is made in hindsight to case selection.



*Figure 4.3*: The evolution of deregulation of banking supervision in Canada over time.

# 4.7 Summary

This chapter has provided a discussion of the multimethodological framework that guides the analyses of this thesis. A regression on various categories of financial deregulation. Shows that there is a particularly interesting correlation between deregulation of supervisory agencies and economic growth, as well as between the same deregulation and wage share. The results are employed in selecting Canada for the case study. Bill C-67 of 1999 is selected as the final start point of the process tracing.

# **Chapter 5: Process tracing**

Before delving into the empiricism, a discussion of process tracing in methodological terms is due. Process tracing should not be seen as an alternative to regressions or other tools that predict covariance, but rather as an entirely independent approach to studying research questions. The question is no longer whether there is some connection between two theoretical concepts, as is the question attempted answered by most academic tools, but whether there *really* is a connection between two empirical situations and *how* that connection plays out (George and Bennett 2005, 206). As a part of a larger nested analysis, I unpack the assumed relationships identified in the previous chapter, that which is found between deregulation and GDP, and between deregulation and wage share. Regressions and other quantitative tools are unable to determine causal links, so a qualitative approach is necessary. While multiple qualitative tools are useful for discovering causal links, process tracing in particular excels at causal inference and uncovering how the causality between two variables works within an individual case (Beach and Pedersen 2011, 4; George and Bennett 2005, 214). This approach allows me to showcase how exactly deregulation can cause an economic upturn as well as a decrease in the wage share of income.

#### 5.1 Mechanisms and steps

Key to understanding process tracing and distinguishing it from other methods is its ontological foundations. Advocates of process tracing view causality in terms of mechanisms (Bennett 2010, 208; George and Bennett 2005, 231). Mechanisms are the processes through which one variable can affect another. They are not case specific in the sense that they describe an empirical chain of events, but they describe a context-specific arrow that links two concepts (Bennett and Checkel 2014b, 12). The social world is viewed as mechanistic by scholars of process tracing, meaning that there exists certain paths in a causal chain through which one concept influences another, though without the absolute certainty of a scientific law (Elster 1998, 45). In this way, process tracing is ontologically separate from quantitative as well as some qualitative research. Throughout this chapter, mechanisms will serve as the framework for understanding the process under examination. In a theory-testing type of

process tracing such as the one conducted here, mechanisms are not new discoveries, but are adopted from existing literature attempting to explain one or more of the same relationships studied here. The mechanisms employed here will be explicitly linked to the literature form which they are adopted. They are also explored in more detail in the theoretical chapter presented earlier. In the event that no theorised mechanism can logically connect the independent and dependent variables, one would have to propose new mechanisms or reject the possibility of a causal relationship.

Mechanisms can be divided into steps that make up the smallest scale components of the entire causal chain. The relationship between variables, mechanisms and steps are illustrated in figure 5.1. These steps should be so fundamental that they in turn are considered laws or basic logic, such as the basic logic that most humans possess some perception of fairness (George and Bennett 2005, 227; Gerring 2007, 180). The reader should be able to instinctly agree that the microfoundational steps are real and sensible. It is not instinctly logical that a greater economy causes democratisation, but most would likely agree that a greater economy ceteris paribus probably means more funding available for education. This statement alone cannot explain the relationship between GDP and democratisation, but it can do so in conjunction with other microfoundations, such as the also sensible statement that education helps people make more informed decisions when they are voting. The entire relationship between GDP and democratisation requires many more steps to be convincing, but this paragraph illustrates why mechanisms can be convincing in explaining a relationship where correlations are less so. This way we can also infer causality between X and Y (Elster 1998, 49). Multiple, competing mechanisms should be included in the analysis (George and Bennett 2005, 217).

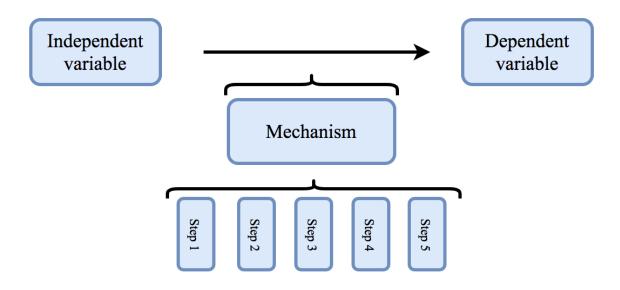


Figure 5.1: The components of a causal relationship.

When identifying and measuring the abovementioned steps, researchers need to employ causal-process observations (CPO). These are the most fundamental type of data used in process tracing. Contrasted with the numerical data used in quantitative research, CPOs are data points of a qualitative nature with noncomparable format and scale (Brady, Collier, and Seawright 2010, 2; Gerring 2012, 328). There is no necessary objection to using numerical values as CPOs as it is the noncomparability that distinguishes them from data-set observations. This also means that CPOs cannot be plotted into a matrix for mathematical analysis, but must instead by assessed by the individual researcher's analytical skills. Analysis utilising CPOs thus demand more scholarly discretion and correspondingly explicitness in how it is analysed. Though some fanatic quantitative scholars might view noncomparability as a weakness of CPOs, it can also be seen as a unique strength of this methodological approach. It is not uncommon for social scientists to study relationships, events or facts that would are highly demanding to gather a sufficient number of observations, if it is at all possible. Any single event – let us say the Napoleonic Wars – may potentially only contain a range of unique observations that each make up n = 1 in their respective categories, such as a single revolution and the single coup d'état that both contributed to the wars' emergence. The coup and the revolution are not comparable, yet they together contribute to a narrative that can explain the Napoleonic Wars. The strength of CPOs and process tracing is the ability to build such a narrative, despite the lack of large datasets.

Though process tracing is here worded as if it were a single method, it would be more accurate to distinguish multiple methods within the umbrella term that is process tracing. These more nuanced methods are theory-testing, theory-generating and explaining outcome (Beach and Pedersen 2011, 6). The overarching nature of this thesis can be described as semi-explorative due to the use of nested analysis to better identify which variables are relevant for financial deregulation, but the isolated performance of process tracing is theory-testing. There is no particularly puzzling or unique outcome that needs to be explained, nor are entirely new mechanisms proposed. The goal here is to explore previously proposed mechanisms explaining the effects of deregulation and to see if they fit into the case at hand.

## 5.2 Tools of process tracing

The theoretical framework of process tracing typically presents four tests that can be applied to mechanisms and assists in building a plausible and convincing narrative of the process under study (Punton and Welle 2015, 3). These are straw-in-the-wind, hoop, smoking gun and doubly decisive. Straw-in-the-wind tests are weak indications of a connection between two items, though it does not confirm or exclude any explanation. Evidence of this type contributes to a narrative, but its absence does not create any implications. Similar to a tree in a forest: it is a part of the forest and its presence contributes to the forest, but its absence does not mean that no forest can exist. Hoop tests are tests that should be passed if one is to believe the explanation, though without the ability to confirm that explanation. A forest cannot grow on bare rock so there must be nutritious soil on the ground for a forest to exist. The absence of nutritious soil means we can immediately rule out the possibility of a forest. However, nutritious soil could be found elsewhere and thus does not confirm the existence of a forest. The difficulty of the criteria of a hoop test and the certainty of the evidence presented against it decides what conclusions we may draw. An easy test with certain evidence that it was not passed will allow us to completely reject the possibility of the tested scenario.

Smoking guns are evidence that explicitly confirm the connection, but which's absence does not disprove anything. If you can see hundreds of trees in front of you, you should reliably be able to say that you are in a forest. Should you however not see hundreds of trees because you are staring into a boulder, will you not be able to reject the possibility that you are standing in a forest. Doubly decisive tests are those that can confirm one explanation while simultaneously rejecting others. If you hike an hour into the wilderness and discover hundreds of trees that you can observe from multiple angles, as well as touch and smell, you can reliably say that you have indeed found a forest and also say that you are not in an art installation of fake trees inside a shopping mall.

Though finding doubly decisive evidence would make quick work of any theory, they are highly unusual to be found in the social sciences. Instead, this thesis relies almost exclusively on hoop test, as can be expected in much social science (Beach and Pedersen 2018, 123–24). Logical conditions tying together the steps of a theoretical mechanism can be constructed and tested far more easily than smoking gun tests or doubly decisive tests. Straws-in-the-wind hold such minimal value that they are not sought out. With the methodological background and implications of process tracing assessed, the next step in the quest for causal inference is to trace the process from financial deregulation to increased GDP and decreased wage share.

#### **5.3 Structure of the analysis**

With the above outlined methodological foundation and guidelines in mind, this chapter examines deregulation of the financial sector of Canada in 1999 and the few years after in which its effects are observed. In June of 1999, bill C-67 with the full name "An Act to amend the Bank Act, the Winding-up and Restructuring Act and other Acts relating to financial institutions and to make consequential amendments to other acts" was passed in the house of commons (Daniel 2003, 6). This bill encompassed a multitude of minor changes, with the central change being the opening up for foreign banks to establish full-service branches in Canada. Prior to the bill, foreign banks could only open subsidiaries. This specific bill will serve as the starting point for the process examined here. Utilising primarily hoop tests, this empirical chapter will present Bill C-67 of 1999 along with events and facts,

in the sense of Elster's analysis of causal mechanisms (2015, 3). As in a court case, the evidence will at first simply be presented and interpreted in a temporally linear manner, but not yet analysed. Causal inferences will not be made until the next chapter.

This chapter will present and interpret causal-process observations, using tools and guidelines from the methodological literature on process tracing. The analysis of these observations against my theory is saved for the next chapter. The remainder of this chapter is structured into three sections that each correspond to key elements of the research question. These are: (5.4) change in behaviour, (5.5) increased GDP and (5.6) decreased wage share. These correspond to the independent variable, the first dependent variable and the second dependent variable, respectively. Section 5.4 aims only to determine whether the independent variable took place and to determine how it manifested into real events. Section 5.5 regards the relationship between deregulation and GDP, whereas section 5.6 regards the relationship between deregulation and wage share. Temporal and logical linearity are absolute requirements in process tracing (Punton and Welle 2015, 2), so section 5.4 needs to be tested prior to section 5.5 and 5.4 needs to also occur prior to 5.6. Recall that economic growth and wage share are two different results from deregulation. The existing literature indicates that the economy grows prior to decrease in wage share, but these are not intervening variables. As such, the order in which section 5.5 increased GDP and 5.6 decreased wage share are presented here does not reflect a continuous path from deregulation, through GDP and to wage share. This chapter should instead be understood as a path from deregulation to GDP and then a path from deregulation to wage share.

After establishing that the independent variable took place, the two following sections will each have three theoretically grounded mechanisms. These are organised as subsections. Minimum requirements for these mechanisms are presented in line with best practices to illustrate what level of detail and type of evidence is satisfactory to accept that the theorised mechanism took place (Bennett and Checkel 2014a, 261). I want to emphasise that these criteria were established prior to data collection and analysis, and are thus not adapted to the findings. Finally, the mechanisms are tested in individual steps, all of which are backed by causal-process observations (CPO1 – CPOn) that are presented and analysed, allowing us to evaluate them against the prior set criteria and consequently make claims about the causal

effect of deregulation on GDP and wage share of total income. It is these CPOs that serve as the empirical data. As a tool for keeping track of the analyses, each mechanism will be concluded with a figure displaying the relevant steps and whether or not they were found to be present. In summary, each section of the research question will be presented in the remainder of this chapter along with their respective mechanisms, their fulfilment-criteria and subsections to fulfil those criteria. I find support for the change in behaviour following deregulation, the mechanism of foreign direct investment on economic growth, the mechanism of credit-led growth and the mechanism of finance-led growth.

#### 5.4 Change in behaviour

In order for deregulation to have an effect on GDP and wage share, one must first establish how the deregulation manifested. In this case, deregulation regarded foreign bank branches, and so we should observe such foreign bank branches before any other step of the causal chains. In more general terms, we are studying the immediate and direct effect of the independent variable. The evidence found here are necessary for the two larger causal chains and it contributes to the narrative presented in those chains, *but* the conclusions drawn here are only conclusions for this section. In other words, a confirmation of the expected change in behaviour is a useful confirmation that contributes to the larger causal chains, but does not confirm the relationship between deregulation and GDP or between deregulation and wage share.

Identifying the theorised effects of deregulation first requires an assessment of whether it had any effect at all. In this case that means seeing if Bill C-67 of 1999 caused the change in the Canadian financial environment it intended. Given that it allowed the establishment of foreign bank branches, one should expect to see such branches established in the period after 1999. The appearance of such branches is the only criterion in this section. *This did occur*. Limited data availability sabotages the possibility of composing a full list of foreign bank branches established in this period. Yet, there is evidence of some foreign bank branches being either introduced from scratch or being converted from pre-existing subsidiaries of foreign banks. For instance, J.P. Morgan Chase and U.S. Bank National Association both

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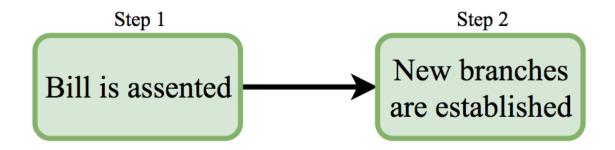
opened branches in Canada in 2000. The following year saw Deutsche Bank AG joining the Canadian banking market with its local branch, while First Commercial Bank opened its branch in 2002 and United Overseas Bank converted their subsidiary to a full service branch the same year.

The latter bank specifically state on their website that the 2002 conversion was due to the deregulation that took place in 1999 ("United Overseas Bank (UOB) Sets Up New Branch in Canada" 2002). Sure enough, the conversion would be entirely impossible without that deregulation. However, this explicit statement indicate that the United Overseas Bank and potentially other banks too might have been sitting on the fence prior to the deregulation, waiting for Canada to liberalise. This should be distinguished from China Construction Bank that opened their Canadian branch in 2016, which is less clearly a direct response to the deregulation. As of 2014, Canada had 27 banks in the "Schedule III" (the regulatory term that is used for foreign bank branches by public entities, where Schedule I and II cover domestic banks and foreign subsidiaries, respectively) category ("Who We Regulate" 2014). While these branches have emerged over a period of about two decades, it is clear that at least some foreign bank branches were a direct response to the deregulation. They did not simply expand for the sake of expanding, but they were triggered by the deregulation to act. This explicit statement should be considered as a smoking gun. Due to the rare and convincing nature of smoking gun type evidence, Bill C-67 should be seen as a direct cause for the establishment of foreign bank branches in Canada after 1999. Keep in mind, though, that this smoking gun only confirms precisely the above – the establishment of foreign bank branches as a response to Bill C-67. It cannot on its own confirm the larger causal chain between deregulation and any of the dependent variables. Yet, it is useful evidence in supporting the larger causal chains and will play a valuable role when considering the questions of causality.

A final CPO to be considered for this section is asset value. Data on foreign bank (both subsidiary and branch) assets in Canada indicate an approximately doubled combined value of these banks over the course of 1999 to 2001, strengthening the view that foreign bank branches appeared shortly after the bill was introduced (Hinchley 2006, 7). Though it might be possible for the foreign banks asset value to increase due to other circumstances – such as an increase in only subsidiaries and not branches – that seems highly unlikely, given the

timing relative to Bill C-67. Similarly, though foreign bank branches might be established without a significant increase in foreign bank asset value, this too seems unlikely. The significant increase observed here should perhaps not be treated as a hoop test – a necessary condition – but should be seen as strong straw-in-the-wind type evidence.

The establishment of foreign bank branches fits the archetype of a hoop-test, where its presence alone fail to prove that the mechanism took place, but its absence would be detrimental to the theory. In other words, it would be impossible for deregulation to cause increased GDP and decreased wage share if the newly deregulated activity – foreign bank branches – was non-existent. The combination of foreign bank value, the actual establishment of foreign banks branches and the smoking gun from United Overseas Bank leaves a picture that is highly convincing that Bill C-67 achieved its desired effect of bringing foreign bank branches into the Canadian financial market. This mechanism is illustrated in figure 5.2 The next question then becomes whether these branches had any effect on economic growth. This effect is proposed by the existing literature to occur through multiple mechanisms, which will be presented below.



*Figure 5.2*: The immediate effect of the independent variable, from deregulation to foreign banks. Green/solid border = proven, red/half solid border = disproven, grey/dotted border = not examined.

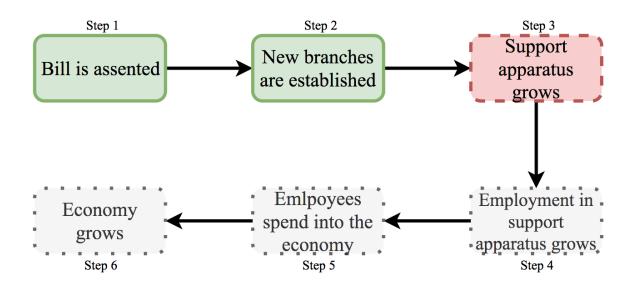
#### 5.5 Increased GDP

With the knowledge that foreign bank branches were indeed present after 1999, we may start to examine the dependent variables. First of these is GDP. This section applies tools of process tracing to the alternative mechanisms that seek to explain increased GDP as a result of deregulation.

#### 5.5.1 GDP Mechanism 1: Support apparatus

Recall from the theoretical chapter that Demirgüç-Kunt, Levine and Min's proposal that foreign banks bring with them a greater support apparatus (1998, 9). Support apparatus refers to the various organisations external to the foreign bank branches that are needed for the branches to conduct their business. For instance, they require credit rating agencies to evaluate the branch's assets. In addition to general expanding due to a larger customer base, auditing firms and supervisory agencies now not only need to employ individuals competent on domestic banking law in Canada, but they also have to employ individuals competent on the newly assented Bill C-67. Rating agencies – one of the services required by foreign bank branches - work under the legal title of Designated Rating Organizations (DROs) in Canada, of which there are only four today ("Credit Rating Agency" 2021). All these were established businesses in Canada prior to 1999, with the only exception being DBRS Limited which was established in 1976, but only was approved as a DRO in 2012. These dates indicate that the DROs' existence has not been a response to increased demand by new foreign bank branches<sup>4</sup>, and accordingly could not have been results of the 1999 deregulation. Demirgüç-Kunt, Levine and Min also point to other support services required by foreign banks, such as accounting firms and auditing firms. Unfortunately, data on accounting and auditing firms is not available. Based on DROs, however, there is no indication that this mechanism took place and thus cannot have contributed to GDP. The entire mechanism along with information on which steps that are found to be present can be seen in figure 5.3.

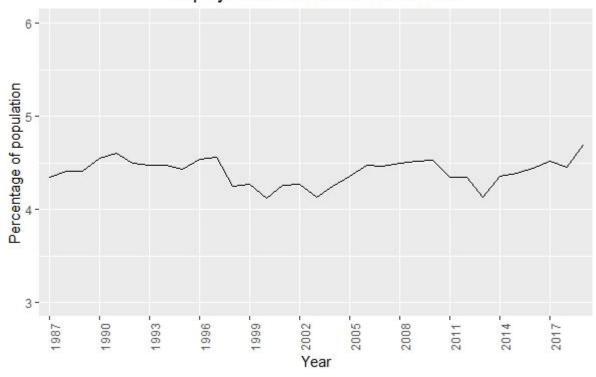
<sup>&</sup>lt;sup>4</sup> A critique might be that one should look at employment numbers or budgets of these DROs. Such data is unfortunately not available.



*Figure 5.3*: The mechanism of support apparatus. Green/solid border = proven, red/half solid border = disproven, grey/dotted border = not examined.

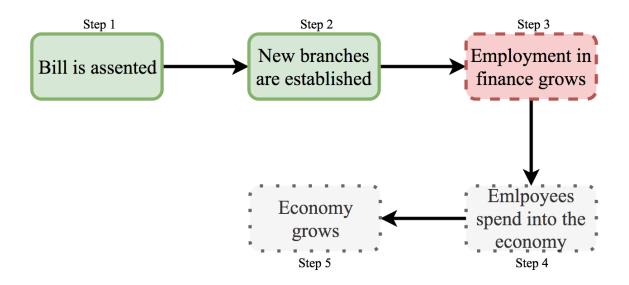
#### 5.5.2 GDP Mechanism 2: Employment in finance

A second proposed mechanism linking deregulation to increased GDP is that of employment in the financial sector (Demirgüç-Kunt, Levine, and Min 1998, 9). Foreign banks, like any organisation or business, require personnel to administer them and to service customers. Establishing a Canadian branch by any foreign bank thus requires employing a reasonably high number of individuals, which in turn contributes to GDP as these individuals spend their income on consumption. Looking at employment numbers by sectors, there is a clear growth in the number of people employed in finance and insurance ("Labour Force Characteristics by Industry, Annual (x 1,000)" 2021). Comparing the numbers prior to and after 1999, employment in finance and insurance grew by 7% from 1989 to 1999 and then by 22% from 1999 to 2009. The year of deregulation marks a clear junction. However, accounting for population growth and general employment levels by looking at share of all employed persons, it is less clear (figure 5.4). After dropping in 2000, the employment share increases again in 2001 and 2002. One could possibly make the argument that this fluctuation shows the effect of deregulation to be lagged by a single year, followed by two years of positive effect. However, although a lagged effect is to be anticipated, there is no established longitude of that lag in the literature. As long as the lag is uncertain and the effect is unclear, one cannot make certain claims about the effect of foreign bank entry on GDP through employment levels in the financial sector. As is illustrated in figure 5.5, the analysis of this mechanism ends as soon as the causal chain between the steps is broken. There is no value to researching all the steps if a necessary preceding step is not found to occur.



Employment in finance and insurance

*Figure 5.4*: *Employment levels in finance and insurance as share of the population in Canada.* 



*Figure 5.5*: The mechanism of employment in the financial sector. Green/solid border = proven, red/half solid border = disproven, grey/dotted border = not examined.

#### 5.5.3 GDP Mechanism 3: Foreign direct investment

Another way to view the same general effect is by looking at foreign direct investment (FDI) (Levine 1996, 237). As foreign banks enter the Canadian banking market, large investments are required to construct offices and employ staff. Furthermore, the banks require large volumes of capital to conduct their business, which includes issuing loans to consumers and businesses or trading in bonds. It is reasonable to assume that foreign bank branches are components of very large banks in terms of value, as smaller banks would limit their operations to their immediate market. One should thus expect the opening up to foreign banks to generate FDI, followed by an increase in GDP growth (1996, 238). Data on FDI inflow in Canada shows a very distinct peak in 2000, precisely after the deregulation (figure 5.6). There is little doubt that something caused this dramatic increase. Given the fact that foreign bank assets doubled in this exact same period, it would not be unreasonable to assume that the deregulation played a significant role in increasing FDI inflow.

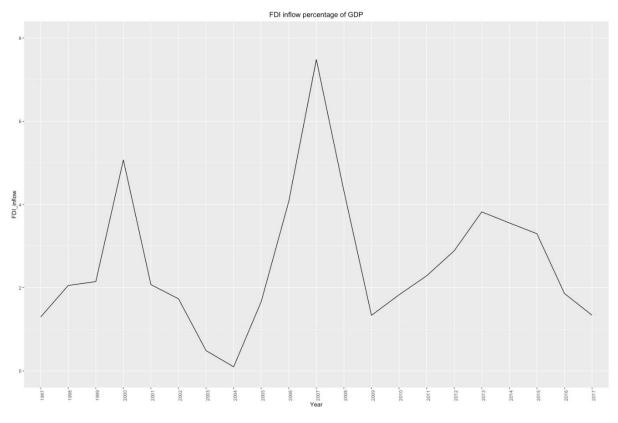


Figure 5.6: Foreign direct investment inflow as share of gross domestic product in Canada.

As the FDI peak occurred in 2000, we should find economic growth from 2000. Though there is a large drop in 2001, 2000 saw very high levels of growth in relative terms (figure 5.7). With only crude, yearly data available, it is difficult to tell which came first of GDP or FDI. Near perfect overlap of the FDI peak and the GDP peak, in addition to strong fit to the theoretical mechanism is sufficiently convincing to conclude that GDP grew as the next step of the mechanism. In other words, this is an indication that deregulation contributed to economic growth through the mechanism that is foreign bank branches' need for FDI inflow. The mechanism is convincingly supported (figure 5.8).

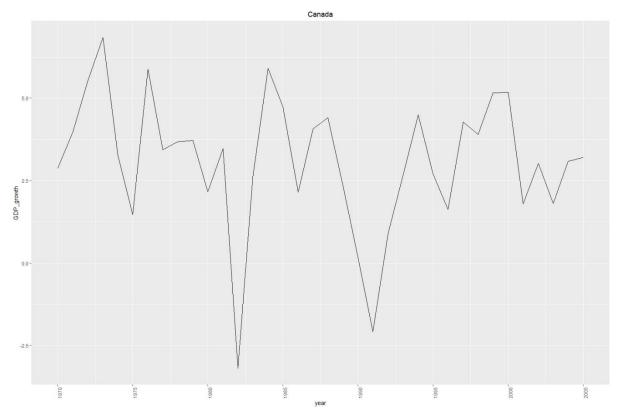
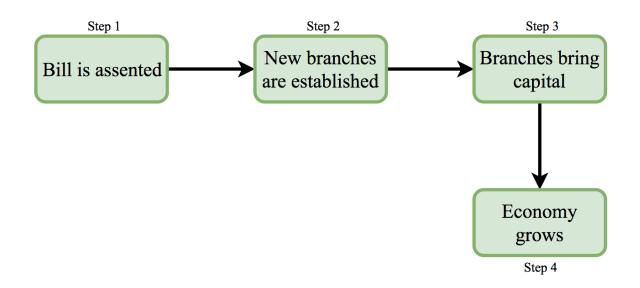


Figure 5.7: Gross domestic product growth in Canada.



*Figure 5.8*: The mechanism of foreign direct investment inflow. Green/solid border = proven, red/half solid border = disproven, grey/dotted border = not examined.

In summary, clear support can only be found for the mechanism linking deregulation to increased GDP through inflow of foreign direct investment. The observations from Designated Rating Organisations show no support. Employment data is indicative at best, but is realistically inconclusive.

#### 5.6 Decreased wage share

This section regards the relationship between deregulation and wage share. Three mechanisms originally presented in the theoretical chapter are briefly re-stated and then tested. These mechanisms are credit-led growth, investment shift and finance-led growth.

#### 5.6.1 Wage share mechanism 1: Credit-led growth

For this next subsection, the analysis will utilise the theoretical framework of a finance-led growth model. The key distinction between credit-led growth and wage-led growth is that the former uses credit to substitute wages where they are insufficient to sustain consumption (Baccaro and Pontusson 2016, 186). Growth is in such cases still fuelled by consumption, but workers must rely upon credit in order to keep or increase their attained lifestyles. The causes for stagnant wages are numerous, including weakened unions and the natural development of capitalism through long term capital accumulation, as was discussed in detail earlier (Bresser-Pereira 2010, 511; Foster and McChesney 2012, 39). One cause may be that credit-based consumption disguises the stagnation of wages, as consumption is sustained and the built-up debt is temporarily kept at a distance.

The conditions required to make a causal claim about the effect of deregulation on decreased wage share are the following. First, the deregulation must have the ability to increase creditled consumption. This means that the newly established foreign bank branches must be allowed to issue loans. Second, these banks must have capital available to fund the loans. Consequently, we must be able to show that foreign bank branches did in fact issue loans. This should in turn translate into an acceleration of household debt if the growth of GDP indeed was credit-led. Finally, there should evidence of a higher GDP growth than growth of real wages.

The first criterion can easily be tested by examining the text of Bill C-67. §538 states that authorised foreign banks may engage in activities generally to be considered as bank activities, and explicitly includes "any financial service" as well as "issuing payment, credit or charge cards" (Martin 1999, para. 538). In other words, the foreign bank branches were given the authority to issue credit – a necessary condition for the causal chain to continue uninterrupted. Next, they would have to have capital available, either in the form of direct ownership or as credit to another bank. Capital availability is neatly confirmed as it is a written requirements in order for new banks to be approved, with a requirement of 10.000.000 CAD (1999, para. 534). This is in addition to more general requirements of financial soundness and the ability to function in and contribute to the Canadian financial system (1999, para. 526). Actual levels of foreign bank brand and subsidiary assets show an approximate doubling in the period 1998-2001 (Hinchley 2006, 7). The legal requirements and the asset data paint a clear picture and so it should be safe to conclude that any approved foreign bank branch has capital available to issue credit.

With the judicial and financial powers to serve as creditors out of the way we still have not confirmed whether foreign bank branches actually did contribute to a credit-led growth by issuing loans. By looking at financial data for foreign banks from the Office of the Superintendent of Financial Institutions we can see that the total sum of loans as sources of income for foreign banks fluctuates with approximately 10 billion CAD around a gravity point of 50 billion ("Financial Data for Foreign Bank Branches" 2020). This gives a somewhat ambivalent picture of lending by foreign banks. As data are available from 1996 – three years prior to Bill C-67 of 1999 – they must include foreign bank subsidiaries, which were legal in Canada earlier than foreign bank branches. Although there is a spike in loan income in 2000 from 1999, such spikes occur on multiple occasions, along with equally strong drops. Yet, the fact that we cannot see an unambiguous increase in loan income after the deregulation is not necessarily contesting the presence of a causal chain. What matters for this particular criterion is that lending happened, which it did, and in rather high sums at that. As such, the hoop test is passed.

Given that foreign bank branches issue loans, one would expect to see this reflected in the debt levels of the general population. The receivers of credit are not specified in the above data, so it is not entirely clear from that alone whether credit is given to businesses, individuals or even public entities. The theoretical foundation here rests on the assumption that credit is given to individuals who then consume on a personal level, as opposed to businesses which consume on an industrial level. We can then expect to see household debt rise as a response to the entry of foreign bank branches. The data tells that household debt grew fluctuating – but always positive – before the deregulation, experienced a short dip at negative growth in 2000, followed by what can only be termed an explosion of household debt from 2001 onward (figure 5.9) ("Household Sector Credit Market Summary Table, Seasonally Adjusted Estimates" 2021). While some lag is to be expected from all policy changes, it is often uncertain how much lag to expect. That uncertainty of lag-length is also present in financialisation theory. Considering that there is no clear guidelines on how long after the deregulation of the financial sector one can expect to see changes, there is no theoretical contradiction between the dip of 2000 and the expected growth in household debt. The unidirectional and exponential growth from 2001 onward is so strong that it eliminates the uncertainty surrounding lag. If anything, these results indicate that the lag indeed is two years. Rigorous testing of two years lag on deregulation is far beyond the scope of this thesis, but should be explored further in future scholarship.

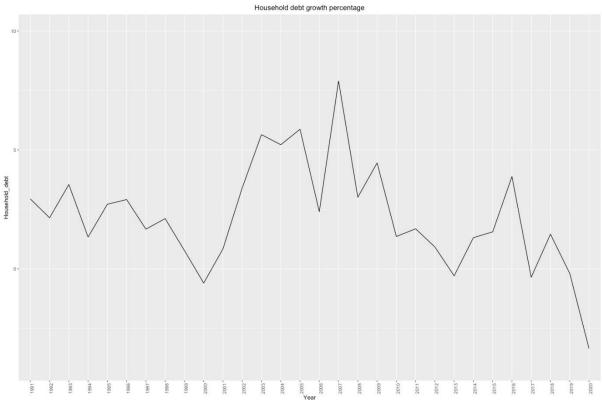
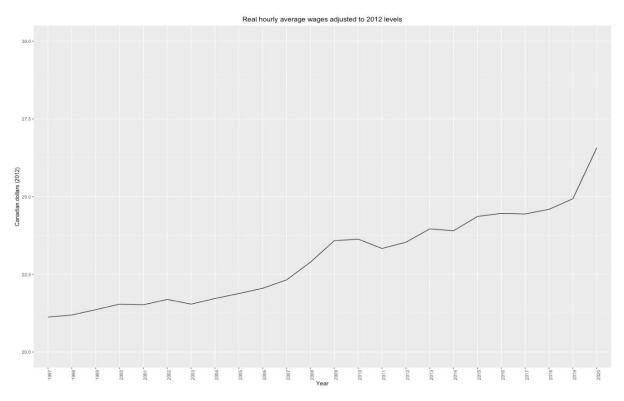


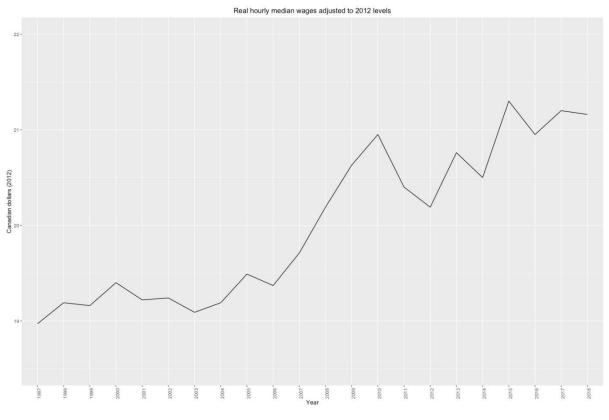
Figure 5.9: Household debt growth in Canada.

Finally, if GDP is led by some other factor than wage-based consumption, we should see a higher level of growth of GDP than growth of wages. While it would be intuitive to continue using the wage share variable central to the entire thesis, this cannot in fact capture the binary question of whether or not GDP is wage-led. Wage share of total income can only capture changes in this relative level. As long as data for the non-wage share of income is not available, it is impossible to tell which source is dominant. If, however, we study GDP versus real wages, we can at least tell whether wages could be the dominant source. Or to put it in reverse, if GDP grows more than wages, there is no way wages can be the main contributor to GDP. Looking at both average real wage growth (figure 5.10) and median real wage growth (figure 5.11), this is the case for every year in the relevant period and almost every year for which data is available. The only exceptions in the wider period are 2008-2009 when GDP drastically decreases – which are exactly as expected, given that these were the prime years of the Great Recession in which financial products plummeted in value – and 2015. There is also an exception in 2013 on the median wage model. However, these longer trends only serve to entrench the picture that Canada does not rely on wage-led growth. The key years are

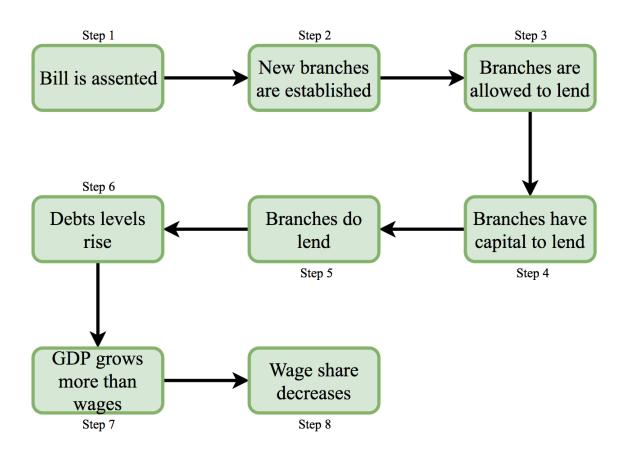
of course the ones before and after 1999, and they all indicate that there could be some other leading factor than wages. The conlcusion is that credit-led growth did contribute to decreased wage share (figure 5.12).



*Figure 5.10*: Real hourly average wages in Canada adjusted for inflation and set to 2012 levels.



*Figure 5.11*: Real hourly median wages in Canada adjusted for inflation and set to 2012 levels.



*Figure 5.12*: The mechanism of credit-led growth. Green/solid border = proven, red/half solid border = disproven, grey/dotted border = not examined.

#### 5.6.2 Wage share mechanism 2: Productive firms shift investment

Another proposed mechanism to explain the effect of deregulation on wage share is introduced by Stockhammer, where deregulation facilitates a larger financial market which in turn draws investments from the real economy, making businesses less dependent on workers and consequently reducing or stagnating their wages (2017, 10). First, we should observe that the financial market grew in size. Second, we should observe that non-financial businesses shift their investments from the real economy to the more profitable financial sector. Third, the investments in finance should make up a larger portion of their revenue. Fourth, this should make them less dependent on their workers. Lastly, we should be able to observe that wage growth stagnates. The most effective way to measure the size of the Canadian financial market in line with the theory would be to look at the value of the financial in relative as well as fixed terms. Judging from figures 5.13 and 5.14, there has been a significant growth in the Canadian financial market, both as a share of GDP and at basic prices. "Finance as share of GDP" best controls for inflation and other macroeconomic trends, while simultaneously risking that the displayed growth is merely a result of changes to other components of GDP, such as a hypothetical collapse of a certain sector. To capture an imagine reflecting the real events, both measurements are included. The effect is highly similar in both, though with sharper fluctuations in the "share of GDP" data. Keep in mind the uncertainty surrounding lag. As long as its extent is unknown, one could argue that the change in finance as share of GDP is inconsistent. However, the consistent and unidirectional development of finance at basic prices is far more convincing. A critique of this conclusion would be that the discovered trend started prior to Bill C-67 and continued long after, except for a halt around 2007. It is then vital to remember the goal of finding a hoop here, not a smoking gun or doubly decisive. These data do not prove causality between steps two and three, or three and four, but they allow for the causal chain to proceed. This hoop test is thus passed. The Canadian financial market grew in the years following Bill C-67.

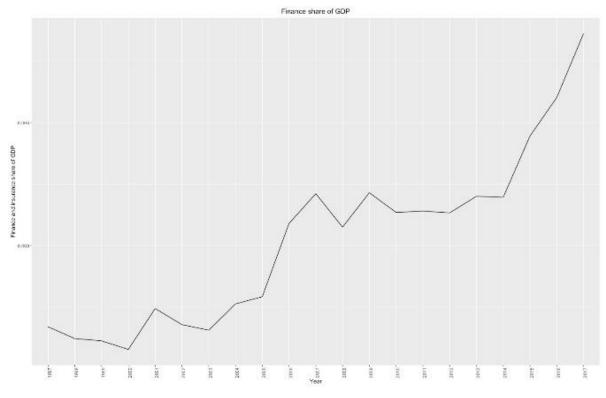
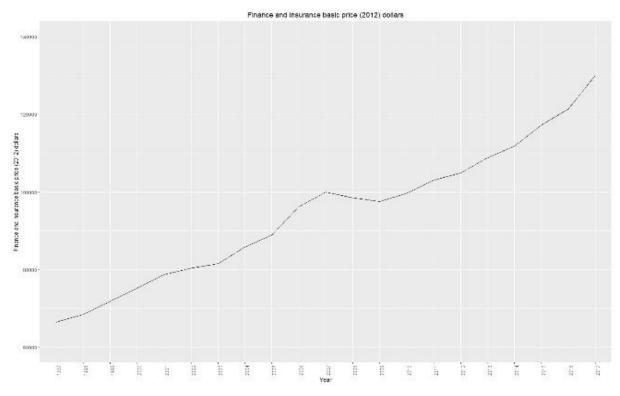


Figure 5.13: The financial sector as share of gross domestic product in Canada.



*Figure 5.14*: The financial sector value in Canada adjusted for inflation and set to 2012 levels in CAD (x1,000,000).

Next, we should be able to observe a shift in investment by non-financial firms from productive assets to financial assets. For the sake of commensurability, this is operationalised in line with existing literature as a change in the sources of income for non-financial firms (Stockhammer 2004, 729). An OECD report points to as a particularly prominent case of that shift, as non-financial firms started seeing better investment opportunities in financial products since 2000 (Tebrake and O'Hagan 2017, 181). The temporal positioning of this shift is, of course, perfectly situated relative to Bill C-67. Placing this CPO in the four tests outlined earlier is challenging. While it certainly can be considered a hoop test in that it must necessarily be found for the causal chain to continue uninterrupted, there is also some explicit dimension to the fact that previous research claims a causal link between the financial market's profitability and the shift in investment. Regardless, it is convincing evidence that this shift could have been a result of deregulation.

Step five in this mechanism is the decreased dependency of corporations on their employees. This can be tested by examining the number of wage settlement agreements that were made in the relevant period. As seen in figure 5.15, these data are inconclusive ("Collective Bargaining Trends in Canada, 1984-2014" 2017). While there is no doubt about a long-term downward trend – indicating decreased bargaining power for workers – one cannot make convincing conclusions based on this. If we consider the years 2000 – 2004 as step four (investment shift) is seen to start in 2000, one can certainly claim that corporations became less dependent on their workers as fewer settlements were made. However, the years 2005 – 2006 saw an increase of settlements. This V-turn development, combined with the long-term downward effect cannot distinguish the mechanistic effect under examination here. As such, mechanism three is rejected (figure 5.16).

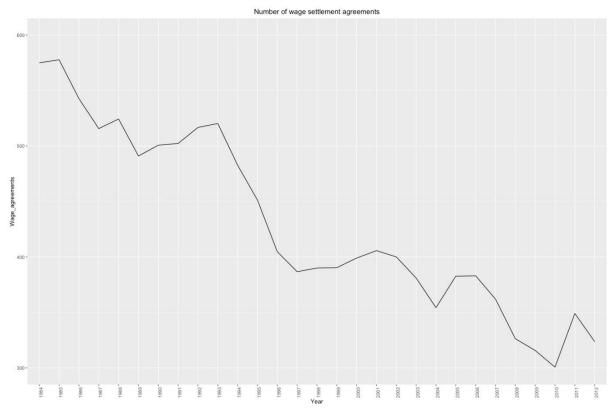
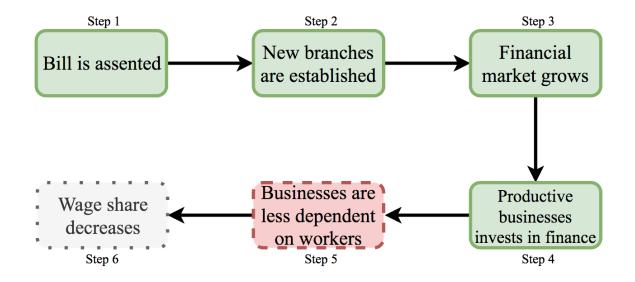


Figure 5.15: Number of wage settlement agreements in Canada.



*Figure 5.16*: The mechanism of shift in investment. Green/solid border = proven, red/half solid border = disproven, grey/dotted border = not examined.

#### 5.6.3 Wage share mechanism 3: Finance-led growth

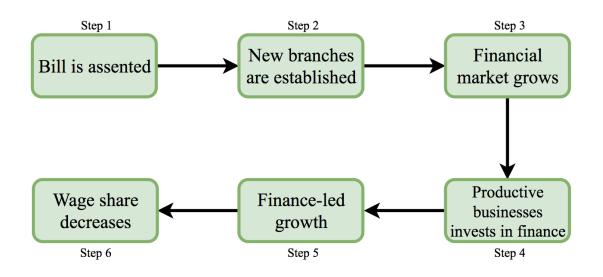
A final mechanism is constructed by combining the two wage share-mechanisms, where a finance-led growth occurs as a result of crowded out productive investments and that growth becomes entirely limited to the financial sector. First, financial markets should grow in size as a result foreign bank entry. Second, we should see that the productive sector investment shifts towards the financial sector. Third, we should see stagnant wages. Lastly, there should be economic growth. Economic growth should occur simultaneously to the stagnation of wages, as it is the combined effect of these that constitute the mechanism.

A larger financial market has already been determined to have occurred above in 5.6.2. Shift in investment from the productive sector to the financial sector was also found to occurred. The shift was found to be starting in 2000 and the stagnation of wages must be sequentially after the investment shift, so wage stagnation must occur immediately after 2000. Looking at figure 5.10, the wage growth does appear somewhat stagnant. With the exception of a small increase in 2003 followed by an equal decrease, real hourly average wages in Canada remained stable from 2000 until 2003. If we look at real hourly median wages in figure 5.11, we get a similar picture, although with a far clearer downward trend. This proves without doubt that wages stagnated. In addition to the more convincing trend in the latter, median wages also likely better capture the phenomenon under examination. The theoretical mechanism presented earlier in this thesis specifies that economic growth continues without benefiting workers. If this is true, there is a possibility that only the wealthiest receive wage increases. That could explain the difference in average and median wages, and finds support for the mechanism. This is sufficient evidence to support the hoop test that wages stagnated following the investment shift.

The final criterion is whether there was economic growth at the same time as wage stagnation. Wages stagnated in 2000 – 2003, so this is the period under we should observe economic growth. Referring back to figure 5.7 that was presented earlier, we can see that GDP growth was fluctuating in this period with an overall reduction in growth levels from 2000 until 2003, but still always remaining at positive values. In other words, the hoop test is passed and there was economic growth for the entire period where wages stagnated. This

85

means that every criterion of the mechanism of financial-led growth is fulfilled, as can be seen in figure 517. It is plausible that this mechanism contributes to explaining the effect of financial deregulation on wage share.



*Figure 5.17*: Path-dependent mechanism of finance-led growth. Green/solid border = proven, red/half solid border = disproven, grey/dotted border = not examined.

#### 5.7 Summary

We are then left with a picture that looks as follows: **Section 5.4 Foreign bank entry** shows that foreign bank branches were established in Canada, including at least one bank that explicitly attested this to Bill C-67, and a general growth in foreign bank value. **Section 5.5 Economic growth** has proven that there was no visible increase in financial support institutions after Bill C-67, there was no unambiguous increase in employment in the financial sector, though there was a significant increase in inward foreign direct investment. **Section 5.6 Wage share** illustrates that foreign bank branches are allowed to issue credit, they have the capital to do so, they receive a substantial amount of their income from credit rents, the credit levels of households explode upwards, and GDP is not led by wages. Additionally, I have shown a continued path from a growing financial market, through a shift in investment by productive businesses, to finance-led growth as illustrated by simultaneous

wage stagnation and economic growth. After now having presented the causal-process observations within the mechanistic framework, the next chapter will analyse them.

## **Chapter 6: Interpretive analysis**

This chapter ties together the theoretical expectations, the proposed hypotheses, the quantitative findings and the qualitative findings. The two have unique ontological foundations so the findings should also be seen as independent of each other. The use of multiple methods allows me to comment on the cross-case effect of financial deregulation and the within-case effect of foreign bank entry in Canada.

#### **6.1 Quantitative findings**

Based on the conceptualisation of financialisation and on the financialisation literature, I expect a dual effect of financial deregulation. The first effect is that one will experience economic growth, the other is that one will experience a decreased wage share. The first takeaway from the regression results is that measuring the effect of financial deregulation is challenging due to extreme homogeneity of values across the sample. The level of homogeneity causes four out of seven total dimensions of financial deregulation to be excluded as soon as fixed effects are applied. While coding decisions influence the nuance of variation one can capture, it is also an inherent challenge of studying financialisation that all researchers of the field must face. This limits the possibility of interpreting the regression results as "financial deregulation". The results should be interpreted as follows: out of deregulation of credit controls, barriers to bank entry and supervisory agencies, credit controls is seen to have the most consistent effect on economic growth, whereas banking supervision displays the clearest effect on wage share. Both of these bivariate relationships show overall statistical significance with near complete consistency in effect direction. The only potential caveat to complete consistency is the negative effect of banking supervision in the model without lag and positive effect on all the lagged models. This can, however, be interpreted as a continuous scale, starting negative and increasing positively with each lag.

The above are the most interesting individual findings. If we instead look at each outcome holistically, we can see that the majority of the coefficients on economic growth are negative. This means that these categories of financial deregulation *decrease economic growth*. They

88

are negatively associated with economic growth, which is in contrast to expectations. The expectations outlined in the theoretical framework indicate that financialisation causes economic growth. The findings here are an indication that this might not be the case. While the variable coverage is too narrow to make claims about all financial deregulation – and even less so to make claims about financialisation in general – they can tell us that deregulating credit controls and banking supervisory agencies are probably not an efficient route to take if one wishes to achieve economic growth, which is a common political goal. Deregulating the entry barriers for new banks may be more bountiful in the long run, as it is positively associated with economic growth after two and three years, though this too is overshadowed by inconsistency and statistical insignificance.

If we look at the effects on wage share, we can see a similar contradiction to the expectations. The majority of the variables and models are positively associated with wage share. This means that deregulating bank entry barriers or banking supervisory agencies will, after a first year of negative effects, likely *increase the wage share of the economy*. The results of credit control deregulations are too inconsistent to regard.

What do these results tell us about the world and about the theory on which the expectations were generated? While complete theory-building is beyond the boundaries of this thesis, one can imagine that the financial deregulation contributes to instability of the financial sector and corresponding decrease in the value of financial assets. If that instability and value drop is isolated to the financial sector, then it would decrease economic growth without affecting workers' wages. As long as the economy decreases more than wages, the latter will necessarily constitute a larger portion of the former. However, this hypothesised scenario would not make sense if the claim that the financial sector is increasingly entrenched in the real economy were true. It could be the case that financial sector penetration of the real economy is limited to a few cases, such as perhaps the United States which has received much scholarly attention. A comparative study of the effects of financial deregulation in two cases where one has experienced financial sector entrenchment in the real economy and the other has not would be able to shed light on this puzzle.

#### **6.2 Qualitative findings**

While the regression results are valuable, they were only half the reason for conducting a regression analysis. The other half was case selection for the purpose of process tracing. The majority of the contributions of this thesis come from the process tracing.

The initial finding from studying deregulation of foreign bank entry in the form of Bill C-67 in Canada is that the bill achieved its intended goal of inviting foreign banks to establish local branches. This finding is a crucial hoop test, as its failing would immediately interrupt the causal chain. As foreign banks did establish themselves in Canada as a result of deregulation, five mechanisms adopted from existing literature and one mechanism constructed by myself from existing ones are tested. Starting with the mechanisms that related the introduction of foreign banks to economic growth, there is found no support for a growing support apparatus or employment in finance as bringers of wealth. I do, however, find support for the mechanism that sees foreign direct investment inflow as a pathway to economic growth. Though there could of course be other pathways that are not theorised yet, and though there are other pathways in the existing literature, I have included the ones that are compatible with the theory and case at hand.

Deregulating foreign bank entry barriers did contribute to economic growth in Canada as the multitude of international banks that established offices there brought much capital with them. The temporal proximity of these events ties the Bill C-67 to the establishment of foreign bank branches, foreign direct investment inflow and economic growth. The nature of foreign bank regulation makes it difficult to employ these findings in future policy recommendations. Canada has already allowed foreign banks to establish local branches and cannot repeat that deregulation since it now already is allowed. However, as long as they continue to allow so, more banks will likely be established and contribute to economic growth. Although the internal validity is the strongest selling point for process tracing analysis, that does not mean that a similar effect like the one seen after deregulating foreign bank entry cannot be found elsewhere. There is nothing in the findings that indicate this mechanism to be Canada-specific. However, the absence of statistical significance for

ENTRYBARRIERS and the presence of a negative effect direction does not render this the most likely effect to be found outside Canada.

Moving on to the effect of foreign bank entry on wage share, three other mechanisms are examined. No support is found for the mechanism of investment shift. While such an investment shift did occur, it did not reduce the businesses dependency on workers and correspondingly the workers' bargaining power. Support is, however, found for the credit-led growth mechanism. A chain of steps links the foreign bank branches to an increased use of credit which, through increased consumption, contributes to GDP without benefiting workers and their wages. While deregulating foreign bank entry can only be done once to the (full) extent that Canada did in 1999, this does indicate that other institutions that may contribute to increases lending may have a similar effect as foreign banks did. That discover highlights the value of unpacking the mechanisms. What may otherwise just have been a claim that foreign bank entry caused decreased wage share is now more nuanced and reflective of real events. Individuals concerned about decreasing the wage share should not only be wary of foreign bank deregulations, but of deregulating any institution or activity that may contribute to credit-led growth.

Lastly, I also find that finance-led growth contributed to a decreased wage share. The profitability of the financial sector in the aftermath of Bill C-67 caused productive businesses to invest in the financial sector rather than in expanding their productive services, which contributed to economic growth without contributing to workers' wages, resulting in a decreased wage share in Canada. The issue of using economic growth and GDP as a metric for desired economic trends, which is a recurring theme of this thesis, is seen here. The dominance of economic growth as a metric risks completely overshadowing other metrics that affect more induvial lives, causing countries and voters to support policies that do not benefit workers. Canada and other countries should be transparent about the anticipated effects of various policy choices, and the background for those choices. Other financial deregulations or other policies entirely that contribute to the profitability of the financial sector risks boosting GDP while leaving workers behind. This was definitely the case in Canada.

Yet, although I allude to externalising the qualitative findings, these are merely open questions of whether the same causal mechanisms *could* exist elsewhere. In my analysis I found no CPOs that indicated the causality to be case-specific. That does not imply that the findings are generalisable, but it does not imply that they necessarily cannot be found elsewhere either. External validity is still a key drawback from using any kind of within-case analysis, including process tracing (Schimmelfennig 2014, 104). That means that the results found here should not be expected to be applicable to other cases than Canada. That is not an issue as long as we are transparent about what claims we can make. The objective of conducting process tracing was to make causal inferences within the case, not beyond it. That objective has been accomplished. However, the extent to which this limitation to external validity is true is dependent on the nature of the causal process observations.

Finally, the contradictory results of finding foreign bank entry barrier deregulation in Canada and the regression displaying no significant effect of bank entry barriers is worth noting. The most likely explanation to this is that the effect of the other countries in the regression are contradictory to Canada and thus negated the effect of Canada. The qualitative findings are seen as more reliable here than the regression findings due to the prowess of process tracing in internal validity.

# **Chapter 7: Summary**

This thesis has examined whether there exists a dual effect of increased economic growth alongside a decreased share of total income appropriated by labour. Such an effect is found to be present in Canada after deregulating foreign bank entry barriers with Bill C-67 in 1999. After assessing potential causal mechanisms adopted and constructed from theoretical literature, multiple paths are found to link the independent and dependent variables. Lessons from Canada tell us that foreign bank entry may accompany foreign direct investment and consequent economic growth, but may also bring with them decreased wage share through both credit-led growth and finance-led growth.

The results from the regression analysis on OECD-member states do, however, not support the research question. While a dual effect is found from credit controls on economic growth and from banking supervisory agency deregulation on wage share, both of these effects are in the opposite direction than what was expected from the research question. This does not render the findings any less valuable, though. To confirm these relationships, future research should conduct hypothesis testing, focusing only on cases where credit control deregulation and banking supervisory agency deregulation are present. Neither of these deregulations were found to be present in Canada and cannot as such be confirmed or rejected. Still, the findings in Canada does moderately weaken our confidence in these two deregulations.

The methodological approach employed in this thesis make important contributions to the literature. Some aspects of financial deregulation are shown to be more impacting than others, while some mechanisms of foreign bank entry are proven to have causal effects. In addition to the abovementioned hypothesis testing, some still unanswered questions for future researchers to examine are the role of lagged effects on financialisation and the effects of excluded categories of financial deregulation. Furthermore, future research may utilise the findings presented here to continue Lieberman's nested process by adjusting theoretical expectations and testing again on another case. For now, we know that financial deregulation played a role in Canada after 1999.

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# Appendix A: Quantitative data tests

## Multicollinearity

Variance Inflation Factor test for multicollinearity could not be conducted due to the presence of aliases in the models. This in itself is a result indicating multicollinearity. A correlation test is then conducted on the independent variables, producing the following results.

	DIRECTEDCR	CREDITCONT	INTRATECONT	ENTRYBAR
	EDIT	ROLS	ROLS	RIERS
DIRECTEDCRE	1	0.991606180	NA	0.01043083
DIT				
CREDITCONTR	0.99160618	1	NA	0.04757888
OLS				
INTRATECONT	NA	NA	1	NA
ROLS				
ENTRYBARRIE	0.01043083	0.047578875	NA	1
RS				
BANKINGSUPE	0.06772118	0.103054030	NA	0.08950721
RV				
SECURITYMA	NA	NA	NA	NA
RKETS				
INTEREST_RA	-0.01493823	0.002207637	NA	-0.34421663
TE				
INFLATION	-0.07090485	-0.049736332	NA	-0.19725408
UNION_DENSI	0.02816097	0.047035847	NA	0.04637372
ТҮ				
UNEMPPROTE	-0.27158049	-0.255280320	NA	0.11278601
CTION				
FEMLABOURF	-0.04250568	-0.014376253	NA	0.10413340
ORCE				

WARDUMMY	0.04571344	0.046406051	NA	0.02191905

	BANKINGSU	SECURITYM	INTEREST_RAT	INFLATION
	PERV	ARKETS	E	
DIRECTEDCRE	0.067721184	NA	-0.014938234	-0.070904850
DIT				
CREDITCONTR	0.103054030	NA	0.002207637	-0.049736332
OLS				
INTRATECONT	NA	NA	NA	NA
ROLS				
ENTRYBARRIE	0.089507214	NA	-0.344216628	-0.197254078
RS				
BANKINGSUPE	1	NA	-0.180592719	0.009027568
RV				
SECURITYMAR	NA	1	NA	NA
KETS				
INTEREST_RAT	-0.180592719	NA	1	0.558802975
Е				
INFLATION	0.009027568	NA	0.558802975	1
UNION_DENSIT	-0.268496005	NA	0.212926649	-0.064520324
Υ				
UNEMPPROTEC	-0.163187952	NA	0.092621997	0.170887942
TION				
FEMLABOURF	0.016617873	NA	-0.054126880	-0.211763836
ORCE				
WARDUMMY	0.074670920	NA	-0.042820815	-0.010900402

	UNION_DEN	UNEMPPROT	FEMLABOURF	WARDUMM
	SITY	ECTION	ORCE	Y
DIRECTEDCRE	0.02816097	-0.27158049	-0.04250568	0.04571344
DIT				

CREDITCONTR	0.0470358	-0.25528032	-0.01437625	0.04640605
OLS				
INTRATECONT	NA	NA	NA	NA
ROLS				
ENTRYBARRIE	0.04637372	0.11278601	0.10413340	0.02191905
RS				
BANKINGSUPE	-0.26849601	-0.16318795	0.01661787	0.07467092
RV				
SECURITYMAR	NA	NA	NA	NA
KETS				
INTEREST_RAT	0.21292665	0.09262200	-0.05412688	-0.04282082
Е				
INFLATION	-0.06452032	0.17088794	-0.21176384	-0.01090040
UNION_DENSIT	1	-0.08281011	0.58367382	-0.04897514
Y				
UNEMPPROTEC	-0.08281011	1	-0.26955625	-0.06636904
TION				
FEMLABOURF	0.58367382	-0.26955625	1	0.02012210
ORCE				
WARDUMMY	-0.04897514	-0.06636904	0.02012210	1

# Heteroskedasticity

The Breusch-Pagan test produces the following result.

BP = 2.6582, df = 9, p-value = 0.001639

### Autocorrelation

The Durbin-Watson test produce the following result.

DW = 0.45389, p-value < 2.2e-16