

A COMPARATIVE ANALYSIS OF FINANCIAL REGULATION REFORMS
IN TURKEY AND POLAND: EVIDENCE FROM THE 2000S



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Evidence from the 2000s

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- this thesis contains no material that has been submitted or accepted for a degree or diploma in any other educational institution;
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ABSTRACT

A Comparative Analysis of Financial Regulation Reforms in Turkey and Poland:

Evidence From the 2000s

This thesis focuses on identifying the determinants of financial regulation reforms. It investigates the reasons behind the introduction of or changes to financial regulations by governments and other regulators, with specific reference to the financial regulations undertaken by Turkey and Poland in the 2000s. The research question is explored from a comparative political economy perspective, and the answer is arrived at by employing the most similar systems design method using two cases. This limited number facilitated an in-depth comparative analysis. The determinants that I hypothesized would have an effect on financial regulations were domestic learning, policy diffusion, global shocks, local shocks, financial development, and trade development. Both qualitative and quantitative methods were used to investigate the effects of these factors. The results are largely compatible with each other. The findings in this thesis provide evidence that these variables are effective in financial regulation reforms, but there are significant differences in the direction of their effects. One significant difference is observed in the learning factor. Both exogenous (policy diffusion) and endogenous (domestic learning) types of learning turned out to have a negative effect on the pace of financial liberalization reforms in Turkey and Poland. The thesis finds that this difference is primarily the result of the rise in state intervention in response to financial crises that triggered concerns about financial stability. The findings further suggest that the effects of these factors vary across critical junctures and spatial and temporal dimensions.

ÖZET

Türkiye ve Polonya'daki Finansal Düzenleme Reformlarının Mukayeseli Analizi:

2000'li Yıllardan Kanıtlar

Bu tez, finansal düzenleme reformları belirleyicilerinin tespitine odaklanmaktadır. 2000'li yıllarda Türkiye ve Polonya tarafından yapılan finansal düzenlemelere özel olarak atıfta bulunarak, hükümetler ve diğer düzenleyiciler tarafından finansal düzenlemelerin getirilmesi veya değiştirilmesinin ardındaki nedenleri araştırmaktadır. Araştırma sorusu, karşılaştırmalı siyasal ekonomi perspektifinden değerlendirilmekte ve en benzer sistem tasarım yöntemi kullanılarak ve az sayıda vaka seçilerek yanıtlanmaktadır. Bu vaka seçimi tercihi, derinlemesine bir karşılaştırmalı analiz yapmaya imkan sağlamaktadır. Finansal düzenlemeler üzerinde etkili olduğunu öne sürdüğüm belirleyiciler, yerel öğrenme, politika yayılımı, küresel şoklar, yerel şoklar, finansal gelişme ve ticaret gelişimidir. Bu değişkenlerin etkileri, hem nitel hem de nicel yöntemler uygulanarak araştırılmaktadır. Sonuçlar büyük ölçüde birbiriyle uyumludur. Bu tezde elde edilen bulgular, bu değişkenlerin finansal düzenleme reformlarında halen etkili olduğunu, ancak etkilerinin yönünde önemli değişiklikler olduğunu kanıtlamaktadır. Önemli değişikliklerden biri öğrenme faktörünün etkisinde görülmektedir. Hem dışsal (politika yayılımı) hem de içsel (yerel öğrenme) öğrenme türleri, Türkiye ve Polonya'daki finansal liberalleşme reformları üzerinde olumsuz etkiye sahip olmaya başladı. Tez, bu değişikliğin öncelikle finansal istikrara ilişkin endişeleri tetikleyen finansal krizler nedeniyle yükselen devlet müdahaleciliğinden kaynaklandığını ortaya koymaktadır. Bulgular ayrıca, Türkiye ve Polonya'da yerel ve küresel şokların zıt etkilerinde gözlemlendiği gibi, bu değişkenlerin etkisinin kritik noktalara ve mekânsal ve zamansal boyutlara göre değiştiğini göstermektedir.

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DEDICATION

This dissertation is dedicated to my beloved daughter Feyza.



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ABBREVIATIONS

BCBS	Basel Committee on Banking Supervision
BIS	Bank for International Settlements
BRSA	Banking Regulation and Supervision Agency of Turkey
BU	Banking Union
CBRT	Central Bank of the Republic of Turkey
CGF	Credit Guarantee Fund
CMB	Capital Markets Board of Turkey
CPE	Comparative Political Economy
CRD	Capital Requirements Directive
DTI	Debt-to-Income
EC	European Commission
ECB	European Central Bank
EMU	Economic and Monetary Union
ESM	European Stability Mechanism
ESRB	European Systemic Risk Board
EU	European Union
FDI	Foreign Direct Investment
FRI	Financial Regulation Index
FSAP	Financial Sector Assessment Program of World Bank
FSB	Financial Stability Board
FSC	Financial Stability Committee of Turkey
FSF	Financial Stability Forum
FX	Foreign Exchange

GARCH	Generalized Autoregressive Conditional Heteroscedasticity
GFC	2008 Global Financial Crisis
GDP	Gross Domestic Product
IMF	International Monetary Fund
ISI	Import Substitution Industrialization
KNB	The Commission for Banking Supervision of the NBP
LCR	Liquidity Coverage Ratio
LTV	Loan-to-Value
MDSD	Most Different Systems Design
MiFID	Markets in Financial Instruments Directives
MSSD	Most Similar Systems Design
NATO	North Atlantic Treaty Organization
NBP	National Bank of Poland
OECD	Organization for Economic Cooperation and Development
OLS	Ordinary Least Squares
PFSA (KNF)	Polish Financial Supervisory Agency
RWAs	Risk-Weighted Assets
SDIF	Savings Deposit Insurance Fund of Turkey
SIBs	Systemically Important Banks
SSM	Single Supervisory Mechanism
UK	United Kingdom
UN	United Nations
US	United States
VIFs	Variance-Inflation Factors
VoC	Varieties of Capitalism

CHAPTER 1

INTRODUCTION

The global economy has witnessed several financial crises and financial regulation reforms over the last few decades. Countries all over the world are striving to achieve sustainable growth, strong external balance, sound financial systems, and reduced levels of income inequality. To achieve these goals, they have implemented reforms that affect financial markets and institutions, politics, structural economics, and foreign trade. Thus, financial regulation reform became an important research area in the field of political economy. However, because the number and scope of studies that focus on the reasons behind financial regulation reforms undertaken in the 2000s, we do not have a comprehensive picture of the reforms of that period.

The scarcity is more apparent in quantitative research. Abiad and Mody (2005) conducted an important quantitative study, but the data they used covered a period before the 2000s. Financial regulation reforms initiated in different countries around the world in the 2000s provide evidence that the effects of the determinants have changed drastically. I used the financial regulation reforms in Turkey and Poland between 2003 and 2018 and conducted both qualitative and quantitative research on the effects of financial regulation reform determinants. I selected Poland and Turkey as cases because they meet the requirements of the most similar systems design (MSSD), explained in detail in Chapters 3 and 4. The comparative analysis of these two cases allows me to identify reasons behind differences and shifts in effects of aforesaid determinants.

1.1 Research question

The research question of this dissertation is “Why do governments or regulatory authorities introduce financial regulation reforms?” To answer this question, I focus on three broad categories as independent variables that are identified in theories of political economy as determinants of financial regulation reforms: global and local shocks, learning and diffusion, and political and economic conditions.¹ This dissertation finds that these determinants are still effective in the current stage of capitalism. However, it also shows that there are significant differences in the way these determinants influence financial regulation reforms.

1.2 Research puzzles

To examine changes in the process of financial regulation reform historically, I constructed a financial regulation index (FRI) as dependent variables for Turkey and Poland. The FRI that I constructed is similar to the index used in the literature in the sense that it ranges from 0 (fully repressed) to 1 (fully liberalized). The details of indexation for the FRI are given in Chapter 3. The FRIs for Turkey and Poland are presented in Figures 1 and 2, respectively. The trends in each FRI are different even though Turkey and Poland are largely similar economies from an MSSD point of view. The FRI trends for Turkey and Poland are examined in three historical episodes, indicated with dotted vertical lines in Figure 1 and Figure 2. A detailed discussion is given in Chapter 5.

¹ See Abiad and Mody (2005) for details.

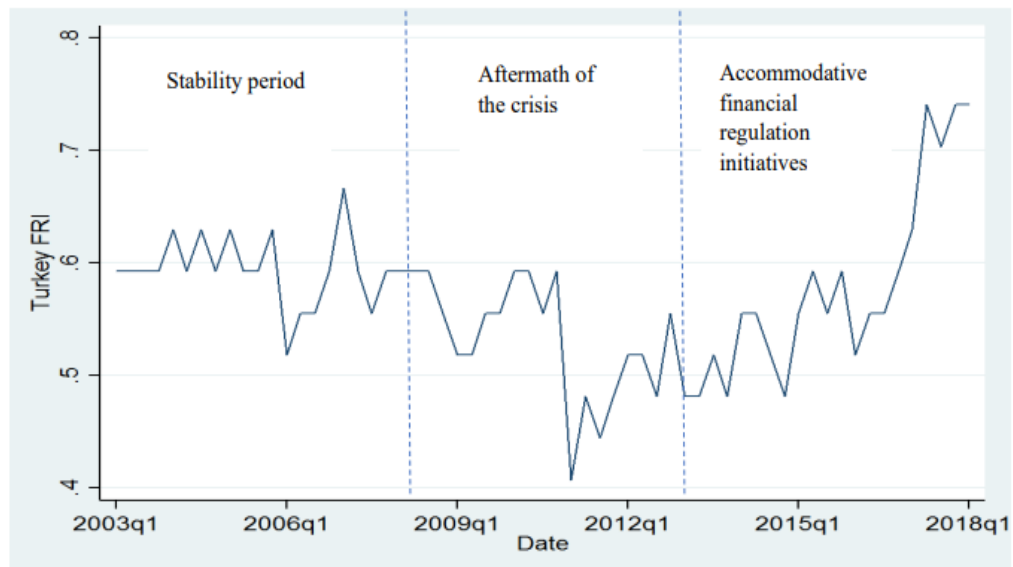


Figure 1. FRI for Turkey and Separation of Historical Episodes

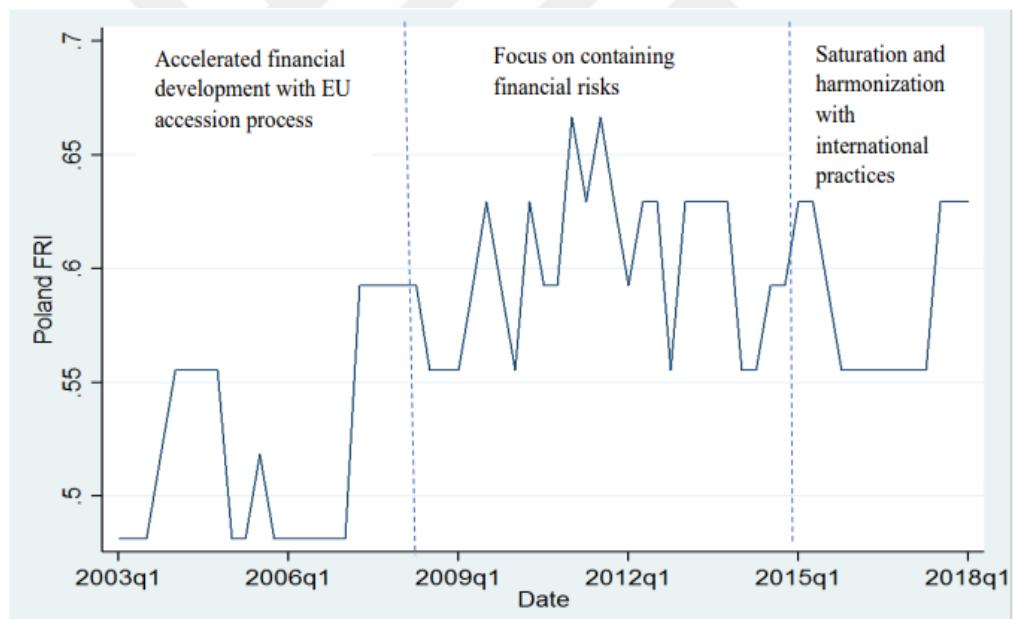


Figure 2. FRI for Poland and Separation of Historical Episodes

The Turkey FRI followed a stable trend in the first period. Financial liberalization reforms in Poland, however, revealed an upward trend. In the second period, which began with the outbreak of the 2008 global financial crisis (GFC), the FRI for Turkey showed a downward trend, which meant that the financial regulations

were repressive. By contrast, the Poland FRI revealed an upward trend in the years immediately following the GFC, implying liberalizing financial regulations. In the third period, when Turkey faced local shocks triggered by political unrest, election cycles, and macroeconomic imbalances, the rising trend in the Turkey FRI was salient, while the tendency in the Poland FRI was more stable and saturated.

The interpretation of different trends in the FRIs for Poland and Turkey gets more complicated when the results of the quantitative analysis that I conducted are added to the analysis (see Chapter 6). The quantitative analysis results suggest that local shocks have a liberalizing impact, and global shocks have a repressive effect on financial regulation reforms in Turkey, but these same factors run in completely opposite ways in Poland. Financial development affects the Poland FRI significantly in a liberalizing way, but it does not have any effect on the Turkey FRI. The puzzle gets more challenging when findings from existing studies—Abiad and Mody (2005) in particular—are taken into account. Using data for the period of 1973-1996, they found that domestic learning and policy diffusion had a liberalizing impact on financial regulation reforms. However, the quantitative analysis results for the 2000s in this dissertation suggest that the repressive effect of policy diffusion is significant in both Poland and Turkey; yet the repressive effect of domestic learning is significant for Poland, while it is less evident for Turkey. These observations present the following puzzles that I deal with in this dissertation: “Why do the factors that shape financial regulation reforms operate in different ways throughout time and spatial dimensions?” and “Why do local and global shock factors operate in opposite directions in countries which are quite similar?” My dissertation addresses these questions by selecting financial regulation reforms in Turkey and Poland which fit the most similar cases model and carefully examines the financial regulation

processes in these countries from a comparative political economy (CPE) perspective.

I define financial regulation reform as any considerable change in existing financial regulations or the introduction of a new financial regulation that influences financial markets considerably. For the purpose of this dissertation, financial regulation reforms do not need to have a wide scope or deep impact on national or international economies to qualify as a reform. Instead, irrespective of who the regulator is and the nature of the scope, any new regulation or amendment to an existing regulation that influences financial markets significantly, such as changes in monetary and fiscal policy regulations, are counted as financial regulation reforms. In this dissertation, the terms financial reform, financial regulation reform, and financial regulatory reform are used interchangeably.

Drawing on economic theory, the 2009 Geneva Report (2009) outlines three main aims of financial regulations:

1. to constrain the use of monopoly power and the prevention of serious distortions to competition and the maintenance of market integrity; 2. to protect the essential needs of ordinary people in cases where information is hard or costly to obtain, and mistakes could devastate welfare; and 3. where there are sufficient externalities that the social, and overall, costs of market failure exceed both the private costs of failure and the extra costs of regulation. (p.2)

These objectives make heterogeneity intrinsic to financial regulations, related institutions, and countries.

In a globalized world, any economic event in one nation, whether its effect is positive or negative, invariably has an effect on other nations. This phenomenon, referred to as financial contagion, has attracted the attention of academia in recent decades. Dimitriou et al. (2013) define two types of contagion: fundamental and pure. They state “some researchers argue that there are “fundamental” reasons for a

significant increase in cross-market linkages after a shock to one country, while others refer to “pure” contagion which cannot be explained by changes in fundamentals” (Dimitriou et al., 2013, p.46) . In the case of the latter, significant increases in cross-market linkages might also arise from abrupt shifts in risk appetite. Short-term interest rates, bond yields, and equity prices also play an important role in volatility spillover and international financial transmission (Aloui et al., 2011; Ehrmann et al., 2011). Large asset-price spillovers resulting from country-specific shocks are thought to be amplified when there is a substantial rise in net credit and financial intermediation activities in developed countries as a result of financial integration (Mendoza and Quadrini, 2009). With regard to the fundamental contagion channel, closer movements in cycles of real economic activity further explain how volatilities in one country can be transmitted to another. Business cycle synchronization between emerging and developed countries can result from factors such as external demand and the price of internationally traded goods. Financial integration and globalization are also considered to have a significant role in the strengthening of the degree of business cycle synchronization (Artis and Okubo, 2008; Fidrmuc and Korhonen, 2009).

The global financial crisis (GFC) of 2008 is a good example of how financial turbulence in one country can influence the financial markets of other countries and trigger both global and local reforms. Financial problems in the U.S. mortgage market in 2006 led to an economic downturn in 2008, which, owing to integration, then affected economies globally, including emerging markets like Turkey (Uckun and Doerr, 2010). The crisis forced the U.S. Federal Reserve and relevant authorities in other countries to take measures to prevent the crisis from spreading, but these were unsuccessful. Thus, what started out as a U.S. financial dilemma eventually

became a global crisis when it spilled over into other countries (Eroğlu and Eroğlu, 2011). Claessens et al. (2010) examine the economic costs and geographical reach of the 2008 GFC. Its catastrophic impact was observed in the form of high levels of financial stress, reduced economic activity, rapid spillovers, and subsequent collapses in international trade. The magnitude of the effect, however, differed markedly across emerging countries. It was not surprising to see that countries with closer ties to the U.S. financial system were the first ones affected. Empirical studies show that countries with high vulnerabilities got most affected (e.g. rapid credit growth, high leverage, asset price bubbles, and large current account imbalances). Countries with more policy intervention capability recovered from the crisis earlier than others, but there was a growing awareness of the need for reforms to macroeconomic policy and financial regulation (Claessens et al., 2010).

Such events leave a scar on the global economy, so it is important to re-think existing financial regulations and to determine the need for financial reforms.

Independent researchers and analysts who represent governments and regulatory bodies are spending more and more time reviewing the dynamics of financial reforms. The reforms that follow a crisis exhibit distinct features. The features of the reforms of the 2000s stand out as particularly unique and are therefore interesting topics of study that can be examined both qualitatively and quantitatively.

The first of these features is financial deregulation. In the two decades that preceded the year 2000, developed countries exhibited trends in financial deregulation that included lifting the ceiling on interest rates, eliminating restrictions on banking activities (such as investment and commercial banking), and removing limitations on geographical branching. They also increased deposit insurance, which

resulted in sustaining financial deepening and a low level of supervision of derivative instruments.

For these kinds of reforms, Sherman (2009) cites the U.S. as a good example. Before the 2008 crisis, the U.S. was experiencing a rise in the volume of transactions in derivative markets, which brought potential risks, as these markets lacked a traditional clearinghouse structure, which created uncertainty and opaqueness in transactions. Actually, the high risk of derivative instruments was later determined to be a major cause of the 2008 crisis. Sherman (2009) also notes the repeal of the Glass-Steagall Act, which lifted all restrictions on the collection of banking securities and insurance operations for financial institutions. Around the same time, financial reforms in France allowed expansionary activities, removing interest rate ceilings and boosting competition between financial intermediaries (Melitz, 1990).

In the U.K., financial deregulation in the 1980s eased liquidity constraints on households, creating a rise in real interest rates on consumption (Bayoumi, 1993). In Korea, policymakers adopted reforms that created new financial instruments, privatized commercial banks, widened the scope of business for financial firms, and increased flexibility in terms of the interest rates banks could charge on loans (Edwards, 1987).

Meanwhile, in emerging markets, reforms were being implemented for financial liberalization purposes, which encouraged expansionary policies. Hermes and Lensink (2005) report that governments that were aiming to control their country's financial markets (i.e., financial repression) had been severely criticized, so those countries implemented financial reforms to eliminate the factors that were preventing the efficient functioning and sound development of financial system. These included measures such as privatizing banks, allowing foreign institutions to

enter the financial sector, relaxing capital controls and adopting flexible exchange rate regimes—all of which contributed to financial liberalization in emerging markets. However, in the literature, there are claims that such liberalization policies and the corresponding financial openness in such countries might have contributed to the heightened volatilities in domestic financial markets (Edwards, 1987; Stiglitz, 2004; Umutlu et al., 2010).

From another perspective, New-Keynesians were criticizing financial liberalization theories, claiming that financial problems can be explained by fundamental market failures that were due to a lack of information and the fact that markets are inherently unpredictable (Stiglitz, 1985). Risk accumulation in emerging countries, accompanied by heightened sensitivity to financial conditions, has resulted in financial turmoil, with substantial volatility in equity markets and sizeable depreciations in currencies, as can be seen in the crises in Mexico, Asia, and Russia—most notably during the GFC (Miles, 2002). The main feature of post-crisis reforms in this regard is risk minimization, as opposed to financial development and liberalization. Decisions to minimize risks were taken to avoid market failures, moral hazard, systemic risks, information frictions, and speculative motives (Balseven, 2016). Regulatory measures have been designed specifically for each source of risk. These include countercyclical capital buffers, the application of liquidity coverage ratios and net stable funding ratios, the shifting of derivatives trading to central clearing platforms, and systemic risk assessments and stress testing procedures combined with macroprudential measures. In other words, they target credit, liquidity, and counterparty and contagion risks (Cecchetti and Schoenholtz, 2017).

The second feature of post-crisis financial reforms in the 2000s is a recognition of the need for financial governance. Historical evaluations indicate that

some reforms were realized or forced through initiatives of international organizations under stabilization programs or foreign aid, but they were not sustained in the long run due to lack of proper governance and monitoring mechanisms. As the global economy grew after World War II, several regulatory bodies were formed, including the IMF, the Basel Committee, and the Organization for Economic Cooperation and Development (OECD). These bodies were all created to promote the global economy while ensuring financial soundness in world markets. However, cracks in financial systems gave rise to inconsistencies, so most of the time, governments and agencies were unable to prevent or stop a financial crisis, let alone keep it from spreading. As a result, analysts and the authorities re-evaluated financial regulations and set about implementing new rules and amending old ones, thus bringing about financial reforms. It is important to note here that the speed at which financial reforms are implemented and the strictness with which they are to be applied need to be carefully calculated before any steps are taken. A small misstep in implementation causes new potholes to appear in the financial system, which opens the door for new financial crises, thus creating a never-ending vicious cycle. Krueger (1993) summarizes this point as follows: “Most reforms seem to take place in one of two circumstances: either a new government comes to power or a perceived economic crisis prompts action.” Hence, in the period following a crisis, compliance with financial governance principles is prioritized. In fact, Levine (2012) and Barth et al. (2012) emphasize that financial turbulence not only reflects macroeconomic imbalances and toxic financial instruments, it also reflects failures in the governance of financial reforms that emanate from poorly-designed policies. In other words, financial turbulence paves the way for policies that encourage excessive risk-taking and that distort the allocation of savings in an economy. An increased need for

coordination and governance creates a need for new financial regulations under the auspices of supranational organizations.

The third feature of post-crisis reforms is their broad scope. Historically, reforms have tended to center on traditional financial intermediation activities. These include financial deepening and the diversification of financial products, but globalization has required that reform frameworks have a wider scope. They need to focus on different financial firms and markets, including investment banking, insurance companies, and shadow banking activities, as well as derivative transactions, mutual funds and hedge funds. Harrington (2009) provides a rich discussion of how the recent crisis affected the insurance business and how the U.S. government provided assistance to one of the largest insurance companies in the market. He also discusses the possibility of federal chartering and regulating insurers to minimize systemic risk. Another example of how financial reforms have enriched content to cover the nonbank institutions is observed in recent regulatory measures in Europe. The Markets in Financial Instruments Directives (MiFID), for instance, was introduced in 2007 to support the functioning of a single market in the EU by protecting investors, sustaining financial integration within the Union, and promoting transparency. In 2017, that regulation was amended,² expanding the scope to cover reporting and communication standards about financial instruments, bond and equity transactions, over-the-counter markets, investment banking activities, high frequency trading and commodity derivatives.

² <https://www.esma.europa.eu/policy-rules/mifid-ii-and-mifir> Last accessed 14 September 2022.

1.3 Contribution to the literature and outline of the dissertation

The current literature pays considerable attention to studies on the consequences of reforms and of real economic dynamics. Examining financial reforms in China, Brandt et al. (2001) find that reforms have led to an improvement in (a) asset quality, as measured by non-performing loans ratios and (b) funding conditions, as measured by the loan-to-deposit ratio. With regard to implications for bank performance, Naceur and Omran (2011) examine the effect of bank regulation on performance. They determined that financial regulations that are proxied by reserve requirements have a significant positive impact on bank performance when viewed through return on assets and net interest margins. Lagoarde-Segot (2009) investigates the impact of financial reforms on time-varying microstructures. Focusing on emerging markets, he suggests that emerging market microstructures are associated with specific institutional reforms. Harris et al. (1994) analyze the consequences of financial liberalization in India in the real sector. Their overall conclusion is that the financial liberalization benefited firms by enabling them to access more financing opportunities. Another branch of the literature focuses on assessing financial regulation and its effect on the real economy consequences. Levine et al. (2000) suggest “legal and accounting reforms that strengthen creditor rights, contract enforcement, and accounting practices can boost financial intermediary development and thereby accelerate economic growth” (p.34). Holzmann (1997) highlights the impact of Chile’s 1981 pension reform on financial market developments, total factor productivity, capital formation, and saving behavior. Apart from the effect on savings, the majority of the results are in line with their expectations. Bandiera et al. (2000) employed an econometric analysis to assess the impact of financial

liberalization in developing countries on private saving. They claimed that relaxing liquidity constraints causes a decrease in private savings.

In addition to examining the consequences of reforms, we need to analyze what prompted them. I take each reform to be a discrete event that is influenced by domestic, international, and indeed global factors; these may include politico-economic conditions and periods of financial distress or crisis. All these factors warrant due attention. Taking a political economy perspective, this dissertation therefore analyzes the fundamental dynamics that contribute to the introduction of financial regulation reforms, which can be categorized in three broad titles: shocks, learning and diffusion, and political and economic conditions.

Shocks occur from time to time, triggering both financial reforms and reversals. Shocks can be either domestic or global. Domestic shocks include events such as a change in the ruling government, excessive political turmoil, crises in banking or balance-of-payment systems, or a significant increase in inflation. A global financial shock, by contrast, alters the policy stance of prominent monetary authorities and creates significant shifts in the macroeconomic indicators of leading economies such as the U.S. and EU. Learning results when they see the outcomes of initial reforms and recognize the benefits, which motivates them to develop even more reforms. More specifically, in a multi-stage reform framework, new reforms may affect the pace of future financial reform decisions, as they provide information about potential outcomes.³ The extant literature emphasizes the external sources of the learning process—regional or global diffusion of policies.⁴ The idea is that a country's financial reform decisions can be influenced by the policy decisions of a leading country in their region or elsewhere in the world. Finally, a country's

³ See Krueger (1993) for details.

⁴ See Elkins and Simmons (2005) and Brinks and Coppedge (2001) for details.

political and economic situation can have an important impact on policy decisions. Other factors that influence decisions about reforms in financial regulation include the political orientation of the ruling government, election rules, the type of political system, the legal system, a rising level of macroeconomic uncertainty, the degree of financial development, and trade liberalization.

Considering the above categories, I examined the effect of variables that influence financial regulation reform decisions: global and local shocks, learning and diffusion, and trade openness, using both qualitative and quantitative methods.

Although there are studies in the current literature that qualitatively analyze the factors that affect financial regulation reform decisions, there are none, to the best of my knowledge, that use both qualitative and quantitative methods. To fill this gap, I used a combination of qualitative and quantitative methods to conduct a comparative case study that will shed light on factors that contribute to financial reform processes. In other words, this dissertation differentiates itself from the existing literature by adopting Clift (2014)'s methodological pluralism.

There are inspiring studies in the literature that explore the factors behind change in financial regulations. These studies also investigate the effects of global and local shocks, learning and diffusion, financial development, and trade openness on financial reforms. Abiad and Mody (2005) and Abiad et al. (2010) are good examples of such studies. These scholars generalize their findings using a panel dataset for a large number of countries. However, their data is limited to the period of 1973-1996, when liberalization and privatization were considered global norms and efforts were in place to diminish role of the state in the economy. In fact, in the 2000s, particularly after the 2008 GFC, the state became more interventionist in order to control and reduce the risks arising from negative consequences of excessive

liberalization and marketisation policies. Therefore, the findings in the existing literature need to be tested and reevaluated against data and observations of the current stage of capitalism. Abiad and Mody (2005) and Abiad et al. (2010) argue that learning encourages further financial liberalization reforms, but the evidence in this dissertation shows that learning is not a unidirectional factor that incentivizes financial liberalization. It is a bi-directional process where regulators also learn how to reverse, control, and limit liberalization and marketisation. Therefore, the factors need to be redefined and their effects measured with a new understanding that addresses the current mode of capitalism, that is, neoliberalism.

Studies in the existing literature ignore the revealing effects of the factors, i.e., independent variables or determinants across time and individual countries, from a comparative political economy perspective. In fact, the way determinants affect financial regulation reforms may vary across critical junctures and evolutionary changes in path-dependent patterns. In the meantime, we must keep in mind that capitalism is not a unique economic system. It takes different forms throughout time and across geographical and cultural regions and countries. To fill the gap in existing studies, I argue that the effects of the factors vary as a result of changes in path dependency and critical junctures in different countries.

Another unique aspect of this dissertation is the choice of cases. Comparing Poland and Turkey requires an interpretive, qualitative approach that prioritizes depth of knowledge. A comparative approach helps in figuring out causality and examining causal mechanisms in the cases with greater confidence that arises from a detailed understanding. As Clift (2014) notes, a comparative analysis of such a small number of cases and comparison of case studies “constitute mutually reinforcing and complementary undertakings” (p. 300). The process-tracing technique in this

dissertation involves “the systematic comparison of carefully selected cases” (Clift, 2014, p. 300). “Here, the goal is to assess whether the dynamics of change within each case reflect the same causal pattern suggested by the comparative appraisal of the case in relation to other cases” (Clift, 2014, p. 300).

I first present an extensive literature review and introduce historical accounts of various institutions. These are followed by qualitative and quantitative analyses of factors that affect financial regulation reforms. For the qualitative analysis, I drew on different perspectives proposed by well-known theories of diffusion, institutionalism, and globalization. Diffusion theories, which include the concepts of “diffusion,” “lesson drawing,” and “policy transfer,” look at the processes and mechanisms that cause policies to spread to different political jurisdictions. Institutional theories, on the other hand, define power relationships between multiple actors and offer insights on the effect of organizational structures in policy-making. The globalization theory reflects the radical impacts of globalization and internationalization of the world economy on financial regulation. These theories provide valuable insights into financial regulation and reforms in any given context. They point out that we have a more regulated financial sector and that there is a strong trend toward increasing regulation at both domestic and international levels. Regulatory trends have passed through several stages, and financial crises have been among the main factors that led domestic and global actors to focus more on regulations that had a profound impact in the markets. In institutionalist-based theories, the actors are more aware about the spillover effects of financial turbulence, and they feel the need to cooperate in order to minimize its effects. Theories of policy transfer and learning tend to focus on sharing experiences of various polities with regard to their regulatory policies, and they consider regulation reforms as a part of transferring “best practices” to their

respective markets. Globalization-based theories explain regulation as an irresistible desire to govern globalizing markets. All these theories also define the actors (both domestic and international) that play a role in the regulation of markets and in regulatory reforms. The primary issues here are the varying effects of these actors, their interactions, and the role of states in particular. The diffusion and globalization theories both tend to place heavier emphasis on the role of global dynamics, and they focus on interactions between actors. Learning theories leave room for state initiative, but both diffusion and learning theories and globalization theories depict regulatory reforms as being shaped primarily by international and global powers. The institutionalist theory, on the other hand, argues that states still play a significant role in regulatory attempts. Institutionalists accept that certain practices are widespread (especially some organizational types), but they state that domestic actors play an important role in shaping the policies. Thus, the institutionalist theory has a more balanced view of interaction and power relationships between domestic and global actors. For the quantitative analysis, I used an ordinary least squares (OLS) regression to investigate the main factors behind financial regulation reforms, the players involved in the reform process, and interactions between domestic, international and global factors.

The contributions of this dissertation to the existing literature are threefold. The first is that I used a combination of quantitative and qualitative methods and took advantage of methodological pluralism. Employing an exhaustive dataset, I investigated the factors that precipitate reforms by using both qualitative and quantitative methods. The second contribution is that I resolved the puzzle by employing a comparative method that involves evaluation of factor changes within historical and spatial dimensions. I differentiated the domestic and global factors that

affect reform decisions. The third contribution is that this dissertation is a study that seeks out determinants of financial regulation reforms in the 2000s, and it illustrates that the effects of determining factors have changed drastically since financial stability has emerged as a primary source of concern, which in turn, led the states to be more interventionist.



CHAPTER 2

LITERATURE REVIEW AND HYPOTHESES

This dissertation builds on various strands of the existing literature that investigate the main stimuli for financial regulation reforms. Some studies focus on the question of how to design reforms properly as part of an effective policy-making process (Bakır and Woo, 2016; Mukherjee, Coban and Bali, 2021), while others focus on issues like policy capabilities (Mukherjee et al., 2021), different forms of learning (Fernandez and Rodrik, 1991; Colin J. Bennett and Michael Howlett, 1992; Krueger, 1993; Dolowitz and Marsh, 2000; Simmons and Elkins, 2004; Meseguer, 2005; Gilardi, 2010; Asatryan et al., 2017; Szekely and Warmedinger, 2018; Bakır, 2017; Elkins and Simmons, 2005, and Simmons et al., 2008 among others), globalization (Modelski, 2007; Kindleberger and Aliber, 2011), and institutions (Hall and Taylor, 1996; Blyth, 2002; Clift and Fisher, 2002; James and Lodge, 2003; Weyland, 2009; Dente et al., 2012; Hill, 2013; Bakır and Woo, 2016; Newman and Posner, 2018; Bakır et al., 2021). In this chapter, the aim is to expound on the factors that motivate policymakers to introduce new sets of regulations or amend existing ones, with reference to the mentioned studies.

2.1 Design-centric approaches to financial regulation reforms

A design-centric approach focuses on the processes that shape financial sector reforms. Bakır and Woo (2016) analyze the post-GFC period and suggest that previous financial policies and institutions were not designed to address such a crisis. Failure to address the implications of the crisis prompted a call for a policy design approach to financial sector reforms. Referring to Howlett et al. (2015), they describe policy design as “a deliberate and conscious attempt to define policy goals and

connect them to instruments or tools that are expected to realize those objectives” (Bakır and Woo, 2016, p. 194). They identify three levels of policy goals: “general abstract policy aims, operationalizable policy objectives, and specific policy targets” (Bakır and Woo, 2016, p. 194). They also specify three levels of policy means: “general policy implementation preferences, operationalizable policy tools, and specific policy tool calibrations” (Bakır and Woo, 2016, p. 194). They illustrate these levels in a matrix and state that “this multi-level approach to understanding policy design is particularly useful for evaluating policy instruments at various levels of abstraction and application” (Bakır and Woo, 2016, p. 194).

Bakır and Woo (2016) also add spatial dimensions—national, regional and international—to the financial reform design matrix and state as follows:

A multi-level policy design approach allows for a deeper and more nuanced analysis of the various processes and rationales for the design and implementation of financial policies and regulations at different levels of policy. . . There is an intuitive correlation between . . . international/regional/national levels of financial policymaking. . . This is evident especially with regard to international regulatory standards such as the Basel III standards, which provide broad guidelines for desired policy goals and policy means, which can then be used as a basis for crafting more specific programs and measures at the regional and national levels . . . The GFC has shown that financial policy design is crucial not only within domestic national boundaries, but at regional and international levels as well, since these higher-level institutional standards have a bearing on the formulation of domestic regulations. There is therefore a need for a closer understanding of the types of competencies and processes required for effective policy design across these levels. (p. 195)

Bakır and Woo (2016) argue that the key concern should be how to design better financial regulations and conclude “our delineation of financial policy design into its components of policy goals, policy instruments, and the order of policy change, provides a useful first step towards a more design-centric understanding of financial sector reform” (p. 200).

Policy capacity and effective policy design are key themes in Mukherjee et al.'s (2021) study, which defines policy capacity as “a set of skills, competencies, and resources across government agencies to design and pursue policy goals” (p.247). They identify three types of policy capacity: political, analytical, and operational. For this dissertation, an interesting aspect of Mukherjee et al.'s (2021) study is their proposal to “operationalize specific types of capacities as a spectrum of independent variables” and then investigate “how they shape policy outcomes” (p. 254). In other words, they call for studies that take policy capacity as an independent variable in explaining the determinants of financial regulation reforms. However, they do not offer a precise measurement technique for operationalization of this variable. Nevertheless, policy capacity has implications for policy styles that shape the financial regulations. As the policy capacity increases, governments are more likely to adopt an anticipatory (i.e., active) attitude towards societal problems. On the contrary, lower policy capacity is supposed to result in essentially reactive approach to problem-solving.

2.2 Dimensions (types) of financial regulation reforms

Examining the determinants of a dependent variable requires identification of the types and dimensions of financial regulation reforms. In other words, regulations that govern financial activities should first be identified and classified so that we can trace changes in them over time. As mentioned by Veron (2012), the GFC was a turning point that led to the realization that a cluster of policy and instrument mixes was needed for the proper functioning of financial systems. The resulting regulatory setup needed a wider scope that would include bank capital, leverage, liquidity, risk management, control of moral hazards, and capital markets. Although systematic policies aiming to make financial systems safe and sound can be traced back to the

nineteenth century (Benmelech and Moskowitz, 2010), the financial crises of the 1990s (e.g. those in Asia, Mexico and Russia) and the economic turbulence during the 2000s necessitated the adoption of multi-dimensional reforms. In addition, new risk sources arising from contemporary financial architecture needed to be addressed. These new risk sources included issues related to the resilience of institutions' capital and liquidity, systemic risk and the too-big-to-fail problem, derivative markets, and shadow banking (Duffie, 2017). The multidimensional nature of the financial architecture necessitates analyzing several dimensions of financial regulation reforms. This is evident in empirical studies such as Sarlin and Peltonen (2013), who use a statistical method called a self-organizing map to illustrate sources of systemic risk, macro-financial conditions, and the degree of financial stability. Their results for the 1990-2010 period show different degrees of financial stability and a certain dynamism. Abiad and Mody (2005) and Abiad et al. (2010) captured the multifaceted nature of financial reforms in six dimensions.

2.2.1 Macprudential measures

Macroprudential measures are the first dimension of financial regulations.

Macroprudential measures are policy implementations that aim at increasing the financial system's resilience to shocks by addressing possible systemic risks.

Examples include loan-to-value ratios, installment restrictions, capital adequacy, and liquidity coverage ratios. Macroprudential authorities monitor the financial system, identify risks and vulnerabilities, and take measures to ensure financial stability⁵. As indicated by Hanson et al. (2011), "the term macroprudential recognizes the importance of general equilibrium effects and seeks to safeguard the financial system

⁵ <https://www.ecb.europa.eu/pub/financial-stability/macprudential-measures/html/index.en.html>. Last accessed 14 September 2022

as a whole” (p.3). In fact, the effort to contain the social costs of such general equilibrium effects makes these measures relevant for domestic policymakers. The term “domestic policymaker” refers to a wide group of institutions that includes central banks and governments, among many others. Bruno et al. (2017) discuss the process of policy formulation where there are initial discussions between the government, the central bank, and other public authorities. However, Forbes et al. (2013) point out that macroprudential measures do not discriminate on the basis of residency and that they are expected to address cross-border foreign currency exposures and lending. The focus on cross-border issues creates an association between the international organization and macroprudential measures. For instance, the Bank for International Settlements and the Basel Committee on Banking Supervision developed the Basel Accords (Basel I, II and III), a set of agreements that provide recommendations for dealing with a variety of issues, including capital adequacy and liquidity coverage (BIS, 2017). Apart from these two specific measures, there are other measures such as loan-to-value ratios and installment restrictions that are applied by local central banks and public institutions. The organizational actor or regulator responsible for the final implementation of these measures might therefore differ from one country to another. For instance, Pirgaip and Hepşen (2017) state that, in Turkey, it is the Banking Regulation and Supervision Agency (BRSA) that is responsible for devising loan-to-value ratios, whereas in Hong Kong, it is the Hong Kong Monetary Authority (that is, the currency board and de-facto central bank of the country) that performs this function and initiates this measure (Wong et al., 2011).

2.2.2 Credit controls and reserve requirements

The second dimension of financial regulation encompasses credit controls and reserve requirements. Bernanke and Gertler (1995) provide a detailed description of the credit channel for monetary policy transmission where reserve requirements are considered as a policy tool. Reserve requirements affect the financial system through money multipliers, loan growth, and the remuneration of excess reserves. Gray (2011) indicate “most central banks oblige depository institutions to hold minimum reserves against their liabilities, predominantly in the form of balances in central banks” (p.1). (Borio (1997) states that the reserve requirement ratio is an important instrument in the implementation of monetary policy, along with other tools used in the monetary policy framework. These include official interest rates, open market operations, and direct controls (Borio, 1997). Gray (2011) cites an IMF survey which shows that almost 90% of all central banks around the world impose some form of reserve requirement. For instance, the Central Bank of the Republic of Turkey (CBRT) is legally mandated to monitor and make adjustments to the reserve requirement as needed.

2.2.3 Credit guarantee fund policies

The third dimension involves credit guarantee fund policies. These policies allow a transfer of credit risk. One of the biggest obstacles that small and medium-sized enterprises face in accessing bank financing is a lack of adequate collateral to cover the amount of the loan in the event of default. To ease such firms’ access to finance, there are credit guarantee schemes, which fall into four categories, depending on which institutional body is responsible for initiating, managing, and supervising the funds (Beck et al., 2010): mutual guarantee associations, corporate associations,

publicly operated national schemes, and international schemes. However, as indicated by Beck et al. (2010), who include a comprehensive survey of credit guarantee funds around the world, the public sector and associated public institutions—central banks, for instance—play a crucial role in the funding and management of these schemes. Furthermore, there is a public tendency to use credit guarantees as policy tools to boost economic growth, employment, and exports to achieve better social outcomes. A prominent example of the use of credit funds is found in South Korea, where empirical studies demonstrate the positive effects of such measures on macroeconomic outcomes (Park, 2006; Oh et al., 2009; Kang and Heshmati, 2008).

2.2.4 Foreign exchange (FX) borrowing requirements

Addressing the risk derived from adverse movements in currencies and their connection to financial stability—foreign exchange (FX) borrowing requirements—is the fourth dimension of financial regulation reform. Artetat (2005) defines dollarization as the tendency of local economic agents (mainly households and companies) to hold FX-denominated assets and to incur FX-denominated liabilities. Galindo and Leiderman (2005) establish a threshold for a high level of dollarization as a banking system that has more than 40% of its deposits (or loans) denominated in FX. Countries with high dollarization may experience financial instability, which can have consequences in the real sector in the form of firm defaults, a decrease in employment, reduced investment tendencies, and weak export performance. A high level of dollarization also appears to influence monetary transmission (Galindo and

Leiderman, 2005). Because of such effects, policymakers consider restrictions on FX borrowing as a vital aspect of financial reforms.⁶

2.2.5 Banking sector entry, interest rate liberalization, and capital account transactions

The above-mentioned dimensions of financial reforms are not exhaustive. These dimensions are of the financial reforms that are carried out by bureaucratic agencies like central banks, public institutions, and international organizations (or a combination of thereof). However, some dimensions are largely under the jurisdiction of legislative bodies and governments. Entry into the banking sector, interest rate liberalization, and capital account transactions are examples of such dimensions.

2.3 Unit of analysis in financial regulation reforms

The dimensions of financial regulation reforms raise the issue of unit of analysis. A closer examination of the theoretical and empirical literature and anecdotal evidence reveals that policy formulation that uses the above-mentioned dimensions of financial regulation reforms necessitates a dynamic approach that engages public institutions, central banks, governments and international organizations. In the case of Chile, the government was responsible for abandoning dollar-denominated bonds as a part of its fiscal policy, whereas macroprudential measures such as regulating currency mismatches were initiated by the monetary authorities. Similarly, Israel has applied two measures: public debt management and prudential regulation. Public debt management was under the control of the government, and prudential regulation

⁶ <https://www.bbvaresearch.com/en/publicaciones/international-experiences-of-de-dollarization-what-could-be-done-in-the-turkish-case/>. Last accessed 14 September 2022.

was overseen by banking supervision agencies. Peru is an exception in that the central bank played a major role in creating financial reforms in its efforts to achieve de-dollarization. It actively managed the reserve requirements to curb funding in FX and introduced a repo market in the local currency (Upper, 2017).

Blyth (2002) focuses on the unit of analysis issue in institutional change. He argues that it is reasonable to concentrate on collectivities as agents, thereby rejecting rational choice institutionalism's argument that only individuals are real and appropriate units of analysis. The subject of unit of analysis in institutional change also drew the attention of Bakır, Akgunay and Coban (2021), who examine the institutionalization process of policy ideas. Bakır et al. (2021), referring to the policy change literature that focuses on the connection between ideas and policy entrepreneurship, maintain that links between policy entrepreneurship and institutional entrepreneurship, which are interconnected phenomena and fundamental to the institutionalization of policy ideas, are crucial elements for explaining policy change. They argue that ideas alone are not explanatory without an examination of "the conditions that motivate and enable actors to undertake agential action in the institutionalization process" (p. 398). Referring to Campbell (2004), Bakır et al. (2021) define institutional entrepreneurs as "agents of change who seek to mobilize ideas to affect institutional change" (p. 402) and cite "an institutional entrepreneur creates shared meanings among principal decision-makers, including politicians and bureaucrats, that inform policy design and implementation" (p. 398).

The unit of analysis issue at the institutional level needs to be discussed from a point of view that distinguishes between elected and appointed institutions. Regulatory reforms are initiated either by elected institutions or by bureaucratic agencies that are in charge of financial regulation and financial administration.

Considering that both Turkey and Poland (the sample countries for this dissertation) have democratic political systems, their bureaucratic agencies are assumed to be accountable to both the elected representatives of the people who have seats in elected institutions and to society as a whole. The bureaucratic agencies' goals and missions are usually defined by rules in the form of laws or decrees enacted by elected bodies such as the parliament or the cabinet in democratic parliamentary systems. The regulations and reforms put into place by these bureaucratic agencies are required to comply with the framework set out by the elected bodies. A strong political will is needed to implement regulatory reforms, yet bureaucratic agencies tend to refrain from taking the initiative unless the scope of the reform falls under the mandate or the goals that have been assigned to them. On the other hand, in democracies, it is quite usual that such bureaucratic agencies run their activities in coordination with elected bodies. On that point, Verdier (2013) points out as follows:

In most countries, the legislature delegates extensive authority to promulgate and enforce financial regulation to expert bureaucrats. . . the more recent trend has been to delegate regulatory powers to the central bank or to create specialized independent agencies such as capital markets, the banking sector, and commodities commissions. . . Administrative agencies are typically not subject to direct electoral discipline. Instead, they exercise powers delegated by the legislature and are subject to its oversight. In theory, the legislature has many tools to discipline regulators: it can override their policies by legislation, dismiss them from their jobs, reduce the agency's budget, or even abolish it altogether. . . The literature on administrative decision-making characterizes the relationship between the legislature and agencies as a principal-agent problem. While it is impossible to ensure perfect compliance, the legislature has several means at its disposal to provide agencies with incentives to follow its preferred policies. It can adopt detailed legislation that delegates less discretion to regulators and exposes them to judicial review. It can reduce information asymmetry by establishing specialized committees to monitor the agencies. It can also adopt mandatory administrative procedures, such as notice and comment requirements. . . to ensure that new agency proposals will be publicized and that constituents will have time and a venue to air their objections. The legislature also relies on interest groups to support its monitoring functions by raising the alarm if a proposed action adversely affects their interests. (pp. 1428-1429)

In line with Verdier's (2013) view outlined above, Meier (1997) writes as follows:

Bureaucracies are permanent, goal-oriented open systems, and all these characteristics are important for understanding the relationship between a bureaucracy and elected institutions. Bureaucracies are structured around policy-oriented goals and they naturally resist tasks that do not fit within these goals. (p. 195)

Meier (1997) further cites the following:

The open-systems element of bureaucracy has consequences for a bureaucracy existing in a democracy. The norms of democracy grant policy-making legitimacy to elected institutions, not to bureaucracy. While bureaucracy can at times claim to represent the interests of individuals, bureaucracies are not inherently representative institutions and lack the imprimatur of elections. As open systems, however, bureaucracies both shape their environment and respond to it. In general, bureaucracies are responsive institutions as long as what the environment demands of them is consistent with their mission, their capabilities, and the norms of democratic policy-making. The democratic norms of the policy process also define methods for influencing bureaucracy. The more the attempts to influence the bureaucracy are consistent with the norms of democracy, the less likely they are to generate resistance... Given the development of bureaucracies as goal-oriented open systems in a democracy, I would posit a normative institutional rule for bureaucracy. Bureaucracies perform best and can contribute the most to the policy-making process when they are given clear goals by elected institutions, allocated adequate resources, and given the autonomy to apply their expertise to the problem. This normative rule applies to all stages of the policy-making process. In the agenda-setting or policy-adoption phase of policy-making, this demands a policy advocacy role. Bureaucracy contributes to political debate to the extent it can provide informed commentary on policy problems and how they might be solved. (p. 195)

In light of the views presented above, I argue that reciprocal processes and complex interactions between legislatures and bureaucrats in the development of public policy and in reforming financial regulations lead us to realize that analyzing the reforms of distinct executing entities is difficult. However, it is necessary to take reform initiators into account in analyses that explore the issues and motivations that underlie reforms. In this study, I take into account any significant changes in financial regulations, irrespective of whether they are initiated by legislatures or bureaucrats.

2.4 How to trace changes in financial regulations: Selection of criteria

Analyzing the relationship between change in financial regulations as a dependent variable and the determinants of such change as independent variables requires us to identify criteria for tracing changes. In other words, we need to stick to at least one criterion that will enable us to observe the changes in an array. Abiad and Mody (2005) and Abiad et al. (2010) monitor changes in financial reforms from a liberalization–repression vector. From this angle, changes in financial reforms are graded, based on the degree to which they reduce government control over the financial activity. In contrast to liberalizing financial regulation, a repressive financial regulation restricts or discourages market participants from engaging in financial activities by creating certain barriers, limitations, and bans. The literature usually accepts the essence of financial liberalization as removing the government's control over the interest rates, banks' credit policies, ownership structure, and international capital mobility. Financial repression is envisaged as a government's direct influence on the financial sector. For instance, Demirgüç-Kunt and Detragiache (1998:4) point out that “financial liberalization is part of a broader trend towards reduced direct intervention of the state in the economy. In a number of developing countries” and that it is “a deliberate attempt to move away from ‘financial repression’” financial liberalization is a part of broader trend towards reduced direct intervention of the state in the economy and that it is a deliberate attempt to move away from financial repression.

2.5 Determinants of financial regulation reforms

The field of political science comprises various schools of thought that shed light on the determinants of financial regulations and financial policies. I drew on the theories

of learning and diffusion, institutionalism, and globalization in detail in the qualitative analysis to derive hypotheses on determinants of financial regulations.

2.5.1 Theories of learning and diffusion

The contributions of Bennett and Howlett's (1992) article to the literature on policy learning as a source of policy change are significant.⁷ Bakır (2017) states that, first of all, they offer one of the most widely accepted definitions of learning in the literature: "the commonly described tendency for some policy decisions to be made on the basis of knowledge of past experiences and knowledge-based judgments as to future expectations" (p. 586). Thus, they overcome the problem of definitional ambiguity of the concept. Second, they identify who learns, what is learned, and the effects on policies that emerge as a result of learning. Bakır (2017) cites "their policy-learning framework privileges the role of actor to help explain policy change resulting from policymakers' general increase in knowledge about policies, especially that of policy design" (p. 586) and adds "third, they distinguish three types of learning . . . government learning. . . lesson-drawing . . . and social learning" (p. 586).

Bennett and Howlett (1992) state that learning involves several distinct components, including "who learns," "what is learned," and "to what effect" in a learning-based approach to policy studies. Bennett and Howlett (1992) cite as follows:

First, someone must learn, and the various theories . . . differ substantially on this question. Some restrict learning to high-level politicians and officials; other extend it to a more general social process involving most members of society. Second, there must be some object of learning, that is, what the learning is about. Once again, the existing theories vary on what this object is. While all see learning as the general increase in knowledge about policies, some see this in terms of instruments, some in terms of programs, and some

⁷ See Bakır (2017) for details.

in terms of policy goals; or some combination of these three elements. Finally, there is the question about the effect of learning, about what impact learning has on subsequent policy change. Again, the authors are divided. Some see learning as culminating in organization change, some in program or instrument change, some in major paradigm shifts in how policy problems are viewed, and thus in what sorts of policies are preferred or supported—and which are not. (pp. 288-289)

Bennett and Howlett (1992) reconcile these views by writing as follows:

This is accomplished by accepting (a) that learning is in fact a complex, multi-tiered phenomenon which can affect either decision-making organizations and processes; specific programs and instruments used to implement policy; and/or the ends to which policy is developed, and (b) that the agent of each type of learning will be different. (p. 289)

Bennett and Howlett (1992) present the three types of learning identified in this literature review and their relationship to policy change. “In government learning, state officials learn policy processes to achieve organizational change. In lesson-drawing, policy networks learn which instruments can achieve program change. And in social learning, policy communities learn ideas to achieve a paradigm shift” (Bennett and Howlett, 1992, p. 289).

Regarding the quantification and the measurement of domestic learning, Bakır’s (2017) review of Bennett and Howlett’s 1992 article is an inspiring work that reconciles different meanings of learning in the political economy sphere and explains its role in policy-making and policy change. Bakır (2017) cites Bennett and Howlett’s (1992) review of the literature on policy change, which they organize on the basis of different conceptualizations of learning. He points out that the learning-based approaches prior to Bennett and Howlett (1992) actually recognize the increasing importance of the role of ideas and learning in explaining policy change; they were also aware of conceptual ambiguity, under-theorization, and fragmentation in the learning subjects. In emphasizing the role of learning in public policy formulation, these studies “identify different actors, different types of learning, and

different effects of learning. They aim to reconcile the theories of policy learning and policy change” (Bakır, 2017, p. 586) and accept that learning is a complicated and multi-dimensional phenomenon which can affect decision-making organizations, processes, instruments, and the goals of policies. They also recognize that the agent of each type of learning is different (Bakır, 2017, p. 586).

Defining learning as the making of policy decisions on the basis of knowledge from past experiences is a concept also adopted by Abiad and Mody (2005), which has inspired my study as well. If learning relates to past experiences, one may assume that learning advances as involvement in reform practices increases. In other words, learning is an incremental phenomenon which can be measured through certain scales or levels and can therefore be quantified for the purpose of empirical research. However, Abiad and Mody’s (2005) understanding of learning is problematic in the sense that they consider learning as a unidirectional phenomenon. They assume that learning increases as regulators undertake liberalization reforms. In reality, however, reformers not only learn how to liberalize but also how to reverse, restrict, and modify liberalization reforms. Abiad and Mody (2005) define deviation from the ideal level of liberalization as status quo bias. However, in the age of neoliberalism, what the authors define as status quo bias is, in fact, sometimes what is intentionally learned and practiced by the regulators. I have preferred to adopt the bidirectional facet of learning in my dissertation, which follows a modified version of the method developed by Abiad and Mody (2005).

Regarding Bennett and Howlett’s (1992) questions of “who learns,” “what is learned,” and “to what effect,” this dissertation focuses mainly on government learning. The financial regulation process is a specific field of policy-making that is more related to government learning, as it is fulfilled by official actors. Legislators

and bureaucrats may consult societal actors and professional communities in the regulation-making process, but in democratic societies like Poland and Turkey, where the rule of law prevails, enacting regulations and laws is at the discretion of legislators and bureaucrats (bureaucratic agencies and ministries) that are legally authorized. In Turkey, these are the parliament, the Ministry of Finance, and agencies such as the BRSA, the CBRT, the Capital Markets Board (CMB). In Poland, the main institutional actors in financial regulation are the parliament, the Ministry of Finance, the central bank (Narodowy Bank Polski – NBP), and the Polish Financial Supervision Authority (PFSA). These entities experience government learning in the financial regulation process. They learn about the contents, goals, processes, and instruments of financial regulation. The learning process results in new financial regulations or changes to existing ones.

Elkins and Simmons (2005) focused on clusters of policy reforms, seeking explanations for these clusters. They analyzed the clustering in terms of the autonomy of policymakers and their basic motives. They argue that in some cases, policymakers independently choose similar policies when their polities have similar conditions. The similarities may be economic, cultural, or institutional. The second explanation they offer is that actors coordinate. This may be either cooperation or coercion, depending on the relationship between the actors. Their third explanation is diffusion. They argue that a set of processes can occur without coordination. What they refer to as “uncoordinated interdependence” occurs when states “factor in the choices of other governments” in interaction with each other. Elkins and Simmons also mention that there are two basic understandings of diffusion. One presents diffusion as a process, whereas others depict it as an outcome. Dolowitz and Marsh’s (2000) “policy transfer,” Bennett’s (1991) “emulation,” and Westney’s (1987)

“imitation” are examples of diffusion-as-process. Powell and DiMaggio’s (1983) “isomorphism” and Huntington’s (1991) “waves,” on the other hand, are examples of diffusion-as-outcome. Simmons et al. (2008) point out that what diffusion theorists reject is the notion that policy and political change can adequately be conceptualized as national governments “making decisions independently of each other. Policy independence is thus the null hypothesis” that motivated Simmons et al.’s (2008, p. 787) inquiry.

A broad class of diffusion mechanisms is based on lesson-drawing, or learning. The main idea is that policymakers in nation-states have to develop solutions for problems that are common in other countries. Elkins and Simmons (2005) state that learning from familiar groups is the most common method of developing solutions. Westney (1987) mentions that learning is a traditional way to approach policy-making, and he elaborates on how Japanese institutions have been modelled on Western models, which are the most prominent institutional setups. Meseguer (2005) discusses “policy learning against the background of research on the diffusion of deregulatory and regulatory policies and attempts to distinguish learning from other mechanisms of diffusion” (p. 67) and cites as follows:

Learning, therefore, is a *voluntary act*. Governments confronted with the uncertainty of difficult policy decisions may find it relatively simple and inexpensive to gain new information simply by observing the results of particular policies in other countries. "Good" policies are then adopted only because politicians are persuaded that they are the best, not because they are imposed. The distinction between learning as a voluntary act and coercive mechanisms of policy diffusion should be, in principle, clear-cut . . . Learning is taken to imply a change of beliefs (by some also as a change of choices) in the light of the experience of others. Learning, additionally, can be rational or bounded. It is rational if actors, in our case politicians, are taken to have full analytical capabilities. In such a perfect world, government officials would scan all available information regardless of its origin and interpret all of it in exactly the same manner, drawing the same conclusions about the relative merits of different policies and marginalizing prior beliefs about policies in the light of mounting evidence, positive or negative. Rational learning, in short, would imply convergence in policy choices. . . In contrast to rational

learning, bounded learning entails recourse to particular cognitive short cuts. Rather than scanning all information, governments look at relevant information. According to prospect theory, relevant information is information that is available or near to hand (in geographical, cultural, or historical terms) to the learner. . . Both rational learning and bounded learning entail a purposive search for information with which to resolve a problem . . . In my opinion, there are two dimensions along which learning (whether rational or bounded) and emulation can be distinguished. First, learning is purposive: a problem is set and a solution is sought. Second, a solution is chosen on the basis of observed experience and a *better understanding* of which policies may lead to particular outcomes. How experience is weighed and which experience is relevant distinguishes rational from bounded learning, but these two elements are present in both types of learning. But this is not the case when imitating others: emulation is usually driven by motivations other than problem solving and does not entail reflection on causal paths leading from policies to outcomes. (pp. 72-73)

Based on empirical evidence, Meseguer (2005:67) “concludes that learning cannot be rejected as a plausible mechanism of the diffusion of policies, although it shares its explanatory role with the less rational mechanisms of diffusion— in particular policy emulation.”

Simmons and Elkins (2004), in their study on policy diffusion in international political economies, suggest that domestic versions of foreign economic policy-making models are inadequate. They cite as follows:

The evidence shows that policy transitions are influenced by international economic competition as well as the policies of a country’s sociocultural peers. We interpret the latter influence as a form of channeled learning reflecting governments’ search for appropriate models for economic policy. (p. 171)

Simmons and Elkins (2004) argue that such a policy-diffusion mechanism has a significant effect on the liberalization or restriction of current accounts, capital accounts, and the exchange rate regime, as the evidence suggests. Gilardi (2010), who also sees interdependence as a powerful force in policy-making, believes that policy diffusion is a real phenomenon. However, he argues that the evidence on which mechanisms drive the diffusion process is inconclusive, even though

explanations have been suggested in numerous studies. Gilardi (2010) states as follows:

. . . all policy makers are not equally sensitive to new information about the likely effects of policy change and that the relevant outcomes from which policy makers learn include both the policy and the political consequences of reforms. Ideological positions and prior beliefs about the effectiveness of policies shape the interpretation of new evidence and make policy makers react differently to information coming from the experience of others, which helps them assess both the political and policy potential of alternatives. (pp. 660-661)

According to Gilardi (2010), a statistical analysis of unemployment benefit retrenchment in 18 OECD countries shows that, “the right governments tend to be more sensitive to information on the electoral consequences of reforms, while left-governments are more likely to be influenced by their policy effects” (p. 660). Thus, he refers to the conditional nature of learning processes and establishes the political root or ideology of the government as a material factor in the direction reforms take.

As mentioned earlier, the concept of policy transfer is emphasized in diffusion theories. Stone (2001) emphasizes “cross-national experience has an increasingly powerful impact upon decision-makers within the private, public, and third sectors of nation-states” (p. 1). In line with Dolowitz and Marsh’s (2000) definition, Stone states that, “policy transfer and lesson-drawing is [sic] a dynamic whereby knowledge about policies, administrative arrangements, and institutions is used across time or space in the development of policies and administrative arrangements and institutions elsewhere” (p. 1). Fawcett and Marsh (2012) and Dolowitz and Marsh (2000) refer to the same definition of policy transfer, and they both focus on the relationship between the process of policy transfer and its outcome. Their main research question is related to factors that affect the success or failure of policy transfer. Taking the transfer of the Gateway Review Process (a key assurance mechanism developed in the U.K.) to other countries as a case in point, they

emphasize that success has resulted from the fact that the transfer was informed, complete, and appropriate.

The existing literature also comprises empirical studies that examine the learning and policy diffusion theories of different countries. Abiad and Mody (2005) and Abiad et al. (2010) work with an exhaustive dataset covering the financial liberalization process of 35 countries for the 1973-1996 period. Their findings show that domestic learning (where initial reforms increase the likelihood of future reforms) and external learning (from regional leader countries) are crucial for sustainable reforms. Moreover, the importance of regional diffusion is found to be very high, especially for countries in a given region that possess similar characteristics. In another study, Francesco (2010) conducted a comprehensive analysis of policy diffusion in the European Union (EU) and OECD countries. He performed a regulatory impact analysis (RIA) and showed that diffusion is a multi-faceted process. Francesco (2010) cites as follows:

In the decision to adopt RIA, the role of OECD in translating, packaging, and promoting such administrative innovation coexists with previous innovations and other administrative variables. Yet the impact of interdependency is marginal in the successive phases of implementation and evaluation. (p. 3)

In other studies, Fernandez and Rodrik (1991) and Krueger (1993) emphasize the importance of domestic learning in the reform process. In particular, they state that reform experiences will bring about new reforms by providing information about potential benefits and losses.

Apart from studies by Abiad and Mody (2005) and Abiad et al.'s (2010) articles, we have an empirical study by Asatryan, Heinemann and Pitlik (2017) that sheds light on the determinants of financial regulation reforms. They focus on the impact of learning in public administration reforms. They differentiate between two types of learning: vertical learning and horizontal learning. Vertical learning results

from financial and technical assistance provided by the EU for its member countries. They hypothesize that “countries that benefit to a larger extent from EU cohesion spending should be more likely to reform their public administration” (p. 132). They define horizontal learning as the diffusion of the experience of other reformers and assume that “efficiency-enhancing administrative reforms in neighboring countries should increase the likelihood of domestic public administration reforms” (p. 132). Indeed, these two types of learning are forms of policy diffusion, as they are exogenous sources of learning. These types of learning need to be differentiated from domestic learning, which is built on past experiences and is by nature endogenous.

Asatryan et al. (2017) apply a quantitative analysis and find some evidence that economic and financial crises induce administrative reforms. However, they also find that receiving higher amounts of cohesion spending, which is used as a proxy for vertical learning, is not significantly associated with increased public administration reform activity. For horizontal learning, they calculate spatial indicators of reform activity in other EU countries and weight them according to distance and per capita GDP or alternatively, by Alfonso et al.’s (2005) measure of distance and the public sector efficiency. Asatryan et al.’s (2017) conclude “the evidence hints at significant positive spatial spillovers from other EU countries for reform activity in general, and for public administration reforms in particular” (p. 139). Asatryan et al.’s (2017) empirical research is inspiring in the sense that it provides an alternative way to quantify and measure policy diffusion and factor it into a regression model. However, it ignores the impact and relevance of domestic learning, which is quite different from the diffusion type of learning.

Szekely and Warmedinger (2018) focus on the role of social learning, i.e., domestic learning, in reform reversals of former transition economies during their

rapid journey to EU membership. Like Asatryan et al. (2017), they argue that external anchors—the IMF, the World Bank, and European institutions—and interaction between countries that are geographically and culturally close to each other have played a uniquely strong role throughout this process. As mentioned earlier, Asatryan et al. refer to these factors as vertical and horizontal learning. Szekely and Warmedinger, on the other hand, emphasize the role of social learning.

Inspired by these studies, I formulated the following hypotheses to explore the impact of learning on financial reforms in emerging economies:

H₁: Domestic learning had a significant repressive effect on the liberalization pace of financial regulation reforms in the 2000s.

Domestic learning is expected to have a negative relationship with financial liberalization due to the rise of new state activism or the reinvention of political control over the economy following the 2008 GFC. As Clift (2014) cites, the state acts as “co-constitutive of the market economy”, and it is “always integral to the process of re-regulating the free market” (p. 195).

Before formulating a similar hypothesis for policy diffusion, which is an exogenous type of learning, I would also like to elaborate on institutionalism and globalization theories that focus on this factor from different angles.

2.5.2 Institutionalism and policy diffusion

Unlike defenders of the diffusion and learning theories, James and Lodge (2003) argue that these theories are not sufficient to explain the various reform processes, and that researchers may be better off using alternative theories such as institutionalism, a strong theoretical tradition for analyzing policy choices, including financial regulation reforms. Dente et al. (2012) mention that the new institutionalist approach provides models that add flesh to the skeleton of the policy transfer's conceptual framework. New institutionalism achieves this by explaining how actors legitimize public policy, how they interact, and how institutions emerge. Hall and Taylor (1996) state that the new institutionalism focuses on the role of institutions in the formation of policy choices and applications. They describe three main branches of new institutionalism: "historical institutionalism, sociological institutionalism, and rational choice institutionalism" (Hall and Taylor 1996, p. 936). Common to all three is the acceptance of "the institutional organization of the polity or political economy as the principal factor structuring collective behavior and generating distinctive outcomes" (Hall and Taylor 1996, p. 937). In the institutionalist approach, domestic actors play an important role in shaping policies. Like Hall and Taylor, Krueger (1993) emphasizes the role of domestic shocks—a new ruling government or a domestic financial crisis, for example—on financial regulations. Using new institutionalist theories, Clift and Fisher (2002) present a comparative analysis of financial reforms in France and Britain. They reveal that the new institutionalism (or at least some forms of it) provides a persuasive framework for analyzing finance reform. Hill (2013) provides an analytical survey of economic policy reform in Southeast Asia. He argues that in a broad sense, institutions are critical, but it is not necessary to have "high-quality" institutions in order to create reforms.

Clift (2014) elaborates on the views of institutionalists through the lens of CPE and emphasizes the role “of institutional context in producing persistent cross-country or cross-regional variation in economic organization.” He states that the “place of institutions and institutional reproduction in explaining trajectories of capitalist evolution” is at the forefront of this modern revival of CPE. Hall and Soskice’s (2001) “varieties of capitalism” (VoC) approach to analyzing “comparative institutional advantage” is important in this regard. Clift (2014) states as follows:

. . . comparative analysis can enhance political economy’s ability to understand and explain the varied nature and extensive scope of the institutional circumscribing and framing of market activity within capitalism. . . The patterns of institutional interlinkages take different forms in different national historical contexts. Hence comparative analysis is uniquely well placed to reveal the multiple forms that “the market’s” predication upon the institutional context takes. (pp. 101-103)

Clift (2014) maintains that the VoC approach “identified two central ideal-typical institutional forms that capitalism could take” (p. 107) and writes as follows:

First, there are co-ordinated market economies (CMEs) (such as Germany or Japan) that are reliant on a variety of non-market-based coordinating mechanisms and networks such as social partnerships between unions and employers’ associations, and which are characterized by long-term trust-based relationships within firms and between economic actors. Second, there are liberal market economies (LMEs) (such as the USA or the UK which are reliant primarily on markets and market mechanisms for co-ordination, and which emphasize shorter-term contractual relations. These sets of institutional interactions and relationships underpin Hall and Soskice’s (2001) fundamental “market” versus “non-market” co-ordination pathologies of posited institutional ensembles—the liberal and co-ordinated market economy types. Each type of capitalism is institutionalized in different ways in different national settings. (pp. 107-108)

Clift (2014) states “the broad distinction between more regulated continental (European) CME capitalism and more free-market oriented Anglo-American LME capitalism . . . is a powerful undercurrent of and backdrop to contemporary CPE analysis” (p. 267). The distinction is important in analyzing institutional and

regulatory settings in Turkey and Poland, which are both economies that follow the paths of continental European capitalism.

Institutions are critical components of financial regulation reforms. They “refer to formal (i.e., legal) and informal (i.e., ideational) rules that guide the behavior of actors through” rational or normative logics (Bakır et al., 2021). Institutionalists claim that institutions shape actors’ behavior, but they are also sustained by these actors’ behavior (Weyland, 2009). Reciprocal relationships and interactions between actors and institutions imply that financial institutions are key entities that shape financial regulation reforms as part of public policy and, at the same time, they are the product of policymakers’ preferences; they are created or changed through the financial regulation-making process. Then, the answer to the question of “what shapes the changes in financial regulation reforms” depends on a proper understanding of how institutional changes evolve. Institutional change and regulatory change are not identical processes. But institutional changes usually accompany regulatory changes, as they represent significant changes in existing norms and rules. Institutional change processes, which may occur either in the creation of new institutions or in a role change of existing institutions, is an important area of policy change.

The rational choice version of institutionalism stresses that “institutions themselves are merely the products of individual interests and strategic interaction among rational actors” (Weyland, 2009, p. 39). “Institutions emerge from the preferences and strategic interaction of contending political or socioeconomic forces” (Weyland, 2009, p.40). Weyland (2009) criticizes the rational choice version of institutionalism, arguing that it fails to explain institutional creation and change. He maintains that it is contradictory and faces an endogeneity whirlpool in that it

“attributes causal importance to institutions, but derives institutions from the interests and strategic interaction of rational agents”

Weyland (2009) writes as follows:

If institutions are the mere product of preferences and choices, and especially if institutions are conceptualized as equilibria rather than constraints, then how can they exert any independent causal force? Institutions cannot really make a real difference if they are epiphenomena of the interests and capabilities of rational agents. (p. 38)

“Designing institutional solutions that maximize actors’ preferences is very difficult. Actors often have reasonably clear goals but are uncertain about the best means to pursue them. They know what they want but not how to get it best”

(Weyland, 2009, p. 40). Preferences alone are not sufficient to explain institutional creation and maintenance; “new ideas made an indispensable independent contribution” (Weyland, 2009, p. 41).

Referring to Blyth (2002), Weyland (2009) states that the uncertainty that interest-driven actors face gives ideas a decisive role, especially during crises, which often give rise to institutional reform or creation. “Institutional creation and reform therefore depend not only on demand factors—primarily interests and power—but also on supply factors. As ideas do not automatically spring from interests, these supply factors have an independent status and are by no means mere epiphenomena of preferences” Weyland (2009, p. 42) writes and adds as follows:

As decision-makers commonly take inspiration from external ideas and models, institutional change often proceeds in waves. A bold foreign innovation that crystallizes into a coherent, neat model whose logic is easy for observers to grasp, can generate strong attraction and stimulate imitation in a number of countries, especially among the forerunner’s neighbors. If such a striking new blueprint attains initial success, it induces a range of followers in other countries to advocate its emulation. An upsurge of diffusion results as the innovation quickly spreads in the originating region and beyond. As numerous countries of different socioeconomic and political characteristics adopt the basic principles of the same external model, similarity spreads amid diversity. These waves of diffusion show that institutional creation and reform are not driven by the preferences and power

of domestic actors alone. Instead, the external supply of ideas also plays a crucial role. . . Ideas and their frequent supply from external sources can help keep institutionalism from drowning in the endogeneity whirlpool. The appearance of a foreign model constitutes an exogenous factor that cannot be derived from the preferences and power of domestic political actors alone. (pp. 42-43)

Blyth (2002) is another scholar who emphasizes the role of ideas in institutional change. He states that “ideas, specifically economic ideas, are vitally important components of institutional construction and change.” Moving “beyond reductive interest-based explanations, he sees ideas and interests together as essentially embedded elements of institutional change” Blyth (2002).

Blyth (2002) criticizes Polanyi’s double movement approach, which offers interest-based explanations of institutional change in analyzing great economic transformations in the world. Blyth believes that Polanyi’s double movement approach sees “institutional change as a problem of comparative statics” Blyth (2002). “That is, in order to explain institutional change, the elements of a present set of institutions are juxtaposed to those of a previous set, and then a (usually exogenous) variable is imputed that explains why the latter emerged out of the former” Blyth (2002). The shift from dis-embedded to embedded institutions is explained merely by such a punctuation—by a crisis, for instance. The new institutional equilibrium represents a shift from the existing institutional equilibrium. A new balance emerges between the preferences and interests of the agents in a crisis situation. “While Polanyi saw the double movement as a function of agents with structurally given interests reacting to self-apparent crises, what this and other static accounts of institutional change miss is the importance of uncertainty and ideas in determining the form and content of institutional change” (Blyth, 2002). Blyth (2002) rejects this causal relationship and states as follows:

Since structures do not come with an instruction sheet, economic ideas make institutional resolution possible by providing the authoritative diagnosis as to what a crisis actually is and when a given situation actually constitutes a crisis. They diagnose what has gone wrong and thus what is to be done. In short, the nature of a crisis is not simply given by its effects, dislocations, or casualties, nor are the actions of agents simply determined by their given interests. Instead, the diagnosis of situation as a crisis by a particular set of ideas is a construction that makes the uncertainty that agents perceive explicable, manageable, and indeed, actionable. . . Crisis thus becomes an act of intervention where sources of uncertainty are diagnosed and constructed. Given this, the set of available ideas with which to interpret the environment, reduce uncertainty, and make purposeful collective action possible, becomes crucially important in determining the form of new institutions. . . Therefore, in periods of economic crisis, it is imperative to attend to the economic ideas that key economic agents have. . . (Blyth, 2002).

Howlett (2009) suggests that path dependency is a rival model of policy change that competes with “the orthodox homeostatic or exogenously-driven, institutionally-maintained, punctuated equilibrium model of policy dynamics” (p. 245). He contends that path dependency challenges the static punctuated equilibrium explanation of policy change, “in which longstanding incremental policy sequences are seldom punctuated and shift toward a new sequence, trajectory, or equilibrium” (Howlett, 2009).

Mahoney (2000) criticizes the existing literature on path-dependent processes of change that define path-dependence as little more than a vague notion that “history matters” or that “the past events influence the future events.” He states “path dependence characterizes specifically those historical sequences where contingent events set into motion institutional patterns or event chains that have deterministic properties. The identification of path dependence therefore involves both tracing a given outcome back to a particular set of historical events and showing how these events are themselves contingent occurrences that cannot be explained on the basis of prior historical conditions” (Mahoney, 2000, p. 507).

Howlett (2009) also focuses on this subject and states as follows:

Identifying turning points or conjunctures is a critical element in path-dependency analyses, along with specification of the exact mechanism which leads trajectories to stay on course once they start along a path. . . In a contingent path-dependent sequence, the turning point renders the occurrence of each subsequent point more likely until, finally, lock-in occurs. “Lock-in” in this model is due to the key role played by positive feedback to policy actors in which there are increasing returns available to those who follow an emerging trajectory. (p. 248)

As Mahoney and Thelen (2009) note, historical institutionalists call these turning points “critical junctures,” “often understood as periods of contingency, during which the usual constraints on action are lifted or eased” (Mahoney and Thelen, 2009, p. 7). Mahoney (2000) writes as follows:

Periods of institutional genesis correspond to critical junctures. Critical junctures are characterized by the adoption of a particular institutional arrangement from two or more alternatives. These junctures are critical because, once a particular option is selected, it becomes progressively more difficult to return to the initial point when multiple alternatives were still available. . . In a path-dependent pattern, selection processes during a critical juncture period are marked by contingency. Contingency refers to the inability of theory to predict or explain, either deterministically or probabilistically, the occurrence of a specific outcome. (p. 513)

Mahoney (2000) adds the following:

Within the framework of path dependence, scholars often consider two dominant types of sequences. First, some path-dependent investigators analyze self-reinforcing sequences characterized by the formation and long-term reproduction of a given institutional pattern. In this path-dependent perspective, institutions are enduring entities that cannot be changed instantaneously or easily. Self-reinforcing sequences often exhibit what economists call “increasing returns.” With increasing returns, an institutional pattern, once adopted, delivers increasing benefits with its continued adoption, and thus over time it becomes more and more difficult to transform the pattern or select previously available options, even if these alternative options would have been more efficient. (p. 508)

As Mahoney (2000) confirms, “in a self-reinforcing sequence, initial steps in a particular direction induce further movement in the same direction such that, over time, it becomes difficult or impossible to reverse direction” (p. 512). “Mechanisms of reproduction lock in a given institutional pattern, making it extremely difficult to

abolish” Mahoney (2000, p. 515) cites further. “The concept of increasing returns explains why a particular path is taken and is ultimately locked in.” Political life “will commonly generate increasing returns to key players, leading to path dependency” (Howlett, 2009).

Mahoney (2000) notes “a second basic type of path-dependent analysis involves the study of reactive sequences. Reactive sequences are chains of temporally ordered and causally connected events. These sequences are “reactive” in the sense that each event within the sequence is, in part, a reaction to temporally antecedent events. Thus, each step in the chain is dependent on prior steps” (p. 509).

Mahoney (2000) notes as follows:

In a path-dependent pattern, earlier parts of a sequence matter much more than later parts. . . In a path-dependent sequence, early historical events are contingent occurrences that cannot be explained on the basis of prior events or initial conditions. Since these early historical events are of decisive importance for the final outcome of the sequence, this criterion rules out the possibility of predicting a final outcome on the basis of initial conditions. . . Once contingent historical events take place, path-dependent sequences are marked by relatively deterministic causal patterns, or what can be thought of as inertia - i.e., once processes are set into motion and begin tracking a particular outcome, these processes tend to stay in motion and continue to track this outcome. The nature of this inertia will vary depending on the type of sequence analyzed. With self-reinforcing sequences, inertia involves mechanisms that reproduce a particular institutional pattern over time. With reactive sequences, on the other hand, inertia involves reaction and counterreaction mechanisms that give an event chain an inherent logic in which one event naturally leads to another. Although both kinds of sequences are characterized by relatively deterministic properties, specific sets of conditions can be identified that cause the reversal of path dependence (pp. 510-511).

Mahoney (2000) concludes as follows:

Path dependence occurs when a contingent historical event triggers a subsequent sequence that follows a relatively deterministic pattern. In the case of a self-reinforcing sequence, the contingent period corresponds with the initial adoption of a particular institutional arrangement, while the deterministic pattern corresponds with the stable reproduction of this institution over time. By contrast, in the case of a reactive sequence, the contingent period corresponds with a key breakpoint in history, while the deterministic pattern corresponds with a series of reactions that logically

follow from this breakpoint. . . Whereas self-reinforcing sequences are characterized by a processes of reproduction that reinforce early events, reactive sequences are marked by backlash processes that transform and perhaps reverse early events. In a reactive sequence, early events trigger subsequent development, not by reproducing a given pattern but by setting in motion a chain of tightly linked reactions. (pp. 527-535)

Howlett (2009) supports Mahoney's (2000) view, indicating "that the mechanism for sequencing in trajectories is not just positive policy feedback and self-reinforcement, but rather negative feedback or what Mahoney (2000) refers to as reactive sequences".

The distinction between positive policy feedback and self-reinforcing sequence versus negative feedback and reactive sequence is a key point for this dissertation, which analyzes policy change in a liberalization-repression vector quarterly analysis and critical junctures in qualitative analysis. The financial regulations enacted in Poland and Turkey in each period either increase or decrease the financial liberalization level. In other words, they may materialize in reactive or self-reinforcing sequences and generate positive feedback or negative feedback to the financial market players within certain path-dependent patterns. Quarterly analysis of financial regulations using a financial liberalization index is an adequate tool to capture the reactive or self-reinforcing effects of financial regulations on the overall liberalization level of a financial system at any point over the time. Analyzing the cases through critical junctures facilitates tracing and observing the shifts and reversals in their path-dependent institutional and policy-making patterns.

The term "reactive sequence" has implications for the literature that focuses on policy styles too. Richardson et al. (2013) formulate a "typology of policy styles and argue that it is more useful to characterize approaches to problem-solving in terms of governments taking either an anticipatory (i.e., active) attitude toward societal problems, or taking an essentially reactive approach to problem-solving"

(Richardson et al., 2013). Dyson (2013) suggests that a reactive policy style characterizes a government's essentially passive and responsive character in its policy-making, and it rests on a neo-liberal view of the importance of the state-society distinction in positioning the role of government. The reactive style is deductivist and pursues a language of principles (Dyson, 2013). A government is reactive to outside events in a reactive policy style (Jordan and Richardson, 2013). An anticipatory policy style is the opposite intellectual style of problem-solving. An anticipatory approach requires a high-minded and didactic style of thinking about making policies and implementing them. It is a pre-emptive style that focuses on the importance of acquiring information and knowledge as the basis of an engaged, innovative role of government. It uses the language of goals, options, appraisal, and effectiveness (Dyson, 2013).

The relationship between path dependency, policy style, and learning is an important subject that warrants attention. Since an active policy style requires acquiring information and knowledge, as Dyson (2013) notes, it is likely to be facilitated and promoted by domestic learning. Policy diffusion is supposed to be more influential in reactive one because the policymakers are very reactive to outside events in this policy style, as noted by Jordan and Richardson (2013).

Howlett (2009) suggests that learning can lead to paradigmatic lock-in in path dependence. However, "learning can also involve exogenous lesson-drawing, i.e., it can bring new ideas into existing subsystems", disrupting or eroding existing paradigms and creating an impetus for policy change. "The idea that change occurs largely through exogenous shocks, as proposed by the exogenously-driven punctuated equilibrium model, flies in the face of much evidence about the effects of policy learning or other endogenous sources of fundamental change" (Howlett, 2009,

p. 245). From this point of view, learning is expected to deliver a bi-directional effect on path-dependent sequences. In a policy change model that tracks shifts based on repressive or liberalizing regulations—as suggested in this dissertation—learning can theoretically foster liberalization further by generating positive feedback and reinforce path dependent institutional pattern that favors financial liberalization, or it may lead to a reversal of liberalization by signaling negative feedback and therefore encourage an institutional or policy pattern that relies on financial repression. Thus, by examining the role of policy diffusion and domestic learning in reactive or self-reinforcing sequences in the respective path-dependence frameworks of Poland and Turkey, this dissertation contributes to discussions in the literature on this subject.

2.5.3 Globalization theories and the role of global institutions in policy diffusion

Bakır and Woo (2016) put forward ideas which are line with globalization and institutionalism theories. Emphasizing the key role of global institutions in financial regulatory responses, they state that the G20 and the Financial Stability Board (FSB) are key transnational governmental policy networks which are at the center of financial regulatory policy design at the global level. Using Blyth’s terminology, financial stability emerged after the 2008 GFC as a new economic idea that was institutionalized formally with the establishment of the G20 in 2009 (Blyth, 2002). The introduction of financial stability into the ideational realm and its formal institutionalization is evidence of the role of ideas in institutional and policy change, as described by Weyland (2009) (See, Blyth, 2002; Weyland, 2009; and Bakır et al., 2021 for the role of ideas in institutionalization, institutional change and policy change). “In addition to being a forum for central bankers and finance ministers, the G20 became a forum for heads of states”. Similarly, “its core network, the Financial Stability Forum (FSB), included central bank governors and the finance ministers of

19 states, the European Commission, and the European Central Bank.” The representatives of the IMF and the World Bank also participate in the G20 and the FSB. Bakır and Woo (2016) note that the “FSB was chosen over the IMF to lead international regulatory reform and that the G20 was designated by its members to be the premier forum for their international economic cooperation” (Bakır and Woo, 2016, p. 194).

As noted by Bakır and Woo (2016), policy aims and means proposed by the G20/FSB can be analyzed through Hall’s (2019) three orders of policy change model. His first order of policy change refers to changes in the calibration of policy instruments. The second refers to changes in policy mechanisms, and the third refers to changes in policy goals. Policy change dimensions can be realized in paradigmatic or incremental ways.

Bakır and Woo (2016) emphasize international financial stability as the policy goal of the G20 and state as follows:

Its key policy objectives have been strengthening the safety and soundness of financial corporations and the stability of the financial system as a whole (i.e., systemic stability). In regard to policy means, the G20 advocates strengthening micro-prudential regulation and supplementing it with macroprudential regulation. Policy calibrations for micro-prudential regulation included the Basel III framework, which was designed by the Basel Committee on Banking Supervision (BCBS), the key transnational forum of bank regulators from 27 countries. (p. 196)

Bakır and Woo (2016) illustrate the “Basel III policy changes in the context of Hall’s three orders of policy change. The Tier 1 capital policy represents a first-order policy change because, after the widespread recognition of policy and market failure in the midst of the crisis, it increased the particular settings of instruments like risk-weighted capital adequacy requirements. The change in the leverage ratio represents a second-order change because it sets a risk-sensitive limit on the amount of leverage that banks can have; and the liquidity coverage ratio represents a third-

order policy change because it, with its focus on macroprudential regulation, represents a fundamental paradigmatic shift” (Bakır and Woo, 2016, p. 197).

Newman and Posner (2018) introduced the concept of international soft law as an institutional factor that disrupts and transforms the politics of economic governance. They define it as a political institution that has the potential to govern and regularize social behavior. “Unlike the staid world of treaties and state-to-state diplomacy, soft law comprises a different class of international market rules made up of voluntary standards, best practices, and recommended guidance” Newman and Posner (2018, p. 1) argue. They refer to complying with international soft law as voluntary disruption. “Examples of international soft law are the Basel Committee’s Global Regulatory Framework for more Resilient Banks and Banking Systems and Fairtrade International’s Standard for Hired Labour” (Newman et al., 2018, p. 3).

Newman and Posner (2018) argue that international soft law affects political change through two mechanisms: legitimacy claims and arena expansion. With regard to legitimacy claims, “soft law gives policy entrepreneurs new political resources for intervening in, influencing, and opening up domestic fights. In areas where regulatory factions struggle to set the policy agenda, opportunistic and skilled political actors take advantage of the various forms of legitimacy associated with soft law and the bodies that create it” (Newman and Posner, 2018, p. 5) indicate. As for arena expansion, international soft law is politically disruptive because it expands conflicts into new arenas. Newman and Posner (2018) add as follows:

In contrast to traditional law, forged through formal negotiations and by heads of state, soft law typically depends for its creation on additional cast of characters - sub-state officials and private actors including national regulators, international bureaucrats, firms and their associations, professional assemblies, and NGOs. The making of soft law thus breaks up the state’s monopoly of professional diplomats, allows for transnational alliances of like-minded factions across jurisdictions, and expands policy-making to new arenas. (p.5)

However, some scholars argue that the institutionalist theory fails to define the role of global/international dynamics in reform choices. Apart from the realist and liberal theories, there have been new attempts to analyze growing interconnectedness in the global arena. Modelski (2007) argues that globalization, long discussed at the level of state interactions, had to be redefined in the 1990s as a process of growing connectivity and interdependence. Kindleberger and Aliber (2011), in their analysis of the history of financial crises, mention that the interconnectedness of global markets has evolved throughout history and that crises have become more devastating with this integration.

Devastation is rooted in the fact that uncertainties and large, widespread shocks bring serious economic and social consequences, especially for developing countries. Salman et al. (2010) provide a detailed description of the economic consequences of the 2008 GFC for emerging markets. The effects are observed in different economic and financial dimensions, including growth realizations and prospects, stock market performance, sovereign spreads, and credit growth. Using modelling methodologies, Horvath and Rusnak (2009) work on the case of Slovakia (a developing country) and show that foreign shocks are crucial in explaining the fluctuations in local price levels. In profound crises, social consequences accompany economic consequences. Knowles et al. (1999) examine crises in Asian countries and point out that these events led to a decline in purchasing power, increased poverty, greater inequality, and a decline in social capital. Policymakers were therefore obliged to take reformist measures to cope with the economic and social impacts. Staehr (2003) shows that monetary stabilization and reforms that change the structure of economies correlate positively with growth. Schuknecht et al. (2011), focusing on Europe, mention that, in response to financial and economic crisis

episodes, sovereign governments have adopted a range of reforms to stabilize the financial sector and to support the economic recovery in the region. Such efforts include consolidation measures to reach sound fiscal positions. Claessens and Kodres (2014) assess the objectives of post-crisis reforms and conclude that the main aim is to reduce the chance and costs of future systemic risks in the most efficient way possible and to design a solution that has the lowest cost to economic growth and social welfare. For instance, economic and financial reforms conducted in China since 1979 have generated macroeconomic stability and significant growth rates.

The prevalence of global and regional interdependence paves the way for supranational organizations to initiate economic reforms that may be related to globalization and diffusion theories. Economic and financial reforms launched after the GFC and the European sovereign debt crisis are examples of such reforms. Bolgherini (2016) discusses the recent wave of crises and describes how they prompted reform movements in Italy and Spain. Measures introduced in these two countries fall into two groups: those that were directly affected by EU compliance requirements and those that were initiated at the national level. Since crises are more frequent in southern European countries with weak fiscal balances, those countries incorporate austerity measures into their plans for purposes of balancing their budgets. Hence, they are inclined to institute reforms that require local governments to cut back on public expenditures and comply with EU requirements.

The work of Hinrich (2015) can also be considered in this context. He discusses pension fund reforms in Europe in the post-crisis period. He argues that this new financial reform pattern is the result of pressure exerted by financial markets and supranational actors such as the IMF and the European Commission, which limit the policy space for the domestic actors. The above-mentioned external

constraints oblige local governments to abandon vote-seeking aims and cut back on public expenditures related to savings and retirement plans. Hinrich's sample includes eight European countries. He concludes that financial reforms in these countries have sought to increase resilience, regain space for fiscal maneuvering, and obtain aid from supranational organizations. Duval and Elmeskov (2006) discuss the role of global institutions in reform efforts that aim to decrease vulnerability to shocks from the global economy. Duval et al. suggest that, because of the existence of the European Monetary Union (EMU), sovereign countries are not able to exercise independent monetary policy strategies. He also states that they are incentivized to undertake structural economic (and financial) reforms to support market-based adjustment to shocks, mainly in the labor market. Similarly, Saint-Paul and Bentolia (2000) indicate that the EMU offers incentives to undertake reforms that would speed up adjustment to shocks. Finally, Eggertsson et al. (2013) maintain that, amid limited policy options such as devaluing the currency, there emerged a broad consensus that European countries should adopt structural reforms to increase competition in the product and labor markets that would in turn increase resilience to shocks. These reforms are said to target the sources of macroeconomic imbalances. Since recent crises have been characterized by declining growth rates and deteriorating competitiveness, the reforms have common aims such as reducing the competitiveness gap between peripheral countries in Europe and boosting future growth prospects.

I synthesized three key theories to formulate my hypothesis:

- (a) learning theory, which treats policy diffusion as an exogenous type of learning,
- (b) institutionalism theory, which posits that institutional change occurs in waves and is influenced by external ideas and models and that a successful foreign innovation

can exert strong attraction and inspire imitation in a number of countries, particularly among the innovator's neighbors, and (c) globalization theory, which emphasizes the role of global institutions and supranational organizations in policy diffusion and is supported by the interdependence and interconnectedness of countries around the world. My hypothesis is as follows:

H₂: When financial conditions are appropriate for tightening, a regional-leader's financial reform policies are most likely to have a significant repressive effect on decisions about financial regulation reforms.

Policy diffusion is expected to correlate negatively with financial liberalization because global institutions and regional leaders focus mostly on restricting and controlling financial activities to mitigate risks that threaten the financial soundness of economies and their financial stability, which has become a key concern following the crises in Asia, Latin America and Turkey in the 1990s and the GFC in 2008.

2.5.4 Theoretical frameworks on the other determinants of financial regulation reforms

2.5.4.1 Global shocks

It should be noted that reforms in the wake of shocks and uncertainties that originate from the global economic structure and affairs vary, depending on the characteristics of individual countries. Lee and James (1991) examined external shocks and subsequent adjustment processes during the 1970s and 1980s in the Soviet Union, China, and Hungary; they compared the responses of these socialist countries with those of newly industrialized countries. They found that these countries varied greatly in how they adjusted to external shocks. They also differed from the way

newly industrialized countries adjusted. “It is interesting to note that the responses in the Soviet Union were quite opposite to that one observes for market economies. However, reform-oriented China and Hungary seemed to have response patterns similar to those of market economies” (Lee and James, 1991, p. 65).

Finally, in addition to economic and financial reforms, another strand of literature focuses on how global political shocks can lead to improvements in the local context from a political perspective. Gunitsky (2014), for instance, argues that abrupt shifts in global uncertainties—which are defined not as economic shocks but as “shifts in the distribution of power among leading states”—“create unique and powerful incentives for sweeping domestic reforms” (p. 561). Drawing on a historical dataset, he indicates “shifts in hegemonic power shaped waves of democracy, fascism, and communism in the twentieth century” (Gunitsky, 2014, p. 561). “Volatility in the international system, manifested through abrupt hegemonic transitions, has been a major catalyst for domestic institutional reforms” (Gunitsky, 2014, p. 562). Furthermore, statistical analyses using regressions and instrumental variable estimations have shown that the share of power among leading states has an effect on the evolution of domestic regimes. In this context, spikes of volatility in global affairs are said to have precipitated the “hegemonic shocks of world wars and the collapse of the Soviet Union” (Gunitsky, 2014).

Considering the above-mentioned theories and evidence from the literature, I investigated whether domestic or global shocks have an impact on financial regulation reforms. The way that global shocks affect financial regulation reforms may differ depending on historical and national contexts. My hypothesis was the following:

H₃: Global shocks have a substantial impact on financial regulation reforms, either in a repressive or liberalizing way.

2.5.4.2 Trade liberalization

Trade liberalization is seen as an important motivation for financial reforms.

Considering the numerous studies and the substantial empirical evidence that support the trade openness-finance-economic growth nexus,⁸ the degree to which a country's trade relations develop is an important determinant of reform in the financial sector.

In fact, reforms in trade policies and in the domestic financial sector are key elements of policy packages that aim to reduce productive distortions and promote stronger economic activity.

Law and Habibullah (2009) emphasize that trade openness is important in the development of capital markets and indicate the following:

When a country is open to trade and capital flows, it is more likely to develop its financial system. This is because openness to both trade and finance breeds competition and threatens the rents of incumbents. Thus, open borders help to check the power of the political and economic elites and promote competitive markets. In other words, globalization forces countries to do what is necessary to make their economies productive, not what is best for the incumbent elites. (p. 47)

Law and Habibullah's (2009) empirical findings also suggest that trade openness and financial liberalization correlate positively with financial development indicators. Svaleryd and Vlachos (2002) find that openness can promote financial development; they find no evidence in the opposite direction. "We empirically address the hypothesis that there is a positive interdependence between financial development and liberal trade policies. We find a positive and economically significant relationship between the two, with causation running in both directions"

⁸ See Zarra-Nejad et al. (2014) and Dufrenot et al. (2010) for empirical evidence on developing and developed countries. See Bordo and Rousseau (2011) for a detailed historical perspective.

Svaleryd and Vlachos (2002, p. 369) indicates. “The current trend towards globalization of economic activity leads to greater exposure to risk and thus a greater demand for risk-reducing reforms, while simultaneously reducing the scope for government interventions, especially through taxation and labor-market regulations” (Svaleryd and Vlachos, 2002, p. 392).

Beck (2003) too assumes that “the structure of trade balance has implications for policy reforms in both the financial and the trade sectors.” He indicates “I have used a methodological approach developed by Rajan and Zingales (1998) by regressing export and trade shares on the interaction between external dependence across industries and financial development across countries” (Beck, 2003, pp. 312-313). He suggests that “a reform of the financial sector that raises the level of external finance available to firms in an economy might have an impact on the industrial structure of this country’s exports. On the other hand, the effect of trade reforms on the industrial structure of the trade balance might depend on the level of external finance available in the economy.” The results of Beck’s empirical study evidence “everything else equal, countries with a higher level of financial development have higher export shares and trade balances in industries that rely more on external finance” (Beck, 2003, p. 313).

Rajan and Zingales (2002) also argue that in economies which are more open to international trade and investment, insider opposition to reforms that promote liberalization is weaker. Accordingly, empirical studies that focus specifically on factors that lead to financial reform (see Abiad and Mody, 2005, for instance) use trade openness as a structural explanatory variable. The liberalization process is generally measured by the proportion of foreign trade volume to GDP, the proportion

of import to GDP, growth in exports,⁹ or the ratio of foreign direct investment to GDP. I investigated the effect of trade liberalization on financial reform decisions. I hypothesized the following:

H4: Trade liberalization affects the pace of financial regulation reforms in liberalizing way.

2.5.4.3 Local shocks

Political and economic uncertainties are other important factors that can result in financial regulations. Considering a wider definition of structural economic reforms in the form of an increase in deregulation in several areas—the domestic financial sector, capital accounts, product markets, agriculture and current account transactions¹⁰—there is one branch of the literature which claims that uncertainty might inhibit the tendency to institute reforms. Fernandez and Rodrik (1991) claim that, in a policy change, uncertainty about the distribution of gains and losses may lead to a status quo bias and slow the adoption of the reforms.

Yet another branch in the development literature supports the view that economic turmoil and volatility can trigger reforms (Drazen, 2000; Tornell, 2015). There are several historical examples. Hanson and De Melo (1985), for example, examine reforms in Uruguay, emphasizing the drivers and outcomes of the country's financial reforms between 1974 and 1983. Deregulation in domestic interest rates and the lifting of prohibition of dollar-denominated assets can be considered such financial reforms. They claim that, like many liberalization episodes in developing countries, these reforms also started with a crisis. In Uruguay at the time, the economic structure was characterized by a deteriorated fiscal position, capital flight,

⁹ See Romer (1993), Chow (1987), Kwan and Cotsomitis (1991) for details.

¹⁰ This classification is used by Giuliano et al. (2013).

and rising inflationary pressures. Currency devaluations and repression in the financial sector were also observed with the collapse of balance of payments. Hanson and De Melo (1985) emphasized that the country's policymakers had acted to introduce a new FX regime (a crawling peg) and a deregulation in commodity markets. In addition to these measures, private capital flows were restricted, and FX transactions were banned, whereas reserve requirements were used extensively by the central bank as a policy tool. Other financial reforms in response to local shocks included the lifting of barriers to entry to the banking sector entry and imports.

Amsden and Euh (1993) regard the South Korean case as a wave of reforms where local considerations were of the utmost importance. A change in the Korean financial system in the 1980s occurred in conjunction with rapid industrial transformations and changes to the domestic economic structure. As a unique example, this country instituted reforms that were not initiated as a result of global affairs or supranational institutions. Instead, it was interest groups inside the country that determined the extent and nature of the financial reforms, which included the establishment of new institutions and revisions to old ones. With this point in mind, these reforms can be associated with institutionalist theories. Amsden and Euh (1993) suggest that financial reforms can be defined as a response to local shocks in the form of a steep increase in interest rates and the drying up of foreign credit to finance industries. Local authorities acted to avoid extremely high costs of capital that might discourage investments. Among the financial measures they instituted were the abolishment of preferential lending rates, the unification of bank loan rates, an expansion of the stock markets, increased efficiency in the financial sector, and curbs on activities in private non-bank lending businesses.

Lay et al. (2004) examined the Bolivian case, where reforms were triggered by local shocks that affected growth rates and exacerbated poverty. They discuss policy reforms in the country's labor and gas markets in response to the poor performance of the local economic structure. Bertrand et al. (2007) investigated the triggers of banking reforms that were intended to quell the local economic turmoil that followed the 1973 oil crisis. They also cite the French economy, which experienced a decline in productivity, intensified budget deficits, rising labor-capital social conflicts, increasing inflation, and deteriorating labor market conditions. This situation is said to have triggered banking reforms that eliminated subsidized loans, liberalized capital controls, and boosted competition. Another example from the literature that is related to the influence of local shocks in accelerating economic reforms comes from the United Kingdom: Ramaswamy and Prasad (1994) cite local industrial disputes and structural barriers in the labor market as the sole reasons behind the labor market reforms that were launched in the early 1980s by Margaret Thatcher's conservative government. As for more recent empirical works, Bonfiglioli and Gancia (2016) use a cross-country panel dataset to find that local uncertainty has a positive and statistically significant effect on the adoption of reforms.

Taking into account the aforementioned views, my next hypothesis was the following:

H₅: Local political and economic uncertainties affect the pace of financial regulation reforms in emerging countries either in a repressive or liberalizing way.

Like global shocks, the way local shocks affect financial regulation reforms varies, depending on spatial and historical conditions.

2.5.4.4 Financial development

Finally, the effect of financial development on reform decisions is emphasized in the extant literature. Beck et al. (2008) present a list of indicators of financial development, focusing on dimensions such as financial intermediation and financial deepening in financial markets.

There exists a broad theoretical and empirical literature on the finance–growth nexus, where researchers and academicians have tried to establish a relationship between financial development and real economic growth. In a recent survey study, Marwa and Zhanje (2015) touch on the evolution of this literature. In this context, the handling of credit rationing and information asymmetry problems is considered vital, so reforms related to financial development that support financial inclusion are among the main catalysts for inclusive growth. Demirgüç-Kunt et al. (2017) provide evidence which indicates that financial inclusion as it relates to “products such as payments services, savings accounts, loans, and insurance can contribute not only to inclusive growth, but also to economic development.”

The close link between financial reforms and financial inclusion is examined by Prasad (2010), who, in the aftermath of the GFC, describes economies around the world as striving to balance the quest for financial stability and broader financial inclusion through macroeconomic policies that are complemented by cross-border regulations. Ardic et al. (2017) document the contemporary need for reforms that will increase financial inclusion, particularly in developing countries. In a study focusing on earlier times, Chinn and Ito (2005) used a panel data that contained 108 countries that covered the years 1980 to 2000. They found that a well-developed

banking sector is a pre-condition for reforms associated with financial liberalization in equity markets.

In the light of these findings, I examined the role of financial development on reform decisions by checking the following hypothesis:

H₆: Financial development affects the pace of financial regulation reforms in a liberalizing way.

In this chapter, I have identified the dimensions of the financial regulations and the factors that shape the changes in such regulations, referring to different theoretical approaches. My hypotheses are established on domestic learning, policy diffusion, global and local shocks, financial development, and trade openness—factors that are the most explanatory variables driven from theories of learning, institutionalism, and globalization.

Learning is described as domestic learning when it is built on past experiences of implementing financial regulations. Learning is referred as external learning or policy diffusion when a financial regulation is formed or changed as a result of imported ideas from external sources, that is, from a regional leader, a global institution, or global best practices. It is not only learning theories that focus on the importance of learning in financial regulation reforms. Institutionalism too delivers remarkable insights on policy diffusion. The institutionalism theory proposes that institutional change can happen as a result of inspiration from innovative external ideas and successful models. Such striking blueprints can appeal to national regulators and can be imitated—by neighboring countries in particular. Globalization theories also emphasize the role global institutions and the spillover effect of their policy design proposals. In addition to policy diffusion, global shock is an explanatory variable derived from globalization theories. Connectedness and

interdependence between countries foster not only the diffusion of policy preferences, but also transmission of shocks across boundaries. Thus, the relevance of the theoretical frameworks given in in this chapter coexist for different factors that explain change in financial regulations.



CHAPTER 3

METHODOLOGY, DATA, AND EMPIRICAL IDENTIFICATION STRATEGY

3.1 The method and case selection

In this dissertation, I used a comparative method for my analyses. The comparative method takes empirical evidence from real-life political phenomena to establish hypothetical relationships between variables; the hypotheses can then be tested in an analytical study with multiple cases. There are, however, drawbacks to the comparative method. One is the possibility of selection bias, which can affect the validity of the research if the analysis is performed using only case(s) that support the theory. To avoid selection bias or at least to minimize its effects, a comparative study should focus on a sufficient number of observations. Using multiple countries with a sufficient number of observations reduces the risk.

Comparative analysis can help us build knowledge. For instance, “without examining social relations in different countries, it is impossible to know to what extent a given factor actually has the effect attributed to it in a single country” as suggested by Clift (2014, p. 286). Comparative analysis is applicable to both qualitative and quantitative studies. Using both qualitative and quantitative methods is an approach accepted by Clift (2014), who advocates methodological pluralism. I adopted Clift (2014)’s methodological pluralism by applying both qualitative and quantitative methods. As Clift (2014) indicates “Both qualitative and quantitative methodology are very valuable parts of the CPE canon and arsenal, each generating tremendous insights into the CPE of capitalism” (p. 304).

“The core research goal of qualitative scholars tends to be to *understand* and *explain* particularly interesting cases, political economic developments and processes

in comparative context” Clift (2014, p. 295) indicates. I explain what shapes financial regulation reforms using the cases of Turkey and Poland.

I decided to conduct an in-depth comparative analysis of two countries—Turkey and Poland—to examine the learning process, the role of different shocks in time, and the impact of economic and political conditions on financial reform decisions. As proposed by Clift (2014), “small-N studies favour a more interpretive, qualitative approach, prioritizing depth of knowledge. Small-N studies involve the configurative understandings of causality, and can examine causal mechanisms within the cases with greater confidence arising from detailed understanding” (Clift, 2014, p. 299). “Comparison and case study can constitute mutually reinforcing and complementary undertakings. Collier’s “process-tracing” case study technique, for example, involves the systematic comparison of carefully selected cases. Here the goal is to assess whether the dynamics of change within each case plausibly reflect the same causal pattern suggested by the comparative appraisal of the case in relation to other cases” (Clift, 2014, p. 300). With regard to comparative research methods, Clift (2014) states as follows:

Mill’s logic has fostered two main types of research design: the most similar systems design (MSSD) and the most different systems design (MDSD) strategies (Przeworski and Teune, 1970). The MDSD explores whether, if you have the supposed cause (the independent variable) present, the expected effect occurs, even if everything else about the cases is different. The MSSD is a more common approach, and is the exact opposite. It attempts to emulate the controlled conditions of scientific experimental design, comparing cases where as many aspects as possible are similar except the supposed causal factor (the independent variable). This follows Lijphart’s (1971) “comparable cases strategy” where many variables are “controlled” for by choosing (broadly) similar cases where a large number of factors are assumed to be (roughly) “equal.” This allows greater confidence in focusing on particular “variables” and attributing causal significance to them. . . especially for small N qualitative comparative analysis. (pp. 309-310)

So, in the qualitative part, I draw on the same empirical categories as independent variables for Turkey and Poland and clarify the factors that trigger different results.

Clift (2014) further notes as follows:

The logic of comparative inquiry underpinning the MSSD informs case selection in much CPE analysis. Work on the advanced OECD states, for example, has cases that are similar in important respects: each country having an advanced economy, socio-economic structure, stable economic and political institutions, and being relatively well integrated into the world economy. . . We can examine variations in different factors that might have important political consequences and, see if variations in different possible causes (possible independent variables) have the posited effects and variations on our dependent variable. (p. 310)

“Another strategy would be to select cases of broadly similar political economies, at a similar size and stage of economic development but which differ on the key intervening variable” Clift (2014, p. 312) indicates.

Inspired by the logic proposed by Clift (2014), I selected Poland and Turkey from among 195 economies¹¹ in the world for several reasons. First, the selected cases need to be as similar as possible to conduct the MSSD design. Poland and Turkey have similar political economies, are of a similar size, and are at a similar stage of economic development. The similarities between these countries and key intervening variables where they differ will be discussed in detail in the following chapters. Second, ideally the cases need to be part of the same economic zone to understand how their policy reactions vary against policy diffusion sourced from a common regional leader. Poland and Turkey both have strong economic and political ties with the EU. Geographically, they are categorized as Eastern Europe economies. They are both listed as emerging markets and developing economies, a category which accounts for a population of 6.72 billion out of the 8 billion world

¹¹ This total includes 193 countries that are member states of the United Nations and 2 countries that are non-member observer states.

population.¹² Third, data availability and access to resources were key factors in selecting these countries as sample cases for the dissertation. Poland and Turkey are democratic countries that have accountable and transparent financial regulators. Their central banks, banking regulators, statistical agencies, and other financial authorities usually make extensive data and information available to the public.

3.2 Data and sources

I operationalized financial regulation reforms by looking at different components. These included interest rate regulation and deregulation, trade liberalization programs, foreign exchange market regulations, banking sector reforms, deposit insurance fund-related regulations, capital market reforms, laws on financial supervision, safety net reforms, and macro and micro prudential regulations. I did a detailed analysis of these components by examining the financial sector as a whole and then by individual sector (banking, insurance, capital markets, investment funds, and pension funds). I also delved into the supervision of these financial sectors, all the while probing the stimuli behind decisions about financial reforms.

In the qualitative part, I benefited from various primary and secondary sources that pertain to financial reforms and crises around the world, and I included primary sources published by national and inter-governmental organizations. Examples of such sources include financial sector assessment reports published by the World Bank and the IMF and financial reports published by the U.S. Department of the Treasury. I also drew on reports from other primary sources such as the web pages of the IMF, the EU, and the G20.

¹² <https://www.imf.org/external/datamapper/LP@WEO/OEMDC/ADVEC/WEOWORLD/ARG>. Last accessed 24 January 2023.

3.3 The period subject to research

I focused on the 2000s for two reasons. First, these years were characterized by rising financial integration, globalization, heightened volatilities, rising leverage, a high degree of systemic risk, and unstable capital buffers. All these issues are unique to the time period being examined. These issues differ from those of previous periods in terms of their origin, their amplification effects, and their results. Policymakers appeared to approach reform processes in a more detailed and complicated way than in previous periods. The second reason is that, in the quantitative part, many of the explanatory variables for the countries in my sample do not have a very long time series dimension, which limits the scope of a quantitative analysis.

Since the features of policy actions differ across countries and over time, quantifying regulations and policy measures based on a single criterion for Turkey and Poland was a challenging task. Therefore, given that the main objective of this dissertation is to identify the factors that lead to changes in financial regulations, my first task was to develop a methodology to quantify financial regulations with a degree of standardization and aggregation.

3.4 Variables

3.4.1 Dependent variable: Financial regulation index

In order to keep track of historical financial regulation tendencies and reform processes for Turkey and Poland, I constructed a financial regulation index (FRI). To capture trends in financial reforms, one must include both episodic and ongoing events, so the quantitative analysis needs to use an indexing method. Earlier literature in this field has a number of studies aimed at forming either indices or

databases to describe the evolution of financial liberalization. For instance, Bandiera et al. (2000) and Laeven (2003) describe the trend of financial liberalization, but their country coverage is very limited, and liberalization components remain as binary variables, which does not represent an ordinal ranking of how deep financial reforms are embraced and applied. Kaminsky and Schmukler (2003) also constructed a graded index of financial reforms, but their formulation includes only a limited number of dimensions and puts greater emphasis on the openness of equity markets to foreign investment.

Taking into account the shortcomings of earlier measurement efforts, I was inspired by Abiad and Mody (2005) and Abiad et al. (2010) to construct such an index. Abiad and Mody (2005) collected a cross-country panel dataset covering 35 developing and developed countries with annual frequency between 1973 and 1996. They captured the multifaceted nature of financial reforms in six dimensions: credit controls and reserve requirements, interest rate controls, entry barriers and lack of pro-competition policies, restrictive operational regulations and lack of prudential regulations, the degree of privatization in the financial sector, and the degree of controls on international financial transactions.

On each dimension, Abiad and Mody (2005) classify each country as fully repressed, partially repressed, largely liberalized, or fully liberalized. They assigned integer values based on the liberalizing nature of financial reforms, producing an ordinal ranking for each sub-component in a particular time period. In other words, these researchers assigned a raw score to each dimension according to certain criteria. After a raw score was assigned, it was normalized to a scale of 0 to 3. The normalization was done on the basis of classifications for each dimension: 0 corresponding to fully repressed, 1 to partially repressed, 2 to largely liberalized, and

3 to fully liberalized. Abiad and Mody use the final scores to compute an aggregate index for each country/year by assigning equal weight to each dimension and then normalizing it by dividing the aggregate score by 18. Hence, their dependent variable is a normalized index that varies from 0 to 1.

Abiad and Mody's empirical findings suggest that both domestic learning (i.e., initial reforms raising the likelihood of further reforms) and external learning through observing regional leaders are essential to the dynamic that sustains widespread reform. The coefficients of domestic learning and regional diffusion effects were found to be statistically significant with a positive sign, implying that these are strong pull factors toward liberalization. Once initial reforms were implemented, countries whose financial sectors were fully repressed were more likely to undertake reforms. Abiad and Mody explain the self-sustaining nature of the reforms in several ways. First, the initial reforms tended to strengthen institutions and individuals who benefited from (and lobbied for) reforms more than those who opposed them. It may also have been that reforms caused changes that made further reforms necessary, which was the case with the Japanese bond markets in the 1970s. Second, regional diffusion effects appear to have been important; countries were under great pressure from regional leaders to further liberalize their financial markets. Third, crises and shocks were found to be significant, as these factors triggered action, making it less likely that the status quo would be maintained. However, different types of crises have different effects. Abiad and Mody's findings suggest that balance of payment crises raised the likelihood of liberalization reform, but just the opposite happened following banking crises. Finally, trade openness appeared to be related to the pace of reform (Abiad and Mody 2005).

Using a similar methodological approach, Abiad et al. (2010) introduced a new database of financial reforms covering 91 countries for the 1973-2005 period. They did not conduct econometric analyses, but they expanded on the work of Abiad and Mody (2005), covering a wider range of countries and a longer time period. They also added a seventh dimension—financial reform policies on securities markets—in constructing the index.

The empirical estimations in this dissertation constitute a unique financial regulation index by considering and appending the dimensions used in Abiad et al. (2010). However, due to the distinctive nature of financial reforms in the examined period and the financial conditions surrounding the cases of Turkey and Poland, my index differs from those of the above-referenced papers. It consists of the following nine dimensions:

- Macprudential measures
- Credit controls and reserve requirements
- Credit guarantee fund policies
- FX borrowing regulations
- Banking sector entry
- Interest rate liberalization
- Capital account transactions
- Securities markets
- Privatization

I constructed a financial regulation index for Turkey and Poland and analyzed the factors that impacted their financial regulation reforms. My FRI is similar to the index used in the literature in the sense that it ranges from 0 (fully repressed) to 1

(fully liberalized). To this end, each criterion under the above-mentioned sub-category is rated using raw scores. More specifically, I assigned scores to the responses to questions related to the nine sub-components, which covered a wide range of financial intermediation practices and financial markets in terms of policy-making. Because these components are composed of different market dynamics and regulatory areas, I categorized the responses to 27 questions under the nine sub-components. (See Appendix A for the rules). Then for each sub-category, I normalized the raw scores to a scale of 0 to 3, where 0 corresponds to fully repressed, 1 to partially repressed, 2 to largely liberalized, and 3 to fully liberalized. A detailed description of this indexation mechanism for Turkey and of how the subcategories are normalized is also presented in Appendix A, for purposes of illustration. The same index is constructed for Poland. As indicated before, this is a method used by Abiad and Mody (2005) and Abiad et al. (2010), but my study enlarges the scope of the evaluation by calibrating the questions separately for each country (Turkey and Poland) and by using a more recent time period in the analysis. I also scored quarterly, which provided an advantage: a more accurate assessment can be made in policy areas that experience frequent changes—macroprudential policies, for example.

Regulators may implement regulations or take policy actions in opposite directions (e.g. a repressive action and a liberalizing action) in the same period of time. In that case, the effects of those regulations would cancel each other out, leaving no net change. This approach has its benefits, however: it is simple to construct, and it allows us to use the frequency and the intensity of changes in regulations as well as a measure of cumulative (in absolute terms) regulatory changes

over time. Aggregate FRI indices are standardized to a range between 0 and 1 to facilitate the interpretation of regression results.

I utilized an exhaustive dataset to form the dependent variable. I used historical and current data from various sources that pertain to financial reforms and crises around the world, and I included primary sources published by national and inter-governmental organizations. Examples of such sources include financial sector assessment reports published by the World Bank and the IMF and a report entitled *Financial Regulatory Reform: A New Foundation*, published by the U.S. Department of the Treasury (2009). I also used data and reports from other primary sources such as the web pages of the IMF, the EU, and the G20.

Data on financial regulation practices in Turkey for the period 2003-2018 were gathered from a wide range of sources. Among them were previous studies in the literature; official documents relating to amendments to laws; reports of national regulatory agencies such as the Central Bank of Turkey and the Banking Regulation and Supervision Agency; and documents of international organizations such as BIS, the World Bank, and IMF. Again, I drew on reports of domestic institutions (such as the NBP and PFSA) and international ones (such as the World Bank, IMF, BIS), economic and financial data sources, and previous studies for Poland on the post-2003 period, which is the sample time horizon. The full list of data for quantitative analysis is given in Appendix B.

3.4.2 Independent variables

3.4.2.1 Independent variable 1: Learning

The concept of learning is not used in exactly the same way that Abiad and Mody (2005) did. They ignore bidirectional facet of learning phenomenon. They suggest

that domestic learning—initial reforms raising the likelihood of further reforms—creates a self-sustaining dynamic in the reform process. It also “has an important implication for would-be reformers. Reforms do not have to be undertaken all at once; even small reforms are a victory, as they carry with them the seeds of future reforms.” Abiad and Mody (2005) evaluate the effect of domestic learning by a variable defined as the difference between the desired level of financial regulation reforms and the current level. They multiply the difference by the current level in order to capture the U-shaped nature of learning. Abiad and Mody’s (2005) model of domestic learning, which was the main reference source for my study, utilizes this measure, taking the maximum (desired) level of financial reform as 1. This assumption implies that financial liberalization is welfare-enhancing.

In fact, it is generally recognized that liberal policies do not always produce results that promote the wellbeing of societies. Government interventions and public policy limitations are needed in order to tackle the negative effects of excessively liberal financial practices and structures. For instance, in the aftermath of the GFC, regulatory attempts by governments and international institutions such as the Basel Committee of the Bank for International Settlements developed rules, frameworks, and structures that came with restrictions and limitations that forced financial institutions to operate under certain financial conditions. The aim was to protect the rights and welfare of society as a whole. Thus, the maximum value of the financial liberalization index as 1 should not be considered the desired level. Instead, it should be considered the maximum value for the purpose of the methodology.

The period Abiad and Mody (2005) selected witnessed a shift in the neoliberal approach. From the 1980s onwards, neo-liberal ideas fostered major transformations in economies. Privatization and marketization of formerly state-

delivered or public sector activities have emerged as new global norms. As noted by Clift (2014), "both became significant international trends of state transformation, reducing the size and scope of the public sector and opening up more fields of activity to markets, competition, and the private sector" (p. 174). The regulators were learning how to undertake privatization and liberalization of the markets. However, following the financial crises in Asia and Latin America in the 1990s and several other emerging markets, elements of a regulatory state have emerged in advanced democracies. The 2008 GFC accelerated this transformation and regulation of financial systems, and economies grew. As Clift 2014 notes, "capitalist states changed form in response to processes of privatization and liberalization, and advanced states came to control a much smaller public sector, and to regulate a much larger private sector" (p. 172), which required extensive intervention through regulations. The regulators then needed to learn how to restrict and control the excessive and harmful features of liberalization and marketisation. Reversing or changing previously implemented liberalization reforms became a new area of learning for regulators. This evidences that learning is not a one-directional phenomenon that prevails as long as the regulators manage to liberalize. Instead, learning is bidirectional phenomenon which also includes reversing and limiting liberalization reforms. Therefore, the differential between the existing level of financial regulation index (FRI) and 1 should be considered the gap between the current and maximum levels rather than the way forward to reach the desired point. Thus, as opposed to the idea adopted by Abiad and Mody (2005), the gap between the current and maximum levels is not status quo bias; it is learning itself. Shifts in the gap are expected to change the FRI significantly. With this different

understanding, I take the maximum level of FRI as 1, in line with the methodological requirements imposed by Abiad and Mody (2005).

The quantitative analysis in this dissertation does not intend to replicate Abiad and Mody's (2005) equation. It differs from their study in that it employs differentiated variables and modified definitions for the same variables. I adopted their financial regulation index, which was based on the liberalizing or repressive dimension of financial regulations—simply because it gives an objective assessment criterion for identifying, classifying, and quantifying regulations and helps explain the reasons behind the changes they embody. Although they define learning as the level of financial liberalization in the previous period ($FL_{i,t-1}$) and argue that financial liberalization increases, as regulators engaged in financial liberalization in the past (previous period) in their statements, they implicitly accept that learning includes reform reversals too when they formulate learning variable as an inverse U-shaped curve ($FL_{i,t-1} * (1 - FL_{i,t-1})$). Their verbal statement and quantitative formulation are therefore inconsistent. In a model where learning is defined as $FL_{i,t-1} * (1 - FL_{i,t-1})$, learning increases as $FL_{i,t-1}$ decreases when $FL_{i,t-1}$ is greater than 0.5. In other words, learning (the current level of financial liberalization) increases while financial liberalization decreases (i.e., reform reversal increases) in the preceding period. This definition not only seems unreasonable, but it also contradicts their statement that liberalization experiences in the past fostered today's liberal reforms. Therefore, I preferred to assume a linear relationship and define learning as $1 - FL_{i,t-1}$.

3.4.2.2 Independent variable 2: Diffusion

Regional diffusion effects were determined by measuring the gap between the level of financial regulation reforms in the region and the level of each sample country's financial regulation reforms. It is generally accepted that if such an influence is an

important determinant, then countries would be motivated to reach the level of reforms attained by the regional leader. In this empirical analysis, the regional leader FRI is calculated for the EU.

The FRI indicator for the regional leader was created using a bottom-up approach, similar to the individual country cases of Turkey and Poland. More specifically, the same sub-components of the financial regulatory environment were taken as inputs, and scoring was performed. In this context, the regulatory measures that were implemented by the EU as a supranational body were taken into account. In cases where European national authorities are authorized to regulate (but not the EU), regulatory measures adopted by all or the majority of Eurozone member countries were considered. The variable representing policy diffusion was derived by subtracting one period-lagged value of a single country's FRI from the regional leader's FRI.

The regional leader was chosen to be the EU for two reasons. First, both Turkey and Poland are considered emerging European countries, so geographical proximity was considered. The second reason was that both Turkey and Poland have close financial and trade ties with this monetary union, which is thought to influence policy in both cases.

3.4.2.3 Independent variable 3: Global uncertainty index

In the same way that financial contagion has increased with globalization, trade channels and finance channels have also transmitted global shocks. This phenomenon is especially important for emerging countries. Instead of limiting myself to proxies, I decided to innovate by employing a larger dataset to construct a unique index to account for global volatilities. I took thirteen variables representing different dimensions of global shocks, e.g., global risk appetite, U.S. stock market

volatility, funding conditions, exchange rate volatilities of both emerging and developed countries, global financial stress, and economic policy uncertainty. For economic policy uncertainty, I took data from Baker et al. (2016) with a series corresponding to global, U.S. economy-based, and European-based uncertainties surrounding economic policy formulation. The full list of sub-series, sources and time spans are presented in Appendix B. Next, I used a principal component analysis (see Appendix E for the details of the principal component analysis) and took the first principal factor as the index (see Appendix C, Figures C1–C7 for graphical representations). Appendix D shows the details and results of the statistical methodology applied.

3.4.2.4 Independent variable 4: Financial development index

To incorporate the impact of financial development into the econometric estimations, I developed an original index. Beck et al. (2008) provide a detailed analysis of benchmarking financial development with regard to different dimensions such as size, efficiency, and reach. For Turkey, five variables—total banking assets to GDP, total loans to GDP, total deposits to GDP, the number of ATMs, and the number of bank branches—were collected and calculated for illustrative purposes. I used a similar approach for global shocks; I integrated these variables into a principal component analysis and took the first component as an index. I used the same procedure for Poland.

3.4.2.5 Independent variable 5: Trade development/openness index

There are several proxies in the empirical literature that define the extent to which trade volume is developed and how trade openness has evolved. Measures such as

the summation of total exports and imports divided by GDP, the year-on-year change in exports, and the ratio of foreign direct investments to GDP are options which are considered in this dissertation. Ultimately, the sum of total exports and imports divided by GDP was selected as a proxy indicator since it mirrors better trade development, and trade is a comprehensive economic activity for both countries. These series are calculated for both the Turkish and the Polish economies using public sources (see Appendix C).

3.4.2.6 Independent variable 6: Local political and macroeconomic uncertainty index

Similar to global shocks, local uncertainties that originate from macroeconomic and political events are quantified using an empirical index composed of several sub-series. The first is based on implied standard deviations obtained from generalized autoregressive conditional heteroscedasticity (GARCH) models that are applied to macroeconomic aggregates such as growth, inflation, employment, foreign trade and public finance. (See Appendix F for detailed information on GARCH models). The GARCH method to model inflation uncertainty in empirical works is commonly used in the branch of literature that investigates the Friedman-Ball hypothesis. For instance, Caporale et al. (2010) use this method to extract inflation uncertainty for the Euro area. By extending the same modelling procedure to other macroeconomic indicators, the uncertainties surrounding other parts of the economic structure can be analyzed. In fact, as a first step, I found the implied standard deviations of consumer inflation, industrial production, and the export quantity index from GARCH models for Turkey. The second series is local financial volatilities. For the case of Turkey, I took the USD/TRY 1-month implied volatility, the JPMorgan EMBIG spread, and the CDS spread. For the last sub-series, I constructed a political stress index that

takes the value of 1 if major or excessive political events occur in the corresponding period—an election, for instance, or a military coup or a diplomatic crisis.

Otherwise, the value is 0. Finally, I combined these seven variables into a single index through a principal component analysis. I used the same method for Poland, using modified variables, depending on the available data.

3.5 Estimation equation

I chose “change in financial regulation index” as the dependent variable. The impact of domestic learning is evaluated by a variable defined as the difference between the desired level of financial regulation reforms and the current level. Regional diffusion effects are measured by the gap between the maximum level of financial regulation reforms in the region and the level of the country’s financial regulation reforms. The regression equation is specified as follows:

$$\begin{aligned} \Delta FRI_{it} = & \vartheta_0(FRI_{it}^* - FRI_{i,t-1}) + \vartheta_1(REGIONAL_FRI_{it} - FRI_{i,t-1}) + \\ & \vartheta_2GLOBAL_{t-1} + \vartheta_3DEVELOPMENT_{it-1} \\ & + \vartheta_4TRADE_{it-1} + \vartheta_5LOCAL_{it-1} + \epsilon_{it} \end{aligned}$$

where θ_0 is the learning aspects of financial reforms, FRI_{it}^* is the maximum level of financial regulation reforms (which is taken as 1), $REGIONAL_FRI_{it}$ represents the level of financial regulation reforms in the country’s regional leader, which is the Euro area. Additionally, $GLOBAL_t$ stands for the index created to account for global uncertainties, while $DEVELOPMENT_{it}$ denotes the financial development index whose details are provided above. Finally, $LOCAL_{it}$ is the index which is constructed to account for local political and macroeconomic uncertainties. Estimations were conducted using an OLS regression, as this method is typically used to assess the determinants of a dependent variable that is continuous in nature.

CHAPTER 4

SIMILARITIES BETWEEN TURKEY AND POLAND: POLITICAL, ECONOMIC, AND FINANCIAL PERSPECTIVES

In this dissertation, I examine the cases of Turkey and Poland to compare and contrast the main factors behind financial regulation reforms in the recent era. This chapter presents the political, economic, and financial similarities and differences between Poland and Turkey to establish a background for a comparative analysis of financial regulations.

4.1 Comparative economic history

Turkey, ever since the establishment of the Republic in 1923, has followed policies that prioritize the country's economic independence. In the first years of the Republic, "full independence was put forward as the primary condition of development" as noted by Çimen and Katman (2014, p. 1). "Capitulations, privileged foreign capital, and foreign borrowing were considered the main reasons for the loss of the country's financial and political independence" (Çimen and Katman, 2014, p. 1). "Ottoman administration was held responsible for the economic dependence of the country" as noted by Çimen and Katman (2014, p.1), and foreign borrowing was avoided unless they complied with sovereignty rights of the Republic. "However, in the post-World War II era, Turkey was placed in the West, both in political and economic terms, adopted international free trade doctrines, released protective measures, and rearranged foreign exchange rates" (Çimen and Katman, 2014, p. 1).

Öniş (2010) indicates “Turkey’s post-war development experience may be conceptualized in terms of four major policy phases” (p. 48). Regarding the first phase, Öniş (2010) writes as follows:

The 1950s correspond to the liberal turn in Turkish economy involving an attempt to reverse the statist and protectionist policies of the inter-war era. The emphasis especially in the early part of the decade was on integrating with the post-war international economy reconstructed under U.S. hegemony, as a producer and exporter of agricultural products. (p. 48)

Çimen and Katman (2014) state “the Republican People’s Party abandoned statist policy after the 1947 Party Congress, also foreign borrowing was perceived positively more in this period, and military aid by Truman Doctrine (1947) and economic aid by Marshall Plan (1948) were received” (p. 2).

“The second phase, under successive five-year plans implemented during the 1960s and 1970s, represents a shift to national developmentalism and ISI-based strong protectionism of the domestic market” Öniş (2010, p. 48) states. “The import substitution model, which is also the prevailing perspective in the world, was adopted in order to overcome a trade deficit stemming from the economic model based on fixed exchange rate regime and external sources” (Çimen and Katman, 2014, p. 2). “This phase resulted in the institutionalization of the domestic market” Öniş (2010, p. 48).

“The third phase, the 1980s and the 1990s, corresponds to Turkey’s encounter with neoliberal policies and the logic of the Washington consensus, which is based on the liberalization of key sectors of the economy” Öniş (2010, p. 48) writes. “Near the end of the 1970s, the import substitution model blocked by rising prices in energy and growing external debt and trade deficit was abandoned in 1979-1980 with the emergence of neo-liberal policies, called the Washington Consensus comprised of deregulation of the economy via foregrounding market economy, downsizing the

state in the economy, and liberalization of trade and capital movements. Turkey, adopting neo-liberal policies with the 24th January 1980 decisions, liberalized the trade through free market economy and export substitution model; in 1989, financial liberalization was also realized through liberalization of foreign exchange transactions and capital movements with the Decree No. 32 on the Protection of the Value of Turkish Currency” Çimen and Katman (2014, p. 2) state.

“The fourth and final phase, from the year 2000 onwards, constitutes the regulatory phase of neo-liberalism, with policy-makers emphasizing strong regulatory institutions and paying more attention to social protection” Öniş (2010, p. 48) indicates. At this point, the Turkish economy is completely integrated into the global economy and has come up against the growing post-Washington consensus. “Major policy shifts are typically associated with deep economic and political crises, accompanied by costly human consequences. At each stage, crises mark the breakdown of the previous model and create the conditions for a new policy coalition to support a revised model of development” Öniş (2010, p. 48) writes.

Poland gained independence in 1918 after a radical change in the political map of Europe during World War I. Ratajczak (2009) indicates “Poland managed to survive the most difficult initial years of independence and gradually began to develop. A symbol of the new economic era was the currency reform of 1924, which replaced the Polish mark with the zloty that was pegged to gold” (p. 2) and further states as follows:

The Great Depression had a significant impact on the Polish economy. It is an established fact that Poland’s economic crisis began to subside only in 1935; it was a time when the country, faced with an increasing threat from Germany and the Soviet Union, launched its industrialization and economic modernization programs. (p. 3)

“One of the consequences of World War II was a political, economic, and military reorganization of Europe. Poland, together with such countries as Bulgaria, Czechoslovakia, Romania, Hungary, and the German Democratic Republic (created in the Soviet occupation zone), became part of the area of Soviet influence” (Ratajczak, 2009, p. 3). “Consequently, only 27 years after regaining independence in 1918, Poland faced the need to rebuild its economic structure almost from scratch” Ratajczak (2009, p. 4) indicates. He writes as follows:

In December 1948, at a unification congress, the Polish Socialist Party was absorbed by the Polish Workers’ Party, which was politically and economically much more pro-Soviet. The unification congress and the creation of the Polish United Workers’ Party (PZPR) marked the beginning of the Stalinization of Poland. The country became a satellite of the Soviet Union, so it was expected to follow Soviet political, social, and economic models. Poland entered into an era of a centrally planned economy. (Ratajczak, 2009, p. 5)

“The year 1956 is generally regarded as the end of the Stalinist era in Poland” (Ratajczak, 2009, p. 6). “Stalinism in Poland was a period of intense industrialization that was primarily related to the development of heavy industry and efforts for total nationalization of the economy. The public sector comprised state-owned enterprises and cooperatives” (Ratajczak, 2009, p. 5). “Successive five-year plans, which determined the direction of Poland’s economic development, basically adopted the principles of a Six-Year Plan” (Ratajczak, 2009, p. 7). Industrial development was accorded a high priority, especially heavy- and raw-material industries. “The production of consumer goods was considered to be of secondary importance. Moreover, the development of the so-called non-productive sphere was regarded as essential, although not of primary importance. International economic relations were dominated by trade with the Soviet Union” (Ratajczak, 2009, p. 7).

In 1970, the new Polish authorities decided to radically transform Poland's economic situation by opening up its economy to the world. Regarding this economic transformation process, Ratajczak (2009) states as follows:

Technologies bought on credit and credit-based investment projects were expected to lead to a great leap toward economic development. Consequently, the import and production of consumer goods increased. Poles enjoyed greater freedom to travel abroad than citizens of other East European countries. However, it was soon revealed that, in a system based on the concept of political monopoly, the limits of economic reforms are ruthlessly determined by transformations and decisions made in the political sphere. . . . Successive advisory committees composed of economists and designed to support the government in economic transformation met with a refusal to accept almost anything that was remotely associated with extensive economic decentralization and an increased role of classical, i.e., free-market, economic mechanisms. (pp. 8-9)

The beginning of *perestroika* in the Soviet Union encouraged the Polish authorities to initiate economic reforms. Ratajczak (2009) indicates, "certain ideas of the reforms were implemented, and the most important among them was the economic activity act that was passed in December 1988 and popularly referred to as the Wilczek act, The law, which introduced considerable economic freedom, even today, is believed to be a piece of simple but effective legislation" (p. 10) and adds the following:

It was the Wilczek Act that triggered an upsurge of private entrepreneurship in Poland. This was one of the last events in the economic history of the People's Republic of Poland. February 1989 witnessed the beginning of the Round Table talks. As a result of these talks, members of the democratic opposition were permitted to participate in the governance of the country. The successive stages of the process initiated by the Round Table talks—the June 1989 election and the formation of a government headed by former dissident Tadeusz Mazowiecki in August 1989—marked the beginning of what is commonly referred to as "transition" in Poland. (p. 10)

Ratajczak (2009) notes, "In the economic sphere, the essence of transformation is a transition from a centrally planned to a market economy" (p. 11). The beginning of the transition is associated with the Balcerowicz Plan and, as Ratajczak (2009) indicates, "the plan proved to be rather effective, at least in the

battle against visible signs of hyperinflation” (p. 11). Ratajczak (2009) further writes as follows:

Positive changes occurred promptly in the country’s economic structure. Moreover, the government budget was in surplus. The rate of economic growth accelerated. . . However, for the general public, the symbols of the Balcerowicz Plan have always been inevitable bankruptcies of state-owned enterprises and a considerable rise in unemployment. Unemployment, practically unknown in a planned economy, began to soar. Undoubtedly, the Balcerowicz Plan was partially modeled on the concepts forwarded in the Washington Consensus. At the beginning of transition in Eastern Europe, this set of rules, designed to help crisis-wracked developing countries, was treated as a universal prescription. In Poland, the Balcerowicz Plan continues to cause major disputes, particularly over whether there was no alternative to it or whether its high social costs were actually inevitable. (p. 11)

Given the historical backgrounds of the two economies, it is evident that Turkey has more experience with a free market economy and liberalization practices. Established political traditions and prior policy practices and decisions are important in analyzing current policy choices. The fact that Turkey has a longer and deeper experience with a liberal economic model than Poland underscores the idea that choices of liberalism early in its history had an enduring impact on its economic structure, shaping both the strategies and goals of Turkish policymakers. Because of the liberal economic path established in Turkey almost from the founding of the Republic, self-reinforcing liberalization processes make reversals more difficult than in Poland. Even though Poland achieved a rapid transformation from a planned economy into a market economy starting from the 1990s, a relatively shorter experience of liberal economic model is likely to make Polish policymakers more skeptical of a free-market economy and cause liberalization reversals, particularly during critical junctures.

Path dependency gets stronger, and established paths become more durable with the creation of institutions and the development of institutional frameworks.

In contrast to Poland, Turkey has had a longer history of participating international

economic and political institutions that were created under the sponsorship of liberal and neoliberal capitalist countries. Turkey joined the IMF in 1947 and is a founding member of the OECD, established in 1961. The Turkish Central Bank became a member of the Bank for International Settlements (BIS) in 1951. Turkey started cooperating with the European Economic Community in 1963 with an association agreement known as the Ankara Agreement and became a candidate for EU membership in 1987. However, starting from the 1990s, Poland established relations with the aforesaid international organizations as well, and in the 2000s, it reached almost the same level of connectedness with the international institutions to which Turkey had already established links. Poland then surpassed Turkey in terms of institutional connection with the EU when it became the member of the EU, while Turkey continued to remain a candidate. The historical degree of connectedness and the level of cooperation with international institutions is likely to foster a path-dependent institutional pattern that favors policies promoted by these international institutions. However, this does not eliminate the likelihood of path dependence reversal as result of reactive sequences. On one hand, having long-lasting and deep relations with these international institutions of a capitalist system encourages the implementation of (neo)liberalism policies for individual countries and therefore provides an institutional advantage. On the other hand, in case of a break in relations with the international institution, i.e., lack of an institutional anchor, deviation from the policy preferences of the institutional anchor may get more severe. This was apparent when Turkey followed exceptional accommodating economic policies in the last decade in response to local economic shocks in the absence of an EU anchor. Historically, Turkey has had relations with the EU longer than Poland has, but its status is still that of candidate, while Poland

became a member in 2004. After 2015, Turkey's relations with the EU eroded and the negotiations for access were muted. From the Most Similar Cases design point of view, the degree of integration with the EU is a key factor in explaining differences in financial liberalization in individual countries.

4.2 Comparative analysis of stationary features

Turkey and Poland fit well into Levy's (2008) Most Similar Systems Design (MSSD) model for making comparisons, as they exhibit similarities in their economies and their social and demographic characteristics. The similarities taken into account at the very early stage of the research were stationary features such as economic scales, geographical location and proximity to each other, connections to regional economic zones, their economic systems (i.e., market vs. planned economy), and demographic conditions. These features are related to those countries' *state* (i.e., the structural and systemic features that are relatively stable and constant across time) as opposed to *actions* and policy responses (i.e., features that are dynamic, unsteady and influenced by business cycles, and fluctuations in economic and financial activities, including regulations).

Common features of *state* facilitate an accurate comparative analysis that focuses on policy actions; they also eliminate the need to concentrate on differences of *stationary* and structural features of these economies in explaining the effects of independent variables on financial regulations. Similarity in terms of *state* does not necessarily imply identical or comparable regulatory responses by Poland and Turkey, because these countries have not experienced the same business cycles or dynamics. Therefore, their policy responses and the color of their regulations may vary, and the way that independent variables influence the regulations may differ.

The similarities in MSSD comparisons refer to the stationary features mentioned above, and they prevail despite any possible difference in the effect of independent variables on the direction of regulations that are either liberalizing or repressive. Empirical research aims to identify which independent variables—domestic learning, policy diffusion, shocks, financial development and trade openness—have a significant impact on the pace of financial regulations in both countries. However, the direction of the effects (i.e., positive vs. negative) might be different since financial regulations are responses of decision-makers who formulate policy on the basis of rational assessments or political considerations.

Comparison is accepted as a fundamental tool of analysis, as it sharpens the power of description. It also plays a vital role in the formulation of concepts by bringing into focus suggestive similarities and contradictions between the countries being compared. Comparison is routinely used in hypothesis testing, and the types of comparisons utilized in political science include statistical analysis, historical studies, and experimental research. The comparative method eliminates the methodological issues that arise in the analysis of a small number of cases. In terms of design in the comparative method—as described in Levy (2008)—the logic underlying Przeworski and Tuene’s (1970) concept of MSSD corresponds to Mill’s method of difference, which identifies cases on the basis of similarities on a range of explanatory variables and/or features. But it also highlights differences based on dependent variables that would be financial reform tendencies in the sample countries. Some researchers believe that political issues can be better understood by examining a small number of cases. In comparative and international studies, focusing on just a few cases achieves greater legitimacy over time, which is in line with the rise of the school of “comparative historical analysis” (Collier, 1993).

A closer examination of data and historical developments in Turkey and Poland shows that these two countries share important commonalities in terms of their economic, financial, and demographic characteristics as well as their reform practices. First of all, both countries are transition and emerging economies. One way to assess emerging economies is to examine per capita income. Others are mentioned in Daniela-Neonila and Roxana-Manuela (2014): GDP growth and population. Figure 3 displays the per-capita GDP figures for Turkey and Poland. Since the 1990s, the income per person has followed the same trend in both countries, each with notable increases in the 2000s and a temporary deviation from the trend during the GFC. Figure 4 provides a cross-country comparison of the categories for the most recently available data. Both Turkey and Poland rank between highly-developed OECD member countries and countries classified by the World Bank as upper-middle income countries.

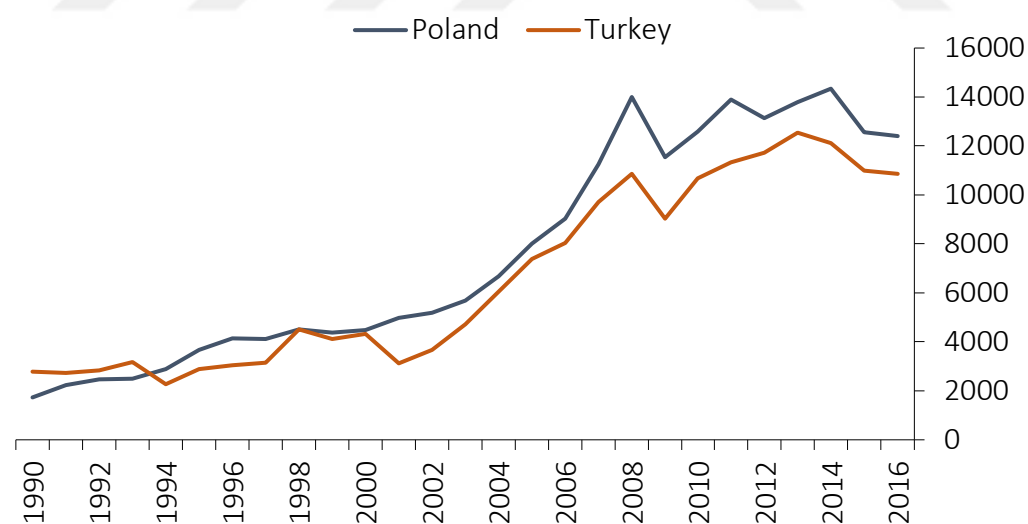


Figure 3. Per capita GDP (in USD)

Source: World Bank.

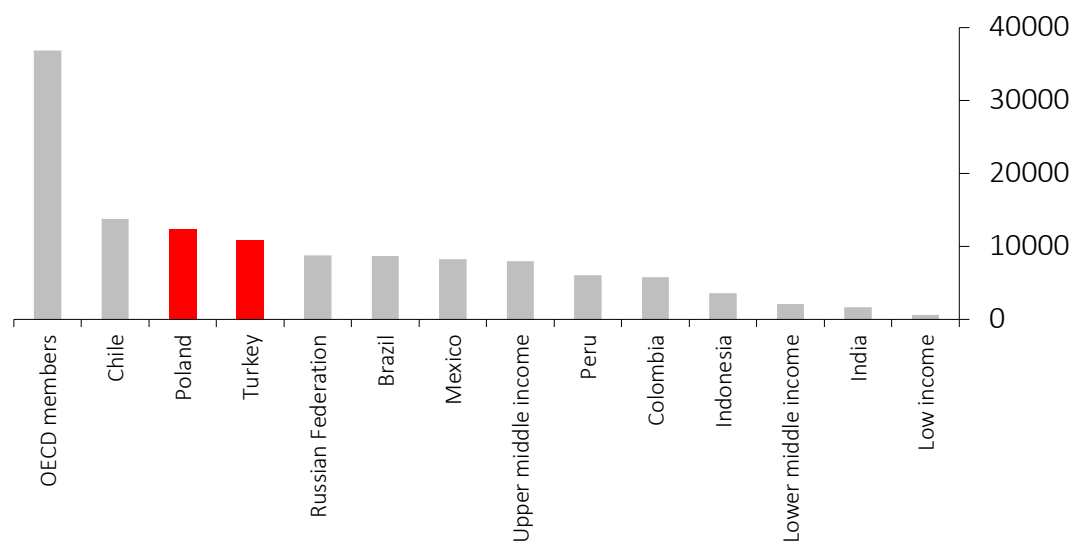


Figure 4. Per capita GDP: Cross country comparison (as of 2016, in USD)

Source: World Bank.

In addition to being classified as emerging countries, both Turkey and Poland have undertaken several reforms in recent decades. Turkey changed a great deal starting from the early 1980s, when it was illegal for Turkish citizens to possess banknotes of a foreign currency. It moved to a highly liberalized financial system that is now integrated into the international market. In the past 20 years, the Turkish financial system has undergone a liberalization process with the aim of transforming the Turkish economy into a market economy that will enable the country to join the group of emerging markets. However, financial crises that occurred in Turkey in 1994, 2000, and 2001 nearly caused the banking sector and the Turkish economy to crash.

Before reform initiatives were taken in Turkey, the Turkish financial system was characterized by “financial repression.” That is,

- i. ceilings were imposed on interest rates, i.e., there were limits on deposit and lending rates;

- ii. real interest rates were negative, which encouraged corporations to use leverage and caused the financial sector to shrink;
- iii. the required reserve ratios and liquidity ratios were high, which increased the costs of bank intermediation;
- iv. there were no institutionalized capital markets, i.e., underdeveloped capital markets had to rely on bank loans for business financing;
- v. credit rationing and subsidized credits to priority sectors were in play, i.e., there were preferential credits, which were subsidized;
- vi. entry into the banking system was restricted;
- vii. foreign exchange operations were significantly restricted;
- viii. public sector deficits were mainly financed through monetization, because money markets and government securities were not developed at the time, making it difficult for the Central Bank to utilize financial market instruments for monetary control; and
- ix. corporate financing was done through borrowing instead of equity financing.

In sum, Turkey's financial market was highly regulated and sustained an inefficient banking system with poor portfolio management.

The initial reform wave started with the 1980 Comprehensive Stabilization Program, by which the Turkish Lira was devalued to avoid overvaluation and high prices on exported goods and services. The main element in this program was a switch from import substitution to export promotion, trade reform, and liberalization in the financial sector. The purpose of deregulation was to develop the financial market and to encourage competition by making it easier to enter the banking system. This deregulation wave was accompanied by the abolition of interest rate

ceilings on loans and deposits, and certificates of deposit were introduced. In line with the liberalization efforts, the interbank money market was set up within the CBRT, and restrictions on households' holding gold or FX deposits and conducting payments denominated in FX were lifted. In addition to regulations related to the banking and financial markets, several reforms were achieved in the real economy, including the elimination of quantitative restrictions on imports.¹³

The second reform phase took place in the early 1980s, when there was a need for laying the institutional foundations for the financial system. In that period, the CBRT began to regulate interest rates on deposits and a deposit insurance scheme was introduced.¹⁴ At the same time, the Capital Markets Board (CMB) was established to control and monitor developments in the securities market.¹⁵

However, rising inflation and a large public deficit necessitated an additional round of liberalization. This one involved freeing up capital accounts with the aim of attracting foreign funds to finance public borrowing. Reforms after 1990 were characterized by government involvement in controlling interest rates. At the same time, the CBRT held interest rates at artificially low levels to protect the exchange rate by selling foreign currency. The 1994 financial crisis in Turkey forced policymakers to adopt an economic stability package, led by the IMF. This reform involved price increases and cuts in discretionary spending, with a tight monetary policy.¹⁶

The late 1990s brought an exchange rate-based disinflation program, which involved fiscal adjustment, structural reforms, and exchange rate commitments, supported by income policies. One outcome of this program was the 1999 Bank Act

¹³ https://www.resmigazete.gov.tr/arsiv/16880_1.pdf. Last accessed 14 September 2022.

¹⁴ <https://www.resmigazete.gov.tr/arsiv/17007.pdf>. Last accessed 14 September 2022.

¹⁵ <https://www.resmigazete.gov.tr/arsiv/17416.pdf>. Last accessed 14 September 2022.

¹⁶ <https://www.resmigazete.gov.tr/arsiv/21896.pdf>. Last accessed 14 September 2022.

No. 4389, which established the Banking Regulation Supervision Agency (BRSA), an institution whose effect on the banking sector was significant. After the November 2000 and February 2001 crises, comprehensive reform packages were created. To this end, structural changes aimed at the transformation of economy as a whole; rapid changes were seen in public sector discipline and institutional frameworks. The BRSA was also tasked with strengthening the private banks, selling or liquidating some banks, privatizing state banks, and improving supervision and auditing.¹⁷

Recent decades, including the GFC have brought new versions of policies and regulations aiming to insulate the Turkish economy from specific risk factors. For instance, after the GFC, the CBRT adopted a new framework in which an asymmetric interest corridor was introduced, and a reserve option mechanism and reserve requirements were used extensively to contain macro-financial risks and loan growth. At the same time, a large set of macroprudential measures were implemented. These included provisions, loan-to-value ratios, and installment restrictions. Meanwhile, restrictions on economic agents obtaining credit in FX were instituted.¹⁸

Similarly, in the 1990s, Poland experienced significant changes, which included changes in the regulatory system for financial services as well as changes in the main bodies responsible for organizing and regulating business activity. As was the case in Turkey, several legal bodies were created or modified in the process; among them were the Securities and Exchange Commission (Komisja Papierow Wartosciowych Gield-KPWiG) and the Warsaw Stock Exchange (Gielda Papierow Wartosciowych Warszawie S.A.) (Marszałek and Janc, 2016). After Poland rejoined

¹⁷ <https://www.resmigazete.gov.tr/arsiv/23734.pdf>

¹⁸ Source: BRSA (<https://www.bddk.org.tr>)

the IMF and the World Bank Group in 1986, a number of economic reforms were undertaken. This included legislation that allowed foreign entry in the form of joint ventures with Western firms, the establishment of the Export Development Bank to promote foreign trade, and measures to prevent industrial concentration. At the same time, bond and stock markets were created, and the banking system was commercialized. On the trade front, control of governmental institutions on foreign trade was liberalized.

After the elections in 1989, Poland was on the road to becoming a market-based open economy, thanks to the new reforms. New legal regulatory and financial mechanisms were established to make it easier for private firms to operate. On the macroeconomic front, stabilization was needed, which could not be achieved without liberalization in the pricing system. The convertibility of the Polish currency, the Zloty, was enhanced so that Poland could integrate into the international financial system. In line with the 1990 and 1991 Balcerowicz Plans, laws on insurance and bankruptcy were passed, foreign trade was gradually liberalized, a crawling peg was adopted, and a stock exchange was established (Ratajczak, 2009).

Poland is a member of the OECD and became a member of the EU on May 1, 2004, which meant that Poland had to align its regulations with those of the EU. A number of changes were therefore made to financial institutions. Poland's accession to the EU also necessitated administrative reform, pension reform, and competition reforms. A substantial wave of foreign direct investment inflows was also observed. Then came the negative effect of the GFC, triggering more reforms. Like other emerging countries, Poland implemented macroprudential measures such as a loan-to-value ratio, a cap on loan-to-income ratios, dynamic provisioning, and sectoral capital requirements (Bierut et al., 2015).

Similarities in the reform trajectories of Turkey and Poland are visible in the data. Figure 5 shows the data for the financial liberalization index that Abiad et al. (2010) developed for Turkey and Poland. In fact, both countries experienced waves of financial reform that resulted in largely liberalized financial conditions; the higher values of this normalized index indicate financial liberalization.

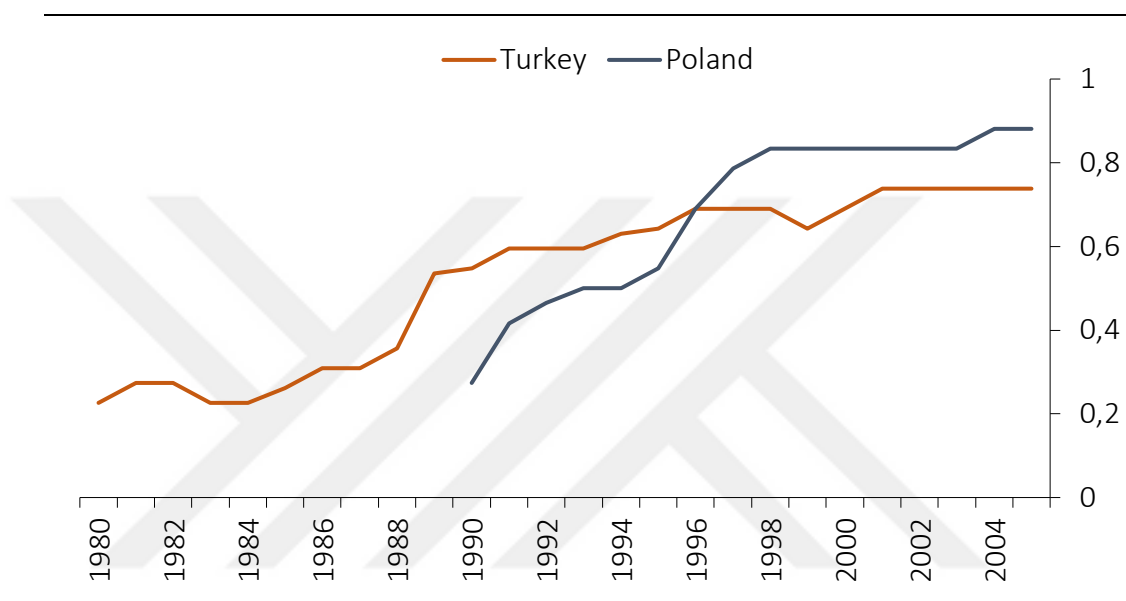


Figure 5. Financial liberalization index values for Turkey and Poland
Source: Abiad et al. (2010).

The two countries also have similar geographical and demographic factors. Geographically, they are in relatively close proximity (Central and Southeast Europe) and have sizeable populations and similar population growth trends, as indicated in Figure 6. Poland's population in 2018 was estimated to be 38.1 million, and Turkey's was estimated at around 80.8 million.

In terms of economic activity and business cycles, both countries follow similar trends over time. Figure 7 shows the annual growth rate of industrial production, which is taken as a proxy for economic activity. As can be observed from the data, both countries' real economic output shows similar fluctuation patterns.

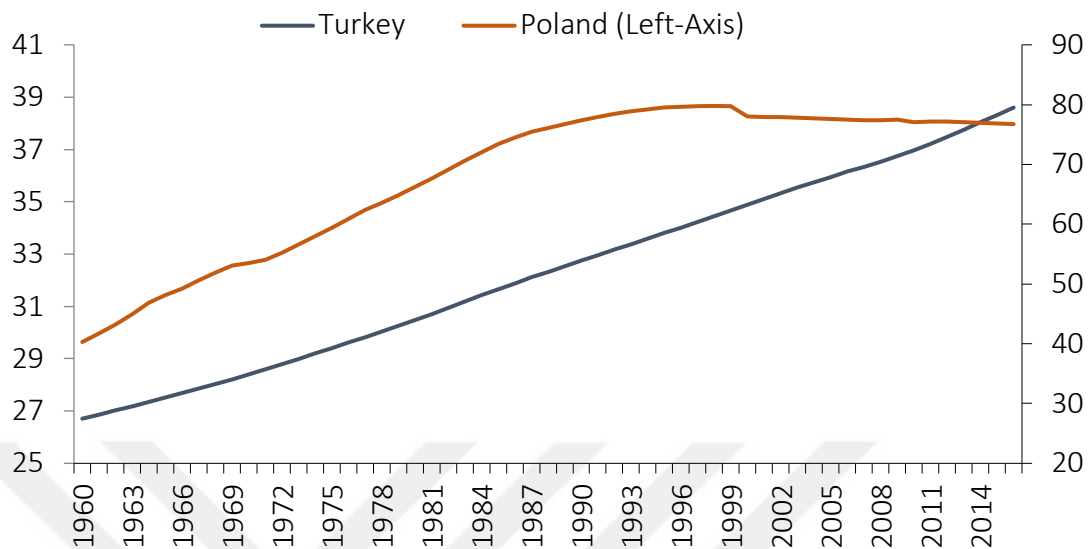


Figure 6. Population in Turkey and Poland (in Millions)

Source: World Bank.

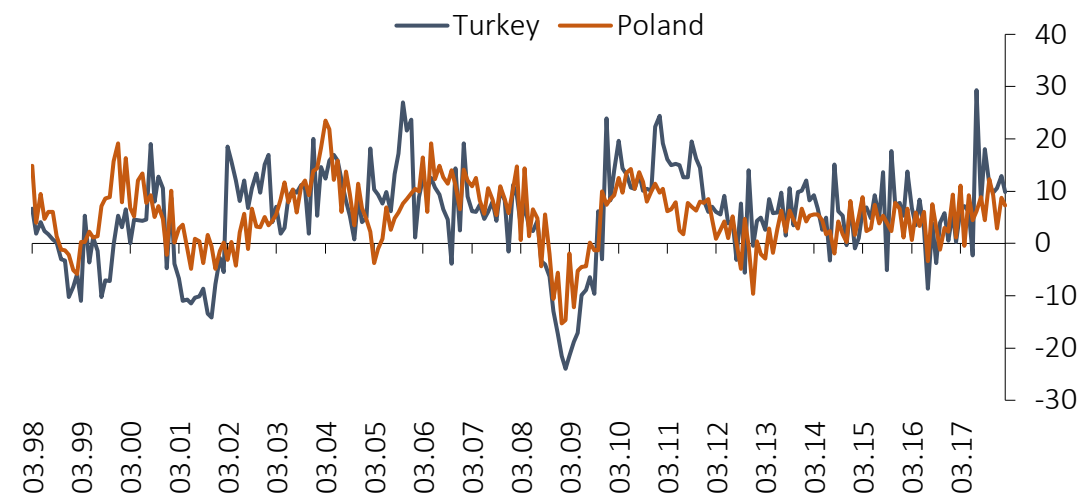


Figure 7: Industrial production in Turkey and Poland (annual percentage of change)

Source: Bloomberg.

A fourth similarity is that both nations suffered several crises in the past, accompanied by rising unemployment and very high inflation rates. In fact, both

countries achieved disinflation in response to excessive price pressures (see Figure 8). Yet another commonality is that their exposure to global financial conditions resulted in important episodes of currency depreciation and hikes in market interest rates, especially in the post-crisis period caused by a Taper tantrum (see Figures 9 and 10).

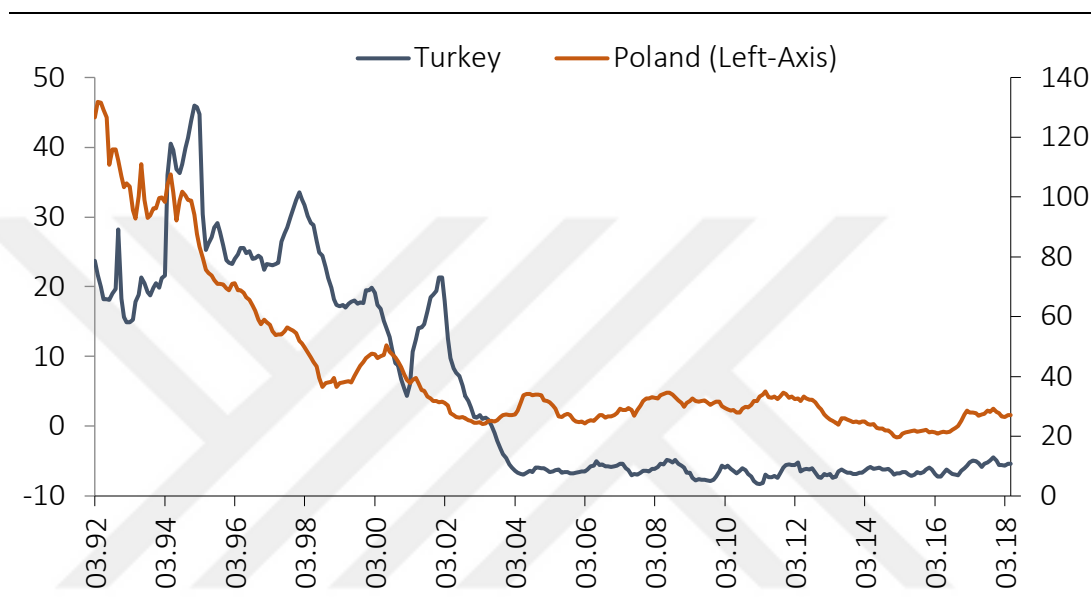


Figure 8. Consumer prices inflation in Turkey and Poland (annual percentage of change)
Source: Bloomberg.

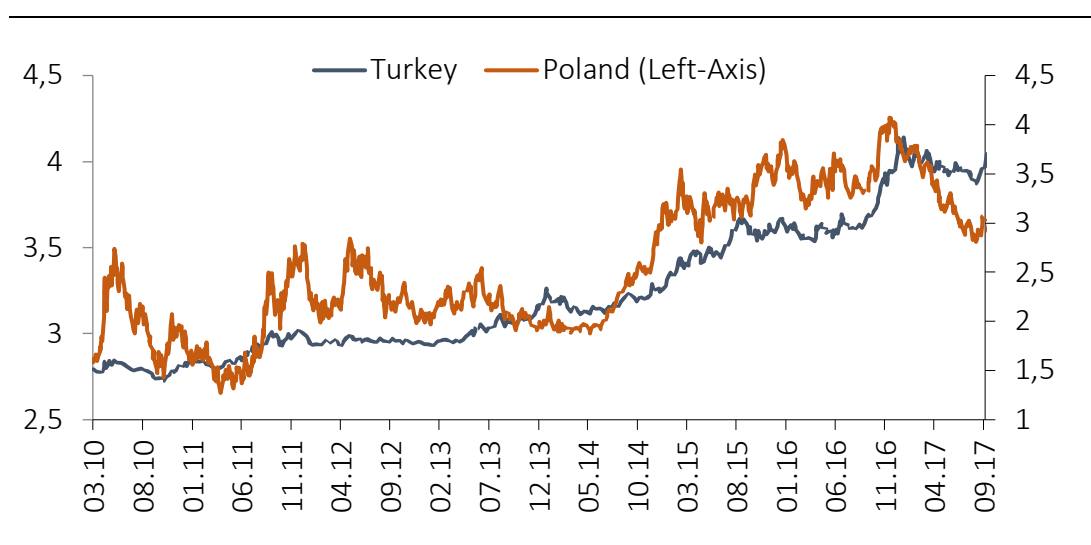


Figure 9. Exchange rates against USD
Source: Bloomberg.

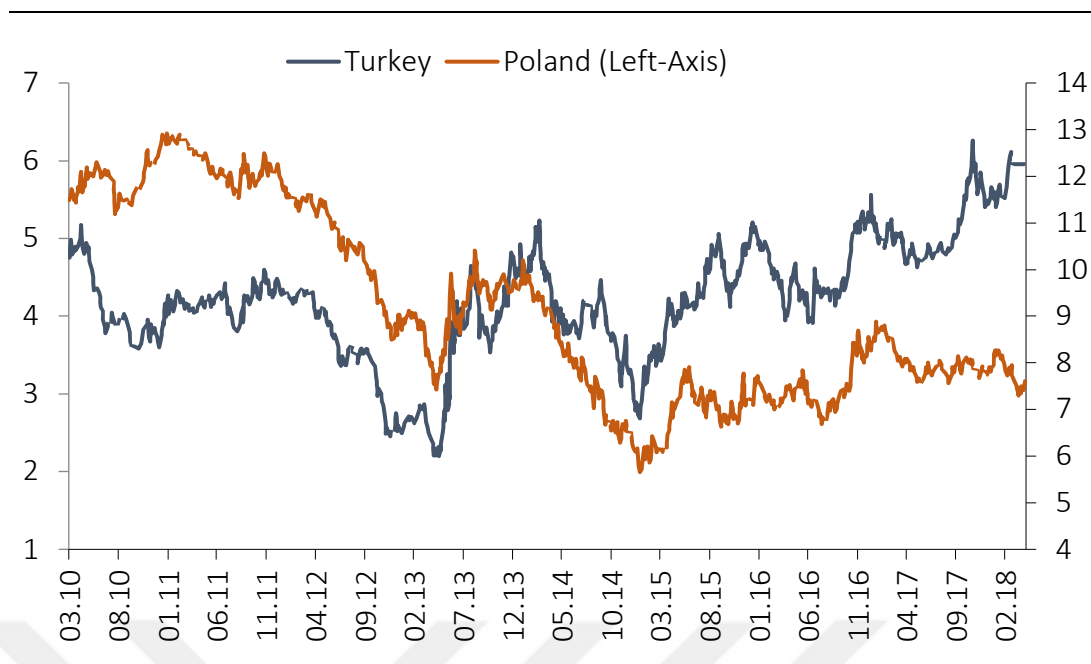


Figure 10. 10-year government bond yield (percentage)

Source: Bloomberg.

4.3 Comparative financial sectors overview

As Yalman et al. (2013) note, “although the insurance sector is developing rapidly and non-bank financial institutions have grown in size and number in recent years, Turkey’s financial sector remain bank-based” (p. 22). Yalman et al. (2013) writes as follows:

The number of banks increased rapidly in the 1980s as a result of relaxed regulatory barriers. Within the economic environment characterised by high interest rates and increased speculative activities in the aftermath of capital account liberalisation, banks acted as institutional rentiers. While IMF programmes played an important role in banking regulatory reforms, as seen in Banking Law No. 4389 enacted in 1999, it was during the exchange rate-based stabilisation and disinflation programme that Turkey faced the biggest crisis in the financial sector. The banking system went through further restructuring after the 2000-1 crisis. As a result, the number of banks dropped significantly, thereby concentrating assets in fewer banks, which increased their ability to maintain adequate capital reserves. State-owned banks were restructured, and some of them were brought under joint management. (p. 25)

In the same period, there were cross-border mergers and acquisitions in the banking sector and Turkey became attractive to foreign banks. Banks being of

utmost importance in the financial sector, almost had 80% of total financial assets. Deposit banks dominate the sector. Yalman et al. (2013) indicate “among the non-bank financial institutions, which have been growing in the last decade in number and size, insurance companies make up the largest segment of value added” (p. 22). Financial leasing companies and factoring companies follow as non-bank financial institutions, but there is a considerable upsurge in the real estate investment trusts, asset management companies, and pension companies in the last couple of years.

Yalman et al. (2013) summarizes the outlook of security markets as follows:

Private sector securities, mostly composed of common shares, still remain behind the public sector securities (mainly government bonds) and comprise 78% of the total outstanding securities. There has been a significant increase in the issuance of government bonds starting from the early 2000s. . . The corporate bond market in Turkey is relatively small, and deposits compose a significant part of bank liabilities. (p. 22)

With regard to capital flows Yalman et al. (2013) writes “financial flows gained more importance in the 1990s and have mostly been in the form of “other” flows or portfolio flows. The increase in foreign direct investment in the aftermath of 2001, on the other hand, was due to the privatization of major public companies” (p. 23). “The short-term indebtedness remained a problem, as can be seen in the ratio of short-term foreign debt stock to the gross reserves of the CBRT” Yalman et al., 2013, p. 24) reports.

Turkey initiated many reforms in financial sector. Yalman et al. (2013) reports the following:

Financial sector reform has occupied a noteworthy place within Turkey’s ongoing process of accession to the European Union (EU). After Turkey was declared as a candidate for EU membership in 1999, governments were advised to carry on financial reforms for increasing transparency and surveillance. Amendments to the 1999 Banking Law augmented the institutional powers of the Banking Regulation and Supervision Authority (BRSA) and Savings Deposit and Insurance Fund (SDIF) while bringing Turkey’s financial regulations closer to the EU standards. CBRT has been granted formal independence in 2001. The National Programs from 2001

onwards comprised targets which were determined for increasing the competitiveness of the economy and convergence with EU practices. With the motto of adopting international best practices and compliance with EU directives, Banking Law No. 5411 of November 2005 has been promulgated. Moreover, the process of transition to Basel II standards, which started in 2005, made the regulation of financial markets one of the fields in which the alignment with EU *acquis* has been achieved. The BRSA remains the sole supervising authority in the banking sector while there is a division of labour in the supervision of growing non-bank financial sector; financial intermediaries supervised by BRSA, funds and trusts by Capital Markets Board (CMB), and insurance companies by the Treasury. (pp.25-26)

Policymakers paid attention to the fragmented structure of financial supervision and have endeavored to consolidate these supervisory authorities. The Financial Stability Committee (FSC), founded in June 2011, was designed to achieve that consolidation “and serves as a hub for developing policy proposals and taking measures in order to manage systemic financial risks. The FSC is composed of the Treasury, the CBRT, the BRSA, the SDIF, and the CMB. It is chaired by the Minister in charge of the Treasury and Finance” (Yalman et al., 2013).

In Poland, a large share of the financial sector by assets is either state-controlled or foreign-owned. As in the Turkish financial system, the overall system is dominated by banks. Among the 12 domestic systemically important banks designated by the Polish Financial Supervisory Agency (PFSA), seven are foreign-owned; six of the seven are headquartered in the EU. World Bank reports “foreign-owned banks still account for 45.5% of the Polish banking system in 2017, compared to 60% in 2012. Foreign-owned companies—from the EU, USA, and Canada—also account for half of the insurance sector. Since the state-controlled large insurer acquired controlling interests in three banks, one from selling foreign owner, the state is now the controlling shareholder of the largest bank and the largest insurance company” (World Bank, Financial Sector Assessment-Poland, 2019, p. 9).

The Polish financial sector also has a large number of small cooperative banks and credit unions. While servicing 25% of the population, these institutions account for only 8% of the assets in the financial system, so they do not pose systemic risks (World Bank, Financial Sector Assessment-Poland, 2019).

World Bank (2019) indicates "the insurance sector is small by comparison with most EU markets. The insurance sector is larger relative to other CEE countries, but penetration rates, especially in life insurance, remain well below those of more developed EU markets, and the product range remains limited" (Financial Sector Assessment-Poland, p. 10).

Regarding the securities market, World Bank (2019) reports the following:

Among Central and Eastern European countries, Poland has the largest stock markets, and Polish Treasury bond markets are sizeable, but non-sovereign bond markets remain under-developed. Equities are traded through both the regulated Warsaw Stock Exchange and a smaller alternative trading system. Bond markets have been growing, but from a low base for corporate bond markets, which remain modest in size, and with limited liquidity by comparison with larger sovereign debt markets. (Financial Sector Assessment-Poland, 2019, pp. 10-11)

Regulatory and supervisory responsibilities are spread over a number of entities. The PFSA and its board, which report to the Prime Minister, have "prudential supervisory responsibility for the financial sector. It also issues recommendations, circulars, and similar documents and enforces regulatory requirements, but only the government issues laws and regulations." The National Bank of Poland (NBP) has no frontline supervisory responsibilities, but it oversees the overall financial system stability and the payments system. The macroprudential mandate is assigned to the Financial Stability Committee Macroprudential, with the NBP taking the lead role in monitoring systemic risk. The committee includes representatives from the NBP, the Ministry of Finance, the PFSA, and the Bank

Guarantee Fund (BGF). It also collaborates closely with these bodies (World Bank, Financial Sector Assessment-Poland, 2019).

It is evident from a comparison of the financial sectors of Turkey and Poland that both economies have very similar financial systems. From the perspective of the varieties of capitalism approach, this is not surprising because both countries are liberal market economies that follow the paths of capitalism in continental Europe.

In sum, the similarities outlined above provide an opportunity to embark on a detailed comparative analysis of different factors that affect financial reform decisions in Turkey and Poland.



CHAPTER 5

WHAT SHAPES FINANCIAL REGULATION REFORMS?

This chapter focuses on factors and dynamics that shape the financial regulation reforms. It explores the experiences of Turkey and Poland in the light of theories on financial regulation reforms. As discussed in the literature review chapter, some studies focus on the question of how to design reforms properly as part of an effective policy-making process, while others focus on issues like policy capabilities, different forms of learning, globalization impacts, and institutions. In this chapter, the aim is to elaborate on the factors that motivated policymakers in Turkey and Poland in a given period (between 2003 and 2018) to introduce new sets of regulations or amend the existing ones. These discussions are then tested in Chapter 6 through a quantitative analysis.

In the 1980s, the role, size, and scope of the state in the economies of Poland and Turkey were challenged. As Clift (2014) indicates, “the neo-liberal shift led to a change in the embedding of market relations in state/society complexes along more market-conforming (rather than market-directing) lines” (p. 174). Clift (2014) writes as follows:

Neo-liberal ideas were important catalysts for major transformations from the 1980s onwards, notably privatization and marketization of formerly state-delivered or public sector activities. Both became significant international trends of state transformation, reducing the size and scope of the public sector and opening up more fields of activity to markets, quasi-markets, competition, and the private sector. (p. 174)

However, following financial crises in Asia and Latin America in the 1990s and several other emerging market crises, regulatory state elements emerged in advanced democracies. An important catalyst in this transformation was the GFC in 2008, which paved the way for increasing regulation (or maybe over-regulation) of

financial systems and economies. “The capitalist state changed in response to privatization and liberalization, and advanced states ended up controlling a smaller public sector and regulating a larger private sector, which required extensive intervention through regulations.

During the time period selected for this dissertation, both Turkey and Poland underwent extensive financial reforms. As two emerging economies integrated with the global financial markets, both witnessed a convergence with global reform trends, but they also had domestic input and country-specific ways of regulating their financial markets. For this reason, the concepts of policy diffusion and learning are relevant in a discussion of the experiences of these two countries.

A discussion of financial reforms should also consider the state type, with links to intellectual legacies and institutional aspects. As noted by Clift (2014), significant national differentiation may be expected in state evolution and in the range and nature of interventions in economy and society. “Different liberal states, drawing on different political economic traditions and intellectual legacies, as well as responding to different political, institutional and economic conditions, arrive at different kinds of state–market relations, rooted in different kinds of interventionism” Clift (2014, p. 197) writes.

When comparing countries, it is also useful to look at institutional interdependencies and policy choices. From the “Varieties of Capitalism” (VoC) approach proposed by Hall and Soskice (2001), the patterns of institutional interlinkages also take different forms in different national historical contexts. Historical institutionalism proposes that path dependency is a crucial idea for understanding temporal and spatial variations and changes. Thus, studying the experiences of Turkey and Poland should also include analyses of established

political traditions and prior policy practices and decisions with a focus on previous periods or between sub-periods. As institutionalists argue, these factors become institutionalized in ways that may limit the conditions for policy evolution.

“Nationally differentiated but enduring configurations of capitalist organization and the attendant institutional infrastructure are conceived as meta-examples of path dependency, since the institutional infrastructure will tend to guide evolution along a particular path” Clift (2014, p. 107) notes. “Hall and Soskice’s VoC (2001) takes direct inspiration from the concepts of feedback effects, increasing returns, and path dependency theorized by North and others” (Clift, 2014, p. 107). However, concepts like path dependency need to be approached cautiously, as social processes have distinct and dynamic temporal dimensions (Clift, 2014). “In thinking through how and why particular paths are selected and how the development of a chosen path is reproduced,” if we assume that rational responses are uniform, we run the risk of overlooking the fact that different types of capitalisms can develop over time, owing to distinctive histories, trajectories, and institutional contexts, and different approaches to economic behavior (Clift, 2014). One important aspect may be the choice of growth and development models in different countries, and in this chapter, these aspects will be discussed with regard to Turkey and Poland’s experiences.

Examining the cases of Poland and Turkey from an institutionalist analysis perspective may reveal a punctuated equilibrium of institutional change in capitalism. The punctuated equilibrium may be a result of evolutionary change in path dependency or critical junctures such as economic crises or war, when institutions are changing. As Clift (2014) indicates, “a path is decided upon in a contingent manner; thereafter, until at the next critical juncture, institutions deliver

significant degrees of stability. However, this way of thinking about change fails to acknowledge shifts that are gradual and incremental, though cumulatively transformative” (p. 38).

Institutional change can occur either through incremental change or disruptive (transformative) change. As Clift (2014) notes “critical junctures (radical or dramatic shifts in the logic, nature and functioning of political economic institutions) do not exhaust the possibilities of types of institutional change. Change may originate from within” (p. 115). “Using the comparative method both diachronically (analysing the same case at two points in time) and synchronically (analysing the processes of change within two or more different cases), this broader menu of types in institutional change can be revealed, as can the politics underpinning the dynamics of such change” (Clift, 2014, pp. 115-116). Path-dependent evolutionary change is possible (Clift, 2014). I conducted a comparative analysis of the two countries using significant determinants of financial regulation reforms (my independent variables) throughout historical episodes that constitute either a path-dependent evolutionary change or a critical juncture for each case.

I examined the determinants of the financial regulation reforms in Turkey in three historical episodes:

- 1- Stability period (2003-2008)
- 2- Aftermath of the crisis (2009-2013)
- 3- Accommodative financial regulation initiatives (2013-2018)

Figure 11 shows the separation of historical episodes whose characteristics are defined by critical junctures or evolutionary changes in path-dependent patterns.

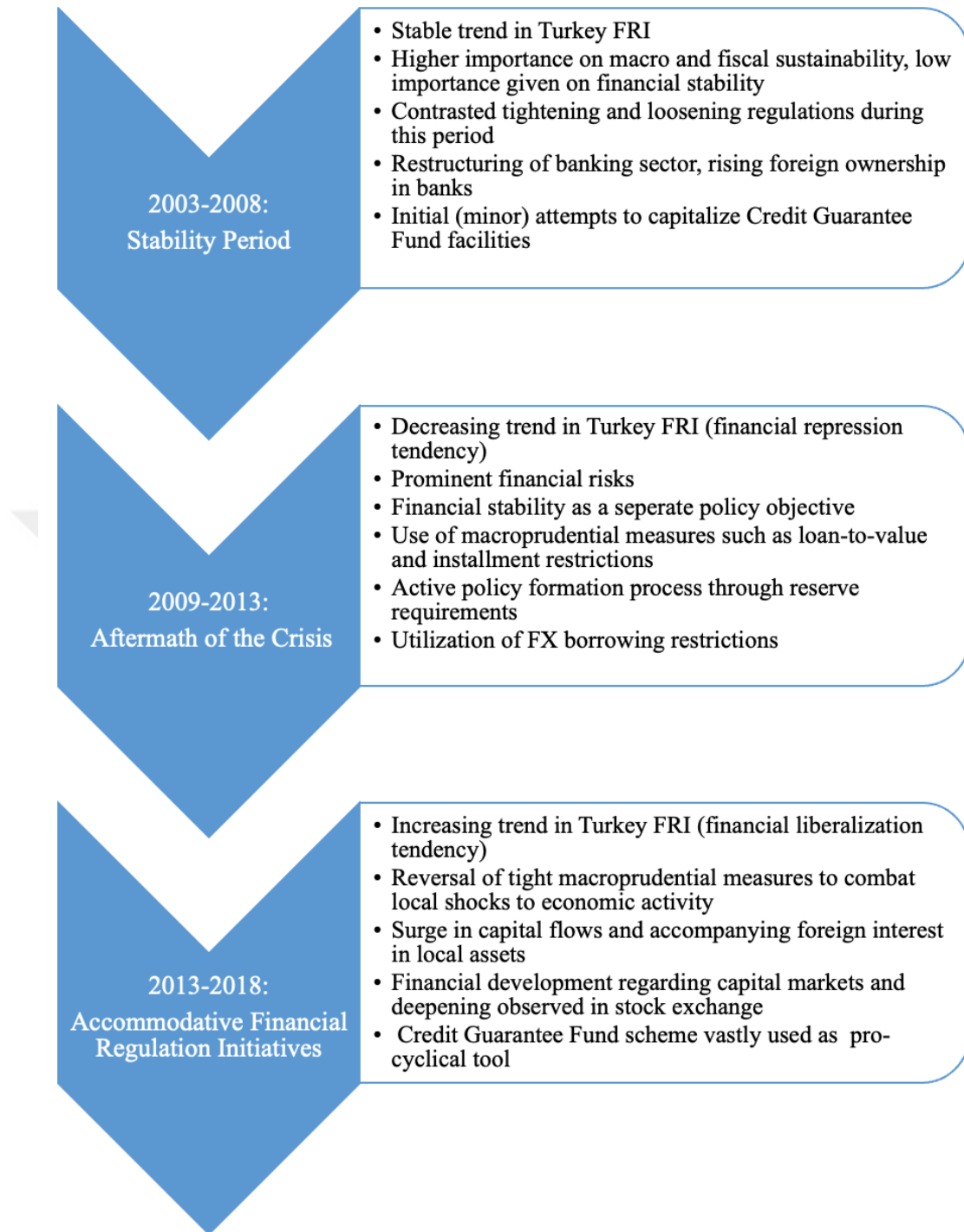


Figure 11. Separation of historical episodes in the sample examined (Turkey)

The first period I examined in the Turkish case was a “stability period,” where the focus was mostly on macroeconomic governance. The financial crisis in 2001 corresponds to a critical juncture that commenced in this period, when a particular institutional arrangement from among different alternatives was adopted (See Mahoney, 2000). The financial regulation was the product of various factors, some of which were financially repressive, while others aimed to boost financial liberalization. The learning process contributed to policy formation, especially in this period. Given the crisis episodes in the 1990s, stabilization efforts in the early 2000s took on a unique pattern. The financial reforms were unique in that they introduced new mechanisms, goals, and instruments. For instance, structural reforms—which ranged from fiscal policy to the banking sector and from institutional structure to the design of inflation-targeting regimes—were all designed to cope with economic problems by not using so-called “old” methods. Local shocks also had an impact on the financial regulations, as evidenced by the initiation of various regulatory efforts following the onset of the 2001 crisis in Turkey.

In the second period, “the aftermath of the crisis”, we see that the GFC, as a critical juncture, had prompted significant changes to the existing regulations. Like other emerging markets, Turkey adopted multiple macroprudential measures to contain risks to financial stability. Financial stability was accepted as a complementary policy objective. The repressive nature of this policy is not surprising when analyzed in the light of theories that associate financial reforms with globalization and international shock transmission. Burgoon et al. (2012) maintain that turmoil and crisis episodes (specifically in the case of Europe) have led to concerns about the efficiency of the international financial system. It was for this reason that national authorities and international institutions were forced to follow

more coherent and coordinated economic and financial policies following the outbreak of the GFC (Peters et al., 2011). This was experienced in Turkey as well.

The last period I examined in the Turkish case is characterized by accommodative financial regulation initiatives. The events that led to a critical juncture in this period were primarily due to local shocks and financial developments triggered by local political imbalances after 2013, which accompanied the deterioration of relations with the EU and the U.S. due to conflicts of interest on geopolitical issues.

Like Turkey, Poland experienced three different periods which colored the path of its financial regulation reforms (see Figure 12):

- 1- Accelerated financial development with the EU accession process (2003-2007).
- 2- Focus on containing financial risks (2008-2015).
- 3- Saturation and harmonization with international practices (2015-2018).

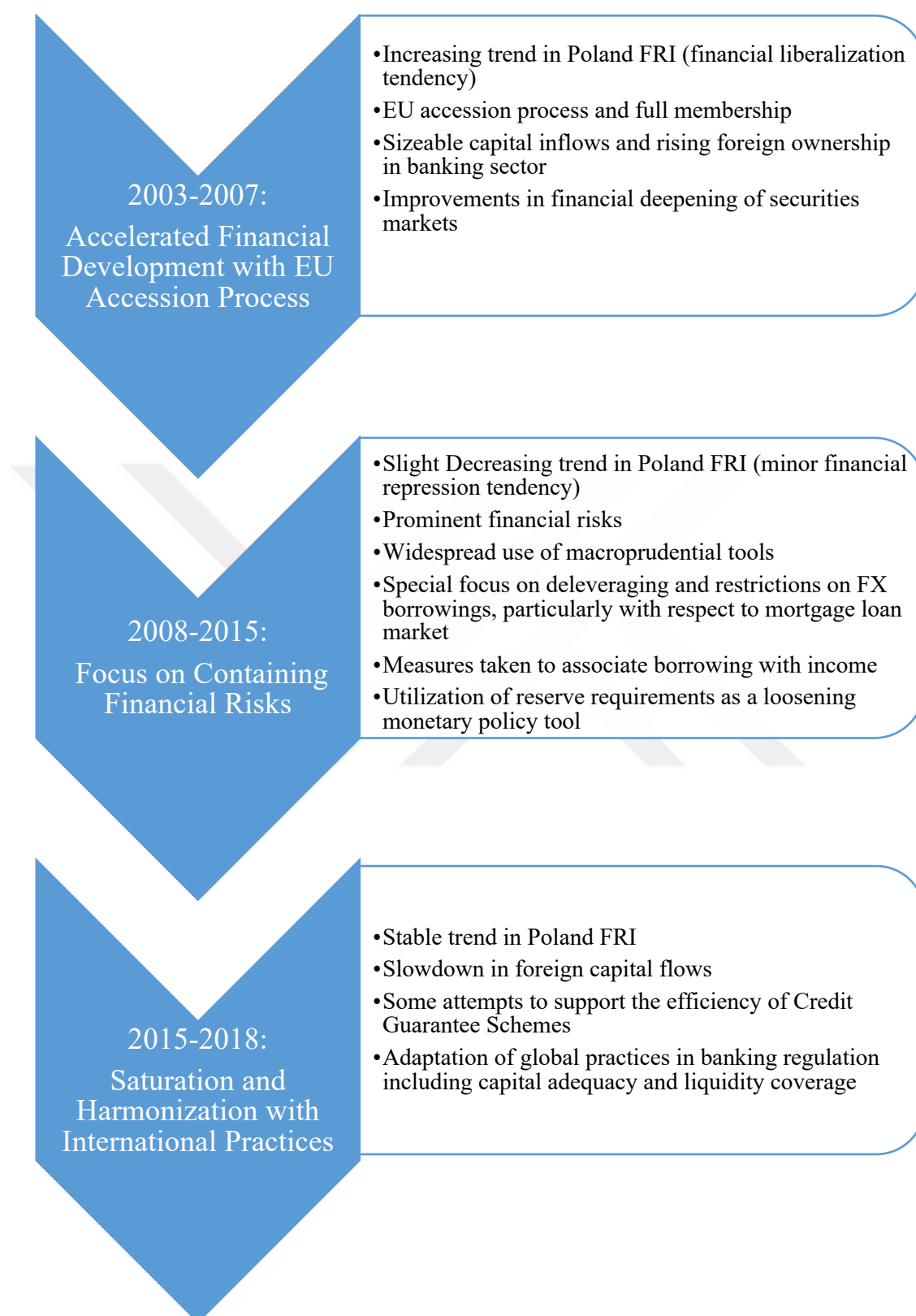


Figure 12. Separation of historical episodes in the sample examined (Poland)

I refer to the first episode as “Accelerated Financial Development with the EU Accession Process.” In fact, before Poland became a member of the EU, its economy had experienced a significant surge in capital flows, which caused a shift in the banking sector structure and significant improvements in the stock market. Like other emerging market economies, global shocks and the resultant financial risks appear to have inspired Polish policymakers to implement macroprudential measures, which caused a slight movement in the Polish FRI toward financial repression. During that time (the so-called “Focus on Containing Financial Risks” episode), the local economic outlook and the unique dimensions of the Polish economy appear to have led to a differentiated implementation of policies in different sectors. In particular, the Poland case includes policy measures that aimed to achieve deleveraging and associate borrowing capacity with the income of economic agents. As in the Turkish case (albeit at different times), reserve requirements were utilized as an active monetary policy tool. I refer to the last episode of the historical decomposition of events that make up the Poland FRI as “Saturation and Harmonization with International Practices.” As the name suggests, this time episode was characterized by a relative slowdown in foreign interest in Polish financial sectors (including banking) and saturated capital inflows. Poland also implemented global practices in its banking sector regulations during this period.

5.1 Linkages with international institutions and policy diffusion

Elaboration of financial regulation reforms of the two countries throughout the time episodes mentioned above is an accurate way analysis from comparative political economy perspective. The linkages of both countries with international institutions and the way that such institutions influenced their financial regulation reforms is

important in analyzing the role of the policy diffusion factor. A large heterogeneous set of international institutions were involved in the process of reforming financial market regulations, including the OECD, the United Nations, the Bank of International Settlements (BIS), and the World Bank. However, only a small number of institutions played a central role in the regulatory reform processes in Poland and Turkey; these were the G20, the Financial Stability Board (FSB), the International Monetary Fund (IMF), the Basel Committee on Banking Supervision of BIS (BCBS), and the European Commission (EU Directives). Turkey has membership relations with the G20, the FSB, IMF, BIS, and the OECD, but it does not have membership status in the EU. Poland is a member of the EU and aforesaid international institutions, with the exception of the G20 and the FSB. Even though Turkey is not a member of the EU, it has conducted accession negotiations for a long time, and it has taken EU-originated financial regulations into consideration in reforming financial regulations. Poland, on the other hand, is not a member of the G20 or the FSB, but it does follow the financial regulation recommendations made by these institutions to comply with the global financial norms.

The G20 worked closely with the FSB, which in turn strengthened its ties with the IMF and the BCBS as an international standard setting organization. The G20 was established in 1999 as a forum where finance ministers and central bank governors of the world's major economies meet to discuss financial stability. Until 2007, visibility of the G20 was low. After the GFC, the G20 became a nodal actor in the reform process that was triggered by the financial crisis (Viola and Mayntz, 2015). G20 membership is restricted, which means that consensus-building would be easier than in an international organization such as the IMF or a United Nations unit with a similar sectional mandate. Beginning in 2009, the heads of G20 governments

also started to hold highly visible summits. G20 became the premier forum of international economic cooperation. The commitments and tasks proclaimed at summit meetings legitimize the regulatory activities of European and national bodies. As Mayntz (2015) notes, “the reform of the financial sector and of international financial institutions dominated the first two summit declarations (Washington 2008 and London 2009)” (p. 40) and continued to be a major topic in subsequent G20 summits. When the global crisis hit in 2008, banking sector reforms were taken up at international level and discussed by the G20. An understandable time-specific measure to prevent bank failure was to require banks to hold more capital. The G20 heads of government welcomed the corresponding initiatives of the Basel Committee. Over time, Mayntz (2015) indicates “the reform process moved from the earlier emphasis on bankers’ excessive risk-taking and insufficient bank capital to more complex issues such as the moral hazard posed by increasingly global financial institutions that were “too big to fail,” and the threats posed by the unregulated over-the-counter trading of complex derivatives” (p. 12).

The G20 played role in international accounting standards too. Borio et al. (2020) state follows:

All bank assets are subject to risks. For example, a mortgage is subject to the risk of the borrower defaulting (credit risk). A stock or bond is subject to valuation (market) risk. And a derivative contract is subject to the risk of a counterparty’s default (counterparty risk, a form of credit risk). Each of these risks can translate into losses. Losses have an “expected” and “unexpected” component. The timely recognition of, and provision for, credit losses is a prerequisite for the safety and soundness of the banking system. However, the “incurred loss” approach banks followed before and during the GFC tended to result in provisions that were “too little, too late.” (pp. 20-21)

The regulatory response to address the “too little, too late” problem was G20 leaders’ call for accounting standard setters to amend loan loss provisioning. Upon the G20’s call in 2016, the International Accounting Standards Board set out a new

standard, based on expected credit losses – IFRS 9 (International Financing Reporting Standards). “Under this standard, provisions should increase/decrease as soon as banks estimate a rise/fall in the riskiness of their credit exposures” Borio et al. (2020) indicates.

The IMF, an institution formed under so-called Bretton Woods instructions, also focuses on issues of financial stability. After the Asian crisis, the IMF got involved in market supervision, as Mayntz (2015) pointed out. Not only was the IMF authorized to inspect the financial market supervision of the IMF members asking for credit; together with the World Bank it developed a new, quite intrusive instrument, the Financial Sector Assessment Program (FSAP). The FSAP evaluates the extent to which national regulators comply with internationally agreed upon best practices. The result of inspection is then to be shared with the country under examination to help the country’s policymakers identify the strengths, vulnerabilities, and risks of their financial system. In the course of the reform process that started in 2008, the FSAP became a valuable instrument. Mayntz (2015) states as follows:

From the first summit onwards, the G20 asked for collaboration with the IMF. To strengthen the IMF’s capacity to play its expected role in the reform process, the G20 devoted much attention to the issue of institutional reform, including changes in the representation of different countries and regions in its decision-making bodies. Already in the early phase of financial crisis management, IMF resources were increased . . . and the IMF was drawn into the reform network coordinated by the FSB, and was given specific tasks by the G20. These tasks involve monitoring and information-processing more than the development of specific rules. The financial stability reports published regularly by IMF reflect a shift of attention parallel to corresponding shifts in G20 attention: until April 2011, issues of financial stability and specific aspects of regulatory reform dominate the IMF’s financial stability reports, while the April 2012 report deals extensively with the sovereign debt crisis. (p. 45)

In the following reports, policies to revive credit markets are discussed, and the monetary policies of the American Federal Reserve, the Japanese central bank, and the economic policies of the Chinese government are critically reviewed. Risk-

taking, liquidity, and shadow banking were among the other issues that the subsequent financial stability reports of the IMF dealt with. The IMF has become an important collaborator of the FSB, particularly in monitoring the implementation of agreed reforms. But with all that, the IMF did not become the focal actor in the process of regulatory reform (Mayntz, 2015).

In contrast to the G20, the FSB and BCBS are formally constituted institutions, but they differ from international organizations like the IMF. In a typical international organization such as the IMF or the OECD, the top decision-making body consists of representatives of the member countries, and the organization has a large bureaucratic staff that prepares policy decisions and implements them. The top decision-making bodies of the FSB and BCBS also consist of national representatives, but they have only a rudimentary administrative staff, so their task—formulating recommendations and rules for the behavior of financial market actors—is discharged by the representatives of national authorities at top-level meetings and by the national delegates to numerous working groups. In other words, these are member-driven institutions, unlike the staff-driven IMF and OECD. The FSB and the BCBS are not regulators in the strict sense of the word. They can at best produce what is generally referred to as soft law—rules that are legally binding only if ratified at lower political levels (Mayntz, 2015).

In contrast to the G20 and the IMF, the attention of the FSB has remained fixed on financial market regulation. The FSB was established by the G20 in 2009 by upgrading the Financial Stability Forum (FSF), which had served to coordinate the work of the international standard setters. Mayntz (2015) writes as follows:

The FSB was to coordinate and direct the future development of financial market regulation at the international level, with a view to ensuring the stability of the financial system. It would be a stronger institution than its predecessor . . . with the capacity not just to compile international standards,

but to actively promote higher quality and effectiveness for financial market activity as a whole. (p. 46)

To this purpose, the charter of the FSB charges it “to coordinate the work of national authorities and international institutions in order to develop and promote the implementation of effective regulatory, supervisory and other financial sector policies.”¹⁹ The FSB “describes itself as being responsible for coordinating and promoting the monitoring of the implementation of agreed G20 and FSB financial reforms” Mayntz (2015, p. 46) indicates.

The FSB is located in Basel, Switzerland, at the Bank for International Settlements (BIS), which largely covers its budget without being involved in its work. The official membership of the FSB includes 25 jurisdictions (including the European Commission), five international institutions (the BIS, the IMF, the OECD, the World Bank, and the European Central Bank) and six standard-setting organizations. Depending on their internal organization, jurisdictions can be represented by up to three delegates—from their central bank, finance ministry, and the supervisory authority. The FSB secretariat has 29 staff members, a steering committee, and three standing committees. The weak autonomy of such a member-driven (versus a staff-driven) institution reflects the preferences of nation-states for international institutions that do not produce binding rules (Viola and Mayntz, 2015). Instead, the FSB plans and organizes the completion of specific envisaged reforms and assigns specific information from the national authorities in the framework of the FSB Implementation Monitoring Network (IMN). Another information source is the previously-mentioned Financial Sector Assessment Program (FSAP), run by the IMF and the World Bank. Responding to call from the G20, the FSB, together with the

¹⁹ <https://www.fsb.org/wp-content/uploads/FSB-Charter-with-revised-Annex-FINAL.pdf>

IMF and the OECD, prepared a report for the November 2014 summit of G20 leaders, informing them briefly about the structural banking reforms that were underway in some countries and the European Union (Mayntz, 2015).

Borio et al. (2020) focus on bank failures and international regulatory responses to this issue and write as follows:

The GFC highlighted challenges in managing bank failures while safeguarding financial stability. In particular, the exit of systemically important banks (SIBs) was disorderly, and sales to larger institutions were well-nigh impossible. They were “too big to fail.” Faced with obsolete resolution and insolvency regimes, several jurisdictions made use of public funds to support the banks and maintain their critical economic functions. (p. 19)

As the regulatory response to this issue, Borio et al. (2020) note the following:

The first step was to identify global SIBs (G-SIBs), i.e. those for which a resolution would require international agreement. The BCBS developed a pragmatic indicator-based approach. The indicators capture a bank’s size, interconnectedness, complexity, substitutability, and global scope—that is, attributes reflecting the system-wide damage the institution’s failure can cause. . . The second step was to ensure G-SIBs have sufficient nLAR without recourse to public funds. To that end, the FSB imposed minimum total loss-absorbing capacity (TLAC) requirements. These requirements set an additional layer of loss-absorbing resources over and above that arising from risk-weighted and leverage ratio requirements. As a result, G-SIBs have an extra layer of nLAR. (p. 19)

As Borio et al. (2020) indicate “orderly resolution rests on sufficient loss-absorbing and recapitalisation capacity, which is the objective of the FSB’s total loss-absorbing capacity (TLAC) standard for global systemically important banks (G-SIBs)” (p.3). They state as follows:

Nonetheless, absent a sound resolution regime, the amount of resolution-earmarked resources could be insufficient. Thus, in 2014, the FSB issued the Key Attributes, whose objective is to make feasible the resolution of financial institutions without severe systemic disruption and without exposing taxpayers to loss, while protecting vital economic functions. The key attributes refer to resolution authorities and their powers. They also provide guidance on recovery and resolution planning, resolvability assessments, and crisis management groups. (Borio et al., 2020, p. 20)

“The Financial Stability Board’s (FSB’s) Key Attributes of Effective Resolution Regimes for Financial Institutions set out the core elements to allow authorities to resolve institutions in an orderly manner without resorting to the taxpayer” Borio et al. (2020, p. 3) indicate.

Neither the G20 nor the IMF are standard-setting organizations, which also holds for the FSB, despite its proactive stance in the process of regulatory reform. The BCBS is one of the prominent international standard-setting bodies that have developed operative rules for the behavior of financial market actors. The BCBS, established in 1974, is hosted by the BIS and is located, like the FSB, in Basel. Its members are central banks and supervisory authorities that are represented in committee meetings by senior officials. The IMF and the European Central Bank (ECB) attend BIS meetings as observers.

The BCBS started by developing rules for banking supervision but soon turned to the development of rules for bank capital reserves in order to forestall a banking crisis. In 1988, the BCBS adopted the “Basel Accord” on capital requirements for the regulated banks. This was the initial global framework of minimum standards for internationally active banks, known as Basel I standards. In explaining how Basel I evolved, Borio et al. (2020) write as follows:

Recognizing that banks perform critical functions—payments and settlements, financial intermediation, and deposit-taking—this framework formulated three main objectives. First ensuring that banks maintain an adequate level of capital—that is own funds—at all times. Second, enforcing a regulatory level playing-field for cross-border banking. Third, increasing the comparability of banks’ capital positions. Under Basel I, banks were required to meet a minimum ratio of capital to risk-weighted assets (RWAs). The calculation of RWAs was based on a relatively simple standardised approach. This approach assigned different risk weights to different asset classes on account of their relative riskiness. It also captured some of banks’ off-balance sheet exposures through a simple methodology for converting these exposures into on-balance sheet equivalents. While Basel I represented an important milestone in global bank regulatory and supervisory cooperation, it did not stand the test of time. The limited differentiation of

risk created incentives for potentially destabilising risk-taking behaviour. In fact, the underlying standardised approach quickly became outdated in light of the rapid development of banks' risk management and modelling approaches. In addition, the scope of Basel I was largely limited to credit risk. Risks that Basel I did not cover explicitly, such as market and operational risk, became increasingly prominent during the 1990s. (p. 12)

Basel I was followed by a revised framework known as Basel II, which was finally published in 2005. The BCBS then continued to focus on bank equity as a reform issue (Borio et al., 2020).

Basel II contains three sections or “pillars,” referring to minimum capital requirements for banks, risk management, and information disclosure. The BCBS responded to the financial crisis first by amending Basel II, but simultaneously, work started on a new set of capital adequacy standards. With the transformation of FSF into today's FSB, the BCBS became a member of the FSB and was tasked by the G20 to develop what has come to be called Basel III. Basel III—officially called “a global regulatory framework for more resilient banks and banking systems”—was completed in 2010. Submitted to and endorsed by the G20 leaders in November 2010, Basel III was published on December 16, 2010. The Basel III framework of the BCBS is at the core of global banking regulations. “Its overarching objective is to ensure that the banking sector serves as a shock absorber in order to support the real economy and contribute to sustainable economic growth over the medium term” (Borio et al., 2020, p.3) indicate. Basel III rules define stricter minimum capital requirements in relation to banks' risk weighted assets; in addition, they introduce counter-cyclical and capital conservation buffers that banks are required to hold and demand that banks observe a fixed leverage ratio and a fixed liquidity ratio. The minimum capital requirements were to be implemented by the end of 2013 and the rules on liquidity and leverage were to be phased in over a period up to 2019. The EU, a laggard with respect to the adaptation of Basel III rules, incorporated them in a

modified form in its revised Capital Requirements Directive, CRD IV (Mayntz, 2015).

In 2011, the BCBS developed indicators for measuring the systemic importance of global, systemically important financial institutions (G-SIFIs). This regulatory measure was achieved under the coordination of the FSB. As Mayntz (2015) notes, “in October 2009, the FSB, together with the IMF and the BIS had presented “Initial Considerations” on how to assess the systemic importance of financial institutions and instruments. A year later, the FSB presented recommendations on how to reduce the moral hazard posed by SIFIs generally, and by SIBs (systemically important banks) in particular” (p. 53). Using the indicators developed by the BCBS in 2011 as mentioned above, the FSB identified and published in 2012 a list of 28 global systemically important banks (G-SIBs) (Mayntz, 2015).

Quaglia (2014) emphasizes the role of the EU in international financial governance and writes as follows:

Amongst regional regulatory regimes, the EU is by far the most advanced because its legislation is legally binding in the member states and to large extent it provides the framework for national financial services regulation. Moreover, The European Commission is in charge of monitoring the implementation of EU rules in its member states, and the European Court of Justice has jurisdiction over compliance with those rules. Nowadays, the EU is one of the largest financial jurisdictions worldwide. Over the 2000s, the EU devoted considerable efforts to the completion of the single financial market in Europe, promoting regulatory harmonization within its borders and strengthening the institutional framework for financial regulation and supervision. Moreover, the EU is increasingly active in international financial fora and is one of the main interlocutors of the US in the policy debate on this subject. For all these reasons, the EU is an important player to consider in global financial governance. (Quaglia, 2014)

The EU imports some of its financial regulations from other jurisdictions or international institutions, and it exports its financial services rules internationally. For example, capital requirements in the banking sector have been agreed

internationally by the Basel Accords and have subsequently been incorporated with some modifications into EU directives. By contrast, capital (solvency) requirements in the insurance sector have been set by an EU directive, the Solvency II Directive, which has partly been incorporated in embryonic international regulation. Capital requirements for investment firms have not been agreed internationally. However, the EU has decided to apply the content of the Basel Accords to investment firms (Quaglia, 2014).

As pointed out by Quaglia (2014), from the late 1990s until the unfolding of the GFC, EU financial regulation largely reflected Anglo-Saxon preferences (Quaglia, 2014). Montalbano (2015) states, “the EU’s pre-crisis financial regulatory framework has generally been promoted by Wall Street and London, based on a light-touch and market-based regulation of the financial markets mirroring the US-led financialization of the world economy” (p. 503). She adds as follows:

The Basel II standards on capital requirements and their translation into EU policy are a good example of how the combined U.S.-UK approach and the willingness of the continental EU member states to retain national regulatory and supervisory power fostered a differential modernization of the banking sectors in the various member states, the absence of regional coordination in risk management and oversight, and the growing interdependence between domestic funding channels and the transnational circuits of securities markets. The low minimum capital thresholds, the non-mandatory character of tougher prudential measures, the lack of counter-cyclical measures and liquidity standards, the large reliance on internal risk assessment methods, and the long phasing-in arrangements contained in the first directive on capital requirements—transposing the Basel II international agreement—allowed a largely under-regulated expansion of new sources of credit, securitization and financing instruments for both the private and public sectors, decisively contributing to the credit boom and asset price inflation in the pre-crisis period. (p. 505)

After the GFC, the legislative measures adopted by the EU reflected a shifting balance of power in favor of continental Europe. with the completion of the third and final stage of the evolution of the Economic and Monetary Union (EMU), combined with the Financial Services Action Plan (FSAP), and the so-called

Lamfalussy reform, the regulatory capacity of the EU increased. Jurkowska-Zeidler (2017) writes as follows:

Legal integration in financial regulation at EU level has proceeded at an accelerated pace since the FSAP (1999) and the establishment of the Lamfalussy framework (2002) to provide for fast-tracked single financial market legislation. The FSAP was a blueprint of the issues that needed to be harmonized in order to complete the single market in financial services and ensure the full integration of banking and capital markets by the year 2005. It contained 42 legislation act designed to harmonise the member states' rules on securities, banking, insurance, mortgages, pensions and all other forms of financial services within the European Union. By the end of 2004, almost all of these measures have been adopted. . . The FSAP was accompanied by the new model for the adoption of financial market rules twchich came from proposals from the Lamfalussy Committee. . . The Lamfalussy process advanced a new regulatory model which has provided for a higher degree of harmonization. . . The Lamfalussy framework was designed to structure the coordination between the member states and their connection to the legislative process on the EU level. (pp. 382-383)

Several new financial legislations were issued by the EU in the aftermath of the GFC. Quaglia (2017) summarizes these legislative initiations as follows:

The vast majority of these measures regulated activities or entities that were previously unregulated (or subject to self-regulation) in the EU and its member states such as credit rating agencies (CRAs)—or at the EU level (such as hedge funds and bank resolution) or at national, EU and international level (Over the Counter Derivatives (OTCDs)). In other instances, they imposed heavier, more prescriptive, and more burdensome requirements on financial entities that were already regulated prior to the crisis, as in the case of higher capital requirements for banks and new liquidity management rules (the Capital Requirements Directive IV, CRD IV). Or they set in place more substantial protection for depositors (the revised Deposit Guarantee Scheme Directive). Some of the post-crisis EU rules had potential protectionist effects due to contentious provisions concerning the access of third-country entities or products to the EU market, for example in the legislation concerning credit rating agencies, hedge funds and OTCDs. The reform of the financial services architecture following the de Larosi re Report (2009) was designed to strengthen financial supervision at the EU level and to foster macroprudential supervision in the EU. (pp. 4-5)

On the other hand, Jurkowska-Zeidler (2017) summarizes the changes in institutional supervisory structure of the EU financial system as follows:

The institutional architecture of financial supervision in the EU has undergone a considerable transformation due to the recent financial crisis. On 1 January 2011, EU financial regulation and supervision entered a new era in

which an increasing number of regulatory issues has been decided by four newly created regulatory agencies. These bodies are the European Systemic Risk Board responsible for oversight of systemic risk in the EU, and three European Supervisory Authorities (ESAs: the European Banking Authority, the European Securities and Markets Authority, and the European Insurance and Occupational Pensions Authority) responsible for the regulation and supervision of the banking, securities, and insurance sector. These four institutions, with the Joint Committee of the ESAs and the national supervisory authorities of each member state, constitute the European System of Financial Supervision, a decentralised, multi-layered system of micro- and macroprudential authorities established at the EU level to ensure consistent and coherent financial supervision in the whole EU. (p. 386)

“A fundamental change in the architecture of financial regulation and supervision was the establishment of the European Banking Union” Jurkowska-Zeidler (2017, p.387) indicates. Concerning the Banking Union, Quaglia (2017) writes as follows:

BU was the main (and delayed) response of the euro area to the sovereign debt crisis that began in Greece in 2010 and subsequently extended to Ireland, Portugal and Spain. When the crisis threatened to extend to Italy, BU was proposed. In June 2012, the President of the European Council, the President of the Eurogroup, the President of the Commission, and the President of the ECB jointly presented an interim report entitled “Towards a Genuine Economic and Monetary Union” that laid the foundations for BU. Afterwards, the various components of BU were set in place, with one important exception. . . (p. 9)

“The Regulation for the establishment of a Single Supervisory Mechanism (SSM) was adopted in October 2013. The SSM applies only to euro-area member states and to non-euro area member states that decide to join the BU. In the SSM, responsibility for banking supervision was assigned to the ECB in cooperation with national competent authorities” Quaglia (2017, p. 9) states. “Within its framework, for the first time ever in the history of European integration, full supervision of the systemically most important banks was transferred to a common European institution—the European Central Bank in the Single Supervisory Mechanism” Jurkowska-Zeidler (2017, p. 387) indicates. As, Quaglia (2017) indicates “this was followed by the adoption of the Bank Recovery and Resolution Directive (BRRD) in

June 2014 and the Regulation on the Single Resolution Mechanism (SRM) in July 2014. The SRM, which was to complement the SSM, was responsible for the planning and resolution phases of cross-border banks and those directly supervised by the ECB, while national resolution authorities would be responsible for all other banks” (p. 8). Quaglia (2017) mentions about institutional financial stability measures initiated in the EU as follows:

The revised Deposit Guarantee Scheme (DGS) Directive was finalised in June 2014, but a common EU deposit guarantee scheme did not materialize, mainly because of German opposition. In November 2015 the Commission proposed regulation for the creation of a European DGS. The European Stability Mechanism (ESM)—which was established by an intergovernmental treaty finalised in 2012 to replace the temporary European Financial Stability Facility—began operation in September 2012. It was envisaged that, subject to certain conditions, the ESM could provide financial support to ailing banks and the governments of countries experiencing severe financial difficulties. BU was designed to rebuild financial market confidence in both banks and sovereigns—especially in the euro area periphery—by stabilising the national banking systems exposed directly to a vicious circle. In fact, the sovereign debt crisis created a ‘doom-loop’ between the instability of the banking sector—which had to be bailed out in the majority of euro area countries—and the fragility of public finances, which were becoming unsustainable in some countries. BU was also to reverse the fragmentation of European financial markets that had begun with the international financial crisis and was worsened by the sovereign debt crisis. BU transferred powers from the national to the EU level. It was also significant because not all EU member states joined: it included only euro-area member states, even if other EU member states were able to opt in. Hence, BU increased the trend towards differentiated integration in the EU, which posed a major challenge to the EU as a whole and to the opt-out countries—first and foremost the U.K., given the size of its financial sector and its connection to the euro area. (p. 9)

Of the international institutions and organizations discussed above, the BCBS and the FSB had the greatest impact on Turkey’s financial regulations via policy diffusion. Because Turkey’s financial system is dominated by the banking industry, the rules decided by BCBS—known as the Basel Standards—were very effective in Turkish financial regulations. On the other hand, the effect of the FSB increased, especially after the GFC, when financial stability was the main concern for national regulators. Since Poland is an EU member, that organization has played a crucial role

in shaping the country's financial legislation through the policy diffusion channel. Even the policy diffusion from the BSBS and the FSB was received by Poland via the EU, in many cases because the recommendations made by these institutions were interpreted and translated into the EU directives. Thus, the EU became a major source of policy diffusion, but the BSBS and the FSB remained indirectly effective in spreading their policies.

Having given background information on the international institutions and organizations that affected policy diffusion in Turkey and Poland, I will elaborate on the financial regulation reforms of the two countries for the time episodes mentioned earlier.

5.2 Turkey

5.2.1 Stability period (2003-2008)

For the Turkish economy, the 1990s was a decade of structural imbalances, financial turbulence, and risk accumulation in both the public and private sectors. The outcomes were the financial crises in 2000 and 2001, contingent historical events or critical junctures that led to radical changes in the economic model and financial system. These involved reactive sequences (Mahoney, 2000) that reversed the existing path dependency. The period following the 2001 financial crisis was characterized by regulatory and institutional changes aiming at establishing and maintaining stability and improving the resilience of the overall economy.

The Turkish financial system has always been bank-dominated, and one of the key regulatory steps was the enactment of the Banking Law, which, some have argued, was shaped by the learning process and affected by both domestic experiences and diffusion from international best practices. From the point of view

of domestic learning, the regulators felt a need to revise the existing framework and changed the rules stipulated in Banking Law No. 3182 that were considered inadequate to cope with the threats to financial stability. A new banking law, No. 4839, went into effect in June 1999 to help financial institutions adjust to changing international norms. Banking Law No. 4839 also established the Banking Regulation and Supervision Agency (BRSA). This law was in effect until 2005 and saw several amendments over the years. An immediate amendment entered into force in December 1999. As Demir et al. (2017) indicate “with this amendment, the powers belonging to the Council of Ministers, were transferred to the BRSA. . . from the Council of Ministers which is the political authority, to the BRSA that is an independent administrative authority, in accordance with international standards” (p. 4).

The establishment of the BRSA was also an example of creating a local institution through policy diffusion, as described by Weyland (2008). An increased volume of problematic credits in banks, “structural weaknesses such as lack of corporate governance in the finance sector, and insufficient monitoring of the quality of the receivables of the banks” (Demir et al., 2017, p. 3) were perceived by economic agents as the reasons behind the crisis, and the formation of new institutions like the BRSA, represent an institutional and policy change to address these issues. As Demir et al. (2017) note, “regulations requiring more effective surveillance and audit were needed” (p. 3) to tackle these adverse developments in the financial markets (see Blyth, 2002 for the role of ideas in institutional and policy change processes). “The other reason for the amendment is that clear and comprehensive regulations should be done by adopting appropriate auditing principles in accordance with EU directives” Demir et al. (2017, p. 4) indicate.

Demir et al. (2017) summarize the structural change in the BRSA as follows:

The other amendment in Banking Law No. 4389 is related to the determination of the board members of the BRSA. Previously, the members of BRSA were elected by the Council of Ministers among candidates nominated by the Under-secretariat of Treasury, the Central Bank of the Turkish Republic, the Union of Banks of Turkey, State Planning Organization (SPO), and the Capital Market Board (CMB); after the amendment, the BRSA members are appointed by the Council of Ministers by a majority of votes with the recommendation of the related Minister among the candidates in the banking sector. Subsequent amendments to banking law have been restorative legal regulations aimed to harmonize with financial developments in the world and international regulations. Among the international regulations based on amendments in the banking law, the most important of them are directives issued by the European Council. (p. 4)

Demir et al. (2017) highlight the financial regulation steps by the EU and reports the following:

Directives on the principles, the operational fundamentals, supervision and auditing of credit institutions between 1973 and 1992 were published by the Council of Europe and consolidated in a single booklet in 2000. In 2001, the liquidation and restructuring processes of credit institutions are attributed to certain standards with directive numbered 2001/24/EC issued by the Council of the European Union. Directive numbered 2001/65/EC, issued in the same year, brought practices for the determination and accounting recognition of asset values in line with international standards. In the formation of the directive on International Financial Reporting Standards numbered 2002/1606/EC, Enron Cases were triggering factor as well as the accounting tricks of the Italian Parmalat Food Group and balance sheets and statements misleading the people who works with stocks and other market transactions. In the banking sector, reaction regulations, in other words if an event happens, the regulations preventing the repetition of this event are prevalent. A "Financial Services Action Plan Report" was prepared by the Council of the European Union in 2004. In this report, it was accepted that financial markets and financial institutions are needed to be audited by an independent authority in order for the supervision of cross-border activities of financial institutions and institutions formed in a competitive market, common audit, common solution platform. These principles were later ratified by OECD countries, such as China, Japan, and South Korea as well as by the European Union. (pp. 4-5)

The EU regulations highlighted above were influential in formation banking regulation in Turkey. However, as Demir et al. (2017) indicate “the adopted regulations and measures taken did not prevent the crisis in the banking sector in December 2000”. Demir et al. (2017) state as follows:

In the ongoing February 2001, the banking sector faced a second crisis. Duty losses of public banks, indirect loans of private banks to group companies, and the fact that the exchange rate was above what was expected were factors that increased the effects of the crisis. Within this scope, “Banking Sector Restructuring Program” was put into practice on May 15th, 2001. (p. 5)

This program was as a response to the negative consequences of the crisis. As Demir et al. (2017) indicate, "new risks that arose with globalization brought the need for amendments to Banking Law No. 4389 due to changes in market needs and in order to be able to pace with these changes" (p. 5). Banking Law No. 4389 was amended several times, the last being in May 2005. Banking Law No. 4389, which failed to meet the requirements of the time, was replaced by Banking Law No. 5411.

The financial regulations enacted in this period reflect the reactive policy style of Turkey; they were put into force either as a reaction to negative consequences of the crisis or as imitations of best practices elsewhere in the world, as observed in the adoption of the Banking Sector Restructuring Program and amendments to Banking Law No. 4389. These types of regulations mirror the responsive character of regulators and the government in policy-making; they are simply reactions to outside events, especially to crises (See Dyson, 2013; Jordan and Richardson, 2013 for typologies of policy styles).

The preamble to Law No. 5411 lays out the economic ideas that led to institutional and policy change in the banking industry. As part of the lessons drawn from the financial crisis and policy responses given to it, “the purpose of the law is stated as to regulate the principles and procedures regarding the establishment of trust and stability in the financial markets, the effective functioning of the credit system and the protection of the rights and benefits of the account owners.”²⁰ Demir

²⁰ See Banking Law No. 5411 dated 15/10/2005 available at Official Gazette: <https://www.resmigazete.gov.tr/eskiler/2005/11/20051101M1-1.htm>. Last accessed 14 September 2022.

et al. (2017, p. 6) note. “In the preamble of the first article of the law, it is stated that ‘confidence in the financial markets is provided by establishing clear and comprehensive market standards, reducing financial crime, establishing markets with sufficient depth and liquidity, ensuring trustworthy systems for the investors compliance with national and international amendments’”²¹ Demir et al. (2017, p. 6) indicate. It has also been stated that the behavior of actors in the financial market and the functioning of related activities should be subject to monitoring (Demir et al., 2017). “Making regulations to acquire timely information in a transparent and comprehensive level, ensuring enlightenment of the public, providing the savings be directed to credits in areas that they could be efficient, securing the deposits of the depositors in a way that market discipline was not disrupted are among the aims of the law” Demir et al. (2017, p. 6) note.

Having been formulated as an enhanced remedy to the drawbacks and inefficiencies of the then-existing banking system structure, the related law had four aims: to foster an environment of trust in the market, to provide stability, to ensure effective credit distribution, and to protect the rights of customers.²² With respect to providing an environment of trust, banks should be prudent and honest in order to be trusted by the markets. With increased trustworthiness, markets are able to adapt more quickly to international standards. In order to maintain an environment of trust, the government must provide safeguards, make regulations accessible to the public, develop reporting procedures and define accuracy standards for the market that are understandable and accessible. To address these aims, the Banking Law was prepared, and the effectiveness of related laws was increased by sub-regulations. Prudent regulations and efficient monitoring of market operations are necessary for

²¹ Ibid.

²² Ibid.

ensuring stability. These must take into consideration the possible risks related to the behaviors of actors in the market. Powers granted to relevant institutions are enumerated in the Banking Law. The BRSA was authorized to implement these procedures for this purpose.²³

Blyth (2002) emphasizes the role of the economic ideas that feed institutional and policy change. The economic ideas reflected in the stated purposes of banking law were primarily to provide “confidence and stability in financial markets” and “secure efficient functioning of the credit system.” These ideas emerged following financial crisis that the economy encountered in 2001. Formal institutionalization of these economic ideas under Banking Law No. 5411 and the reorganized BRSA also relied on the learning experience of economic agents (see Weyland, 2008; Blyth, 2002, Bakır et al. 2021, Bakır, 2017).

Among the learning types that Bennett and Howlett (1992) examined, government learning and lesson-drawing prevails in the institutionalization of new economic ideas. Considering that the Turkish financial system relies heavily on the banking industry, and taking into account the adverse consequences of the financial crisis in banking sector, the regulators regarded the confidence and stability in financial markets stipulated in the new banking law as essential, given the lessons drawn from experiences in the past. Moreover, the misuse of and ill practices in loan disbursements prior to the financial crisis made the regulators think that a reliable and stable market had to be a priority if an effective credit system was to be established.²⁴ For a credit system to be based on trust, depositors and investors

²³ Ibid.

²⁴ See Demir et al. (2017) and Banking Law Draft and numbered B.02.0.KKG/101-1028/1481 dated 30/03/2005.

needed to be included. As credit is a mechanism utilizing deposits to finance economic activity, it plays a vital role on economic prosperity of a society.

The impact of learning on financial regulations is evident from rules that limit the disbursement of loans, specifically on those related to concentration risk and the maximum exposure limit to a single risk group. This concept was introduced for the first time in Banking Law No. 4389 and was incorporated into new banking laws in 2005 in a more sophisticated way. The aim was to prevent misuse of bank resources by entrepreneurs who, prior to the Turkish financial crisis in 2001, had allocated the majority of their financing portfolio to their own companies in the real sector. The concept of maximum risk exposure to a single risk group that had emerged in a previous regulation encouraged the next regulators to upgrade the standards in a restrictive way, based on their learning. This was an example of government learning where Bennett and Howlett's (1992) questions of "who learns," "what is learned," and "to what effect" are addressed. Since Banking Law No. 4389 was adopted by the Parliament, legislators learned from past experiences. Also, the BRSA and the Undersecretariat of the Treasury participated in the preparation of the draft law and were therefore involved in learning process. What they learned was setting maximum risk exposure to a single risk group in loan disbursements as a policy instrument and to reach the policy goal. The result of the learning was an adaptation of the articles of Banking Law No. 5411 related to credit, a financial regulation reform.

The thinking behind the above-mentioned credit regulations exemplifies the impact of learning in policy-making, as it involves a process of drawing lessons from the undesired consequences of previous regulatory practices. It also illustrates a reactive policy style, because the regulation is a reaction to a shock (i.e., the local financial crisis in 2001).

Another lesson that rule-makers drew from past practices was the importance of protecting the rights and interests of savings owners, which was expressed as yet another goal of the Banking Law.²⁵ The state is supposed to safeguard the rights and interests at play so as to inspire confidence. In this context, deposit protection for savings is a benefit available only to savings account holders, but this guarantee must be kept at a certain limit to ensure market discipline.²⁶

Adding to the previous regulatory framework of the banking industry, another action was taken to restrict bank activities: there was a tiered system of banking licenses, and the level of the license determined the business fields where they were permitted to operate. The different bank types and their respective fields of activity are set out in the law. The allowed activities are defined and categorized based on their legal status and licensing level, e.g., deposit banks, participation banks,²⁷ development and investment banks.²⁸ New organizations such as the Turkish Banking Association, the Turkey Participation Banks Association, the Banking Regulation and Supervision Agency, and the Savings Deposit Insurance Fund were introduced in the banking law. This is another example of institutional formation and change that emerged from the ideas and learning processes, mostly triggered by the crisis (see Weyland, 2008; Blyth, 2002, Bakır et al. 2021, Bakır, 2017).

The Banking Law also introduced corporate management principles that covered management structure and procedures that banks were required to use. “In

²⁵ See Banking Law No. 5411 dated 15/10/2005, published in the Official Gazette: <https://www.resmigazete.gov.tr/eskiler/2005/11/20051101M1-1.htm>. Last accessed 14 September 2022.

²⁶ Ibid.

²⁷ Participation banks are type of banks defined in the Banking Law 5411 in Turkey, which operate in line with the interest-free banking principles.

²⁸ See Banking Law No. 5411 dated 15/10/2005, published in the Official Gazette: <https://www.resmigazete.gov.tr/eskiler/2005/11/20051101M1-1.htm>. Last accessed 14 September 2022.

addition to these, the banks which are open to the public are also subject to the corporate management principles announced by the Capital Markets Board” Demir et al. (2017, p. 11) indicates. Furthermore, they state as follows:

The corporate management principles cover the principles that determine the management structure and determine the responsibility and authority areas for the managers. Within the framework of these principles, the board of directors is authorized to carry out supervision and surveillance activities. Within the scope of this authority, it is responsible for detection of internal corruption and malicious intentions, prevention and improvement of these situations. As a requirement of this responsibility, it is necessary to establish a correct, transparent, and reliable information system to inform the public. In this context, the following aspects are regulated: financial reporting in compliance with international standards, accounting standards, banks being subject to be monitored by independent audit firms, and the principle of accountability. (pp. 11-12)

All these prudential measures were introduced not only as a response to malicious practices by some banks prior to the financial crisis in 2001, but also as an effort to comply with international standards and best practices. Demir et al. (2017) state “the relevant legislation was prepared taking into account the reports published by the OECD and the international standards adopted by the Basel Committee” (p. 11). Compliance with international standards has always been important for Turkey because of its ties with international organizations and institutions such as BIS and the OECD. Turkey became a member of BIS in 1951, and the BRSA continuously strives to comply with the Basel accords in terms of banking and financial regulations. Efforts to join the EU were another anchor for Turkey in formulating its financial regulations.

Öniş and Bakır (2007) state that external anchors play an important role in reform implementation, and the EU is clearly an anchor for Turkey in its transformation process, which includes several regulation reforms. External anchors such as the IMF and the EU helped Turkish policymakers overcome strong resistance from domestic rival groups. Öniş and Bakır state “the EU has been an important

catalyst for change in the political and economic realms. The significance of the EU's influence increased considerably following a decision at the EU's Helsinki Summit in December 1999 to grant Turkey formal candidate status" (p. 147). "In the Turkish context, the EU, IMF and World Bank (WB), have been external actors pushing for institutional reforms that would contribute to strengthening regulatory capacity in economic governance (e.g. establishment of the Competition Authority, the Banking Regulation and Supervision Authority, the Central Bank reform of 2001)" Öniş and Bakır (2007, p. 149) indicate.

Öniş and Bakır (2007) also state that the role of the EU as an external anchor was reinforced by the financial crisis in 2001. "The very depth of the crisis had two important implications. First, it created public support for the reform process. Secondly, it helped increase the power of external anchors to push in the direction of reform" Öniş and Bakır (2007, p. 161) indicate. The government became more committed to undertake reforms after the crisis, which contributed to the emergence of positive developments. The recovery process moved forward, deepening relations between Turkey and the EU. The IMF also benefited from the EU anchor (Öniş and Bakır, 2007, p. 161).

The Basel Committee was also an important source of financial regulation reforms. In 1988, the Committee issued the "Capital Adequacy Accord," known as "Basel I." It set out a capital adequacy ratio of not less than 8%. Basel I was revised in line with new developments and was finally replaced by the Basel II standards in 2004. With the completion of the Basel II standards on bank capital in 2004 and its adaptation into the EU directives, the BRSA enacted the regulations entitled "Measuring and Assessing Capital Adequacy of Banks" in November 2006, abolishing the 2001 regulation that bore a similar title. The new regulation stipulated

that the standard capital adequacy ratio should not be less than 8%, but in practice, the BRSA took this ratio to be 12%. The BRSA did not stop at regulations on banks' capital; it continued its efforts to comply with the Basel II standards in 2006. To this end, the "Legislation for Internal Systems of Banks"²⁹ was created, which outlined the requirements for setting up proper procedures for auditing, internal control, and risk management in bank organizations. Legislation entitled "Measuring and Assessing Liquidity Coverage of Banks"³⁰ was adopted by the BRSA, which drew up guidelines for calculating liquidity adequacy.

All these observations concerning policy actions in the form of financial regulations that were initiated after the 2001 crisis are evidence of the effects of domestic learning, diffusion, and local shocks on Turkey's financial regulations. The financial regulations were initiated with the aim of achieving stability in the financial system and the proper functioning of the financial markets during this period. They also addressed challenges from the financial crisis. In other words, the root causes of these regulations have a multi-dimensional character; they cannot be attributed to a single factor. While some restrictions, qualification requirements, and limitations were introduced with these regulations, more favorable financial conditions were created for players in the financial markets via incentivizing clarity, reliability, accountability, transparency, and trust.

²⁹ Official Gazette dated 1/11/2006 and numbered 26333, available at: <https://www.resmigazete.gov.tr/eskiler/2006/11/20061101-27.htm>. Last accessed 14 September 2022.

³⁰ Official Gazette dated 1/11/2006 and numbered 26333, available at: <https://www.resmigazete.gov.tr/eskiler/2006/11/20061101-24.htm>. Last accessed 14 September 2022.

5.2.2 The aftermath of the crisis (2009-2013)

The 2008 GFC radically challenged the global financial stability, and the regulatory efforts increased in line with enhancing policy coordination efforts. G-20 became the main platform for coordinating economic policies to overcome the considerably negative impact of the crisis, whereas the Financial Stability Board turned out to be the main center for development and introduction of new regulations that leveled the playing field globally. Turkey was a contributor to and a close follower of these efforts.

It can be argued that Hall's three orders of the policy change model was applicable to Turkey during that period. Several regulations that were put into effect were a reflection of Turkish regulators' efforts to comply with the standards set out by the Basel Committee on Banking Supervision of the Bank for International Settlements (BIS). These efforts also represent financial regulations initiated by Turkey in a reactive policy style as a response to global shocks and uncertainties that emerged due to the GFC. Within this scope, the second set of Basel II compliance activities of the BRSA came out in 2012. The regulations entitled "Measuring and Assessing Capital Adequacy of Banks" and "Legislation for Internal Systems of Banks."³¹ were amended drastically. Among the other regulations adopted by BRSA in the same year were the "Communique on Financial Statements and Related Disclosures to be Disclosed Publicly by the Banks," the "Communique on Risk Mitigation Techniques," the "Communique on Calculating Capital Requirement for Market Risk Arising from Options as per Standard Method," and the "Communique

³¹ Official Gazette dated 28/06/2012 and numbered 28337, available at: <https://www.resmigazete.gov.tr/eskiler/2012/06/20120628-16.htm>. Last accessed 14 September 2022.

on Calculating Risk Weighted Amount for Securitization.”³² The regulatory efforts seen in the case of the BRSA were essentially linked to and were a reflection of international institutions’ response to the GFC. The soundness of the banking industry has become the main source of concern because the effects of the financial turmoil on banks and financial institutions were largely adverse ones. The focus of the regulators was on financial elements that were sources of vulnerability—capital requirements, liquidity adequacy, and financial risks.³³ The regulations that mandated minimum ratios, restrictions, and requirements which were related to these vulnerable financial aspects were driving forces of the restrictive nature of reforms in the aftermath of the crisis.

Financial stability has been defined as a separate policy objective by regulators because of the prominent financial risks that emerged as a result of the GFC. Macroprudential measures such as the loan-to-value ratio and installment restrictions on loans are used frequently and extensively. For instance, in 2011, the BRSA determined the loan-to-value ratios for housing loans for consumers and commercial enterprises at 75% and 50%, respectively.³⁴ In 2013, installment schedules for vehicle loans and other general-purpose loans were limited to 48 and 36 months, respectively. Such restrictions were aimed at preventing overheating of the economy by tightening financial conditions on one hand and mitigating the credit risk for the banking sector on the other. The reserve requirement is used as an active monetary policy tool. Restrictions on the utilization of FX borrowings were introduced to mitigate the risks posed to financial stability.

³² Official Gazette dated 28/06/2012 and numbered 28337

³³ Ibid.

³⁴ Source: BRSA (<https://www.bddk.org.tr/Mevzuat/DokumanGetir/174>. Last accessed 14 September 2022.)

Institutional frameworks and the changes at the institutional level are also important for design and implementation of financial reforms. A good example is the Financial Stability Committee, which Turkey created in 2011 to cope with systemic risks arising from global financial turmoil. It was designed as a platform for monitoring risks to the financial stability and to enable coordinated action.³⁵ The members of the Committee are the Undersecretary of the Treasury, the governor of the CBRT, and the chairmen of the BRSA, the CMB, and the SDIF. The key responsibilities of the Committee were defined as monitoring and preventing systemic risks and ensuring coordination in systemic risk management.³⁶ The creation of Turkey's Financial Stability Board to pursue financial stability as a new objective supports Weyland's (2008) argument that institutional change often proceeds in waves, as decision-makers commonly take inspiration from external ideas and models. Financial stability as a new concept was inspired from external sources i.e., it originated from the FSB of the G20, a foreign model, and constituted an exogenous factor that could not have been derived from the preferences and power of Turkish political actors alone. The institutional innovation at the G20 quickly spread to Turkey through an upsurge of diffusion (see Weyland, 2008).

5.2.3 Accommodative financial regulation initiatives period (2013-2018)

It should be noted that, as Szekely and Warmedinger (2008) point out, there are usually periods of reform reversals or changes in general trend of the reform practices. In the Turkish case, the period between 2013 and 2018 is an example of reversal. This was a period of accommodative financial regulation initiatives for

³⁵ Source: CBRT

(<https://www.tcmb.gov.tr/wps/wcm/connect/TR/TCMB+TR/Main+Menu/Temel+Faaliyetler/Para+Politikası/Finansal+İstikrar/Kurumsal+Yapılanma>. Last accessed 14 September 2022.)

³⁶ Ibid.

Turkey that exemplifies the reactive sequences that reversed path-dependency and changed institutional patterns significantly. It also exemplifies the reactive policy style of Turkey in the sense that it involves adaptation of several liberalizing financial regulations as a response to deteriorating financial conditions that resulted from local political and geopolitical tensions. There were challenges from global shocks (the Fed tapering in 2013) and local shocks (political events and election cycles). These led to a reversal of several regulatory measures. The response of regulators and policymakers was to ease the financial conditions. An accommodative stance was supported mostly by regulations to ease the conditions for accessing loans. In that period, the Credit Guarantee Fund (CGF) was mandated to support strong loan growth, mostly by credit guarantees. The positioning of CGF was a major change in the institutional setting with a series of political uncertainties as a backdrop. These steps were critical, and their effect was fundamental for growth. For instance, the Turkish economy, which grew by 2.9% in 2016, achieved a growth rate of 7.4% in 2017³⁷ with the support of these accommodative measures.

Even though the reversal of some reforms may have defined certain periods, some repressive reform steps still took place. For instance, Turkey complied with the changes in the Basel accords in that period, and Basel III was expected to be fully implemented by 2019. The BRSA initiated several regulations to fully comply with the Basel III regulations. The “Communique on Equities of the Banks”³⁸ was issued in 2013 to define and specify the criteria for common equity and the Tier-1 and Tier-2 components of capital. This regulation was followed by two new communiques in

³⁷ Source: Turk Stat (<https://www.tuik.gov.tr>)

³⁸ Official Gazette dated 5/9/2013 numbered 28756, available at: <https://www.resmigazete.gov.tr/eskiler/2013/09/20130905-10.htm>. Last accessed 14 September 2022.

2014 and 2015 entitled “Calculating Liquidity Coverage Ratio for Banks”³⁹ and “Measuring and Assessing Capital Adequacy of Banks.”⁴⁰ The BRSA stipulated a minimum capital adequacy ratio of 8%, which is consistent with Basel III. In addition to this minimum ratio, the capital conservation buffer ratio was fixed at 1.25% and the countercyclical capital buffer ratio at 0%, in line with the limits set forth in the Basel III standards. The BRSA decided that, by 2019, the total and foreign-currency liquidity coverage ratios would be applied as 100% and 80%, respectively to comply with the Basel III Liquidity Coverage Ratio (LCR). In February 2016, the BRSA also published the “Regulation on Systemically Important Banks”⁴¹ to comply with the prudential regulatory framework introduced by the Basel Committee for systemically important banks. Finally, the BIS confirmed Turkey as a compliant member country in an announcement made in March 2016.

The observations above imply that financial regulations are typically shaped by responses to local shocks and the diffusion of financial regulations of the international institutions. This responsive style is defined as a reactive policy style. Bolukbasi and Ertugal (2018) note that the Turkish government tends to be reactive, typically responding to the interests of its core supporters in problem-solving. Additionally, it is influenced by EU and global policy paradigms in formulating and implementing policy. They argue that Turkey’s policy style can best be described by what they term “statism.” “The effect of exogenous drivers of change (such as global policy paradigms and international pressures) is mediated by dominant domestic actors, whose behaviors are strongly shaped by long-standing domestic institutions.

³⁹ Official Gazette dated 21/03/2014 numbered 28948, available at <https://www.resmigazete.gov.tr/eskiler/2014/03/20140321-7.htm>. Last accessed 14 September 2022.

⁴⁰ Official Gazette dated 23/10/2015, available at <https://www.resmigazete.gov.tr/eskiler/2015/10/20151023-9.pdf>. Last accessed 14 September 2022.

⁴¹ Official Gazette dated 21/03/2014 numbered 28948, available at <https://www.resmigazete.gov.tr/eskiler/2016/02/20160223-3.htm>. Last accessed 14 September 2022.

Hence, the effect exerted by exogenous forces is re-molded by dominant domestic actors whose actions, following standard operating procedures, ensure a safe return to default path dependent behavior – the statist policy style” (Bolukbasi and Ertugal, 2018, p. 371).

Politization is probably the best term to describe this period of financial regulations. Bolukbasi and Ertugal (2018) state that the Napoleonic administrative tradition and majoritarian character of Turkey’s legal-political system have significant implications for the nature of the policy style. They maintain “Turkey’s political system increasingly swayed back towards majoritarianism under the successive Justice and Development Party (JDP) governments” (Bolukbasi and Ertugal, 2018, p. 354). “The majoritarian system of government combined with a Napoleonic administrative tradition has produced a predominantly statist policy style in Turkey . . . Thus, policymaking is carried out by government actors who have primary control over structuring the state-society relationship” (Bolukbasi and Ertugal, 2018, pp. 359-360) indicate.

Bolukbasi and Ertugal (2018) further indicate “the term “state” can be (or even should be) used synonymously with the term “government” in describing Turkey’s policy style” (p. 352). “The executive in Turkey is the exclusive actor in policymaking, effectively steering from the center. The executive dominates the legislature. Power is concentrated in the hands of the executive, all the more so under single-party governments” (Bolukbasi and Ertugal, 2018, p. 361). “The bureaucracy typically informs the policy formulation phase. Bureaucrats carry out these functions within the parameters set by the executive,” (Bolukbasi and Ertugal, 2018, p. 363) conclude.

To sum up, the Turkish case shows us that the factors that I identified as the determinants of financial regulation reforms were effective throughout the examined period. However, the way these factors interact and the magnitude of their effects vary across certain periods. Changes in new banking regulations as a reaction to previous regulations exemplify the role of domestic learning on the forms of financial regulations. Domestic learning played a bidirectional role in both liberalizing and repressive reforms, although the latter was more apparent because the regulations were tightened to secure financial stability. Policy diffusion also shaped financial regulations mostly in repressive ways as Turkey imported financial regulations to comply with the standards adopted by global financial institutions which were targeting to secure financial stability against the shocks and crises prevailing across the globe. Global shocks have a repressive effect on Turkish financial regulations in line with the policy diffusion factor. This is an expected result since the GFC and preceding crises in Asia and Latin America led both international institutions and national regulators to tighten the financial rules. A failed coup attempt in 2016—a local shock—and a subsequent slowdown in economic growth led the Turkish regulators to follow accommodative financial regulations to ease the financial conditions. Therefore, local shocks predominantly affected the financial regulations in a liberalizing way.

5.3 Poland

5.3.1 Period of accelerated financial development with the EU accession process (2003-2007)

Poland has been going through fundamental changes after transitioning to a market economy, and financial regulatory reforms have been critical in managing

macroeconomic stability. The country witnessed economic liberalization efforts after the collapse of the Eastern Bloc, and in the 1990s, Poland gained significant experience in a decade due to the transformation in its economic structure and the steps taken in the EU integration process. The collapse of the Eastern Bloc represents a critical juncture and a contingent event of a new path dependence that emerged in Poland. Subsequent liberalization steps taken by Poland account for the adoption of particular institutional arrangements and policy choices from among the available alternatives (see Mahoney, 2000 for an analysis of critical junctures, contingent events, and path dependency). During this period, Poland benefited from the prevailing financial systems (especially those in the EU) through imitation. It also relied on its domestic learning capabilities to set up its own financial market structures in a way that was primarily liberalizing. Although a few repressive financial regulations are observed in Poland due to an overheating economy in 2006-2007, the path dependence in Poland was clearly sustained by liberalizing financial regulations as self-reinforcing sequences where domestic learning and policy diffusion (through the EU channel in particular) were very relevant. A path-dependent institutional policy-making pattern prevailed in the first period and continued in subsequent periods, although some policy changes were effectuated in the meantime.

The Polish financial system has been affected by the ideas, regulations and institutions prevailing in the EU. Bakır and Woo (2016) argue that the EU anchor was a way of implementing regional and global best practices. There have been several reforms that relate to financial regulation and supervision in the EU, which were also in line with the G20 initiatives. These included institutional steps like the establishment of the European Systemic Risk Board (ESRB) and European System

of Financial Supervisors (ESFS). The overall policy aim was to prevent contagion of systemic and inter-connected vulnerabilities. Bakır and Woo (2016) summarize policy aims of these institutions as follows:

The ESRB aimed to form judgements and recommendations on macroprudential policy, issue risk warnings, compare observations on macro-economic and prudential developments, and give direction on these issues. The ESFS aimed to effectively supervise an increasingly integrated and consolidated EU financial market. (p. 198)

As Bakır and Woo (2016) note, “another institutional and policy response of the European Commission included the Banking Union (BU) initiative, which aimed to create a safer and sounder financial sector for the single market” (p. 198). They state as follows:

Based on a single rulebook for financial actors in the 28 member states of the EU, key policy instruments of the BU included stronger prudential requirements for banks, improved depositor protection, and rules for managing failing banks. The BU is based on two main pillars: a Single Supervisory Mechanism (SSM) and a Single Resolution Mechanism (SRM). The European Central Bank became the banking supervisor for all banks in the euro area in 2014, under a single supervisory mechanism. A Single Resolution Board with the power and resources to protect taxpayers from banks’ failures will be responsible for the resolution of troubled banks during a financial crisis (Bakır and Woo, 2016, p. 198).

There was a kind of collective learning and diffusion process in the EU. However, there were challenges as well. Bakır and Woo (2016) refer to certain reactions from member countries to EU regulations. They suggest that, especially among the central and eastern EU member states, countries where foreign banks had a large market share and those where the political party in power were skeptical about EU integration had reservations about transferring regulatory power to the EU with regard to financial sector regulatory reform proposals. In Poland, where the foreign banks had once heavily dominated the financial system, there were amendments to the EU-originated regulations to soften certain processes and to

mitigate the risks of concentration in the financial sector (Bakır and Woo, 2016, p. 198).

The financial system in Poland and its regulations were poorly developed before the economic transformation began in 1989 (Eberly, 2017). The sector consisted almost entirely of the banking system. The banks acted under non-market rules and were strictly regulated by the government. Institutional and regulatory changes were required because domestic and foreign conditions changed on an ongoing basis, and new types of risks and challenges for supervisors appeared. Since 1989, the financial system has undergone profound changes. There are now various types of financial institutions (banks, insurance companies, investment funds, pension funds, etc.) (Marszałek and Janc, 2016).

As Marszałek and Janc (2016) argue, profound changes in the banking system were enforced by two new acts passed in January 1989. The Banking Act, which determined the creation and functioning of commercial banks, and the act on the National Bank of Poland (NBP) redefined the roles and responsibilities of the Polish central bank. Thus, Poland initiated free market principles in the banking industry and, at the same time, created nine commercial banks. “Another important step was the liberalization of the terms of entry into the banking system. Broad opportunities were provided to domestic and foreign investors to run banking activities in Poland” Marszałek and Janc (2016, p. 4) indicate. As a result, the number of commercial banks increased, and competition increased significantly, which was followed by the development of other types of financial intermediary industries. “The scale and scope of regulations also increased systematically, along with the growing complexity of Polish financial market.” Lessons learned from experiences at national level motivated these changes.

Poland's financial development process was faster than that of Turkey in this period due to a base effect. Poland started almost from scratch to develop its financial markets through a rapid transformation and liberalization. Turkey, however, had already reached to a certain level of financial development due to years of experience in liberalization and the penetration of financial intermediary services. These included banking, insurance, leasing, and factoring.

Regulatory reforms were also reinforced by the ongoing process of integrating with the European Union. Integration also implied adjustment of financial regulations. Thus, in many cases, no special modifications were needed, as it was sufficient just to prepare and introduce laws that were consistent with EU regulations. From the very beginning of the transformation, EU financial regulations and financial institutions were introduced into the Polish financial system, even prior to Poland's formal accession to the EU. The Act on the National Bank of Poland and the Banking Act, which was passed in August 1997, changed almost all the structure and functioning of Polish banks to bring them in line with EU directives. The major acts passed in 1997 covered regulations on the entire financial sector, including banking, insurance companies, capital markets, investment funds, pension funds, and overall supervision. All remaining differences were eliminated by amendments which went into effect in January 2004. Since then, the domestic regulations have blended in with those of the EU. Thus, this period (especially between 2003 and 2007) was a time of accelerated financial development supported by the EU accession process.

In addition to the EU accession as of May 2004, the commitments related to Poland's membership in the OECD were also reasons for the above-mentioned acts being introduced into Polish financial legislation. Frequent changes to regulations in

the financial sector in European law were reflected in numerous amendments to acts and in the creation of new ones (Marszałek and Janc, 2016). For instance, Poland changed its Foreign Exchange Law in July 2002 to fulfil the obligations to the EU and the OECD. (Marszałek and Janc, 2016) explain this point as follows.

Non-residents were not able to purchase short-term securities or financial derivatives in Poland without a foreign exchange permit. . . The new law (Act of July 27, 2002 – Foreign Exchange Law) implemented in 2002 had already met the obligations stemming from European Union law. The abolition of restrictions in the flow of capital to countries within EU, countries within the European Economic Area and other countries in the OECD, made it possible for residents to freely invest on capital markets of these countries. As a result of these changes, residents obtained the right to maintain accounts with foreign banks and to deposit funds on such accounts. (p. 7)

The requirements of the European Markets in Financial Instruments Directive (MiFID) were fulfilled by Poland with its adoption of the Act on Trade in Financial Instruments, which entered into force in June 2010. Agents investing in financial markets in Poland were thus entitled to the same level of protection as agents in other EU countries (Marszałek and Janc, 2016). These observations in Poland validate my hypothesis on financial development (i.e., H_6 : Financial development affects the pace of financial regulation reforms in liberalizing way). The Banking Act was critical in introducing significant changes in the organization of banking supervision. The Commission for Banking Supervision now has the power previously held by National Bank of Poland and its president (KNB).

The General Inspectorate of Banking Supervision became the executive body of the Commission and remained an organizational unit of the NBP. The Banking Act also created regulations for certain banking operations, including bank accounts, bank settlements, loans, advances, and non-cash credits—similar to what had been done in the Turkish case. Licensing processes and capital requirements for incorporation were also introduced by the Banking Act, which was amended

significantly in August 2001 in line with the requirements stipulated in Directive 2000/12/EC of the European Parliament and those of the Council as they related to the business of credit institutions. “Significant regulatory changes took place in the Polish banking sector, especially with reference to capital requirements and risk management,” which had been devised to align with the new Capital Accord prepared by the Basel Committee and then incorporated into EU law in 2006. This was a clear sign of a diffusion effect on Polish financial regulations. The diffusion of policy ideas realized at the institutional level was evident in reorganization of the Polish financial supervisory agents. Policy ideas such as trust and stability in the financial markets and the effective functioning of the credit system appear to have been institutionalized in Poland through the diffusion of policies from the EU and the BIS (Marszałek and Janc, 2016). This evidence supports the argument that ideas play a critical role in institutionalization processes and institutional and policy changes, as maintained by Blyth (2002), Weyland (2008), Campbell (2004) and Bakır et al. (2021).

Some changes in domestic legislation have been introduced not for the purpose of aligning with EU law, but rather as part of a domestic learning process. Domestic learning (as opposed to policy diffusion) is the process by which financial regulations are modified or introduced at the sole discretion of local regulators in light of prior experience with a similar situation and in the absence of external factors that would cause regulators initiate—either voluntarily or involuntarily—a reform. As was the case in Turkey, in order to protect the rights of consumers, Poland introduced a cap on the interest rates banks could charge for loans. In the meantime, limits on loan-to-value (LTV) and debt-to-income (DTI) are at the sole discretion of local regulators and are widely exercised as tools to cope with surges in

asset prices and credit extension. They are also used to curb macro-financial risks by diminishing leverage and mitigating the sector-specific shocks. There was no strict guidance from the EU in implementing interest rate caps and levels of LTV ratios. In 2006, official recommendations were made for the assessment of riskiness of borrowers. Starting from Recommendation S, there were different amendments and updates for loan-to-value ratios and risk weights for loans (and other macroprudential policies), some of which were, by nature, tightening. Recommendation S, released in 2006, required banks to exercise a “more conservative assessment of creditworthiness in case of FX mortgage loans. It also obliged banks to establish their own LTV limits” (Bierut et al., 2015).

Recommendation T, released in 2010, introduced explicit DTI caps for all exposures toward private individuals (50% or 65%, depending on the borrower’s income) (Bierut et al., 2015). Kok et al. (2014) state that the unique features of Poland’s financial markets—such as the rapid financial deepening after the country’s integration with the EU, a relatively high share of foreign currency loans in total loans (especially the Swiss Franc), and dependence of capital flows—have all necessitated the utilization of macroprudential policies on a regular basis. The ECB (2014) points out that steep rises in FX loans were observed in Poland until 2008. The Polish authorities were also actively restricting FX borrowing, and they increased the minimum risk weight for FX mortgage loans (from 50% to 75%) (Bierut et al., 2015). There were greater economic fluctuations at this time. In 2006 and 2007, economic growth exceeded historical norms, raising serious concerns among policymakers about the overheating economy. Drozdowicz-Bieć (2011) points out that the economy showed symptoms of overheating, which manifested itself mainly in a high rate of price increases, i.e., inflation. These examples

demonstrate that Polish financial regulations tend to be repressive when dealing with local shocks.

The institutional structure of financial supervision changed with the enforcement of the Act on Financial Market Supervision, provisions that came into force in September 2006. “The new solutions were aimed at integrating the supervisory bodies that oversaw the financial market (the Commission of Banking Supervision, the Securities and Exchange Commission, the Insurance and Pension Funds Supervisory Commission)” Marszałek and Janc (2016, p. 14) write. The Polish Financial Supervision Authority (PFSA), one organizational body, was responsible for the tasks and powers that formerly belonged to several supervisory bodies. As a result, the PFSA emerged as a new authority separate from the NBP, following the completion of the transition that started in 2008.

5.3.2 Focus on containing financial risks (2008-2015)

The GFC had relatively limited influence on the Polish economy, partly thanks to the regulatory reforms that had already been implemented. The Polish economy avoided heavy losses from the crisis, and the Polish financial system initially remained relatively stable. In other words, the GFC as a critical juncture did not initially cause a new path to emerge in Poland, and self-reinforcing sequences continued to lock-in path dependence. But as the crisis deepened, it started to affect economic processes in Poland, and negative trends were observed in the financial system, signaling a need for a change in the existing financial regulations in the years that followed. Thus, the years following the GFC witnessed an increasing focus on containing financial risk.

The most significant changes took place from 2009 to 2011. Due to the dominant role of the banks in the Polish financial system, most changes addressed these institutions. Among new regulations and modifications, the most important were those related to the banks' capital requirements, their deposit guarantee scheme, and accounting. The PFSA, in several resolutions, adjusted the Polish regulations on capital requirements to align with laws introduced in the EU (Capital Requirements Directives i.e., CRD II, CRD III) in interaction with the Basel Committee accords. Tier-1 and Tier-2 capital concepts were introduced to mitigate the risks arising from capital inadequacy. The amendment to the Polish Banking Act passed in April 2011 introduced significant changes to the supervisory limits of risk exposures and to the guidelines for concentrating credit risk. Like the Turkish banking regulations, the maximum amount of risk exposure to a single risk entity or risk group is not allowed to exceed 25% of the bank's equity. The PFSA subsequently adopted new resolutions on risk measurement procedures for different types of risk, including operational risk in 2012, to comply with EU regulations (Marszałek and Janc, 2016). Thus, to a certain extent, learning and policy diffusion played a repressive role in financial regulations in the second period.

The repressive effect of learning in eastern European countries, including Poland, was discovered by Szekely and Warmedinger (2018). They write “reform reversal episodes cannot be understood without carefully considering how developments in national institutions helped or hindered reform and how this process was shaped by the interaction of national with European institutions” (p. 562). They maintain that the role of the EU—through membership requirements, the common EU law and institutions, and coordinated fiscal policy and structural reforms—is essential in reform practices of former transition economies. They see “insufficient

social learning” as the main reason for reform reversals after accession to the EU.

They explain this point as follows:

Membership offered an institutionalized anchor to the West. It secured access to the largest market in the world, the single market, the free movement of capital and labor, and massive, historically unprecedented financial support to promote convergence. . . Once these countries entered the EU, most of the advantages became granted, while many of the reforms were not protected by EU legislation. Self-enforcing social norms and social learning were apparently not emerging fast enough to protect some of the previously undertaken reforms in those areas. In fact, reforms started to be reversed soon after EU accession, and not only in combination with the negative impact of the crisis. (Szekely and Warmedinger, 2018, p. 565)

However, we should note that the reform reversals Szekely and Warmedinger (2018) pointed out were implemented within the tolerance limits of EU legislation.

In other words, they did not explicitly contradict EU legislation. Thus, Szekely and Warmedinger (2018) see a lack of sufficient social learning and crises as main causes of reform reversals in former transition economies, one of which is Poland. They write “rules and institutions emanating from the EU law have not yet been transformative enough and thus have not yet shaped the identities and mentalities of a sufficiently large part of society in these countries” (Szekely and Warmedinger, 2018, p. 567). From a path-dependency perspective, their view suggests that the reactive sequences observed in Poland were not sufficiently transformative to alter the path-dependent institutional patterns and the policy processes that had been chosen when the initial contingent event (i.e., the collapse of the Eastern Bloc and rapid integration with Western institutions and organizations, including the EU membership process) occurred.

Szekely and Warmedinger (2018) state “several reforms had not been developed “in house” by the FTEs themselves, but rather imported from these external anchors, may have weakened the social learning process. In many cases, the FTEs took the best practice from other countries, with a lack of thorough conviction

and indigenous development, which left the best-practice institutions with social norms that were not sufficiently strong to maintain them” (p. 580). Policy diffusion is therefore more influential than social learning when it comes to implementing reforms in Poland, even though the significance of the latter prevails in reversals of such reforms.

The stress experienced by global financial markets with the outbreak of the GFC and its residual adverse impacts shaped financial regulations in Poland until about 2012. The findings in this dissertation suggest that global shocks increase the likelihood that financial reforms will be shaped in a financially liberalized manner in Poland. The Polish case seems to differ from the Turkish case in this respect. At this point, exploring the regulatory reactions to the effects of the GFC will shed light on the subject. A close examination of each regulation incident in this period makes it clear that Polish policymakers responded to the global financial shock by loosening financial regulations in many cases, with the aim of mitigating the risks to financial stability.

In 2008, the National Bank of Poland made swap operations available to banks and financed them pursuant to agreements with the ECB and the Swiss National Bank. It implemented an emergency measure called a “Confidence Pact.”⁴² With this policy measure, local currency and FX liquidity were provided to banks, and collateral coverage was expanded. In the same year, liquidity-providing transactions were launched in the form of repo transactions. FX swaps were introduced and haircuts were reduced for the Lombard credit system.⁴³ All these regulations were launched to ease financial conditions and accommodate financial market activities.

⁴² Financial Stability Report (Review), National Bank of Poland, October 2008, p. 11.

⁴³ Republic of Poland: Financial System Stability Assessment, IMF Country Report, 2013, p. 27.

As mentioned earlier, Poland was not directly impacted by the subprime mortgage crisis in terms of having direct exposure to troubled global banks, but gradually, the Polish economy experienced adverse effects from the GFC. In the subsequent years, a slowdown in the economy was a problem for policymakers. Poland showed GDP growth rates of 2.8% in 2009, 1.3% in 2012 and 1.1% in 2013, all well below historical average growth rates.⁴⁴ By the end of 2011, Polish banking regulators initiated some accommodative measures. LTV limits were softened for mortgage loans and the DTI cap was lowered to 42% for FX mortgage loans under Recommendation S. Polish banks again increased the supply of high-LTV and FX-denominated loans towards the end of 2009 and in 2010. (Bierut et al., 2015). In 2013, explicit DTI caps for consumer loans were lifted. The abolishment of DTI caps is an example of government learning where Bennett and Howlett's (1992) questions of "who learns," "what is learned," and "to what effect" are addressed. The PFSA, as a bureaucratic agency, had already applied DTI caps in the past and learned that abolishing this cap would accommodate the economic activity. What they learned was about policy instruments and policy goals. The result of the learning was a change in the regulations on DTI caps. Another macroprudential measure was taken on the reserve requirement side. The National Bank of Poland decreased the cash reserve ratios to incentivize credit expansion and accommodate economic activity.

In fact, the liberalizing policies that were designed to counteract the negative consequences of the GFC should be considered part of the risk mitigation effort to maintain macroeconomic and financial stability. The measures mentioned above were at the sole discretion of national authorities. However, the fact that these measures were implemented does not mean that repressive regulations were no

⁴⁴ Source: World Bank, <https://data.worldbank.org>. Last accessed 14 September 2022.

longer on the stage. In fact, some repressive regulations were adopted, but they were mainly part of the policy diffusion process, as they were implemented to comply with EU directives and the Basel standards. Indeed, the repressive nature of such regulations was not in conflict with the liberalizing ones mentioned above, because both types of regulation were serving the same aim: financial and macroeconomic stability. An example of one such repressive regulation was Resolution No. 386, on defining liquidity standards that would bind the banks. This resolution was enacted by the Polish Financial Service Authority (PFSA, KNF) in 2008 in line with the Basel II standards. With this regulation, strict compulsory liquidity ratios were determined for banks operating in Poland (Kruszka, M., and Kowalczyk, M., 2011).

Another regulatory change that occurred in the aftermath of the GFC was about a deposit guarantee scheme. The Bank Guarantee Fund (BGF), incorporated in 1995, is the organizational body tasked with securing reimbursement of funds accumulated in bank accounts in the event of a bank's bankruptcy; the aim is to protect the rights of depositors and to provide financial assistance to banks facing a risk of insolvency. The entities covered by the guarantee system are obliged to contribute a premium payment to the Fund. "After the outburst of the global financial crisis, the most important changes in the functioning of the BGF took place in 2010. In the very year, two amendments to the Act on the Bank Guarantee Fund were adopted that made the law consistent with changes in EU legislation. . . The second amendments aimed at raising the deposit guarantee from the PLN equivalent of EUR 50,000 to EUR 100,000" Marszałek and Janc (2016, p. 26) indicate. Thus, regulations introduced to the deposit guarantee scheme were not only the result of national learning from past experiences but also from the diffusion of EU policies into the Polish financial system.

In Poland, when the economic activity started rebounding in 2013, concerns about financial stability associated with rapid credit growth— fueled by foreign exchange (FX) mortgage loans, rising real estate prices in an illiquid market, and systemic risk arising from repayment risk due to high LTVs—made Polish regulators tighten regulations. “To prevent the accumulation of risks and to ensure high-quality lending going forward, Recommendation S was again amended in June 2013, introducing strict caps on LTV ratios for mortgage loans and a requirement to extend FX housing loans only to customers with corresponding FX income” (Bierut et al., 2015, p. 13) write. LTV caps for mortgage loans were determined at 80% or 90%, depending on the collateral and decided to be implemented as of 2014 (Bierut et al., 2015, p. 16). In addition, the regulators continued with a traditional consumer loan interest rate cap and renewed it several times. The quantification of the cap was based on an interest rate that was four times that of the Lombard rate, which is the rate applied to obtaining liquidity from the National Bank of Poland. The purpose of applying such a cap seems to be to shield customers from predatory lending and from excessive interest rates, according to Maimbo et al. (2014).

5.3.3 Saturation and harmonization with international practices (2015-2018)

A slowdown in foreign capital flows was observed after 2015, as the Polish markets were saturated with enormous foreign investments from previous decades. The economy encountered no major global or local shocks and posted moderate growth rates in line with historical averages. Most of the regulations adopted in the financial sector were designed to adapt to international standards, specifically, the Basel III standards and EU directives. Domestic learning and diffusion played a great role in

regulatory reforms; the regulators revised existing rules and structures and built more detailed ones based on their previous knowledge and experience.

The learning process also reinforced the policy diffusion factor, as international standards like Basel III accords were taken into account in formulating the new financial structures and mechanisms. The overall characteristics of the regulations in this period were bidirectional in that the majority were intended to revise the old structure in parallel with changing financial dynamics and to bring in further limitations and flexibilities that could be both repressive and liberalizing. In 2017, the PFSA adopted a resolution that addressed the leverage ratio, the net stable funding ratio, counterparty credit risk, and market risk. The role of domestic learning is evident when we consider Polish regulators' past experiences in implementing leverage and liquidity ratios (i.e., the FPSA's regulations on July 1, 2013;⁴⁵ January 1, 2014;⁴⁶ and January 1, 2014⁴⁷ for leverage ratios and on June 30, 2008⁴⁸ for liquidity ratios) (ESRB, 2015).⁴⁹ The Recommendation issued by the Financial Stability Committee (FSC) on the restructuring of the FX housing loans portfolio and

⁴⁵ "Removal of strict DTI levels, for creditworthiness assessment bank should take into consideration broad set of indicators and set their internal DTI limits. Applies to all loans to households" (ESRB, 2015, p. 31).

⁴⁶ "Removal of strict DTI levels, for creditworthiness assessment bank should take into consideration broad set of indicators and set their internal DTI limits. The supervisor can challenge these limits. Banks should pay particular attention to loans for which DTI ratios exceed 40% (for borrowers with incomes below the average salary in the region) and 50% (for other borrowers). In such cases, the client should be informed about heightened risk of such a transaction. Applies to newly originated housing loans" (ESRB, 2015, pp. 31-32).

⁴⁷ "For any new loans, the currency of the loan and the income out of which the loan will be repaid should be the same. In the case of customers (or households) receiving income in several currencies, the bank should ensure that the currency of the loan and the currency in which the borrower (or household) obtains the highest income in his total income considered for assessing his credit capacity are the same; in the case of other currencies, the bank should assume a possible depreciation by 20%" (ESRB, 2015, p. 32).

⁴⁸ "M1 (short-term liquidity ratio): liquidity reserves - unstable external funds ≥ 0 M2 (short-term liquidity ratio): liquidity reserves/unstable external funds ≥ 1 M3 (long-term liquidity ratio): own funds/illiquid assets ≥ 1 M4 (long-term liquidity ratio): (own funds+stable external funds)/(illiquid assets+assets with limited liquidity) ≥ 1 " (ESRB, 2015, p. 32).

⁴⁹ https://www.esrb.europa.eu/pub/pdf/other/150625_review_macroprudential_policy_one_year_after_intro_crdcr.en.pdf. Last Accessed 5 February 2023

on implementing higher risk weights for exposures secured by mortgages on immovable property were adopted in the same year. The total capital requirement from Tier-1 capital was increased in 2018 to comply with the Basel III standards, and a net stable funding ratio (NSFR) became effective the same year.⁵⁰ The implementation of IFRS 9 was another remarkable regulatory attempt to comply with the rules defined the International Accounting Standards Board in the last period.⁵¹ The new requirement for Tier-1 capital and IFRS 9 in Poland are evidence of policy diffusion from international institutions.

The bidirectional and contradictory nature of regulations can be seen by examining the IFRS 9 case. This regulation gives flexibility to banks in classifying due but unpaid receivables, depending on the risk profile of the counterparties, and without sticking to a certain time to elapse. Instead, it requires the management to set objective rules for classifying the receivables with a proper credit rating method for counterparties and then applying provisioning and accounting policies in line with pre-determined criteria. Once the management decides to apply IFRS 9 rules, develops a policy framework, and determines the criteria, consistent and continuous implementation is required. The Polish regulators required financial institutions to implement IFRS, so they introduced both limitations and flexibilities for the financial sector, which can be taken as liberalizing and repressive at the same time.

In Poland, similar to Turkey, an official committee was established to manage systemic risks. In 2008, the Financial Stability Committee was created as a coordination platform for supporting and maintaining financial stability. On November 1, 2015, the “Act on macroprudential supervision over the financial system and crisis management” entered into force, and the Committee was assigned

⁵⁰ Financial Stability Report, National Bank of Poland, December 2017, p. 80.

⁵¹ Ibid., p. 70.

responsibility for macroprudential supervision. It was reshaped to work in the areas of macroprudential supervision and crisis management. Supervision activities are chaired by the Governor of NBP, and the crisis management part is chaired by the Minister of Finance.⁵²

This section makes it clear that policy diffusion and learning have affected financial reforms in Poland in a repressive way. The repressive nature of learning became apparent when financial stability arose as a primary concern in the world due to financial crises in the 2000s. The adoption of EU and BIS regulations, which were tightening by nature, was the main reason for the repressive effect of policy diffusion in Polish financial regulations. The GFC, which counts as a global shock, threatened the growth of the Polish economy and led Polish regulators to follow accommodative financial policies. Polish regulators adopted reform reversals partly because they were skeptical about the benefits of EU legislation. The overheating of Poland's economy appeared as a major type of local shock in the 2000s, and the response was a tightening of financial regulations. Poland's economy slowed down slightly and had some overheating issues, which prompted authorities to implement new financial rules that resembled reactionary sequencing, but these were not effective enough to reverse the locked-in path dependency that is associated with the pattern exposed by formal Western international institutions and organizations (e.g., the EU, the BIS, the OECD, and the G20) and informal global norms and conventions like financial stability. Playing an anchor role, the EU facilitated a tranquil economic growth path for the Polish economy, which caused Poland to follow a path-dependent institutional pattern and policy process.

⁵² Financial Stability Report, National Bank of Poland, February 2016, p. 17.

5.4 Comparing the cases: Similarities and differences

The experiences of Turkey and Poland in introducing financial regulation reforms provide valuable insights into the factors that shaped these reforms. The determinants of financial regulation liberalization were the same to a large extent in Turkey and Poland, which have commonalities in their institutional settings, but the way that these factors influence policymaking differs because the patterns of institutional interlinkages take different forms in different national historical contexts. The difference can be detected by using the most similar systems design (MSSD) strategy, which was proposed by Przeworski and Teune (1970), based on Mill's method of difference. The MSSD requires comparing cases with as many similar aspects as possible, with the exception of the supposed causal factor (the independent variable).

From a varieties of capitalism approach, both Turkey and Poland were coordinated market economies (CMEs) as part of the economic regime sustained in continental Europe. The other economic and societal similarities of the two countries have already been described in previous chapters. For the purpose of MSSD, I attribute causal significance to the comparative institutional advantage of Poland as the main difference, which came about because of its EU membership. The institutional advantage that makes a difference is also reflected in a significant difference in policy-making styles of the respective countries. Benefiting from its EU membership, Poland experienced a more stable economic growth path and a tranquil financial regulation reform process, which is usually associated with self-reinforcing path-dependent sequences. Turkey, however, experienced more volatile economic growth cycles because of political and geopolitical tensions, especially after 2013, which ultimately resulted in a deterioration of relations between the EU and Turkey

and brought a halt to accession negotiations. A reactive policy style and reactive sequences leading to the reversal of path dependency emerged as the main frameworks for financial regulation reforms in Turkey.

In the 2000s, the institutional linkages of Poland and Turkey with the international economic and political settings have great commonalities, but they are not totally identical. First, the institutional linkages vary from a historical point of view. Turkey has a longer history of ties to the West's international political and economic systems than Poland. Turkey joined the IMF in 1947 and is a founding member of OECD, which was established in 1961. The Turkish Central Bank became a member of the BIS in 1951. Turkey started to cooperate with the European Economic Community in 1963 with an association agreement known as the Ankara Agreement and became a candidate for EU membership in 1987. Turkey has a longer experience with liberal market economy than Poland, which started with its market-oriented economic policy only after the Eastern Bloc collapsed at the beginning of the 1990s. Starting from that date, Poland established relations with aforesaid international organizations, and in the 2000s, its level of integration with international institutions was on par with that of Turkey.

Poland surpassed Turkey in terms of institutional connection with the EU when it became an EU member, while Turkey's candidate status continues, even though it applied for membership decades ago. Accession negotiations between the EU and Poland started in 1998 and ended successfully with Poland's full membership in May, 2004. However, the accession negotiations between Turkey and the EU that commenced in 2005 have been essentially frozen since that date. The level and form of institutional linkages with the EU is one of the key factors that explain the different financial regulation choices by Poland and Turkey. When

examining the situation of domestic financial institutions, Poland and Turkey had similar institutional endowments, so Poland had no "comparative institutional advantage" over Turkey (see Hall and Soskice, 2001). However, Poland's advantageous institutional position (full membership versus candidate status) was the key factor in explaining their opposite policy choices in response to local and global shocks. This comparative institutional advantage was important since both countries are dependent market economies.

The concept of "dependent market economies" is used for the political economy of Eastern European growth regimes and of Global South countries in general (Akçay, Hein, and Jungmann, 2021). It also refers to the dependency of emerging capitalist economies (ECEs) on developed capitalist economies (DCEs) for economic growth and finance. Dependent market economies are associated with dependent financialization. Concerning financialization, Akçay et al. (2021) writes as follows:

Similar to the main trends in DCEs, financialisation has also caused lower investment in the real capital stock in ECEs, as the investment decisions of NFCs have shifted from long-term fixed investment projects to short-term financial investments. This trend has become even more explicit in the post-2007-09 crisis period, as the growth contribution of investment declined in ECEs. Another significant aspect of dependent financialization has been ECEs' reliance on capital inflows for economic growth. (p. 11).

Poland, as an emerging capitalist economy, has been dependent on the EU in terms of economic growth. Poland benefited from its EU membership, which enabled a stable economic growth trend, and it financed this growth especially through foreign direct investment (FDI) inflows. The annual FDI inflow to Poland was around USD \$6 billion when Poland became a member of the EU, and in a stable increasing trend, it exceeded the threshold of USD \$20 billion starting from

2017.⁵³ These foreign direct investments have become an important component of stable growth in Poland. Turkey too attracted a significant amount of FDI inflow once it started accession negotiations with the EU in 2005. In 2007, FDI inflows to Turkey peaked at around USD \$19 billion and stayed at remarkable levels until 2015. However, in the following years, FDI inflows to Turkey shrank significantly, averaging below the threshold of USD \$10 billion annually (source: CBRT, 2021), most of which has been in less productive forms such as real estate investments. This was the result of deteriorating relations between Turkey and the EU. Following the coup attempt in 2016, significant changes took place in Turkey's domestic and foreign policy. The negotiation process was seriously hampered, and no new chapter was opened after 2016. In the meantime, Turkey had a confrontation with the U.S. with regard to foreign policy in the Middle East and Russia, which eventually resulted in U.S. sanctions on Turkey under CAATSA 231 in 2020. As a result, FDI inflows slowed. This unfavorable relationship with the hegemonic power (the U.S.) and the regional leader (the EU) represents a comparative institutional disadvantage, which led Turkey to follow financial policies that differed from those of Poland. With a scarcity of FDI, Turkey was forced to finance the investments through domestic credit channels. The most important pillar of this economic policy was a credit guarantee fund of 200 billion Turkish lira.

The shifts in the economic growth regimes in the two countries is evident from the study conducted by Akcay et al. (2021). They distinguish the following demand and growth regimes: (1) a debt-led private demand (boom) regime, (2) an export-led mercantilist regime, (3) a weakly export-led regime, and (4) a domestic demand-led regime. In doing so, they state as follows:

⁵³ Source: <https://tradingeconomics.com>. Last accessed 14 September 2022.

The growth contributions of the main demand aggregates have been examined. These are the growth contributions of private consumption, public consumption, as well as private and public investment, which sum up to the growth contribution of domestic demand, and finally the growth contribution of the balance of goods and services, i.e., of net exports. The growth contributions of the demand aggregates should sum up to the real GDP growth for of the respective country. (Akçay et al., 2021, p. 6)

Categorizing four types of economic regimes, Akçay et al. (2021) state as follows:

The debt-led private demand (boom) regime is characterized by deficits of the private domestic sectors as a whole. The deficits of the private domestic sectors are usually mirrored by positive financial balances of the external sector, i.e. by current account deficits of the domestic economy. Growth is driven mainly by private domestic demand, and private consumption demand in particular, to a large degree financed by credit, while the balance of goods and services negatively contributes to growth. . . *The export-led mercantilist regime* shows positive financial balances of the private domestic sectors as a whole that are mainly matched by negative financial balances in the external sector, indicating current account surpluses of the domestic economy. There are high growth contributions of the positive balance of goods and services, and thus, rising net exports and current account surpluses, and small or even negative growth contributions of domestic demand. . . *The weakly export-led regime* shows falling net exports and current account surpluses. . . *The domestic demand-led regime* is characterised by positive financial balances of the private household sector. . . The external sector is usually roughly balanced, seeing only small deficits or surpluses. Domestic demand contributes positively to growth (but without being driven by credit-financed private consumption). (pp. 6-7)

Comparing the periods of 2000-2008 and 2009-2019, Akçay et al. (2021) find a clear shift in the demand and growth regimes of Turkey and Poland. Domestic demand-led regimes before the crisis (including Poland) examined in their research moved towards weakly export-led or even export-led mercantilist regimes after the crisis, but Turkey shifted to a debt-led private demand boom regime even though it was a domestic demand-led regime before the GFC. After the GFC and subsequent local shocks, dependent financialization in Turkey deepened, and NFCs' foreign exchange-denominated debt began to rise. In the period after the 2007-2009 crisis, household indebtedness more than doubled in Turkey. From the NFC indebtedness

point of view, Turkey had the fastest growing rate between two periods, where credit to NFCs as a percentage of GDP more than doubled. Wage shares have been falling and profit shares have been rising in Turkey (Akçay et al., 2021).

The paradigm shift in Turkey's financial regulations and financial policy can be interpreted through the critical approach advanced by Robert W. Cox. Clift (2014) explain this approach and writes as follows:

The world order was reconfigured and stabilized around the embedded liberal compromise. Pax Americana (the post-WWII configuration of world order) was sustained through the inter-action of Cox's three sets of historical structures—institutions (Bretton Woods institutions such as the IMF), ideas (embedded liberalism) and material capabilities (American military and economic dominance) . . . For Gramsci, hegemony entails both coercion and (arguably more importantly) consent and, hinges on material capabilities, but also on the power of ideas. The ideational aspect of hegemony involves the ability to shape perceptions of the general interest in such a way that particular groups or outcomes are favoured. Norms and shared understandings, which are “the parameters of our existence” (Cox 1995: 33) in fact embody power relations. In this way, ideas can legitimate the status quo. Cox argues that culture and ideas are important in the creation and maintenance of a hegemonic system (or world order) by generating consent within state/society complexes. (pp. 156-165)

From Clift's (2014) perspective on critical political economy approach of Robert Cox, Gramscian hegemonic world order was shaping the actions of Turkish policymakers and foreign investors through the interaction of Cox's three sets of historical structures—institutions (the EU as a formal institution and economic sanctions as an informal/cognitive institution or ideational realm), ideas (neoliberal economic solutions such as implementing accommodative economic policies when foreign investors avoid investing to Turkey), and material capabilities of the hegemonic powers (economic and political barriers imposed by the EU and the U.S., including stopping EU-accession negotiations and discouraging the foreign investors from investing in Turkey).

In sum, the effect of shocks on financial regulations differed in both countries, depending on the economic and financial conditions. Thus, the findings provide evidence of the validity of my hypotheses about the effects of global and local shocks on financial regulation reforms (i.e., H₃: Global shocks have a substantial effect on financial regulation reforms in either a repressive or liberalizing way; H₅: Local political and economic uncertainties affect the pace of financial regulation reforms in emerging countries in either a repressive or liberalizing way). Local shocks had a repressive effect in Poland, whereas Turkish policymakers responded by financial liberalization. The main reason for the contradictory result in these countries is differences in economic growth trends. Poland, partly with the support of EU membership anchor, had a more balanced and stable economic growth than Turkey. Local shocks in Poland threatened the financial stability, and policy tools were used in a countercyclical way to mitigate the rising risks. However, Turkey experienced fluctuating growth due to political unrest, election cycles, and macroeconomic imbalances, and it used accommodative policy tools in a procyclical way to stimulate economic activity to protect against the effects of local shocks. Global shocks also ran in opposite directions in these countries. Poland reacted to global shocks by maintaining financial regulations that eased financial conditions. Polish regulators enacted accommodative financial liberalization to remedy the economic slowdown and financial instability following the GFC. These regulatory changes were not explicitly in conflict with EU legislation. In Turkey, on the other hand, regulators continued to implement the Basel regulations after the GFC and introduced several prudential measures to ensure that the risks were mitigated. This can partly be attributed to the higher dependence of the Turkish economy on global capital flows, which necessitated higher standards of risk management.

Prior to 2013, the divergence of the Turkish financial regulation experience from that of Poland can also be attributed to Turkey's comparative institutional advantage over Poland, which is related to the fact that Turkey has had a longer and more profound relationship with Western international institutions than Poland from a historical point of view. Although Turkey was not a member of the EU, it maintained strong relations with the EU during the period commencing in 2005, when accession negotiations started, until 2015, when they were virtually frozen. During this period, Turkey attracted a significant amount of FDI from Western (mostly European) countries. Almost 90% of FDI inflows to Turkey have been from European and American investors.⁵⁴ We also observe stable economic growth in Turkey during this period, in parallel with increasing FDI inflows. Because the macroeconomic foundations of the Turkish economy were sound and its financial sector was more protected than the economy of countries in the rest of the world, the Turkish economy was relatively less affected by the negative consequences of the GFC. Therefore, Turkey demonstrated its ability to continue implementing financial regulations in line with international standards that have a repressive effect on the overall liberalization of regulatory settings. Poland, as a country that connected to global capitalism in a relatively short time after a rapid transformation period, responded to the negative effects of the GFC in the opposite way. This financial policy can be partially explained as a reaction to cope with a slowdown in economic growth. But in the meantime, these reform reversals mirrored the skeptical view of Polish policymakers toward EU rules and regulations. Szekely and Warmedinger (2018) consider a lack of sufficient social learning and crises as the main causes of reform reversals in Poland. In some cases, the laws and institutions arising from EU

⁵⁴ Source: <https://www.invest.gov.tr>. Last accessed 14 September 2022.

have not been influential enough to transform financial policies adopted by Polish regulators at domestic level (Szekely and Warmedinger, 2018).

Financial regulation reforms designed by Polish and Turkish regulators are intended to overcome local and global crises in accumulation of capital, which is manifested in the form of a slowdown in economic growth. The different financial regulation practices of Poland and Turkey can both be seen as attempts to overcome a capital accumulation crisis from a Marxian perspective. A new regime of accumulation required a new mode of regulation. Financial regulations accompanied the financialization process of the two countries, which is a structural feature of accumulation and social reproduction under neoliberalism (see Saad-Filho, 2019 for how crises emerge in neoliberalism due to contradictions inherent to the system of capital accumulation). As noted by Clift (2014), “international trends toward liberalizing the re-regulation of markets, which have been particularly pronounced in the realms of finance, have unleashed common pressures on diverse political economies and national financial systems” (p. 231). National financial systems are converged in a hybridization process due to the mixed effect of changing international financial conditions.

In both countries, domestic learning played a role in how they designed their financial systems. Key laws and regulations were shaped by the experiences of previous episodes and the lessons learned from the financial crisis. In both Turkey and Poland, the banking law was the key legal document that established the framework for the functioning of the most dominant financial actors, namely, the banks. Institutions like banking regulators and supervisory bodies were designed with similar features and vested with similar powers to manage the risks. However, only Poland exhibited a significantly repressive effect of domestic learning, a robust

finding. The observations provided evidence that domestic learning had a bidirectional effect on financial regulation reforms in Turkey. Therefore, my hypothesis on domestic learning (i.e., H_1 : Domestic learning has significant repressive effect on the pace of liberalizing financial regulation reforms in the 2000s) is accepted for Poland only.

Diffusion was also a critical factor in both countries. Turkey followed the IMF program after the financial crisis, and then the EU accession process was a motivator for transforming the financial system. Global conditions were also favorable for attracting foreign direct investments, and the Basel regulations were implemented to comply with international standards. In Poland, EU membership was the key factor in the diffusion channel. Several regulations were enacted in line with the EU regulations. There have been several periods where these regulations have been amended and certain restrictive ones have been relaxed, but these were within the discretion limits of these regulations. Therefore, the evidence from both countries validates the hypothesis on the effect of policy diffusion (i.e., H_2 : A regional leader country's financial reform policies are most likely to have a significant repressive effect on decisions about financial regulation reforms when the financial conditions are appropriate for tightening).

In terms of institutions, both Turkey and Poland created similar regulatory and supervisory bodies. In both countries, separate banking regulatory institutions were created with similar mandates. The roles and powers were clearly defined, and the risk management practices were developed in time, based on new experiences and the global regulatory changes. In addition, to maintain a high level of coordination, both countries established a Financial Stability Committee. These committees focused on monitoring and mitigating systemic risks. In the Turkish

case, the committee was a platform for regulatory steps and generally introduced macroprudential regulations. In Poland, the committee assumed the task of macroprudential supervision over the financial system.



CHAPTER 6

EMPIRICAL RESULTS OF QUANTITATIVE ANALYSIS

This chapter tests the hypotheses using quantitative methods described in Chapter 3. It presents the results of the FRIs for Turkey and Poland (for financial repression/liberalization) in the post-2003 period. The FRI composed of the various dimensions of financial reforms is regressed on a set of independent variables in order to test the hypotheses I outlined in Chapter 2. First, I present the results obtained from the ordinary least squares (OLS) regression along with a detailed discussion about the tendencies of sub-components over time for both countries. An ordered logistic regression for the determinants of financial reform was run as a robustness check for the OLS results. For a further robustness check, a similar analysis was repeated with an ordered probit and Bayesian ordered logit models. I placed special emphasis on historical developments related to the sub-components. Factors that affect financial regulations are discussed for both countries.

A detailed investigation for Turkey using the resources mentioned in Chapter 3 revealed the events, policy decisions, and episodes that resulted in financial regulatory practices, which were maintained or updated. Appendix G presents examples of these events and their timelines. It also shows that the Turkish case had an abundance of policy alterations, which might have affected the direction of the FRI indicator. A closer look at the breakdown indicates that macroprudential measures in particular—as well as regulations related to financial markets and FX borrowing—are the most frequently observed sub-fields.

Figure 13 indicates the calculated FRI for Turkey, where 0 represents fully repressed financial reform tendencies, and 1 represents fully liberalizing financial regulations. It is important to note that the period between 2003 and 2006 was

characterized by a stable trend of FRI. This period is unique in the case of the Turkish economy (as well as the Turkish macroeconomic governance). The 2001 crisis induced a series of repressive financial reforms, such as much tighter regulation of the banking system and a restructuring of the autonomy of the Central Bank. The crisis also prompted liberalizing financial reforms such as the reduction of corporate tax rates, a further boost to privatization efforts, and the adoption of a system of flexible exchange rates. The period that followed the 2001 crisis was characterized by stronger measures to encourage price stability and achieve fiscal sustainability, resulting in comparatively less importance being attributed to financial regulation (Yeldan, 2001; Evrensel, 2004; Özkan, 2005; Öniş, 2009).

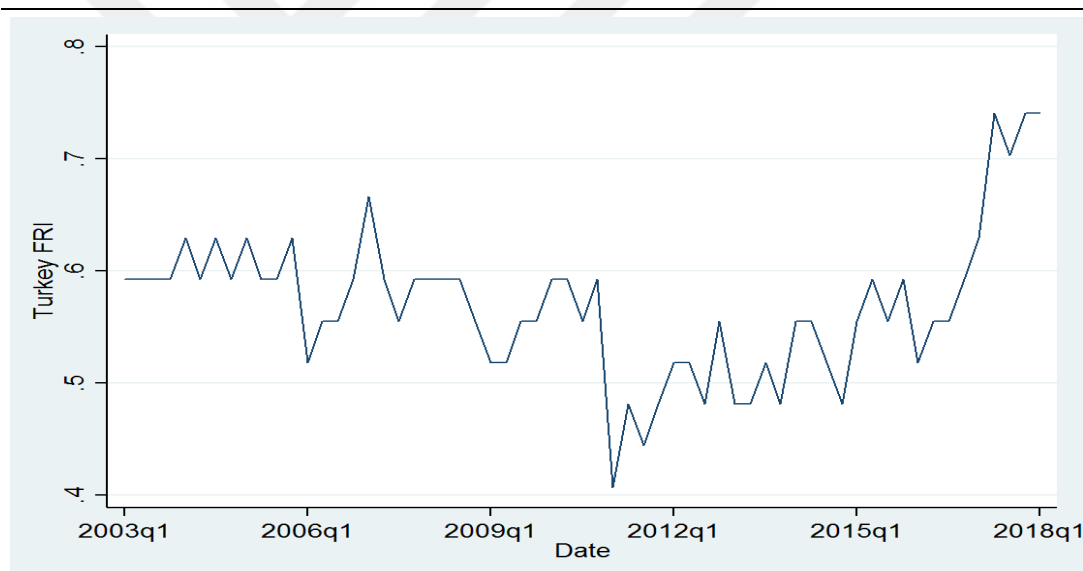


Figure 13. FRI for Turkey

Source: Author's calculations.

While we observed mild upward and downward movements in the FRI prior to the GFC, developments in the banking sector played an important role in the variation. There was an episode of capital inflow in the banking sector when foreign banks entered the market through mergers and acquisitions. Aysan and Ceyhan (2006) pointed out that foreign banks were motivated to enter the Turkish market

because (a) the country had abandoned protective policies, (b) there was an opportunity to expand the consumer base for financial services, (c) there was no serious competition, and (d) the prospects for profitability were good. This resulted in public banks losing market share, which in turn sparked a moderate trend of financial liberalization. The period just before the GFC also witnessed initial attempts to create partnerships for Turkey's Credit Guarantee Fund (CGF), although this contributed little to financial access and deepening.

In the aftermath of the GFC, the Turkish economy, like other emerging markets, faced numerous repercussions that stemmed from heightened volatility in capital flows, soaring credit growth, and the accumulation of macro-financial risks (Kara, 2016). These developments were accompanied by overheating in the form of surging growth rates and appreciation of the Turkish Lira, leading to a sizeable widening in the current account deficit. Policymakers in Turkey were clearly quite active during that period. In fact, the CBRT adopted a new policy mix where financial stability was defined as a policy objective. One aspect of the CBRT's policy that affected the FRI was its reserve requirements. Reserve requirement ratios were differentiated in late 2010s with respect to both maturity and the currency of the accounts (Turkish Lira vs. foreign hard currencies). The aim was to allow bank liabilities to be formed in a financially safer manner, including long-term and local currency-denominated liabilities (Montoro and Moreno, 2011).⁵⁵ More importantly, since 2010, reserve requirement ratios have been considered active policy tools and have therefore been used extensively to adjust market liquidity. In addition, the Banking Regulation and Supervision Agency introduced a series of macroprudential measures in the form of loan-to-value ratios and installment restrictions (mostly in

⁵⁵<https://www.tcmb.gov.tr/wps/wcm/connect/EN/TCMB+EN/Main+Menu/Core+Functions/Monetary+Policy/Reserve+Requirement+Ratios/>. Last accessed 14 September 2022.

housing and consumer loans) to prevent the accumulation of risk by households (FSB, 2015). One example of such reforms is the introduction of a 50% loan-to-value ratio for housing loans for commercial purposes and a 70% ratio for vehicle loans. Another example is the limit placed on the number of installments for vehicle loans and consumer loans—48 months and 36 months, respectively (CBRT, 2017).

Also behind the FRI contraction after the GFC was the adjustment of the legal requirements for FX borrowings. The Turkish authorities attempted to prevent households from obtaining FX credit in order to preserve their financial health.⁵⁶ Studies in the literature argue that expanding household credit can generate vulnerabilities that could trigger banking crises (Büyükkarabacak and Valev, 2010). Abolishing FX-indexed loans for relatively smaller non-financial corporations was as another policy step in this category.

Figure 13 also hints that the Turkey FRI experienced an upward trend in the last period I examined (i.e., post-2012). When we examine the reform practices and regulatory steps in that period, we see that opposing forces interacted to shape the FRI. The Turkish banking sector was harmonized with the different phases of the Basel regulations: adjustments were made to capital adequacy ratios, liquidity coverage ratios were instituted, and more detailed regulations were introduced, including counter-cyclical capital buffers (Külahi et al., 2013; Hazar et al., 2018). I assessed the above-mentioned arrangements as financially repressive, as they aimed to decrease banks' overall riskiness by limiting the amount they could allocate to loans (Kishan and Opiela, 2000). In addition to making changes in macroprudential measures and reserve requirements (which were also observed in this period), the

⁵⁶ <http://www.resmigazete.gov.tr/eskiler/2008/02/20080228-6.htm>. Last accessed 14 September 2022.

authorities also frequently adjusted the maximum lending rate on credit cards and the deposit rate in that period, and these were factored into the formation of the FRI.⁵⁷

On the other hand, there are forces that led the FRI to financial liberalization in terms of privatization, entry to the banking sector, securities market and capital account transactions. Turkey had liberalized capital accounts long before the 2000s; this was common practice in emerging markets as part of their economic, financial and trade development strategy (Alper and Onis, 2003; Edison et al., 2004). Hence, scores that were closer to financial liberalization were assigned to these sub-components. In fact, this liberalization process was completed with the adoption of a fully-floating exchange rate regime (Calvo and Mishkin, 2003; Kasman and Kasman, 2005). No restrictions were observed in capital inflows and outflows. Turkish capital markets had started to develop rapidly in the 2000s along with the macroeconomic recovery, which also contributed to the FRI movement towards financial liberalization (Karacaer and Kapusuzoglu, 2010). The share of foreign investors in equity markets was an important driving force in this context. One major regulatory attempt in this area was the merging of the Istanbul Stock Exchange (IMKB) and the Derivatives Market to form a new entity, Borsa Istanbul (BIST)—a stock exchange—which contributed to financial deepening and the diversification of financial products to be traded. The post-2012 period, on the other hand, has been characterized by more advanced policy tools to support this liberalization process, e.g., non-deliverable forward contracts and FX swap facilities by the Central Bank of Turkey (CBRT, 2017). Details about the sub-components of Turkey’s FRI are provided in Figure 14. (A summary of statistics for the sub-components of Turkey’s FRI is given in Appendix D).

⁵⁷<https://www.tcmb.gov.tr/wps/wcm/connect/EN/TCMB%20EN/Main%20Menu/Announcements/Press%20Releases/2018/ANO2018-40>. Last accessed 14 September 2022.

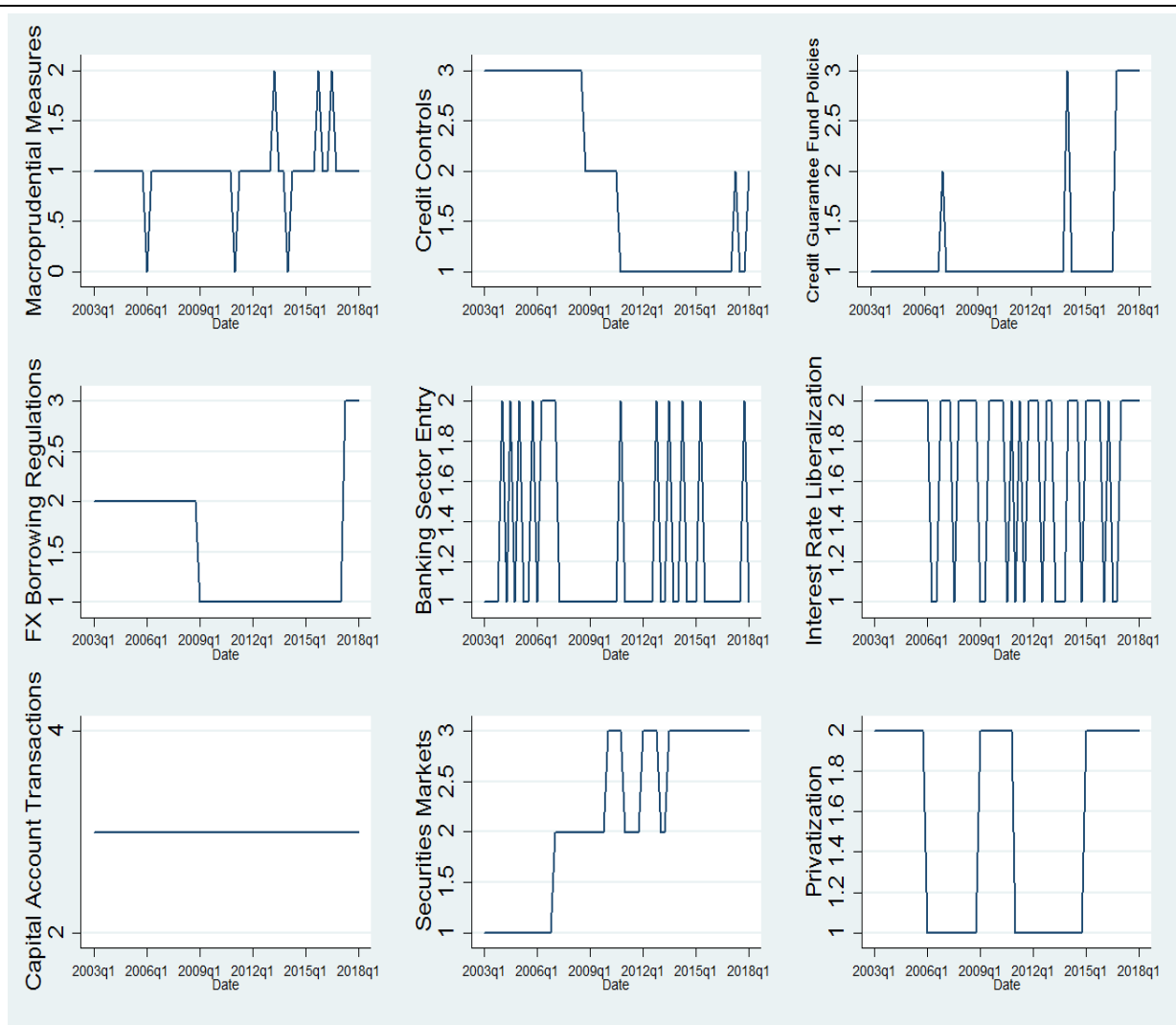


Figure 14. Sub-components of FRI for Turkey

Source: Author's calculations.

As discussed in previous chapters, one of the aims of this study was to test the effect of policy diffusion. To do so, an independent FRI was designed for a regional leader. The FRI for the Eurozone is scattered in Figure 15 in line with the guidelines given in Chapter 3. An initial observation suggests that the regional FRI is higher than the country FRIs, as expected, and points to the relative superiority of the regional leader in terms of applying more liberalized policies. Several events relating to the

sub-components seem to be effective in the formation of regional FRI. Appendix H presents examples of these events and their timelines.

While earlier examples of macroprudential measures such as LTV ratios or debt service-to-income ratios were utilized in periods like 2007 for countries such as Belgium, Italy, Spain and Portugal (as presented by Petra et al., 2009), another wave of such measures was applied in the period after 2012 (mainly the European sovereign debt crisis). This wave saw the introduction of LTV limits in loan segments such as housing and mortgages in numerous countries that included Slovenia, Denmark, Czechia, Finland and Sweden, which embraced these policy steps (European Systemic Risk Board, 2018). Recently, however, there has been a trend toward tightening LTV ratios between EU countries, as indicated by Basto et al. (2019). While installment restrictions are rare in this group of countries, there are numerous examples where EU countries have legislated measures for capital adequacy and liquidity coverage policies in line with global practices. An earlier example of such policies is the Capital Requirements Directive (CRD), which comprises Directives 2006/48/EC and 2006/49/EC and which reflects the proposals of the Basel Committee for the Basel II Framework. Another regulatory step for this sub-component was the establishment of the “European Single Rule Book” in June 2009 by the European Council, which provided a set of harmonized prudential rules related to the banking sector that member countries were expected to adopt. Moreover, in 2013, the Capital Requirements Directive (CRD) IV package was implemented; it comprised Directive 2013/36/EU and Regulation (EU) No. 575/2013. This set of regulations detailed the capital and liquidity requirements for banks, but it also applied to investment firms.

Another component that shapes the regional leader's FRI is credit control, an integral component of which is reserve requirements. It is generally accepted that the reserve requirement is an important monetary and liquidity policy tool utilized by the ECB.⁵⁸ Excess liquidity has also emerged as an important determinant of how much lending can be conducted by European banks, as mentioned by Darvas and Pichler (2018). Historical realizations for excess reserves are also considered in my scoring of this sub-component.

Unhedged FX borrowing by economic agents in the Eurozone is also seen as an important threat to financial stability (Brown and De Haas, 2010). The turning point in terms of imposing regulations in cases of such borrowing was Recommendation ESRB/2011/1, which was created by the European Systemic Risk Board to tackle financial risks that arise from excessive FX lending. Recommendation ESRB/2011/1 is a regulatory framework that EU member countries are expected to apply.

I evaluated the contribution of the “banking sector entry” criterion to the regional FRI through the general structure of the financial intermediation sector in the Eurozone. While no restrictive regulations were implemented with the aim of preventing financial firms from engaging in different spectrums of activities—commercial and investment banking, for instance (ECB 2017)—the influence of foreign banks in local industries varied during the examined period. Heterogeneities were also observed across countries in this regard. In particular, while domestic banks and branches of foreign banks hold significant market shares in relatively more developed countries such as Germany and France, foreign bank subsidiaries have larger market shares in peripheral and smaller countries in Eastern Europe.

⁵⁸ <https://www.ecb.europa.eu/mopo/implement/mr/html/credit.en.html>. Last accessed 14 September 2022.

Another evaluation criterion in this case is branching activities. There is a trend toward financial repression, indicated by the structural change brought about by digital banking practices in the Eurozone at the expense of traditional branching services, as verified by ECB (2017).

When interest rate liberalization is reviewed, the Eurozone performs well; indicators representing capital accounts, securities markets, and privatization exhibit rather liberalized tendencies in the examined period.

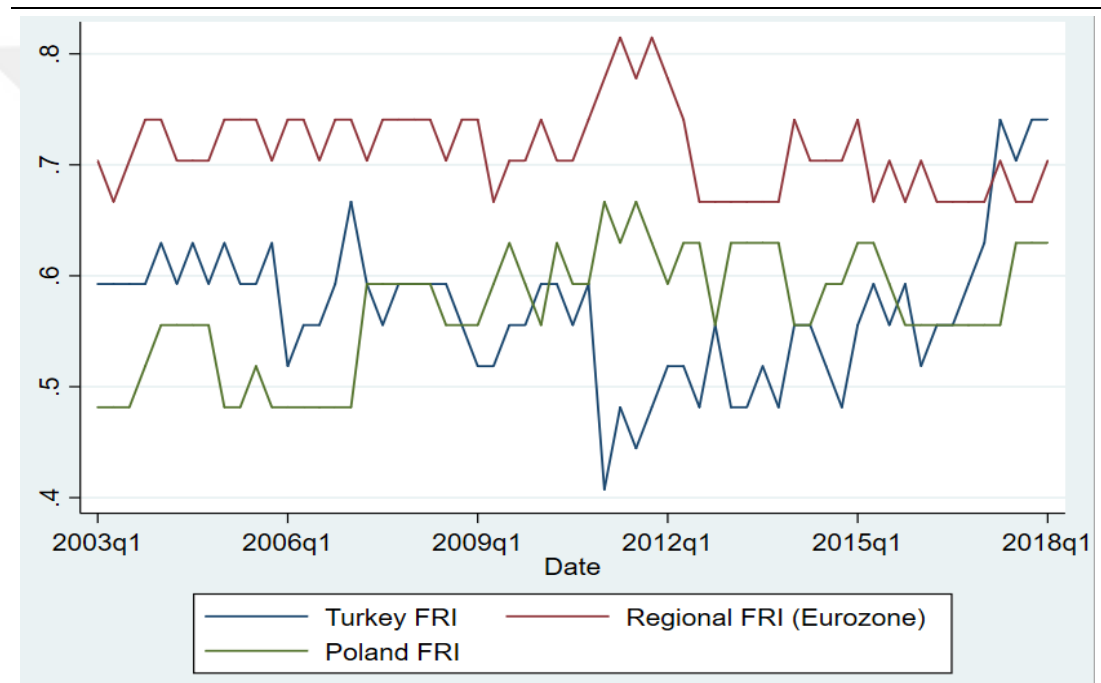


Figure 15. Regional leader FRI for Eurozone

Source: Author's calculations.

After constructing the regional leader FRI, I derived another explanatory variable. As indicated in previous descriptions of my methodology, the variable representing the policy diffusion was derived by subtracting one period-lagged value of a single country's FRI from the regional leader's FRI.

A summary of the statistics related to the explanatory variables for the Turkish case are provided in Table 1.

Table 1. Summary Statistics for Explanatory Variables (Turkey)

	Number of Observations	Mean	Standard Deviation	Min	Max
Turkey FRI	61	0.5695	0.0663	0.4074	0.7407
Learning	61	0.4333	0.0629	0.2592	0.5925
Policy Diffusion	61	0.1469	0.0812	-0.0741	0.4074
Global Uncertainties Index	61	-0.0632	2.7519	-4.1971	11.2339
Local Uncertainties Index	61	0.0921	1.6888	-2.4499	6.4697
Financial Development Index	61	-0.0632	1.7272	-5.1165	3.5726
Trade Development Index	61	0.1376	1.3103	-3.3023	3.4850

Abiad and Mody (2005) used the ordered logit regression method. Ordered logit regression models are suitable for investigating cases where there is a relationship between independent variables and a discrete dependent variable that represents an ordinal classification. Dependent variables with larger values are assumed to correspond to “higher” outcomes in such models. This assumption is valid for my dissertation research, as higher values of constructed FRI mean that financial reform tendencies are approaching financial liberalization. The methodology requires an underlying score to be estimated as a linear function of the independent variables and a set of cut-points (Long and Freese, 2014; Cameron and Trivedi, 2005). However, Huang (2009) states that Abiad and Mody (2005) can be criticized for choosing an ordered logit model to assess the liberalization–repression spectrum, which consists of discrete steps at both earlier and later stages. Huang (2009) also argues that ordered logit specifications may not take error dependence issues into account. Burgoo et al. (2012) used the ordinary least squares (OLS) technique in much the same way as Huang. To make the necessary adjustment, I applied a logistic transformation to the Turkey FRI before conducting the OLS estimation. In other words, a new dependent variable was created —

$$\text{Transformed Turkey FRI} = \ln(\text{Turkey FRI}) / (1 - \ln(\text{Turkey FRI})) \text{ — and}$$

then the coefficient estimates were retrieved.

The variation in the Turkey FRI might be explained by learning, policy diffusion, global and local uncertainties, or financial and trade development. The equation described in Chapter 3 was estimated incrementally in order to capture the impact of different variables. Explanatory variables were lagged for one period so as to avoid a simultaneity problem. Columns 1 to 4 in Table 2 show the coefficients and statistical significance for individual cases, while the last column reports the results that are related to full specification. Mac-Fadden R-square values were checked to gain information about the informative nature of the models.

Table 2. OLS Regression Results for Turkey

	(1)	(2)	(3)	(4)	(5)
	Turkey FRI	Turkey FRI	Turkey FRI	Turkey FRI	Turkey FRI
Learning	-6.755*** (2.301)				5.511 (5.590)
Policy Diffusion		-6.047*** (1.739)			-8.129*** (4.082)
Global Uncertainties (t-1)			-0.196*** (0.061)		-0.170*** (0.067)
Local Uncertainties (t-1)			0.343*** (0.099)		0.304*** (0.103)
Financial Development (t-1)				-0.092 (0.090)	-0.008 (0.082)
Trade Development (t-1)				-0.041 (0.119)	-0.001 (0.117)
Adjusted R-square	0.1143	0.1583	0.1714	0.0230	0.2246
Number of Observations	60	60	60	60	60

Robust standard errors in parentheses.

*** p < 0.01, ** p < 0.05, * p < 0.1

Constant terms are included in the regressions.

As indicated by Fernandez and Rodrik (1991), policymakers can try to maintain a status quo on the basis of the uncertainty faced by agents related to the

outcomes of reforms. In fact, Abiad and Mody (2005) show empirically that initial reforms might raise the likelihood of future reforms in an iterative manner. By using a modified method to construct a learning variable, it turns out that the significance of learning is controversial in explaining the course of the Turkey FRI. The significant and negative coefficient on that variable in the first specification fades away in the broadest specification (the fifth column), weakening the evidence that the learning process increases the likelihood that financial reforms will be financially more repressive or liberalizing. However, the impact of policy diffusion and shocks (global and local) are significant in the broadest specification, where all variables are controlled for. This can be explained by the relatively high correlation between learning and other variables. In the second specification, where the policy diffusion variable was individually run against the Turkey FRI, the coefficient turns out to be significant and negative. This indicates that policy diffusion in the form of mimicking the financial reform practices of the regional leader had a financially repressive impact on the Turkish regulation outlook. This is due to macroprudential and banking sector-related measures that were implemented in line with global practices. In the broadest specification, the impact of policy diffusion remains significant. Moreover, the global uncertainties variable appears to be significant in the third specification, although the significance declines to an extent in the broadest specification. The negative coefficient in this variable indicates that, in the case of Turkey, global shocks trigger financial regulation practices that can be assessed as leaning toward financial tightening, which is in line with previous arguments in the literature (Schuknecht et al., 2011). Macroprudential measures and FX borrowing restrictions in Turkey are examples of such financial regulation practices that were mostly observed in the aftermath of the GFC. Finally, local shocks were determined

to be a statistically significant factor in explaining financial reforms. In such instances, the positive coefficient suggests that Turkish authorities were responding to local shocks by implementing financial liberalizing policies in the period examined in my research, 2003-2018. One piece of anecdotal evidence related to this possibility is the relaxation of some macroprudential measures in 2016. After the failed coup attempt in July 2016, The CBRT has provided the banks with liquidity facility without any limit to secure confidence in the financial markets.⁵⁹ The BRSA increased number of installments for credit card purchases on September 2016.⁶⁰ These examples of relaxed macroprudential measures evidence that Turkish regulators tend to rely on financial liberalization to respond to local shocks.

In order to check the robustness of OLS results for the Turkish FRI, I ran an ordered logistic regression. My estimations were conducted using the maximum-likelihood technique. The results are largely in line with those obtained from the OLS regression method, as illustrated in Table 3. The negative significant effect of learning in the individual specification continued to prevail. In addition to this, significant effects of learning in the full specifications that were unobserved in the OLS regression came back in the ordered logit regression, as can be seen in the fifth column. In the second specification, where the policy diffusion variable was individually run against the Turkey FRI, the coefficient turns out to be significant and negative. On the other hand, in the broadest specification, the effect of policy diffusion is insignificant, while the roles of learning and global and local shocks are significant. This can be explained by the relatively high correlation between policy diffusion and other variables. The global and local uncertainties variables appear to

⁵⁹ <https://www.tcmb.gov.tr/wps/wcm/connect/TR/TCMB+TR/Main+Menu/Duyurular/Basin/2016/DUY2016-32>. Last accessed 14 September 2022.

⁶⁰ <https://www.resmigazete.gov.tr/eskiler/2016/09/20160927-1.htm>. Last accessed 14 September 2022

be significant in the third specification, although their significance declines to some extent in the broadest specification.

Table 3. Ordered Logit Results for Turkey

	(1) Turkey FRI	(2) Turkey FRI	(3) Turkey FRI	(4) Turkey FRI	(5) Turkey FRI
Learning	-28.56*** (4.941)				-23.42** (10.985)
Policy Diffusion		-18.04*** (3.473)			-1.984 (7.581)
Global Uncertainties (t-1)			-0.416*** (0.110)		-0.228* (0.126)
Local Uncertainties (t-1)			0.612*** (0.176)		0.370* (0.197)
Financial Development (t-1)				-0.133 (0.132)	0.031 (0.143)
Trade Development (t-1)				0.083 (0.181)	-0.053 (0.200)
Pseudo R-square	0.1825	0.1382	0.0787	0.0490	0.2022
Number of Observations	60	60	60	60	60
Log-Likelihood	-90.8788	-95.8109	-102.4161	-110.6224	-88.6874

Standard errors in parentheses.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Constant terms are included in the regressions.

Domestic learning and policy diffusion are two types of learning. It was going to be informative to observe the impact of only one of these variables by removing the other from the model. To achieve this goal, I ran both an ordered logistic regression and an OLS regression without adding the policy diffusion variable into the models. By doing so, I observed that the significant impact of learning became more apparent (see Appendix D).

Instead of logistic regression coefficients, marginal effects can also be used to make inferences. The marginal effects method measures the probability of regime (state) change for binary variables. It shows how a dependent variable is affected in case of a one-unit change in one of the covariates, while other independent variables are kept at mean values. Since this concept is more valid for discrete choice

dependent variables, our case of continuous explained series should be subject to an appropriate transformation before calculating marginal effects. I applied an assumption here to make such a transformation. Initially, I calculated the median values of the Turkey FRI and then created a new dummy variable by comparing the FRI realizations and the median value in each time episode. For the observations where FRI values were greater than the historical median threshold, the dummy variable was assigned a value of 1 for showing liberalizing tendencies, while other observations were assigned the value of 0, which corresponded to repressive tendencies. After the formation of this new variable, I ran logit regressions to obtain the marginal effects. Table 4 displays these results. Although the direction and statistical significance of covariates are the same as those in the ordered logit model, the marginal effects were much higher for the learning variable than other variables.

Table 4. Logit Results and Marginal Effects for Turkey

	(1)	(2)	(3)	(4)
	Turkey FRI (Dummy)	Turkey FRI (Dummy)	Turkey FRI (Dummy)	Turkey FRI (Dummy)
Learning	-3.357*** (0.708)			-2.578*** (0.870)
Global Uncertainties (t-1)		-0.090*** (0.021)		-0.053** (0.023)
Local Uncertainties (t-1)		0.111*** (0.038)		0.067* (0.037)
Financial Development (t-1)			-0.003 (0.034)	0.021 (0.027)
Trade Development (t-1)			-0.044 (0.044)	-0.051 (0.039)
Pseudo R-square	0.2172	0.1851	0.0146	0.3109
Number of Observations	60	60	60	60

Standard errors in parentheses.

*** p < 0.01, ** p < 0.05, * p < 0.1

Constant terms are included in the regressions.

An ordered logistic regression model assumes that the probability of engaging in financially liberalizing regulatory efforts is a function of possible explanatory variables with cumulative standard logistic distribution, as described in Long and Freese (2014), Agresti (2002), and Liao (1994), among others. The robustness of the model was reviewed by repeating the same estimations with an ordered probit regression model. In this case, I used the cumulative distribution function of the standard normal distribution. Probit models account for non-constant error variances in more advanced settings.

Appendix D also presents the results obtained from the ordered probit model. The findings are compatible with the ordered logistic regression results. Learning usually has a repressive effect on financial regulations. Global shocks tend to be repressive, whereas local shocks have liberalizing effects. While the development measures were not statistically significant, the broadest specification in the last column shows marginal improvement in terms of statistical significance over logit estimations.

The empirical attempt to model the Turkey FRI was further expanded using Bayesian methods. Bayesian methods are known to have better inference and parameter stability in small samples (Van de Schoot et al., 2014).⁶¹ The ordered logistic model that was estimated in the beginning is repeated with the Bayesian approach. The results shown in Table 5 show the mean and Monte Carlo standard errors for the variables. Default priors are preferred in the estimations. The coefficients provided in Table 5 do not differ dramatically from the baseline results in the ordered logistic regression, which supports the robustness of the findings.

⁶¹ The “bayes” syntax in Stata was used to perform these estimations.

Table 5. Bayesian Ordered Logit Results for Turkey

	Mean	Monte Carlo Standard Errors
Learning	-25.840	0.157
Global Uncertainties (t-1)	-0.246	0.022
Local Uncertainties (t-1)	0.326	0.016
Financial Development (t-1)	0.056	0.147
Trade Development (t-1)	-0.010	0.185
Monte Carlo Iterations	12500	
Number of Observations	60	
Log-Marginal-Likelihood	-125.1427	

For the robustness check, instead of following the approach of Abiad et al. (2010) for calculating the policy diffusion effect as the difference between the contemporaneous regional FRI and the lagged value of Turkish FRI, I considered the level of the regional leader FRI itself in the logit analysis. In Table 6, the first column presents only univariate regression results where the impact of level of the regional FRI was investigated. As was the case in the analysis above, when we do not control for the role of other covariates, adapting financial regulations from the regional leader is restrictive. However, the significance of this relationship again fades away in the full specification, including all covariates, as shown in the second column.

One issue that might disrupt the inference from the results is the possible existence of co-movement between explanatory variables. To statistically check this issue, I evaluated the correlation matrix between variables. As shown in Appendix D, correlation values are not high enough to cause serious problems with standard errors

and the efficiency of estimators. To complement this check, I calculated variance-inflation factors (VIFs). Table 7 shows that the VIF values are far lower than the threshold of 10, indicating that multicollinearity was not problematic.

Table 6. Ordered Logit Results for Turkey (Augmented with Level Values of Regional FRI)

	(1) Turkey FRI	(2) Turkey FRI
Learning		-23.42** (10.985)
Regional FRI	-10.40* (5.026)	-1.984 (7.581)
Global Uncertainties (t-1)		-0.228* (0.126)
Local Uncertainties (t-1)		0.370* (0.197)
Financial Development (t-1)		0.031 (0.143)
Trade Development (t-1)		-0.053 (0.200)
Pseudo R-square	0.1204	0.2022
Number of Observations	60	60
Log-Likelihood	-111.0957	-88.6874

Standard errors in parentheses.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Constant terms are included in the regressions.

Table 7. VIF Results for Turkey

	VIF Values
Learning	1.88
Regional FRI	1.69
Global Uncertainties	1.47
Local Uncertainties	1.31
Financial Development	1.30
Trade Development	1.12

The final step of the empirical analysis of the Turkish FRI addresses the impact of economic growth tendencies (Figure 16). To represent volatility in the growth rate and the direction of economic activity, I calculated the output gap. Output gap is defined as the deviation of economic value-added from its long-run trend, so additional analysis was required. In the first step, I retrieved the GDP index from TurkStat. The second step was to take the natural logarithm of this index. Then I applied the HP filter developed by Hodrick and Prescott (1997) to determine the trend and the cyclical component. Since the GDP index is in logarithm terms, any cyclical component can be directly interpreted as output gap in percentage terms. I used the HP original lambda value of 1600 for the quarterly data.

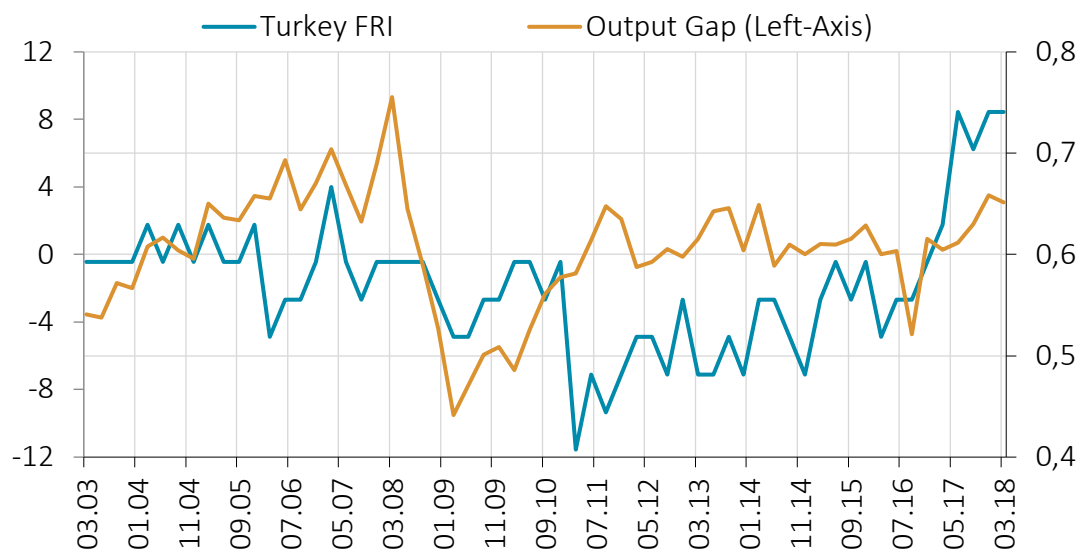


Figure 16. Turkey FRI and output gap

Source: Compiled from TurkStat and author's calculations.

After the stabilization period, the output gap in the Turkish economy remained at a positive level until the global crisis, which triggered a sudden downward movement. Since that time, growth tendencies maintained positive levels until 2016, when volatilities rose. In addition to the launch of macroprudential measures in 2011 (which had a repressive effect on the Turkish FRI), there was a visible co-movement between output gap and FRI in Turkey, which reflected a close relationship between economic activity and the financial conditions in Turkey. I tested this relationship econometrically by augmenting the ordered logit model with the output gap. However, as seen in Appendix D, these regressions yielded no significant coefficient.

I constructed a similar index for Poland by using data and information obtained from the resources mentioned in Chapter 3. Appendix I provides information about the specific policy measures, regulations, events and criteria I examined to segment the historical timeline into phases associated with different

theoretical and literature-based approaches. These regulatory measures aimed to contain the effects of global shocks, policy diffusion and financial development. The Poland FRI is given in Figure 17.

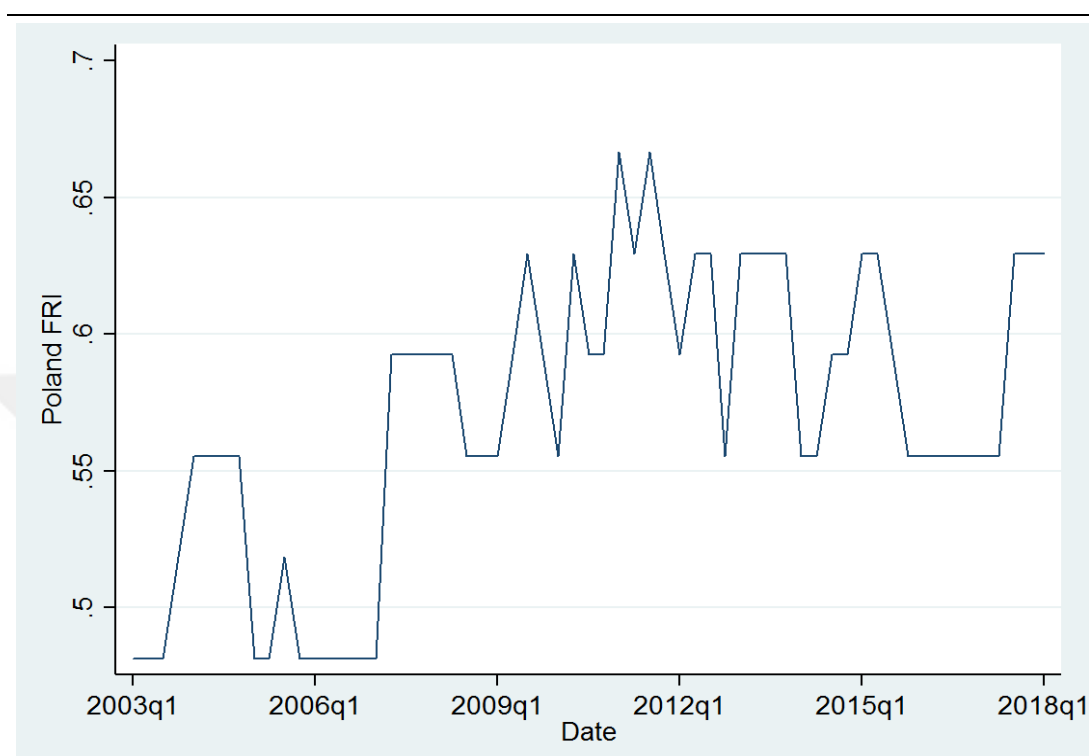


Figure 17. FRI for Poland
Source: Author's calculations.

Several sub-components were involved in the construction of the FRI for Poland. As described by Jacome and Mitra (2015), regulations such as the ones on loan-to-value and debt-to-income ratios were widely exercised as tools to cope with a surge in asset prices and credit extension and to reduce the macro-financial risks by diminishing leverage and mitigating sector-specific shocks. Poland is an important example in this context when we look at the implications of banking loans, especially in the mortgage sector (Bierut et al., 2015). Official guidelines for determining a borrower's level of risk were established in 2006. Starting with Recommendation S, there were various amendments and updates for loan-to-value ratios and risk weights

for loans (and other macroprudential policies), some of which were expansionary, while others were tightening in nature (Jacome and Mitra, 2015).⁶² As stated by Kok et al. (2014), the unique features of Poland's financial markets such as the rapid financial deepening after the country integrated with the EU (a relatively high share of foreign currency loans in total loans—those in Swiss Francs in particular—and dependence on capital flows) have all necessitated the implementation of macroprudential policies on a regular basis. ECB (2014) points out that the number of FX loans soared in Poland until 2008. In terms of capital adequacy and liquidity coverage regulations, the Polish authorities were active as well. For instance, regulations related to bank core capital, liquidity position, LCR ratios, the net stable funding ratio, leverage ratios, conservation buffers, counter-cyclical buffers initiated and implemented by institutions such as the National Bank of Poland, the European Commission, the Basel Committee and the Ministry of Development and Finance (NBP, 2007; NBP, 2010; NBP, 2013; NBP, 2017 among many others). I reviewed all these changes and assessed them in terms of their impact on financial repression/liberalization. Furthermore, as another component of macroprudential policies, the Polish authorities have also frequently utilized the reserve requirement ratio as a policy tool. As argued by Cerutti et al. (2016), reserve requirements are used in positive correlation with policy interest rates in Poland. By tracking the data for these ratios presented by the National Bank of Poland, their effect on the overall FRI can be quantified over time.

In terms of credit guarantee scheme regulations, Poland's first credit guarantee scheme was established in 1994, prior to its accession to the EU. However, Poland has a credit guarantee system which is not particularly large compared to the

⁶² <http://www.ecbc.eu/uploads/attachements/77/65/Poland.pdf>. Last accessed 14 September 2022.

guarantees extended to the GDP ratio before 2005 (Biernat-Jarka, Planutis, 2013).

Funds and capital injections rose between 2004 and 2007. Despite the fact that there were several regional credit guarantee funds, the major player in this field was Bank Gospodarstwa Krajowego, a state-owned publicly-funded institution that guarantees significant amounts. I tracked the developments related to this field over time to form this sub-component.

In line with the loan-to-value arrangements, Polish authorities were not reluctant to utilize FX borrowing restrictions as a part of its policy mix. As stated by Bierut et al. (2015), ECB (2014), and Kabza and Kostrzewa (2016), Polish authorities have undertaken differentiated debt-to-income ratios, increased capital requirements for FX loans, and adopted regulations that are aligned with European Commission Directives in 2007, 2011, 2012 and 2015 onwards. I reviewed and considered all these regulatory measures.

I also evaluated the degree to which entry into the banking sector constitutes financial repression in the historical development of the Polish banking sector. Specifically, Poland experienced a surge of inflows of foreign capital in its banking sector before its EU accession. This resulted in a structural change in the banking sector, and the ratio of foreign bank assets to total assets increased from 17% to almost 70% within a couple of years (Miklaszewska and Miklaszewska, 2009). After 2004, foreign bank participation concentrated mostly on the opening of new branches, but the share of foreign banks started to decrease in the last decade as public banks gained importance.

Maimbo and Gallegos (2014) conducted a comprehensive study that provides details on the use of interest rate restrictions in financial policies. Maimbo and Gallegos (2014) state that Poland does not apply a full-scale restrictive policy on this

front, but in order to shield customers from predatory lending and excessive interest rates, Polish authorities imposed a limit on interest rates for consumer loans, capping the interest at four times the central bank's Lombard rate. Hence, by tracking the Lombard rate over time, one can infer the repressive or liberalizing nature of interest rate caps.

Banbula et al. (2011) demonstrated the historical evolution of Poland's exchange rate system, which is a critical contributing factor to capital accounts. Despite the fact that the country experienced fixed and crawling-peg exchange rate regimes in the 1990s, a free-floating regime combined with explicit inflation targeting has been applied since April 2000. The abolishment of restrictions on the balance of payment dynamics led to a significant increase in capital flow to the country, which in turn led to liberalizing regulatory practices, especially during and after the EU accession period (Jasiniak, 2015). Efforts of Polish policymakers to increase the depth of financial markets and the share of private parties in the financial intermediation sector were also reviewed and included in the formation of FRI. Details about the sub-components of the Poland FRI are provided in Figure 18. Summary statistics for the sub-components of the Poland FRI are given in Appendix D.

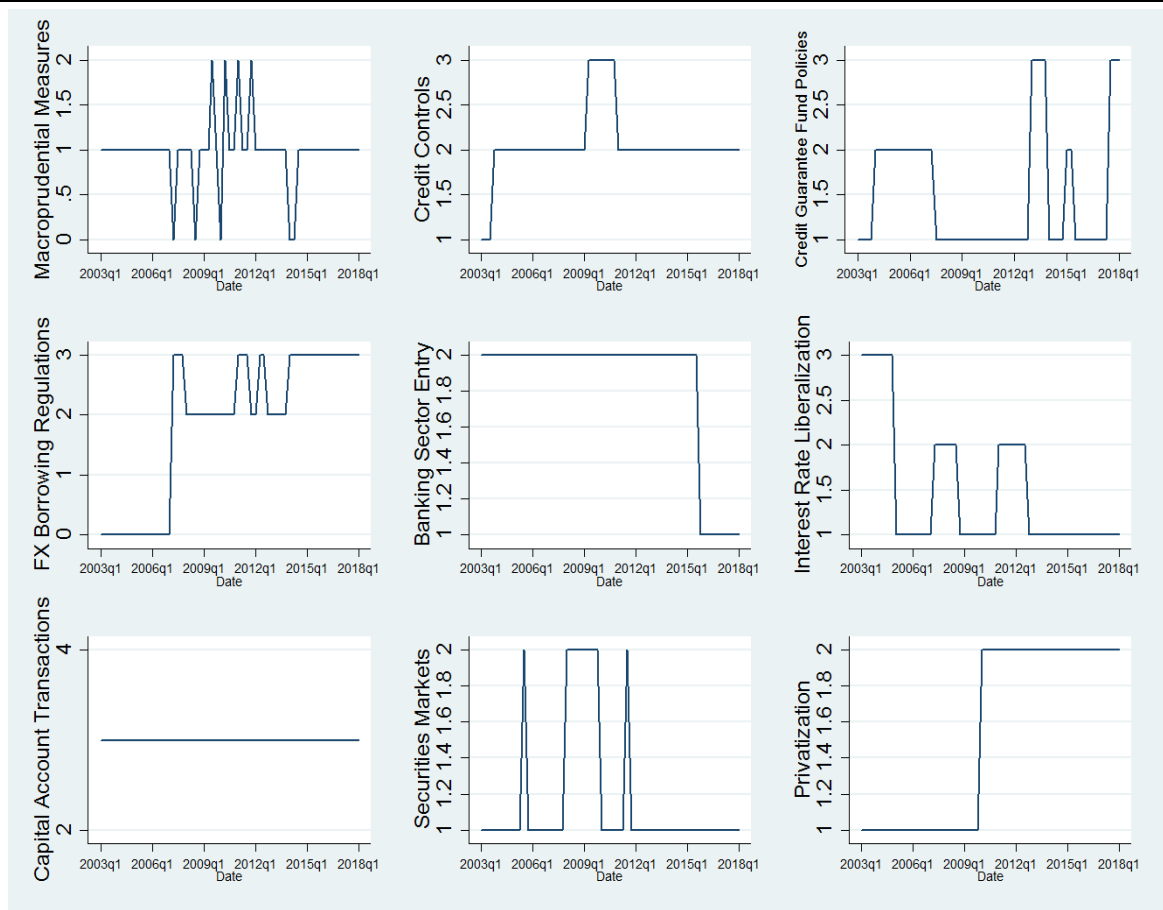


Figure 18. Sub-components of FRI for Poland
Source: Author's calculations.

With regard to the explanatory variables for OLS regression for Poland, I followed an approach that was similar to what I had used for Turkey. Similarly, I ran ordered logistic regression and Bayesian ordered logit regression for the robustness check. The definition of the global uncertainty variable (composed through a principal components analysis by utilizing the financial uncertainty and political economy uncertainty series). The learning variables stayed the same. In terms of defining local shocks, I initially extracted volatilities for output, inflation, employment, and trade, using a GARCH model. I combined these with local financial volatility measures such as USDPLN implied volatilities and bond yields. I then added a political stress index variable to the list and conducted a principal component analysis, ending up with a final local uncertainties measure. In terms of

trade development, I considered the evolution of the trade volume to GDP ratio. Finally, to proxy for local financial development of Poland, I gathered 6 variables (household bank deposits/GDP ratio, loans to non-financial sector/GDP ratio, loans to households/GDP ratio, debt securities holding/GDP ratio, number of ATMs, and the number of bank branches) to form a financial development index. A summary of the statistics is given in Table 8, and the OLS regression results are provided in Table 9.

Table 8. Summary Statistics for Explanatory Variables (Poland)

	Number of Observations	Mean	Standard Deviation	Min	Max
Poland FRI	61	0.5707	0.0538	0.4814	0.6666
Learning	61	0.4302	0.0537	0.3333	0.5185
Policy Diffusion	61	0.1438	0.0644	0.0370	0.2593
Global Uncertainties Index	61	-0.0632	2.7519	-4.1971	11.2339
Local Uncertainties Index	61	-0.0063	1.6028	-2.4554	3.8385
Financial Development Index	61	0.0028	2.1873	-3.5082	2.5691
Trade Development Index	61	0.7057	0.0951	0.5129	0.8812

As mentioned in the estimations conducted for the Turkey FRI, Huang (2009) criticizes the utilization of binary outcome models and suggests regression estimation methods instead. In line with the previous analysis, I conducted similar estimations with an OLS model with heteroscedasticity and autocorrelation-consistent standard errors. Here, as with the estimations for Turkey, I applied the relevant logistic transformation before conducting the formal analysis. The findings presented in

Table 9 again validate the argument that domestic learning, local shocks, and financial development are significant determinants of financial reform in Poland.

Table 9. OLS Regression Results for Poland

	(1)	(2)	(3)	(4)	(5)
	Poland FRI	Poland FRI	Poland FRI	Poland FRI	Poland FRI
Learning	-9.329*** (0.984)				-5.653*** (1.658)
Policy Diffusion		-6.892*** (0.950)			-0.243 (1.447)
Global Uncertainties (t-1)			0.097*** (0.026)		-0.035 (0.027)
Local Uncertainties (t-1)			-0.146*** (0.046)		0.139** (0.063)
Financial Development (t-1)				0.262*** (0.051)	0.183*** (0.068)
Trade Development (t-1)				-1.495 (1.190)	0.305 (1.182)
Adjusted R-square	0.6006	0.4666	0.2305	0.4928	0.6584
Number of Observations	60	60	60	60	60

Domestic learning in Poland is a significant determinant of financial reforms, one that leads to regulations that are financially restrictive. Similar to the Turkish case, policy diffusion had a repressive effect on the Poland FRI. However, this explanatory variable had no significance when other covariates were controlled, as seen in the full specification in the fifth column. In the third specification, global and local uncertainties appear to be significant, and global shocks seem to increase the likelihood of financial reforms to be shaped in financially liberalizing manner. This finding is compatible with the historical changes and the course of the Poland FRI, given the fact that, because of the EU-accession of Poland, local authorities had to

ensure compatibility with EU-induced series of reforms, and they also had to deal with the initiation of policies which were designed to accommodate incoming capital flows, foreign direct investment, and foreign entry to the financial intermediation sector. In this respect, the Polish case differs from the Turkish case. Furthermore, again in contrast with Turkey, Polish policymakers appear to react to local shocks by using financial reforms in a pro-cyclical way instead of using a counter-cyclical method, as evidenced in the negative coefficient of the local uncertainties variable in the estimations. However, when the complete specification in the fifth column is taken into account, the effects of global shocks disappear, expanding the possibilities for financial development. The robust results related to the financial development variable indicate that the main driving force of financial reforms in Poland is its ability to accommodate the financial development process, which is also evident in the course of Poland's FRI switching to a more liberalized regime in the period following 2004-2005, that is, after its accession to the EU.

In order to check the robustness of OLS results for the Poland FRI, I ran ordered logistic regression. The results are largely in line with those obtained from OLS regression method, as illustrated in Table 10.

As exercised for Turkey FRI, I ran both an ordered logistic regression and an OLS regression for the Poland FRI without adding policy diffusion variable into the models. Similarly, I observed that the significant effect of learning was intact, as shown in Appendix D.

Table 10. Ordered Logit Results for Poland

	(1)	(2)	(3)	(4)	(5)
	Poland	Poland	Poland	Poland	Poland
	FRI	FRI	FRI	FRI	FRI
Learning	-41.25*** (6.959)				-36.44*** (9.949)
Policy Diffusion		-23.70*** (4.688)			-5.041 (7.980)
Global Uncertainties (t-1)			0.229** (0.091)		-0.239 (0.154)
Local Uncertainties (t-1)			-0.391** (0.151)		0.590* (0.356)
Financial Development (t-1)				0.867*** (0.237)	0.838** (0.379)
Trade Development (t-1)				-4.896 (4.817)	-0.041 (6.408)
Pseudo R-square	0.2647	0.1630	0.0590	0.1583	0.30425
Number of Observations	60	60	60	60	60
Log-Likelihood	-69.0275	-78.5670	-88.3347	-79.0061	-65.3156

Standard errors in parentheses

*** p < 0.01, ** p < 0.05, * p < 0.1

Constant terms are included in the regressions.

I further assessed Poland's FRI with respect to explanatory variables using an ordered probit model. The results provided in Appendix D illustrate the significant tightening role of learning for Poland in the first and last specification. Global and local forces appear to carry some statistical significance, but the change in the sign of coefficients for explanatory variables proxying global and local shocks (across second and fourth specifications) made the interpretation of the ultimate effect uncertain. However, the ordered probit model results clearly reinforce the previous

finding that financial development plays a significant role in guiding financial regulation practices in Poland.

As for the robustness check, I further estimated the Poland FRI using the Bayesian ordered logistic regression model, which is known to perform better in small samples like this. The results (see Table 11) indicate a close resemblance to standard logit models, especially with respect to the magnitude of the coefficients.

Table 11. Bayesian Ordered Logit Results for Poland

	Mean	Monte Carlo Standard Errors
Learning	-37.545	0.855
Global Uncertainties (t-1)	-0.256	0.152
Local Uncertainties (t-1)	0.601	0.325
Financial Development (t-1)	0.883	0.315
Trade Development (t-1)	-1.530	3.214
Monte Carlo Iterations	12500	
Number of Observations	60	
Log-Marginal-Likelihood	-92.591	

Similar to what I did with the robustness analyses in Turkish case, I tried an alternative specification that included the regional lead FRI variable in levels instead of a diffusion indicator (Table 12). In this case, no significant impact of regional leader FRI on Poland FRI was revealed, neither in univariate nor full specifications. Global uncertainties and trade development were determined to be ineffective, but learning and financial development were retained in a significant manner. Trade

development was ineffective for Turkey too. Therefore, there is not sufficient proof to accept the hypothesis on the effect of trade liberalization (i.e., H4: Trade liberalization affects the pace of financial regulation reforms in liberalizing way).

Table 12. Ordered Logit Results for Poland (Augmented with Level Values of Regional FRI)

	(1) Poland FRI	(2) Poland FRI
Learning		-31.404*** (8.180)
Regional FRI	0.342 (6.578)	5.041 (7.980)
Global Uncertainties (t-1)		-0.239 (0.154)
Local Uncertainties (t-1)		0.590* (0.356)
Financial Development (t-1)		0.838** (0.379)
Trade Development (t-1)		-0.041 (0.6408)
Pseudo R-square	0.0000	0.3042
Number of Observations	60	60
Log-Likelihood	-95.6207	-65.3156

Standard errors in parentheses.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Constant terms are included in the regressions.

In addition, I investigated the degree to which collinear relations were observed across these explanatory variables. Similar to what I did with the empirical analysis for Turkey, my initial step was to review the correlation matrices. The matrix in Appendix D shows few highly visible correlation associations among variables, especially between trade and financial development. However, the VIF

results in Table 13 indicate that none of the VIF scores for the covariates exceeded the threshold of 10, which would have been an indication of problems otherwise.

Table 13. VIF Results for Poland

	VIF Values
Learning	2.30
Regional FRI	1.26
Global Uncertainties	2.47
Local Uncertainties	4.29
Financial Development	9.28
Trade Development	5.14

According to the results of the regression analysis, the effect of domestic learning is found to be negative and significant in Poland whilst it is insignificant for Turkey. The significant effect of domestic learning in the individual specification fades away in full specification for Turkey. This finding suggests that domestic learning has repressive effect on financial regulation reforms in Poland although such effect is less evident for Turkey. The effect of policy diffusion is negative and significant in Turkey despite being insignificant for Poland. The significant effect of policy diffusion in the individual specification disappears in full specification for Poland. This result demonstrates that policy diffusion has repressive effect on financial regulation reforms in Turkey although such effect is less evident for Poland. Significant and negative coefficient of global uncertainties for Turkey implies repressing effect of global shocks on financial regulation reforms. However, global uncertainties variable has significant and positive coefficient in the individual specification for Poland, which implies liberalizing effect on financial regulation

reforms. Nevertheless, this significance disappears in the full specification. Local uncertainties variable has positive and significant coefficient for Turkey. This finding shows that Turkish regulators tend to liberalize financial regulations to respond to local shocks. By contrast, the significant and negative coefficient of local uncertainties variable in individual specification for Poland suggests that local shocks have repressive impact on the pace of financial liberalization in Poland. Financial development variable has positive and significant coefficient for Poland, which supports the argument that financial liberalization increases as financial markets are developed. However, this finding is not observed in Turkey because no significance is found for financial development index of Turkey. Finally, the coefficients of trade development are insignificant for both countries, which means that trade development has no significant effect on financial liberalization reforms.

CHAPTER 7

CONCLUSION

This dissertation aimed to find the factors behind financial regulation reforms introduced by governments and regulatory authorities. It focused on the factors that are generally accepted in the literature and tested the relevance of these factors in the current stage of capitalism, using financial regulations in Poland and Turkey in a comparative study. To this end, domestic learning, policy diffusion, global and local shocks, financial development, and trade openness are factored into the analysis.

The empirical findings in this dissertation tell us that the said determinants of financial regulation are still on the stage in the current capitalism era. However, they provide evidence that there are significant differences in the way these factors affect financial regulation reforms.

One of the significant changes is observed in the effect of learning factor. Endogenous type of learning (domestic learning) turned out to have a negative impact on the pace of financial liberalization reforms in Poland. The pace of liberalization reforms in Poland decreased as learning increased. However, the repressive effect of learning is not clear for the Turkish case, as evidence from the observations denotes a bidirectional effect. Important laws and regulations in Poland and Turkey have been shaped by previous experiences and lessons learned from financial crises. Starting in the 1980s, neo-liberal ideas spurred major transformations in economies. Privatization and marketization of formerly state-run or public sector activities have emerged as the new global norms. Both became important international trends in state transformation, reducing the size and scope of the public sector and opening up more scope for markets, competition, and the

private sector. Regulators were learning how to go about privatizing and liberalizing their markets. However, following the financial crises of the 1990s in Asia and Latin America, followed by several other emerging market crises, regulatory state elements began to emerge. The 2008 GFC accelerated this transformation, and the regulation of financial systems and economies increased. Privatisation and liberalisation caused the capitalist state to evolve, leading governments and other regulators to control a downsized public sector and regulate an upsized private sector, necessitating considerable regulatory action. Regulators then needed to learn how to restrict and control the excessive and harmful aspects of liberalization and marketization. Reversing and modifying previously implemented liberalization reforms has emerged as a new aspect of learning for regulators. Learning is no longer a one-way phenomenon as long as regulators manage to liberalize. Rather, learning has become a two-way phenomenon, including reversing and limiting liberalization reform.

Policy diffusion was also a critical factor in both countries. Turkey has been adhering to the IMF program since the financial crisis, and the EU accession process has been a source of motivation for transforming the financial system. Global conditions were also favorable for attracting foreign direct investment, and the Basel regulations were implemented in accordance with international standards. Poland's EU membership was the key factor in the diffusion channel. Various regulations have been made in line with EU regulations. There have been periods when these regulations have been changed and some restrictions have been relaxed, but these changes are at the discretion of these regulators.

This dissertation reveals that the factors that shape the financial regulation reforms operate in different ways throughout time and spatial dimensions. While the determinants of financial regulation liberalization are largely the same in Turkey and

Poland, which have commonalities in institutional settings, the effects of these factors differ as patterns of institutional linkages take different forms in different national historical contexts. The differences were detected by using the most similar systems design (MSSD) strategy. Turkey's ties to the West's political and economic systems have been in place for much longer than those of Poland. But Poland surpassed Turkey in terms of institutional connection with the EU when it became a member of the EU, while Turkey's application for membership has been pending for decades. Poland's advantageous institutional position over Turkey (Poland's full EU membership versus Turkey's candidacy for EU membership) was the main factor explaining the differences in policy choices of the two countries in response to local and global shocks.

The effect of shocks on financial regulations differed as well, depending on economic and financial conditions. In Poland, local shocks had a repressive effect, while Turkish policymakers responded by liberalizing regulations. The main reason for the contradictory result in these sample countries can be attributed to differences in economic growth. Poland achieved a more balanced and stable economic growth than Turkey, partly thanks to the support of its EU membership anchor. In Poland, local shocks threatened financial stability, and policy tools were used against the conjuncture to mitigate rising risks. However, Turkey, which exhibited fluctuations in economic growth due to political turmoil, election periods, and macroeconomic imbalances, used supportive policy tools in a pro-cyclical manner to stimulate economic activity in order to protect itself from the effects of local shocks. Similarly, global shocks have the opposite effect in these nations too. Poland has responded to global shocks by maintaining financial regulations that facilitate financial conditions. Polish regulators enacted harmonized and liberalizing regulations to address the

economic slowdown and the financial instability that followed the GFC. Regulatory bodies in Turkey, on the other hand, continued to implement the Basel regulations after the GFC and took various precautionary measures to reduce risks. This can partly be attributed to the Turkish economy's greater reliance on global capital flows, which requires maintaining a higher level of risk management, and partly to Turkey's comparative institutional advantage over Poland because of its significant historical ties to Western international institutions.

While the effect of financial development on financial liberalization reforms is significant in Poland, there is less evidence for this in Turkey. This can be explained by Poland's faster financial development and the liberalization of its financial sector due to the base effect. Polish financial markets went through a rapid transformation, from a poorly-developed state-controlled infrastructure to a diversified, advanced, and liberalized in the lead-up to its accession to the EU. Financial development and liberalization increased simultaneously until the GFC hit. However, Turkey had already reached a certain financial development and liberalization long before the examined period. As a result, neither the same performance nor the same connection between financial development and financial liberalization were found in Turkey. The effect of trade openness on the pace of financial liberalization reform in Poland and Turkey is insignificant.

As empirical evidence suggests, the Turkish policy style is reactive in the implementation of financial regulations. The significance of local and global shocks and policy diffusion, which can be described as outside events or exogenous factors, proves that Turkish regulators take a reactive stance in policy-making. Turkey's policy style is further evidenced by the ineffectiveness of its domestic learning and financial and trade development, which are intrinsic and endogenous variables. The

significance of learning, which is less evident for Turkey, would mean that the regulators follow an anticipatory policy style that focuses on acquiring information and knowledge as the basis for an engaged, innovative role of government. The reactive policy style followed by Turkish regulators is associated with reactive sequences of financial regulations, which tend to eliminate path dependency.

The financial regulations in Poland generally follow self-enforcing path-dependent sequences. The significance of domestic learning and financial development along with other factors signify, to a certain extent, the existence of an anticipatory policy style.

The research presented in this dissertation has significant theoretical and practical implications. It reveals major changes in the effects of the determinants that shape financial regulation, and by doing so, it introduces new discussions to the field of political economy. It also provides policy practitioners and regulators with guidelines for tracking the root causes of regulatory changes and an understanding of how these regulatory reforms are instituted.

This dissertation covers data up to the year 2018. There have been several changes in economic policies and financial regulations in the world since that time, so further research is needed to monitor the role played by these determinants in the evolution of financial reforms. One of the significant contingent events that took place after the research period of this dissertation was the COVID-19 pandemic, which had serious political, economic, and financial consequences. This particular critical juncture warrants an independent investigation. Moreover, new factors may come on the stage to explain changes in financial regulation. Therefore, formulating and defining variables in different ways and adding new variables in the changing global financial conditions are potential avenues for further research.

APPENDIX A

THE METHODOLOGICAL DESCRIPTION

OF THE FINANCIAL REGULATION INDEX

For Turkey, Poland and the Regional Leader, the following coding procedure was used for each sub-component of the Financial Regulation Index:

Macprudential Measures

1) Loan-to-value ratios

Coded as 0 if loan-to-value ratios decreased.

Coded as 1 if loan-to-value ratios stay same or are not applicable (do not exist).

Coded as 2 if loan-to-value ratios increased.

2) Installment Restrictions

Coded as 0 if installment restrictions are tightened.

Coded as 1 if installment restrictions stay same.

Coded as 2 if installment restrictions are relaxed.

3) Capital Adequacy (CR) and Liquidity Coverage (LC)

Coded as 0 if CR and LC regulations are tightened.

Coded as 1 if CR and LC regulations stay same.

Coded as 2 if CR and LC regulations are relaxed

Three categories' scores are then summed and defined as follows:

Fully Liberalized = [if summation equals to 8]

Largely Liberalized = [if summation equals to 5, 6 or 7]

Partially Repressed = [if summation equals to 2, 3 or 4]

Fully Repressed = [if summation equals to 0 or 1]

Credit controls and reserve requirements

1) Are reserve requirements restrictive?

Coded as 0 if RR ratio is more than 10%⁶³

Coded as 1 if RR ratio is between 6-10% or complicated regulations to set reserve requirements

Coded as 2 if RR ratio is less than 6%

2) Are there minimum amounts of credit that must be channeled to certain sectors?

Coded as 0 if mandatory credit allocations to certain sectors exist.

Coded as 1 if such allocations are eliminated or do not exist.

3) Are there any credits supplied to certain sectors at subsidized rates?

Coded as 0 when banks have to supply credits at subsidized rates to certain sectors.

Coded as 1 if such requirements are eliminated or do not exist.

Three categories' scores are then summed and defined as follows:

Fully Liberalized = [if summation equals to 4]

Largely Liberalized = [if summation equals to 3]

Partially Repressed = [if summation equals to 1 or 2]

Fully Repressed = [if summation equals to 0]

⁶³ For the Turkish case, until 2010, when diversification in reserve requirements in terms of maturity were not made, the TL RR ratio is used. After 2010, the TL RR ratio on demand deposits is used.

Credit guarantee fund policies

Coded as 0 if no credit guarantee fund scheme exists.

Coded as 1 if regulatory effort is made to establish such a fund is observed.

Coded as 2 if credit guarantee fund is capitalized.

Coded as 3 if credit guarantee fund provides is used as a pro-cyclical tool.

This single category's scores are then summed and defined as follows:

Fully Liberalized = [if summation equals to 3]

Largely Liberalized = [if summation equals to 2]

Partially Repressed = [if summation equals to 1]

Fully Repressed = [if summation equals to 0]

FX borrowing regulations

Coded as 0 if restrictions both households and corporate FX borrowing are introduced or sustained.

Coded as 1 if restrictions on household FX borrowing are introduced or sustained.

Coded as 2 if restrictions on corporate FX borrowing are introduced or sustained

Coded as 3 if no restriction on either household or corporate FX borrowing is observed.

This single category's scores are then summed and defined as follows:

Fully Liberalized = [if summation equals to 3]

Largely Liberalized = [if summation equals to 2]

Partially Repressed = [if summation equals to 1]

Fully Repressed = [if summation equals to 0]

Banking sector entry

1) To what extent does the government allow foreign banks to enter into the domestic market?

Coded as 0 when no entry of foreign banks is allowed or tight restrictions on the opening of new foreign banks are in place.

Coded as 1 when the foreign bank entry is allowed, but nonresidents must hold less than 50 percent equity share.

Coded as 2 when the majority of share of equity ownership of domestic banks by nonresidents is allowed or an unlimited number branching is allowed for foreign banks.

2) Does the government allow the entry of new domestic banks?

Coded as 0 when it is not allowed or strictly regulated.

Coded as 1 when it is allowed freely.

3) Are there restrictions on branching?

Coded as 0 when restrictions are in place.

Coded as 1 when there are no restrictions.

4) Does the government allow banks to engage in a wide range of activities?

Coded as 0 when they can only engage in banking activities.

Coded as 1 when banks are allowed to become universal banks.

Four categories' scores are then summed and defined as follows:

Fully Liberalized = [if summation equals to 4 or 5]

Largely Liberalized = [if summation equals to 3]

Partially Repressed = [if summation equals to 1 or 2]

Fully Repressed = [if summation equals to 0]

Interest rate liberalization

Coded as 0 if both deposit and lending interest rates are set by the government or subject to ceiling/floor.

Coded as 1 when either deposit or lending rates are freed but the other interest rates are set by government or subject to ceiling/floor; or both deposit rates and lending rates are subject to band or partially liberalized; or either deposit or lending rates are subject to band or partially liberalized.

Coded as 2 if either deposit rates or lending rates are freed but the other rates are subject to band or only a part of interest rates are determined at market rates.

Coded as 3 if both deposit and lending interest rates are determined at market rates.

This single category's scores are then summed and defined as follows:

Fully Liberalized = [if summation equals to 3]

Largely Liberalized = [if summation equals to 2]

Partially Repressed = [if summation equals to 1]

Fully Repressed = [if summation equals to 0]

Capital account transactions

1) Is the exchange rate system unified?

Coded as 0 when a special exchange rate regime for capital or current account transactions exists.

Coded as 1 when the exchange rate system is unified.

2) Does a country set restrictions on capital inflow?

Coded as 0 when significant restrictions exist.

Coded as 1 when the banks are allowed to borrow from abroad freely without restrictions or there are no tight restrictions on other capital inflows.

3) Does a country set restrictions on capital outflow?

Coded as 0 when significant restrictions exist.

Coded as 1 when capital outflows are allowed to flow freely or minimal approval restrictions.

Three categories' scores are then summed and defined as follows:

Fully Liberalized = [if summation equals to 3]

Largely Liberalized = [if summation equals to 2]

Partially Repressed = [if summation equals to 1]

Fully Repressed = [if summation equals to 0]

Securities markets

1) Has a country taken measures to develop securities markets?

Coded as 0 if securities market does not exist.

Coded as 1 when a securities market is at early stages of development.

Coded as 2 when further measures have been taken to develop securities markets such as introduction of long term government bonds to build a benchmark of yield curve or policies to develop equity markets.

Coded as 3 when sophisticated measures have been taken to develop derivatives market or broaden the institutional investor base.

2) Is a country's equity market open to foreign investors?

Coded as 0 if no foreign ownership is allowed.

Coded as 1 when foreign ownership is allowed but it is less than 50%.

Coded as 2 when a majority of equity share of foreign ownership is observed.

Two categories' scores are then summed and defined as follows:

Fully Liberalized = [if summation equals to 4 or 5]

Largely Liberalized = [if summation equals to 3]

Partially Repressed = [if summation equals to 1 or 2]

Fully Repressed = [if summation equals to 0]

Privatization

Coded as 0 if major banks are all state owned banks and or the percentage of public bank assets is from 50% to 100%.

Coded as 1 if many banks are privately owned but major banks are still state owned and or the percentage of public bank assets is around 25-50%.

Coded as 2 if most banks are privately owned but major banks are still state owned and or the percentage of public bank assets is around 10-25%.

Coded as 3 if no state banks exist or state owned banks do not consists of any significant portion of banks and or the percentage of public bank assets is less than 10%.

This single category's scores are then summed and defined as follows:

Fully Liberalized = [if summation equals to 3]

Largely Liberalized = [if summation equals to 2]

Partially Repressed = [if summation equals to 1]

Fully Repressed = [if summation equals to 0]

APPENDIX B

DETAILED DESCRIPTION OF DATA SERIES USED TO CONSTRUCT INDEPENDENT VARIABLES

Table B1. Data Sources and Availability Period

Variables	Source	Data Availability
Global Uncertainty Index		
VIX	Bloomberg	1990-2018
V2X	Bloomberg	1999-2018
TED-OIS Spread	Bloomberg	2002-2018
MOVE	Bloomberg	1988-2018
US 10 Year Bond Yield	Bloomberg	1962-2018
JP Morgan EM Volatility Index	Bloomberg	2000-2018
JP Morgan G7 Volatility Index	Bloomberg	1992-2018
Bank of America Merrill Lynch Global Financial Stress Indicator	Bloomberg	2000-2018
Global Economic Policy Uncertainty Index with Current Price GDP Weights	Baker et al. (2016)	1997-2018 (Monthly)
Global Economic Policy Uncertainty Index with PPP- adjusted GDP Weights	Baker et al. (2016)	1997-2018 (Monthly)
Baseline Overall Economic Policy Uncertainty Index for US	Baker et al. (2016)	1985-2018 (Monthly)
News Based Economic Policy Uncertainty Index for US	Baker et al. (2016)	1985-2018 (Monthly)
News Based Economic Policy Uncertainty Index for Europe	Baker et al. (2016)	1987-2018 (Monthly)
Financial Development Index (for Turkey)		
Total Assets/GDP	BRSA, TurkStat, Author's Calculations	2003Q1-2018Q1
Total Deposits/GDP	BRSA, TurkStat, Author's Calculations	2003Q1-2018Q1
Total Loans/GDP	BRSA, TurkStat, Author's Calculations	2003Q3-2018Q1
Number of ATMs	BRSA	2003Q1-2018Q1 (Monthly but transformed to be Quarterly)
Number of Bank Branches	BRSA	2003Q1-2018Q1 (Monthly but transformed to be Quarterly)

Variables	Source	Data Availability
Trade Development/Openness Index (for Turkey)		
(Total Imports+Total Exports)/GDP	TurkStat, Author's Calculations	
Year-on-Year Change in Exports and Imports	TurkStat, Author's Calculations	
Foreign Direct Investment/GDP	TurkStat, CBRT, Author's Calculations	
Local Political and Macroeconomic Uncertainty Index (for Turkey)		
Implied volatilities obtained from economic variables including growth, inflation, employment, foreign trade and public finance (through GARCH models)	TurkStat, CBRT, Author's Calculations	2000-2017
USD/TRY 1 Month Implied Volatility	Bloomberg	1999-2018
JPMorgan EMBIG Turkey Sovereign Spread	Bloomberg	1996-2018
Turkey CDS Spread	Bloomberg	2000-2018
Political Stress Index (It will take the value of 1 if major/excessive political events occur in the corresponding period such as election, military coup, diplomatic crisis etc., otherwise it will take the value of 0)	Author's Calculations	2003Q1-2018Q1

Variables	Source	Data Availability
Global Uncertainty Index		
VIX	Bloomberg	1990-2018
V2X	Bloomberg	1999-2018
TED-OIS Spread	Bloomberg	2002-2018
MOVE	Bloomberg	1988-2018
US 10 Year Bond Yield	Bloomberg	1962-2018
JP Morgan EM Volatility Index	Bloomberg	2000-2018
JP Morgan G7 Volatility Index	Bloomberg	1992-2018
Bank of America Merrill Lynch Global Financial Stress Indicator	Bloomberg	2000-2018
Global Economic Policy Uncertainty Index with Current Price GDP Weights	Baker et al. (2016)	1997-2018 (Monthly)
Global Economic Policy Uncertainty Index with PPP-adjusted GDP Weights	Baker et al. (2016)	1997-2018 (Monthly)
Baseline Overall Economic Policy Uncertainty Index for US	Baker et al. (2016)	1985-2018 (Monthly)
News Based Economic Policy Uncertainty Index for US	Baker et al. (2016)	1985-2018 (Monthly)
News Based Economic Policy Uncertainty Index for Europe	Baker et al. (2016)	1987-2018 (Monthly)
Financial Development Index (for Poland)		
Total Assets/GDP	National Bank of Poland, Polish Statistical Office, Bloomberg, Author's Calculations	2003Q1-2018Q1
Total Deposits/GDP	National Bank of Poland, Polish Statistical Office, Bloomberg, Author's Calculations	2003Q1-2018Q1
Total Loans/GDP	National Bank of Poland, Polish Statistical Office, Bloomberg, Author's Calculations	2003Q1-2018Q1
Number of ATMs	World Bank Global Financial Development Database	2003Q1-2018Q1
Number of Bank Branches	World Bank Global Financial Development Database	2003Q1-2018Q1

Variables	Source	Data Availability
Trade Development/Openness Index (for Poland)		
(Total Imports+Total Exports)/GDP	Bloomberg, Author's Calculations	2003-2018
Year-on-Year Change in Exports and Imports	Bloomberg, Author's Calculations	2003-2018
Foreign Direct Investment/GDP	Bloomberg, Author's Calculations	2003-2018
Local Political and Macroeconomic Uncertainty Index (for Poland)		
Implied volatilities obtained from economic variables including growth, inflation, employment, foreign trade and public finance (through GARCH models)	Bloomberg, National Bank of Poland, Author's Calculations	2003-2018
USD/PLN 1 Month Implied Volatility	Bloomberg	2003-2018
JPMorgan EMBIG Poland Sovereign Spread	Bloomberg	2003-2018
Poland 10 Year Bond Yield	Bloomberg	2003-2018
Political Stress Index (It will take the value of 1 if major/excessive political events occur in the corresponding period such as election, military coup, diplomatic crisis etc., otherwise it will take the value of 0)	Author's Calculations	2003Q1-2018Q1

Table B2. Summary Statistics for Data Series Used to Construct Independent Variables

Variables	Number of Observations	Mean	Standard Deviation	Min	Max
Global Uncertainty Index					
VIX	66	19.37702	8.381183	10.30794	58.59594
V2X	66	24.20247	9.391542	12.86535	58.3387
TED-OIS Spread	66	25.33377	30.57041	6.572459	213.1961
MOVE	66	90.66834	30.02377	49.37543	207.621
US 10 Year Bond Yield	66	3.282649	1.071526	1.559088	5.078592
JP Morgan EM Volatility Index	66	10.40591	3.109029	6.614697	26.02045
JP Morgan G7 Volatility Index	66	9.984531	2.404088	6.209242	19.70576
Bank of America Merrill Lynch Global Financial Stress Indicator	66	0.135932	0.515151	-0.51923	2.503636
Global Economic Policy Uncertainty Index with Current Price GDP Weights	66	115.2401	33.63468	63.11824	215.891
Global Economic Policy Uncertainty Index with PPP-adjusted GDP Weights	66	151.928	59.90148	60.33488	307.6301
Baseline Overall Economic Policy Uncertainty Index for US	66	116.6386	44.22175	57.50298	262.6479
News Based Economic Policy Uncertainty Index for US	66	115.6638	42.13073	55.20392	243.3832
News Based Economic Policy Uncertainty Index for Europe	66	121.6383	39.05176	52.08923	235.084
Financial Development Index (for Turkey)					
Total Assets/GDP	59	0.827431	2.102517	-5.647145	4.918305
Total Deposits/GDP	59	0.330194	1.242592	-3.889973	2.705415
Total Loans/GDP	59	0.952920	1.117038	-1.706230	3.329334
Number of ATMs	59	1778.576	1161.64	-1659	4656
Number of Bank Branches	59	277.8475	353.859	-850	1003
Trade Development/Openness Index (for Turkey)					

Variables	Number of Observations	Mean	Standard Deviation	Min	Max
(Total Imports+Total Exports)/GDP	60	40.991413	3.104845	34.59397	47.07182
Year-on-Year Change in Exports and Imports	59	0.101820	1.306378	-3.302369	3.485054
Foreign Direct Investment/GDP	60	1.756766	0.965045	0.432770	5.132378
Local Political and Macroeconomic Uncertainty Index (for Turkey)					
USD/TRY 1 Month Implied Volatility	59	12.935757	3.912441	5.648359	30.17170
JPMorgan EMBIG Turkey Sovereign Spread	59	283.128227	76.889377	168.7966	589.4032
Turkey CDS Spread	59	233.424718	80.181217	140.0493	528.6807
Political Stress Index (It will take the value of 1 if major/excessive political events occur in the corresponding period such as election, military coup, diplomatic crisis etc., otherwise it will take the value of 0)	59	0.482759	0.504067	0	1
Financial Development Index (for Poland)					
Total Assets/GDP	61	2.331272	0.519323	1.525881	2.963078
Total Deposits/GDP	61	0.144559	0.037655	0.095480	0.219064
Total Loans/GDP	61	1.683114	0.401130	1.014765	2.091080
Number of ATMs	61	49.287725	16.363632	25.4444	72.428
Number of Bank Branches	61	30.719343	2.522830	26.5946	33.9744
Trade Development/Openness Index (for Poland)					
(Total Imports+Total Exports)/GDP	57	71.77635	8.554345	53.72819	88.12816
Year-on-Year Change in Exports and Imports	56	0.549419	2.832174	-5.31575	10.00202
Local Political and Macroeconomic Uncertainty Index (for Poland)					
USD/PLN 1 Month Implied Volatility	61	13.589522	5.870949	7.249167	41.630833
JPMorgan EMBIG Poland Sovereign Spread	61	3.976152	1.015132	2.16	5.702

Variables	Number of Observations	Mean	Standard Deviation	Min	Max
Poland 10 Year Bond Yield	61	4.939599	1.298715	2.257645	7.271045
Political Stress Index (It will take the value of 1 if major/excessive political events occur in the corresponding period such as election, military coup, diplomatic crisis etc., otherwise it will take the value of 0)	61	0.508197	0.499933	0	1



APPENDIX C

GRAPHICAL REPRESENTATIONS OF CONSTRUCTED INDICES AND DATA

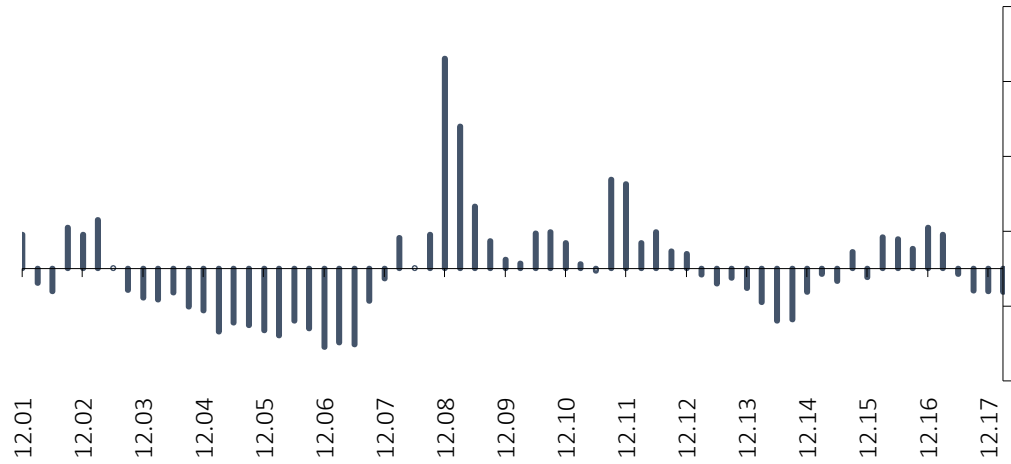


Figure C1. Global uncertainty index

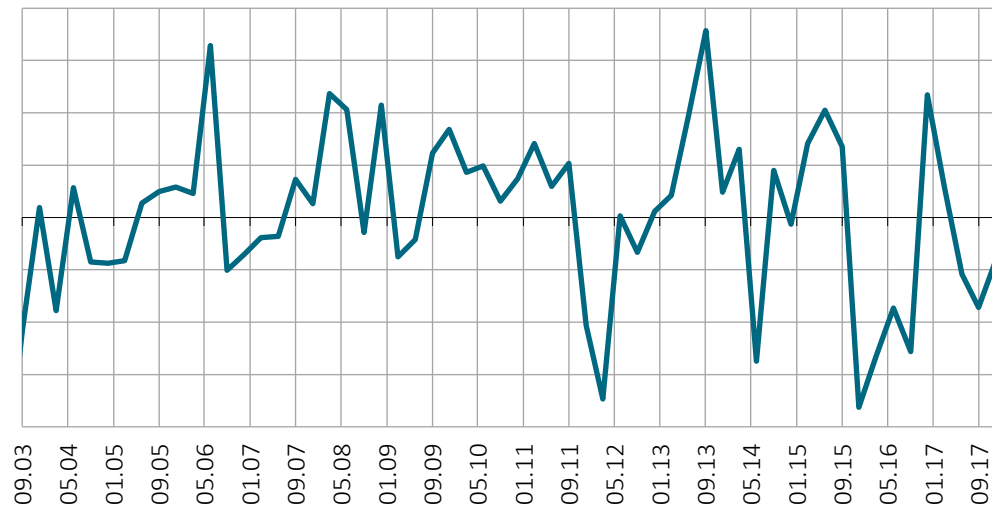


Figure C2. Financial development index (for Turkey)

* The index fluctuates due to the volatility in exchange rates, unstable GDP growth rates and rigid changes in number of branches and ATMs launched.

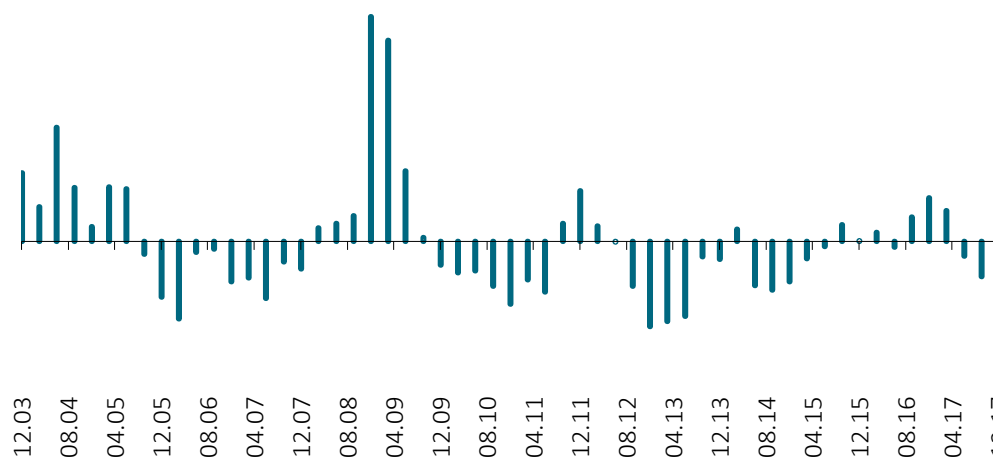


Figure C3. Local political and macroeconomic uncertainty index (for Turkey)



Figure C4. Trade openness and development indicator (for Turkey, trade volume/GDP)

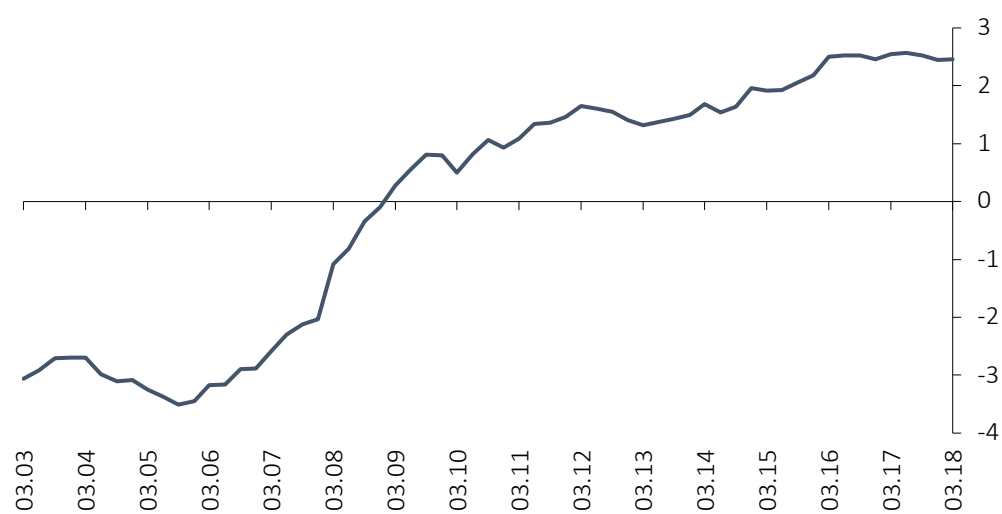


Figure C5. Financial development index (for Poland)



Figure C6. Local political and macroeconomic uncertainty index (for Poland)



Figure C7. Trade openness and development indicator (for Poland, trade volume/GDP)

APPENDIX D

SUPPLEMENTARY EMPIRICAL RESULTS AND ANALYSES

Table D1. OLS Regression Results for Turkey

	(1)	(2)	(3)	(4)
	Turkey FRI	Turkey FRI	Turkey FRI	Turkey FRI
Learning	-6.755*** (2.301)			-4.514*** (2.494)
Global Uncertainties (t-1)		-0.196*** (0.061)		-0.141** (0.067)
Local Uncertainties (t-1)		0.343*** (0.099)		0.285*** (0.106)
Financial Development (t-1)			-0.092 (0.090)	-0.004 (0.084)
Trade Development (t-1)			-0.041 (0.119)	-0.094 (0.111)
Adjusted R-square	0.1293	0.1994	0.0230	0.2513
Number of Observations	60	60	60	60

Robust standard errors in parentheses

*** p < 0.01, ** p < 0.05, * p < 0.1

Constant terms are included in the regressions.

Table D2. Ordered Logit Results for Turkey

	(1)	(2)	(3)	(4)
	Turkey FRI	Turkey FRI	Turkey FRI	Turkey FRI
Learning	-28.56*** (4.941)			-25.97*** (5.183)
Global Uncertainties (t-1)		-0.416*** (0.110)		-0.221* (0.123)
Local Uncertainties (t-1)		0.612*** (0.176)		0.361* (0.194)
Financial Development (t-1)			-0.133 (0.132)	0.032 (0.143)
Trade Development (t-1)			0.083 (0.181)	-0.074 (0.183)
Pseudo R-square	0.1825	0.0787	0.0490	0.2019
Number of Observations	60	60	60	60
Log-Likelihood	-90.8788	-102.4161	-110.6224	-88.7217

Standard errors in parentheses.

*** p < 0.01, ** p < 0.05, * p < 0.1

Constant terms are included in the regressions.

Table D3. Ordered Probit Results for Turkey

	(1) Turkey FRI	(2) Turkey FRI	(3) Turkey FRI	(4) Turkey FRI
Learning	-16.083*** (2.720)			-14.550*** (2.877)
Global Uncertainties (t-1)		-0.241*** (0.064)		-0.144** (0.069)
Local Uncertainties (t-1)		0.363*** (0.103)		0.260** (0.111)
Financial Development (t-1)			-0.095 (0.078)	0.018 (0.083)
Trade Development (t-1)			0.061 (0.104)	-0.029 (0.111)
Pseudo R-square	0.1728	0.0633	0.0073	0.2002
Number of Observations	60	60	60	60
Log-Likelihood	-91.9635	-105.1895	-110.3614	-88.9155

Standard errors in parentheses.

*** p < 0.01, ** p < 0.05, * p < 0.1

Constant terms are included in the regressions.

Table D4. Ordered Logit Results for Turkey (Augmented with Level Values of Regional FRI and Output Gap)

	(1) Turkey FRI	(2) Turkey FRI
Learning		-25.417*** (5.595)
Regional FRI		-1.957 (7.584)
Global Uncertainties (t-1)		-0.234* (0.139)
Local Uncertainties (t-1)		0.367* (0.200)
Financial Development (t-1)		0.033 (0.145)
Trade Development (t-1)		-0.043 (0.229)
Output Gap (t-1)	4.838 (6.112)	-0.883 (9.549)
Pseudo R-square	0.0028	0.2023
Number of Observations	60	60
Log-Likelihood	-111.8580	-88.6831

Standard errors in parentheses.

*** p < 0.01, ** p < 0.05, * p < 0.1

Constant terms are included in the regressions.

Table D5. Correlation Matrices (for Turkey)

	Learning	Regional FRI	Global Uncertainties	Local Uncertainties	Financial Dev't	Trade Dev't
Learning	1					
Regional FRI	0.251	1				
Global Uncertainties	0.284	-0.038	1			
Local Uncertainties	-0.090	-0.025	0.563	1		
Financial Development	0.184	0.092	0.043	-0.149	1	
Trade Development	-0.124	0.324	0.129	0.116	0.184	1

Table D6. OLS Regression Results for Poland

	(1) Poland FRI	(2) Poland FRI	(3) Poland FRI	(4) Poland FRI
Learning	-9.329*** (0.984)			-5.824*** (1.299)
Global Uncertainties (t-1)		0.097*** (0.026)		-0.035 (0.027)
Local Uncertainties (t-1)		-0.146*** (0.046)		0.138** (0.062)
Financial Development (t-1)			0.262*** (0.051)	0.186*** (0.066)
Trade Development (t-1)			-1.495 (1.190)	0.298 (1.171)
Adjusted R-square	0.6006	0.2566	0.4928	0.6646
Number of Observations	60	60	60	60

Robust standard errors in parentheses.

*** p < 0.01, ** p < 0.05, * p < 0.1

Constant terms are included in the regressions.

Table D7. Ordered Logit Results for Poland

	(1) Poland FRI	(2) Poland FRI	(3) Poland FRI	(4) Poland FRI
Learning	-41.25*** (6.959)			-32.76*** (7.910)
Global Uncertainties (t-1)		0.230** (0.092)		-0.226 (0.152)
Local Uncertainties (t-1)		-0.391*** (0.152)		0.576 (0.351)
Financial Development (t-1)			0.867*** (0.238)	0.775** (0.365)
Trade Development (t-1)			-4.896 (4.817)	-0.095 (6.388)
Number of Observations	60	60	60	60
Pseudo R-square	0.2647	0.0590	0.1583	0.3020
Log-Likelihood	-69.0275	-88.3348	-79.0061	-65.5178

Standard errors in parentheses

*** p < 0.01, ** p < 0.05, * p < 0.1

Constant terms are included in the regressions.

Table D8. Ordered Probit Results for Poland

	(1) Poland FRI	(2) Poland FRI	(3) Poland FRI	(4) Poland FRI
Learning	-22.72*** (3.570)			-17.297*** (4.246)
Global Uncertainties (t-1)		0.143*** (0.052)		-0.145* (0.087)
Local Uncertainties (t-1)		-0.242*** (0.089)		0.386* (0.205)
Financial Development (t-1)			0.523*** (0.131)	0.480** (0.199)
Trade Development (t-1)			-3.206 (2.828)	0.675 (3.666)
Number of Observations	60	60	60	60
Pseudo R-square	0.2548	0.0646	0.1692	0.3007
Log-Likelihood	-69.9481	-87.8047	-77.9868	-65.6455

Standard errors in parentheses

*** p < 0.01, ** p < 0.05, * p < 0.1

Constant terms are included in the regressions.

Table D9. Correlation Matrices (for Poland)

	Learning	Regional FRI	Global Uncertainties	Local Uncertainties	Financial Dev't	Trade Dev't
Learning	1					
Regional FRI	-0.044	1				
Global Uncertainties	-0.346	-0.037	1			
Local Uncertainties	0.314	0.325	0.178	1		
Financial Development	-0.383	-0.288	0.428	-0.669	1	
Trade Development	-0.510	-0.286	0.138	-0.683	0.445	1

Table D10. Summary Statistics for Dimensions of Turkey FRI (Normalized)

Variables	Number of Observations	Mean	Standard Deviation	Min	Max
Macprudential measures	61	1.0000	0.3162	0	2
Credit controls and reserve requirements	61	1.9180	0.9182	1	3
Credit guarantee fund policies	61	1.2459	0.6495	1	3
FX borrowing regulations	61	1.5246	0.6220	1	3
Banking sector entry	61	1.2295	0.4240	1	2
Interest rate liberalization	61	1.7377	0.4435	1	2
Capital account transactions	61	3.0000	0.0000	3	3
Securities markets	61	2.1803	0.8268	1	3
Privatization	61	1.5410	0.5025	1	2

Table D11. Summary Statistics for Dimensions of Poland FRI (Normalized)

Variables	Number of Observations	Mean	Standard Deviation	Min	Max
Macprudential measures	61	0.9836	0.3869	0	2
Credit controls and reserve requirements	61	2.0656	0.4029	1	3
Credit guarantee fund policies	61	1.4918	0.6982	1	3
FX borrowing regulations	61	1.8525	1.2361	0	3
Banking sector entry	61	1.8361	0.3733	1	2
Interest rate liberalization	61	1.4754	0.7213	1	3
Capital account transactions	61	3.0000	0.0000	3	3
Securities markets	61	1.1639	0.3733	1	2
Privatization	61	1.5410	0.5025	1	2

APPENDIX E

PRINCIPAL COMPONENT ANALYSIS

Principal component analysis is a multivariate mathematical method which can reduce a larger number of correlated variables into a smaller number of uncorrelated factors (Hotelling, 1933; Stock and Watson, 2002). It is widely used as a dimensionality reduction technique and data compression method. The popularity of this method stems from three important properties. First, it is the optimal linear scheme for compressing a set of high dimensional vectors into a set of lower dimensional vectors. Second, the data itself can be directly used for estimation, for example, by diagonalizing the sample covariance. Finally, compression and decompression works can be conducted easily using only matrix multiplications. For a multivariate random variable $x \in R^D$ and any $d < D$, the “d principal components” can be defined as d uncorrelated linear components of x:

$$y_i = u_i^T x \in R, \quad i = 1, \dots, d$$

for some $u_i \in R^D$ such that the variance of y_i is maximized subject to

$$u_i^T u_i = 1, \quad \text{Var}(y_1) \geq \text{Var}(y_2) \geq \dots \geq \text{Var}(y_d)$$

Traditionally, it is performed on a square symmetric matrix, which can be a covariance or correlation matrix. In other words, it models the variance structure of a set of observed variables using linear combinations of the variables. In my dissertation, the principal component analysis for index construction was conducted using the correlation matrix. In this work, I chose the first principal component (which describes the highest amount variation in underlying series) as index values

whenever the method is applied. In fact, many empirical works from diverse fields use this method to construct indices, such as that of Guihuan and Yu (2014), Mazziotta and Pareto (2016), and Kliesen and Smith (2010).



APPENDIX F

GENERALIZED AUTOREGRESSIVE CONDITIONAL
HETEROSKEDASTICITY - GARCH MODEL

GARCH models were initially conceptualized by Engle (1982) and later were widely used in volatility modelling, especially in the field of finance. Although its use is limited in areas dealing with macroeconomic uncertainty, it is occasionally utilized as a tool for quantifying inflation uncertainty. GARCH models are known to simultaneously model the mean equation and variance equation of a series. As described in the text, this dissertation applies the GARCH method to extract uncertainties embodied in other macroeconomic aggregates such as growth, inflation, and foreign trade. As referred in the text, initially three macroeconomic variables from Turkey were integrated with this model: the consumer price index, the industrial production index, and the export quantity index. GARCH (1,1) models with one period lag values in mean equation, square of the error term and lagged variance of error term in the variance equation. To exemplify, GARCH (1,1) models of the following form are estimated and implied standard deviations are taken:

$$(\text{Macroeconomic Series})_t = c + (\text{Macroeconomic Series})_{t-1} + \epsilon_t$$

$$\sigma_t^2 = \omega + \alpha \epsilon_{t-1}^2 + \beta \sigma_{t-1}^2$$

APPENDIX G

TIMELINE OF EVENTS AND POLICY MEASURES

REPRESENTING INPUTS FOR TURKEY FRI

1. MACROPRUDENTIAL MEASURES	DATE	L/R*
Loan-to-Value Ratios		
75% loan-to-value ratio for housing loans (consumer) is introduced.	2011Q1	0
50% loan-to-value ratio for housing loans (commercial) is introduced.	2011Q1	0
Loan-to-value ratio for housing loans (commercial) is abolished.	2013Q2	2
70% loan-to-value ratio for vehicle loans is introduced.	2014Q1	0
Loan-to-value ratio for housing loans (consumer) is increased to 80%.	2016Q3	2
Installment Restrictions		
The legislation pertaining "Credit Transactions of Banks" is adopted.	2006Q1	0
Installment schedule for vehicle loans and other general-purpose loans are limited to 48 and 36 months, respectively.	2013Q4	0
Installment periods are restricted for credit-card financed purchasing transactions.	2014Q1	0
Installment periods are restricted for credit-card financed purchasing transactions.	2014Q2	0
Installment periods are restricted for credit-card financed purchasing transactions.	2014Q4	0
Installment periods are extended for credit-card financed purchasing transactions.	2015Q4	2
Installment periods are extended for credit card-financed purchasing transactions.	2016Q3	2
Capital Adequacy and Liquidity Coverage		
Establishment of enforcement powers via the creation of a banking law.	2005	1
The legislation entitled Legislation for Internal Systems of Banks is created (bringing foundations for calculating liquidity adequacy).	2006Q2	0
The legislation entitled Measuring and Assessing Liquidity Coverage of Banks is adopted by BRSA.	2006Q4	0
Determination of 12% capital adequacy ratio for the banking sector.	2006Q4	0
The legislation entitled Measuring and Assessing Capital Adequacy of Banks is adopted by BRSA.	2006Q4	0

Introduction of Basel II rules by BRSA.	2012Q2-Q4	0
The legislation entitled Calculating Liquidity Coverage Ratio for Banks is adopted by BRSA.	2014Q1	0
The legislation entitled Measuring and Assessing Capital Adequacy of Banks is extended by BRSA.	2014Q3	0
Minimum core capital adequacy ratio is increased.	2015Q1	0
The legislation entitled Determining Systemically Important Banks is adopted by BRSA.	2016Q1	0
Guidance for Liquidity Risk Management is published by BRSA.	2016Q1	0
Guidance for Stress Testing Framework for Capital and Liquidity Planning is published by BRSA.	2016Q1	0
2. CREDIT CONTROLS	DATE	
Reserve Requirements		
TL reserve requirement ratio is decreased.	After 2008Q4	1
Interest paid on TL reserve requirements is abolished.	2010Q3	1
Reserve requirement ratios are differentiated by CBRT depending on the maturity and currency.	After 2010Q4	0
TL reserve requirement ratios applicable on demand deposits are decreased.	Several time periods such as 2016Q2 and 2018Q1	2
Minimum Credit to Certain Sectors	No restriction is observed in the Turkish case.	
Credit Supplied to Certain Sectors at Subsidized Rates		
The outlook regarding export rediscount credits exceeding historical tendencies is effective.	After 2012Q3	0
3. CREDIT GUARANTEE FUND POLICIES	DATE	
Capital injection to Turkey CGF is implemented.	2007Q1	2
The initiation of portfolio guarantee system in Turkish CGF.	2014Q1	3
A protocol is signed between CGF and the Treasury to launch Treasury-supported credit guarantees.	2016Q12	3
4. FX BORROWING REGULATIONS	DATE	
An amendment is made on Decision No. 32 on Protecting the value of TL which bans the use of FX loans by households.	2009Q2	1
Limits on obtaining FX loans (threefold of FX revenues in last 3 years) are introduced; FX-indexed loans were abolished.	2018	3
5.BANKING SECTOR ENTRY	DATE	
Entry of Foreign Banks into the Domestic Market		
Establishment of Merger for Foreign Banks	2004Q1, 2004Q3, 2005Q1, 2006Q2, 2011Q1, 2012Q4, 2013Q3, 2014Q2, 2017Q4 among some others	2

Government Authorization for Entry of New Domestic Banks	No restriction is observed in the Turkish case.	
Restrictions on Branching	No restriction is observed in the Turkish case.	
Government Authorization for Banks to Engage in Multiple Activities	No restriction is observed in the Turkish case.	
6.INTEREST RATE LIBERALIZATION	DATE	
Threshold values for interest rate applied on credit card transactions imposed by CBRT are changed.	2006Q2-Q3, 2007Q3, 2009Q1, 2010Q3, 2013Q2-Q3, 2014Q4, 2016Q1-Q4 among some others	1
7.CAPITAL ACCOUNT TRANSACTIONS	DATE	
Unification of the Exchange Rate System	No restriction is observed in the Turkish case.	
Application of Restrictions on Capital Inflows	No restriction is observed in the Turkish case.	
Application of Restrictions on Capital Outflows	No restriction is observed in the Turkish case.	
8.SECURITIES MARKETS	DATE	
Measures Taken to Develop Securities Markets		
The enlargement in terms of volume of transactions, market capitalization and the trend of quotations are observed.	After 2010	2
The merger of BIST and the Derivatives Market and the introduction of more sophisticated derivative instruments such as index options takes place.	After 2013	3
Openness of Equity Market to Foreign Investors		
The share of foreign investors in stocks traded in BIST exceeds historical average, according to data from the Central Securities Depository of Turkey (MKK).	2009Q1-2010Q1, 2012Q1-2012Q4, 2016Q4-2018Q1 among others	2
9.PRIVATIZATION	DATE	
The share of public banks in the banking sector's total assets stays below 30%.	2006Q1-2008Q4, 2011Q1-2014Q4	1

*Scores given under L/R column refers to the liberalizing or repressive nature of the regulations and assigned as per the rules given in Appendix A.

APPENDIX H

TIMELINE OF EVENTS AND POLICY MEASURES

REPRESENTING INPUTS FOR REGIONAL FRI

1. MACROPRUDENTIAL MEASURES	DATE	L/R*
Loan-to-Value Ratios		
Loan-to-value ratio for housing loans decreased in many countries such as Belgium, Ireland, Spain, Malta and Portugal as a result of the financial turmoil.	2007Q1-Q2	0
Loan-to-value ratio for housing loans in some EU member states including Spain, Italy, Portugal, Finland, Greece and Ireland ranged between 63% and 101%, remained typically around 80% in EU member states.	2007Q3	1
France increased loan-to-value ratio for residential mortgage loans from 77% to 79%.	2010Q1	2
Loan-to-value ratio maintained 81% in Ireland, 73% in Malta, 69% in Portugal and 61% in Italy, while remained same in major EU member states.	2010Q2	1
Loan-to-value ratio for residential mortgage loans increased in Spain from 57% to 58%, and in Slovenia from 54% to 58%.	2010Q4	2
Loan-to-value ratio for residential mortgage loans increased in France from 79% to 81%, from 67% to 70% in Slovakia, and from 58% to 70% in Slovenia.	2011Q4	2
Netherland started to reduce loan-to-value ratio for residential mortgage loans gradually from 103% to 100%. France reduced it from 81% to 79% and Italy from 60% to 59%.	2012Q1	0
Banks in Netherland were supposed to establish and implement maximum LTV levels internally until 2013. The 95% LTV limit for household real estate valid from 2014 will gradually decrease to 80% in 2017 and the 75% LTV limit for commercial real estate will apply from July 2014.	2013Q4,2014Q1,Q2	0
In Slovakia, a recommendation was issued in 2014 for new loans by real estate, establishing the share of new loans granted in given quarter with an LTV ratio within the range of 90% to 100% should not exceed %25	2014Q4	0
The Czech Republic firstly introduced LTV limits for new retail loans.	2015Q1	0
The Czech Republic tightened LTV limits for new retail loans further.	2015Q4	0
European Union countries that have adopted LTV limits, the majority has opted the application of limits within the range of 85% to 90% (e.g. Slovakia, Slovenia, Finland, Ireland, Latvia, Lithuania, Poland, Norway, Czech Republic, and Sweden). It has been also common standard for authorities to further tighten the LTV limits. Denmark and Netherlands also tightened LTV limits. Germany issued a legal act in 2017 to create LTV instrument. In Luxembourg, a similar legal initiative was taken in 2017.	From 2015Q4 to 2017Q4	0

Installment Restrictions

Estonia allowed maximum maturity for new housing loans up to 30 years	2015Q4	2
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Central Bank of Slovakia authorized credit institutions maturity for new housing loans up to 30 years with no more than 10% of new loans exceeding this limit	2016Q3	2
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Capital Adequacy and Liquidity Coverage

The Capital Requirements Directive (CRD) comprising Directives 2006/48/EC and 2006/49/EC and reflecting the proposals of the Basel Committee for the Basel II Framework enacted.	2006Q1-Q4	0
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The European Council called for the establishment of a "European single rule book" applicable to all financial institutions in the Single Market. The Single Rulebook will ensure uniform application of Basel III in all Member States.	2009Q1-Q4	0
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The Capital Requirements Directive (CRD) IV package entered into application in 2013, comprising Directive 2013/36/EU and Regulation (EU) No 575/2013	2013Q1-Q4	0
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2. CREDIT CONTROLS	DATE	
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Reserve Requirements

Jump in total excess reserves of credit institutions subject to minimum reserve requirements in the euro area under ECB regulations (Reached to EUR 432,898 million in September 2012 from only EUR 4,616 million in July 2012).	After 2012Q3-Q4	0
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Total excess reserves subject to minimum reserve requirements decreased significantly to EUR 116,924 million in December 2013 and remained moderate until March 2015 in the euro area.	2013Q4-2015Q1	2
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Jump in total excess reserves of credit institutions subject to minimum reserve requirements in the euro area under ECB regulations (Reached to EUR 632,130 million in September 2016 from only EUR 117,812 million in March 2015).	2016Q3-Q4	0
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Minimum Credit to Certain Sectors	No restriction is observed in the EU case.	
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Credit Supplied to Certain Sectors at Subsidized Rates

A first series of TLTROs was announced on 5 June 2014, and a second series (TLTRO II) on 10 March 2016 and.	2014Q2-2016Q3	0
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3. CREDIT GUARANTEE FUND POLICIES	DATE	
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Credit guarantee fund is capitalized in EU countries.	2003Q1-2018Q1	2
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4. FX BORROWING REGULATIONS	DATE	
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Supervisors in Eastern Europe (Hungary, Latvia and Poland for instance) have pushed banks to disclose the exchange rate risks of FX loans to households and to tighten the eligibility criteria for such loans.	2003Q1-2010Q4	1
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Recommendation ESRB/2011/1, which was created by the European Systemic Risk Board to tackle financial risks that arise from excessive FX lending	2011Q1	3
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5. BANKING SECTOR ENTRY		DATE
Entry of Foreign Banks into the Domestic Market		
The number and size of foreign banks in EU countries remained low although no legal restriction is observed for entry of foreign banks.	2003Q1-2004Q4	1
The share of foreign branches in the total number of euro area credit institutions increased and reached to 10% in 2008.	2005Q1-2011Q2	2
The share of foreign branches in the total number of euro area credit institutions increased and reached to 14% in 2016.	2009Q1-2016	2
The number of foreign branches declined slightly (from 706 in to 688)	2016Q2-2018Q1	1
Government Authorization for Entry of New Domestic Banks	No restriction is observed in the EU case.	
Restrictions on Branching		
No restriction is observed in the EU case.	2003Q1-2010Q4	1
Number of branches per adult started to shrink significantly	2011Q1-2018Q4	0
Government Authorization for Banks to Engage in Multiple Activities	No restriction is observed in the EU case.	
6. INTEREST RATE LIBERALIZATION		No ceiling or floor for interest rates is observed in the EU case.
7. CAPITAL ACCOUNT TRANSACTIONS		DATE
Unification of the Exchange Rate System	the exchange rate system is not unified across the EU members	
Application of Restrictions on Capital Inflows	No restriction is observed in the EU case.	
Application of Restrictions on Capital Outflows	No restriction is observed in the EU case.	
8. SECURITIES MARKETS		DATE
Measures Taken to Develop Securities Markets		
MiFID, the Markets in Financial Instruments Directive (2004/39/EC), has been applicable across the European Union since November 2007.	After 2010	3
MiFID II and MiFIR, which were adopted by the European Parliament and the Council of the European Union applied within Member States as of January 2018.	After 2013	3
Openness of Equity Market to Foreign Investors		
Significant increase in foreigners' equity portfolio in the EU.	2009Q3-2018Q4	2

9. PRIVATIZATION	DATE	
The share of public banks in the banking sector's total assets stays below 25%.	2003Q1-2018Q4	2

*Scores given under L/R column refers to the liberalizing or repressive nature of the regulations and assigned as per the rules given in Appendix A.



APPENDIX I

HISTORICAL TIMELINE OF THE EVENTS AND POLICY MEASURES

REPRESENTING INPUTS FOR POLAND FRI

1.MACROPRUDENTIAL MEASURES	DATE	L/R*
Loan-to-Value Ratios		
Recommendation S is issued dealing with more conservative assessment of creditworthiness in the case of FX mortgage loans and obligation for banks to establish their own loan-to-value (LTV) limits.	2006Q1-2006Q2	0
Recommendation T is issued regulating explicit 50% debt-to-income (DTI) caps for all exposures towards private individuals.	2010Q1, 2012Q1	0
LTV limits are softened for mortgage loans.	2011Q2-2011Q4	2
DTI cap is lowered to 42% for FX mortgage loans.	2011Q1-2011Q4	0
Explicit DTI caps for consumer loans are lifted.	2013Q3	2
LTV rules become stricter given higher caps introduced for general mortgage loans depending on the value of collateral.	2014Q1, 2014Q4	0
Explicit DTI caps for mortgage loans are lifted.	2014Q1, 2014Q4	1
New LTV limit of 85% is introduced for residential mortgage loans.	2016Q1	0
Installment Restrictions	No changes in rules are observed in this case.	
Capital Adequacy and Liquidity Coverage		
Minimum risk weight for FX mortgage loans is raised.	2007	1
Resolution No. 9 of the Commission for Banking Supervision introduces short-term liquidity ratio.	2007Q2, 2007Q3	0
Resolution No. 386 on defining liquidity standards binding for the banks.	2008Q1-2008Q3	0
KNF Resolution No. 386 is constructed, defining liquidity standards binding for banks (core liquidity reserve).	2008	0
KNF Resolution No. 386 is constructed, defining liquidity standards binding for banks (supplementary liquidity reserve).	2008	0
Resolution No. 314 of the Polish Supervision Authority on the other items of the banks' balance sheets included in the bank's core capital, its value, scope and terms of including it in bank's core capital comes into force.	2009Q3, 2009Q4	1
The Act on the Recapitalization of Certain Financial Institutions is amended.	2010Q1	0

European Commission initiates a set of legislative proposals comprising CRD IV Directive and CRR Regulation to implement the regulatory framework developed by the Basel Committee on Banking Supervision concerning capital, liquidity and leverage ratio.	2011Q2-2011Q4	0
A decision is taken to temporarily raise the minimum capital adequacy ratio to 9%.	2011Q3	0
Minimum risk weight for FX mortgage loans is raised.	2012	1
Regulation of the Minister of Finance on the capital adequacy ratio of a credit union is effective.	2013Q3	0
Rules about the capital adequacy requirements relating to incorporating reference interest rates into the broad market indices.	2013Q3	0
Regulation with respect to liquidity coverage requirement for credit institutions takes place.	2015Q1, 2015Q3	0
Maintenance of conservation, countercyclical and OSII capital buffers are officially determined by the Act on Macroprudential Supervision of the Financial System and Crisis Management.	2015Q3	0
The requirement for banks to comply with the Liquidity Coverage Ratio (LCR) of 70% is established.	2015Q4-2016Q2	1
Calibration of Basel standard defining the minimum requirement for the leverage ratio is done.	2016Q4	0
Legislative resolution regarding leverage ratio, net stable funding ratio, counterparty credit risk and market risk are assessed.	2017	0
The Recommendation issued by the Financial Stability Committee (FSC) on the restructuring of the FX housing loans portfolio is adopted.	2017Q1	0
Higher risk weights for exposures secured by mortgages on immovable property are adopted.	2017Q2	1
Total capital requirement from pillar 1 capital is increased.	2018Q1	0
Effective start of Net Stable Funding Ratio (NSFR) takes place.	2018Q1	0
IFRS 9 enters into force.	2018Q1	1
2.CREDIT CONTROLS	DATE	
Reserve Requirements		
Cash reserve ratio is decreased by 100 basis points by National Bank of Poland.	2003Q4	1
Cash reserve ratio is decreased by 50 basis points by the National Bank of Poland.	2009Q2	2
Cash reserve ratio is increased by 50 basis points by the National Bank of Poland.	2011Q1	1
Minimum Credit to Certain Sectors	It is not observed in the Polish case.	
Credit Supplied to Certain Sectors at Subsidized Rates	It is not observed in the Polish case.	
3.CREDIT GUARANTEE FUND POLICIES	DATE	

Within the government program called "Capital for the Enterprising, the share structure of important credit guarantee fund institution is re-arranged to boost the guarantees to be extended.	2004Q1	2
Cooperation is established between private funds and the self-government Credit Guarantee Fund to create more funds and increase capital.	2007Q1	2
The guarantee system run by state-owned bank in Poland (BGK) activates new portfolio guarantee facility (de minimis programme).	2013Q1	3
In the case of the de minimis programme, capital prudential regulations are relaxed to some extent for BGK.	2013	3
New agreement between European Investment Fund and BGK is signed to launch a new guarantee product for enhancing financial inclusion in the case of SMEs. This initiative is referred to as the COSME Programme.	2015Q1, 2015Q3	2
4.FX BORROWING REGULATIONS	DATE	
Recommendation S is amended to raise DTI ratio for mortgage loans denominated in foreign currencies.	2011Q1	3
With Resolution No. 153, the risk weight for the fully and completely secured part of FX mortgage loans is raised from 75% to 100%.	2011Q4	1
Capital requirements are increased for FX mortgage loans.	2012Q2, 2012Q4	1
With further amendments, borrowers are only allowed to obtain financing in the same currency as their income (in the case of mortgage loans).	2014Q1	1
5.BANKING SECTOR ENTRY	DATE	
Entry of Foreign Banks into the Domestic Market	No restriction is observed in the Polish case.	
Government Authorization for Entry of New Domestic Banks	No restriction is observed in the Polish case.	
Restrictions on Branching	No restriction is observed in the Polish case.	
Government Authorization for Banks to Engage in Multiple Activities	No restriction is observed in the Polish case.	
6.INTEREST RATE LIBERALIZATION	DATE	
Unique caps are applied on consumer loans. The quantification of a cap is made with respect to four times the Lombard rate, which is the interest rate applicable for obtaining liquidity from National Bank of Poland. Tightening episodes are characterized by increases in the Lombard rate.	2004Q3, 2007Q2, 2008Q1-Q2, 2011Q2, 2012Q2 among others	1-2

Unique caps are applied on consumer loans. The quantification of cap is made with respect to four times the Lombard rate, which is the interest rate applicable for obtaining liquidity from the National Bank of Poland. Relaxation episodes are characterized by decreases in the Lombard rate.	2003Q2, 2005Q1, 2006Q1, 2007Q3, 2008Q3, 2009Q2, 2012Q4, 2013Q3, 2014Q4, 2015Q1 among others	1-2
7.CAPITAL ACCOUNT TRANSACTIONS	DATE	
Unification of the Exchange Rate System	No restriction is observed in the Polish case.	
Application of Restrictions on Capital Inflows	No restriction is observed in the Polish case.	
Application of Restrictions on Capital Outflows	No restriction is observed in the Polish case.	
8.SECURITIES MARKETS	DATE	
Measures Taken to Develop Securities Markets		
Episodes are observed where stock market capitalization to GDP ratio falls below historical average. In other words, these are episodes with lower levels of financial development and inclusion.	2003Q1-2004Q4	1
Episodes are observed where stock market capitalization to GDP ratio exceeds historical trend. In other words, these are episodes with higher levels of financial development and inclusion.	2005, 2006, 2007, 2010, 2012 onward	2
National Bank of Poland makes swap operations available for banks and finances them pursuant to agreements with ECB and the Swiss National Bank.	2008Q3	3
National Bank of Poland implements an emergency measure called a "confidence pact." With this policy measure, local currency and FX liquidity are provided to banks. Collateral coverage is also expanded.	2008	3
Liquidity-providing transactions are launched in the form of repo transactions. FX swaps are introduced. Haircuts are declined for the Lombard credit system.	2008	3
Directive 2003/71/EC is initiated, enabling smaller firms to issue securities with less heavy disclosure obligations.	2003	1
Directive 2009/65/EC is initiated, defining the "Key Investor Information" for the purchase of units in investment funds.	2009	3
A directive is initiated to specify details about organization of management companies, internal control mechanism, accounting procedures, risk management policy etc.	2011	2
The release of Recommendation I and A by Polish Financial Authority regarding the FX risk management activities via derivative instruments takes place. These recommendations are also aimed to increase the security of trading in OTC FX market and derivatives market.	2012	2

Openness of Equity Market to Foreign Investors	No restriction is observed in the Polish case.	
9.PRIVATIZATION	DATE	
The criteria is defined by utilizing the share of foreign banks in the total sector assets deviates from historical averages.	2003Q1-2009Q4, 2010Q1-2018Q1	1-2

*Scores given under L/R column refers to liberalizing or repressive nature of the regulations and assigned as per the rules given in Appendix A.



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