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"The Financial Underpinnings of the EU Crisis: Financial Deregulation, Privatization, and Asymmetric State Power"

A Dissertation Presented

by

NINA QUINN EICHACKER

Submitted to the Graduate School of the University of Massachusetts Amherst in partial fulfillment of the requirements for the degree of:

DOCTOR OF PHILOSOPHY

September 2014

Department of Economics

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	risis: Financial Deregulation, Privatization, and c State Power"
A Disserta	tion Presented
	Ву
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# DEDICATION

To John Bonin, Richard Grossman, and Francisco Rodriguez, without whom I would not have applied to graduate school. Thank you!

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platonic ideal of an econometrician. Jen Cohen, Helen Scharber, and Joo Yeoun Suh were my feminist, economic, and social idols as an impressionable first year; I'm so proud to call them friends. Jessica Carrick-Hagenbarth and Joao Paulo de Souza have been lodestones from my cohort; thank you for your friendship and council along the way. A thank you also, to Zoe Sherman, my buddy in Boston and role model for excellent pedagogy and focused inquiry; I'm lucky you started your program when you did! Finally, extra thanks to Simon Sturn and Juan Antonio Montecino for their counsel on issues related to European financial integration and panel time series analysis – the dissertation and my general scholarship would be poorer without it. And, a gargantuan thank-you to Jeanette Wicks-Lim, who helped me print out a copy of the dissertation, and its signature pages, the day before my defense, when my ID wouldn't work in the PERI lab.

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#### **ABSTRACT**

"THE FINANCIAL UNDERPINNINGS OF THE EU CRISIS: FINANCIAL

DEREGULATION, PRIVATIZATION, AND ASYMMETRIC STATE POWER"

SEPTEMBER 2014

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Directed by: Professor Gerald Epstein

This dissertation asks the following questions. How has financial liberalization affected the incidence of financial crisis in Europe? How have power asymmetries within Western Europe facilitated the process of financial liberalization, and distributed the costs and gains from this liberalization? How have these dynamics been demonstrated at the state level?

It charts the institutional liberalization and privatization of European finance from the 1960s onward and presents a survey of descriptive statistics that show how different financial stability, financial flow, and macroeconomic variables have changed in Western Europe since the early 1980s, generally increasing financial and economic instability. It also demonstrates the change in securitization, and European banks' tendencies to hold securitized assets on their balance sheets. An econometric investigation of the relationship between financial liberalization and the incidence of financial crisis shows that a statistically significant and positive correlation exists between international financial flows and the onset of financial crisis. It creates a framework for understanding the power dynamics between

national, industrial, and class interests in Western Europe that promoted secular financial liberalization as well as the institutional design of the EMU that mandated financial liberalization. Finally, it examines the process of financial liberalization in detail in three states, Iceland, Ireland, and Germany. It finds ambiguous evidence that financial liberalization has helped these economies when comparing domestic class interests, or when comparing international interests.

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#### CHAPTER 1

#### INTRODUCTION

#### 1.1 Statement of Problem

This dissertation seeks to answer the following questions. Have financial liberalization and privatization destabilized the Western European economy and created the circumstances for the current European crisis? Did the creation of the European Monetary Union (EMU) facilitate or accelerate effects of that liberalization and privatization? Finally, is there a theoretical framework to explain power asymmetries within Western Europe that have enabled certain states to disproportionately benefit from financial liberalization and deregulation, while other states have paid disproportionate costs of these changes, and is there contextual evidence of these dynamics occurring?

#### 1.2 Reasons for Asking

There are several reasons to ask these questions. First, as the current European debt crisis proceeds, political and economic figures increasingly misallocate blame for the crises. Some blame the welfare state; some blame the ability for "unproductive" nations to borrow under the same terms that "productive nations" like Germany can; some blame the fact that the debt of peripheral borrowers has been viewed as of equivalent risk and value to Germany and other more "productive" countries. While these arguments may have some validity, this line of thought and policy absolves the EMU's financial sectors from their role in the creation of this crisis by promoting and requiring financial liberalization, deregulation, and privatization from states that wished to join the EMU. It also excuses the European banks that fueled housing and credit bubbles in different European nations and the states that oversaw those

financial activities. I argue that without this deregulation, and these capital flows, the Euro crisis would not have been as severe as it was.

Another reason to ask these questions relates to the emerging power dynamics within Europe and the EMU in which countries that lent to nations in the midst of bubbles appear to be shifting the costs of the crisis to those countries whose bubbles have burst through the provision of bailouts with high interest rates and required austerity policies. The uneven enforcement of paying for financial mistakes undermines smaller countries' abilities to recover from their crises, and exempts lenders in more powerful countries from the costs of their irresponsible lending. Understanding how the required financial policies of the EMU contributed to the current crisis can illustrate ways for the EMU to reform itself to avoid crisis (and experience growth) in the future, and may illustrate social inequities in the region's response.

There is a high likelihood of future crisis in Europe if there is no significant re-regulation of its financial architecture. If banks continue to lend and securitize as they have in the past decades, then there will be risks of future crisis. In 2013, Angela Merkel won a second re-election for Chancellor, as German citizens rewarded her pro-austerity stance in European economic policy. Meanwhile, divergent and extremist political movements seem to gain ground in European states like Greece experiencing prolonged economic crisis. Without an attempt to understand the full extent of the causes of the crisis, particularly located in liberalized finance, Europe's core will continue to set policies with impunity, while the public in Europe's periphery will assume greater economic and social costs as the consequences of austerity.

#### 1.3 Mainstream Thought

Orthodox neoclassical literature seems to largely conclude that liberalized (and privatized) finance begets economic growth. On a theoretical level, these proponents of financial liberalization rely on efficient market theory, which has many problems. Empirical literature – even from the mainstream – about the effects of financial liberalization on growth are more mixed. Ross Levine, Frederic Mishkin, and others argue and conclude that financial liberalization has positive effects on economic growth. (Mishkin, 2005, Levine, 2009) Other economists from the neoclassical to the New Keynesian – Jagdish Bhagwati, Joseph Stiglitz, and others – conclude that financial liberalization is likely to negatively impact economic growth. (Bhagwati, 1998, Stiglitz, 2004) Theorists and empiricists across the spectrum seem to agree that financial liberalization is positively correlated with financial crisis; to reconcile this position, pro-financial liberalization economists argue that countries must have the 'right' kinds of financial regulations and governmental institutions to guard against such potential negative outcomes. (Though many argue that financially open economies recover from financial crises more quickly – see Rogoff, Prasad, et al., 2003) Another trend in the empirical literature about financial liberalization and growth is the conclusion that for developing countries, financial liberalization is not unequivocally positively related with economic growth. The conclusions these authors come to is often that institutional quality makes a difference for protecting economies from crisis following financial liberalization (Rogoff, Prasad, et al, 2003, Beckaert, Harvey, and Lundblad, 2001, and Eichengreen, Gullapalli, and Panizza, 2011), though they differ on the recovery prospects that remain for those countries that deal with financial crisis.

Recent economic experiences throughout the presumably developed world – the US and Western Europe at least – give lie to the notion that first world institutions are necessarily

better able to prevent financial crises, or that financial development necessarily translates into improved economic growth. By analyzing the institutional history of European financial liberalization, as well as the empirical changes in intra-European borrowing and lending, both descriptively as well as econometrically, I show how that liberalization is connected to an increased incidence of financial crisis. By demonstrating that European members of the OECD are not immune to the destabilizing and negative growth effects of financial crisis, and that financial development is not implicitly linked with economic growth, I augment the arguments that financial deregulation and liberalization can have destructive economic effects even in states with presumably sophisticated institutions. This illustrates the necessity for restructuring financial sectors in a way to better foster real economic growth, and for reforming EU and EMU institutions in a way to protect members from the wide reaching consequences of financial crisis.

Popular literature about the current problems of the European Union – work by Paul Krugman, Martin Feldstein, Barry Eichengreen and others – overwhelmingly focuses on the ability of smaller EMU economies – Greece, Ireland, Italy, Portugal, and Spain – to borrow at the same rates as Germany could, or for those smaller countries' debt to be rated at the same level as Germany's was. In the aftermath of the crisis, some have started to argue that the roots of the crisis have been in reckless fiscal policies. (Krugman, 2011, Feldstein, 2010, Eichengreen 2010) Though some of the arguments that a major cause of the current crisis lies in the EMU's fixed exchange rate and lack of a true fiscal union may be valid, the mainstream literature appears to ignore a key feature of the EMU: its emphasis on financial liberalization, and the resulting lending behavior that fueled major bubbles in Eastern Europe, Ireland, Spain, and Iceland. Germany and France shoe-horned financial liberalization

Union, and German, French, Belgian, and other European states' banks proceeded to lend heavily to banks in the countries now in crisis, despite emergent literature about real estate bubbles in Ireland and Spain, or the currency bubble in Iceland. (Dyson, 1999) German and French governments argued that these countries in crisis must accept bailouts in order to pay back those loans made apparently without adequate research or oversight, and that each country in crisis must also implement massive austerity measures in order to qualify for those loans. These arguments reveal a power dynamic whereby small countries pay for their financial mistakes, while more powerful ones are exempt. In this dissertation, I add to an emerging literature that identifies the role that the financial liberalization mandated by the EMU charter, asymmetric power among states within Europe, as well as the general deregulation, privatization, and liberalization of Western European finance leading up to the crisis.

### 1.4 Hypotheses

I have several conjectures for the questions that my dissertation poses. First, privatization and deregulation of different European countries' financial sectors have increased European financial fragility and instability, and created the conditions for crisis. Further, the formation of the EMU has facilitated the fast transfer of capital from one bank to another, accelerated the effects of this deregulation, and exacerbated the effects of the ongoing financial crisis. The very design of the EMU's financial policy promotes the rapid and unlimited transfer of capital between EMU nation states' banks, and required would-be members to liberalize their

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<sup>&</sup>lt;sup>1</sup> When I use the terms 'transfer of capital', I am referring to generic lending and borrowing between different European banks. When I refer specifically to 'bank capital, I am referring to required bank reserves, as defined by the Basel accords.

financial sectors enough to bring about that financial state. This rapid transit of capital has fostered real estate bubbles in Spain, Ireland, and Eastern Europe, as well as rapid currency appreciation in Iceland, with little real sector (non financial or real estate) economic development in those regions. Once those bubbles have burst, as Charles Kindleberger's theory and histories of manias, panics, and crashes would predict, these countries have faced tremendous pressure from different lenders and states to bail out banks (on the threat of economic collapse) or to recompense foreign lenders. (Kindleberger and Aliber, 2005) The leaders of the countries in crisis have then had the non-choice between the costs of not accepting bail-outs to deal with the costs of their crises, or the imposition of austerity measures in order to qualify for bailouts and improve their future debt ratings, leading to further and greater economic downturns as their countries' aggregate demand declines.

Other financial components of the EMU structure have facilitated and exacerbated the current economic decline in Europe. The intent to shift towards a market-based financial sector on the grounds of the UK's and the USA's financial experience both ignored the failings of that system in those countries, but it also exposed countries with little experience with equity and bond markets to a host of new financial risks. (Lewis, 2011) Many European financial markets bought financial innovations developed during the subprime mortgage boom, particularly synthetic collateralized debt obligations based on sub-prime mortgages – the costs of the failures of these instruments have accrued to intermediaries ranging from large investment banks, publicly owned regional banks, and pension funds. (Lewis, 2011, Evans, 2007, Morgenson and Story, 2009) Banks and pension funds across Europe seem to have been affected, and the pressure that UK, Dutch, German, and French political and economic actors have placed on Greek, Icelandic, Irish, Italian, Portuguese, and Spanish

banks and governments to pay back what the stronger countries have lost illustrates two phenomena: powerful countries' attempts to recap losses in the bond market, and powerful countries' bankers impunity about making poorly researched loans in the first place.

(Johnson, 2010) Power asymmetries that allow banks to transfer the costs of their mistakes to those more immediately in crisis enable future bubbles and crises – without significant reforms to restructure European finance, we are likely to continue to see such crises with the attendant economic costs.

Political shifts to the right, rising inequality, and shifts from fraternal to fratricidal competition within the finance sector across Western Europe have contributed to the demand in Europe for increasing financial deregulation, and may be likely to continue if there is not some major shift in financial policy inside and outside of the EMU. Finally, re-regulation and socialization or nationalization of European financial sectors should present a first step toward improving financial stability and inequality measures, but these policies should also be paired with active fiscal policies if we want finance to contribute to growth, employment, and productivity improvements.

In this dissertation, my primary focuses are on the effects of financial deregulation and liberalization, effective power asymmetries within the EU and EMU and how they affect Europe's financial architecture, and alternative financial structures for the broader community to implement. Determining the motivations for different countries' financial shifts – whether the mainstream argument of increasing internal and external financial competition, or whether a combination of political and socio-economic shifts better explains those institutional changes – is a secondary aim. My key contributions to the financial crisis literature are an analysis of the destructive nature of deregulated and liberalized finance, even

in the presence of supposedly sophisticated legal institutions, the real sector effects of financial development (including deregulation and liberalization), and the importance of financial regulation as a condition for financial and economic stability, as well as broad economic growth.

#### 1.5 Methodologies

The body of this dissertation has five chapters – a broad institutional study of finance in Western Europe from the end of WWII to the present, an empirical study of the effects of financial liberalization and privatization on European economic development and stability, an econometric analysis of the correlation between financial liberalization and crisis within Western Europe, a theoretical framework for understanding European power dynamics, and a case study chapter that examines Iceland, Ireland, and Germany.

It is impossible to understand the current financial crisis in Western Europe without revisiting its financial development following World War II as well as the terms of the European Monetary Union, as it was designed. Over this period, European countries systematically deregulated and liberalized their banking sectors, repeatedly incurred financial crises, and fundamentally shifted the primary aim of European finance from the promotion of economic stability to the promotion of open financial sectors designed for frequent, rapid, and easy flow of capital. (Story and Walter, 1997, McCann, 2010) These broad changes appear to have worsened the scale, scope, and frequency of financial crisis, and to have adverse consequences for non-financial economic development.

Chapter two presents an institutional survey of European financial development that reveals non-uniform experiences throughout Western Europe in the second half of the twentieth century. Certain states liberalized soon after World War II; some European states

had largely autonomous financial spheres, while others had strongly repressed financial sectors through the 1990s. Some states had largely private financial sectors soon after WWII, other states had substantial public banking operations through the 1990s, and some maintained those facilities following the implementation of EMU. Public banking and highly liberalized financial sectors have not historically been mutually exclusive in Europe. Germany, a chief proponent of financial liberalization as a key element of European Economic and Monetary Union, continues to maintain a strong public banking presence within its domestic financial arena. However, the moment of the global financial crisis revealed that those public banks acquired a large share of very risky financial assets generated in the sub-prime mortgage boom preceding the crisis. While certain European states autonomously pursued financial liberalization in the second half of the twentieth century, other states liberalized under the European institutional push to integrate European finance as part of the platform of uniting European economic interests. (Dyson and Quaglia, 2010) Western European states that liberalized their financial sectors later in the twentieth century, such as the EMU's Spain, Portugal, Greece, Italy, and Ireland, and Iceland, a nonmember of the EU, appear to have disproportionately incurred banking and sovereign debt crises in the aftermath of the global financial crisis of 2008.

Chapters three and four are empirical investigations of the change in European financial dynamics, and their relation to the incidence of financial crisis; both chapters merge a literature review with new data analysis. Chapter three summarizes narratives produced by the mainstream, including those in which Paul Krugman, Martin Feldstein and others argue that the monetary policy of the EMU is chiefly to blame for Europe's crises, because it enabled the convergence of European interest rates, which allowed peripheral European

states to borrow at unprecedentedly low interest rates. It also presents descriptive statistics of the change in European borrowing and lending, and particularly intra-European borrowing and lending, as well as data about financial competition, securitization, housing prices, FDI, and interest rates. By pairing these data with data about the relative economic performance in real and per capita GDP, I draw broad inferences about the relative importance of financial development and economic development on an absolute and per capita basis, as well as possible lending and borrowing dynamics within Europe.

Chapter four includes a brief literature review of the effects of financial liberalization and incidence of financial crisis. My analysis consists of panel OLS regressions and panel logit models of the effects of financial liberalization, measured as the gross international financial flows measured by the BIS, and the incidence of financial crisis in Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the UK, from 1983 through 2011. It includes financial regulation controls, as well as mainstream variables such as current account and fiscal balances, short-term interest rates, size controls, and EMU status. Demonstrating that European financial liberalization has contributed to financial crisis, and had negative effects for growth contradicts the mainstream argument that a region with sophisticated legal institutions is more immune to the negative effects of financial development. (Hutchison, 2002, Levine et al, 2004 and 2008) These analyses help reveal that financial institutions can still have destructive economic effects in spite of sophisticated legal institutions.

The fifth chapter articulates a model of European power dynamics by which certain states, industries, and class interests promoted the integration and rapid financial

liberalization in Western Europe and the EMU, while describing the simultaneous rise of the efficient markets hypothesis in academia and among the architects of European financial policy. The evolution of thought on the efficiency of financial markets and lobbying by financial interests combined to influence policy-making at national levels within European states, and when those states gathered to construct the parameters of the EMU, key policy makers enshrined those national financial policies at the supra-national level. As a result, smaller and more peripheral European states faced the prospect of rejecting EMU in order to liberalize at a slower rate or avoid such systemic change in the regulation and operation of their economies, or joining and administering rapid and potentially destabilizing policies. In the aftermath of the global financial crisis, in which numerous European states experienced banking crises immediately following the collapse of Lehman Brothers. For many of the peripheral European states, these transformed into sovereign debt crises for diverse reasons, andcore European states have dictated the trajectories of the European recovery process. This has taken the form of repeated refusal to integrate European fiscal policy, the provision of bailouts to states that represent indirect bailouts of the core EMU's private banks that had lent to peripheral states' banking sectors with the explicit conditions of austerity and high interest rates, and until very recently, rejection of policies that punish bond-holders in the core with haircuts. As the effects of the financial crisis and austerity play out throughout these peripheral economies, the EMU's core risks, with increasing certainty, the generation of another recession due to diminished aggregate demand, particularly for core states' exports.

Chapter six includes case studies of the experiences Germany, Iceland, and Ireland had with financial liberalization to give perspective on the – at best – ambiguous gains and – at

worst – destabilizing crises that may arise from liberalizing a state's financial sector. Germany is a country that liberalized its financial sector soon after the Second World War, while Ireland and Iceland liberalized their sectors in the 1980s and late 1990s respectively. It also provides a view of the destabilizing effects of privatizing state banks, or forcing state banks to compete with private banks for profits within the state's financial architecture, particularly in the stories that emerged in Germany and Iceland preceding the global financial crisis. Each state experienced growth within their financial, insurance, and real estate (FIRE) sectors in the years preceding the global financial crisis, with poorly distributed gains for the rest of the states' populations, while each state has incurred major losses in the years following the onset of the crisis. However, the relative power and access to political allies of these states in the European arena has made a difference in terms of which costs different classes within these states have absorbed. Ireland's government's decision to bail out private banks in the moment of the global crisis turned private liabilities into public debts, which the EC, IMF, and ECB have systematically forced the Irish citizenry to pay back. Iceland's government's decision not to honor the full private cost of losses incurred by British and Dutch depositors that those states had insured would have disrupted its receipt of aid packages from the IMF if Iceland's Nordic allies Norway, Sweden, and Denmark had not advocated on the small state's behalf. Despite German banks' private risks incurred by lending large volumes relative to the GDP of the EMU's periphery in the years preceding its crisis, the German state has without fail used its state apparatus to ensure that German banks' private costs will be recovered, to the full extent possible. My concluding chapter summarizes the findings of the dissertation. It briefly discusses further avenues for research.

#### **CHAPTER 2**

# A SURVEY OF EUROPEAN FINANCIAL DEREGULATION AND THE CREATION OF THE EMU

#### 2.1 Introduction

Over the past 30 years, Europe's financial arena has been privatized, deregulated, and liberalized. (McCann, 2010) This has been the result of a dynamic between political shifts toward the right and growing economic inequality. (Galbraith and Garciloza, 2007) As inequality has worsened, the political influence of those that support deregulated and liberalized finance has increased, and new governments that have been elected have continued these trends. This positive feedback mechanism has unequal consequences, as it increasingly concentrated benefits for those at the top of the income and wealth distribution. (Claessens and Perotti, 2007) Outcomes include increasing financial fragility, outright financial crisis, and ambiguous real sector growth.

With the creation of the EMU, this process has been accelerated and the consequences have been exacerbated, both for member nations, and for outside nations that have not pursued exceptionally isolated financial policies, with respect to regulation and socialization of their respective financial sectors. There are several reasons for this effect. First, the terms of the EMU charter specifically promote a market-based financial system similar to the US's, with the requirement that member states open their borders to financial flows. (McCann, 2010) This policy has enabled, facilitated, and, in effect, urged the fast transit of large volumes of capital throughout the system. This appears to have been matched with diminished vigilance of bankers' (and perhaps states') monitoring and credit analysis, and

resulting bubbles. (Welfens, 2007) For example, a key reform in the EMU period has allowed banks to open branches in EMU member states and follow whichever regulations are weakest – the origin state or the new state's rules. (McCann, 2010) There is evidence of major lending from states not experiencing asset price bubbles to banks in other states (EMU and non-EMU) experiencing asset price bubbles, like the housing bubbles in Spain, Ireland, and Eastern Europe, as well as the subprime mortgage boom in the US, and Iceland's currency bubble. (Johnson, 2010) These policies and practices have had repercussions for the EMU's members and non-members. There have been large scale and international losses when bubbles have burst, which have opened windows for 'activist' bailouts if lending states are more powerful than the state that experienced the bubble. (McCann, 2010, Bohle, 2010, Baldwin and Gros, 2010)

Though the wave of deregulation, privatization, and liberalization of Europe's different financial sectors fits with global trends, the extent of the financial change that has occurred over the past fifty years is striking. Immediately following WWII, all European countries had substantially regulated financial sectors, designed to promote financial stability above all else. (McCann, 2010, Story and Walter, 1997) In subsequent decades, groups of countries would begin to liberalize their financial sectors in waves – the UK, Germany, and the Netherlands began to liberalize as early as the fifties and sixties, France and different Scandinavian countries liberalized and privatized much of their financial sectors in the late seventies and eighties, and a wave of smaller countries liberalized and privatized their financial sectors by the nineties. (Story and Walter, 1997)

Several trends held throughout this pre-EMU liberalization process. Once a country had begun to liberalize its financial sector, it typically continued to do so, through the creation

and early years of the EMU, despite the occurrence of financial crises. Sweden, Norway, and Finland stand out as exceptions that substantially re-regulated their financial sectors following their major banking crises in the early to mid 1990s. Mainstream literature about these waves of financial liberalization focus primarily on competitive forces, and secondarily on political shifts to the right. (Deeg, 1999) A third possible cause that is likely tied to political shifts may be income and wealth distribution. As countries became more unequal – and inequality increased throughout Europe over the second half of the twentieth century – their elites may have supported conservative governments that supported financial liberalization and deregulation. (Claessens and Perotti, 2007)

Among the countries that would join the EU and EMU that were the latest to liberalize their financial sectors – Greece, Italy, Ireland, Portugal, and Spain – most were emerging from either political dictatorship or political strife following the end of WWII. (McCann, 2010) These countries' financial liberalizations did not necessarily stem from the same root – in some countries, political elites pursued financial liberalization soon after the end of their political repression, while others waited. However, in order to join the developing European monetary union, each of these would-be member states began or accelerated the deregulation of their financial sectors in order to enable rapid capital transfer from one EMU state to another. (McCann, 2010) Countries emerging from long periods of stagnation or depression may have had reason to follow German or French dictates that they open up their banking systems to foreign investment and liberalize their financial sectors if they believed that economic union would improve their growth prospects.

Identifying different European countries' moments of liberalization, the financial conditions preceding those liberalizations, and the conditions afterward help illustrate the

European progression from safe finance to unstable finance. Further, understanding the financial terms of the EMU illuminates the ways that the creation of the EMU and would-be member states' financial transformations set the stage for and expedited the global financial crisis.

#### 2.2 Pre-EMU Financial Regulatory Environment, and the Evolution Thereof

Immediately following the Second World War, Europe had a tightly regulated financial arena. Levels of financial regulation and privatization differed across different countries, but these countries had relatively closed financial sectors, promoted financial stability, and focused on offering low interest rates. Most countries had some sort of public banking system. (Story and Walter, 1997)

In the following schematic, I distinguish between financially liberalized countries and financially closed countries, as well as between countries with significant public ownership of financial intermediaries versus those that lack a large segment of publicly owned financial intermediaries. I characterize a country as 'more closed' if it restricted or prohibited the movement of capital flows as well as the development of securities markets, and otherwise monitored credit provision by private and public financial institutions closely. By contrast, I include countries that maintained liberal capital inflow and outflow policies, supported the existence of securities markets, or provided significant autonomy to financial intermediaries in the relatively open and liberalized category. Soon after WWII, these criteria tend to track together. However, as financial sectors liberalize gradually, countries may assume some financial practices that can be considered open while maintaining other regulations – where this is the case, I make note of how countries have liberalized in stages.

I classify a financial system as "more public" if a country's financial system had a significant percentage of public financial institutions, and "more private" if a country had little to no public finance. This category is meant to capture the effects of financial privatization over time.

Table 2.1: Financial Organization of Western Europe, 1940s – 1970s

Liberalization/Public vs.	More Open/Less	More Closed/ More Regulated
Private	Regulated	
More Private Finance	Britain	Sweden, Denmark, Finland
	The Netherlands	
More Public Finance	Germany, Austria	France, Italy
		Norway, Belgium,
		Ireland, Iceland
		Spain, Portugal, Greece

(McCann, 2010, Story and Walter, 1997, Giner, 1982)

Though all European countries had more tightly regulated financial systems than they have at present, Germany, the UK, the Netherlands, and Belgium were among the most liberal banking systems throughout the past half century. Though the presence of public/state financial intermediaries differed by country, these economies typically allowed their banks significant autonomy in operation. (Story and Walter, 1997, McCann, 2010)

The UK had few if any publicly owned financial institutions. (Mullineux, 1987, McCann, 2010) Its financial system had been largely capital market-driven, similar to the US's. Following the end of the Second World war, British finance was segmented among different financial intermediary activities, – as in the US, until the repeal of Glass-Steagall – but these divisions would gradually disappear, and were not mandated by law. Building societies (savings and loans institutions) typically served the credit needs of workers, while

the central bank, the Bank of England, served as lender of last resort, monitored commercial bank activity, and financed fiscal policy. (Capie, 2010) The Netherlands, like the UK, started the post-war period with a market-based financial system, only one nationalized bank, and light financial regulations. (Prast and van Lelyveld, 2004)

In contrast to the market-based financial systems of the UK and the Netherlands, Germany had a bank-based financial system, with significant inter-industry activity between financiers and industrialists. (Deeg, 1999, Story and Walter, 1997) The German financial system could be divided into three categories – private banks, cooperative banks, and public banks. Germany's several large private banks have historically been tied with German corporate and industrial lending. Its extensive cooperative banking network has offered retail-banking services. Finally, the large network of thirteen state banks (Landesbanks) and more than five hundred smaller public banks has historically acted like central banks for each German state as well as savings and loans, infrastructure, and mortgage lending banks. Soon after the end of WWII, Germany's government granted the Bundesbank, Germany's central bank, significant autonomy over the banking sector, and the Bundesbank allowed banks to resume the universal banking that had characterized German banking from the late eighteen hundreds, particularly among the public banks. (Battilosi, 2001) Richard Deeg argues that a dynamic of 'group competition,' similar to James Crotty's theory of cooperative competition, historically existed between the three categories of Germany's financial sector. (Crotty, 2003) Deeg argues that profit was – prior to the seventies and eighties – not the key focus of the cooperative and public German banks. Cooperative banks focused on the needs of their members, and public banks focused on serving regional infrastructure and political needs. (Deeg, 1999)

Despite the English push for capital controls in the Bretton Woods accord in 1944, Hans Voth dates the first attempt at financial liberalization as 1947, when Britain failed to make sterling convertible, and argues that this failure contributed to an end in US pressure on European countries to liberalize their capital accounts. (Voth, 2003) By the 1950s, Germany and England were successfully liberalizing trade and financial flows, despite Bretton Woods. (Voth, 2003) The Netherlands also began to open up to outside capital flows in this period. (Prast and van Lelyveld, 2004) These countries did little financial privatization – in England, there were few if any public banks to privatize; in Germany, public banks served a distinct function that the state did not see a need to eliminate. Similarly, the Netherlands, which only nationalized one of its major banks in the late 1940s, did not privatize that bank.

By contrast, a large block of European countries had a combination of public finance and strict regulations on capital flows. These countries include the Scandinavian states, France, Italy, Belgium, and Ireland, as well as Portugal, Spain, and Greece, which had closed economies and dictatorships during the post-war period. (McCann, 2010, Story and Walter, 1997, Quenouëlle, 2005, Iversen and Thue, 2008) All of these states regulated and restricted capital inflows, though Ireland was part of a free capital movement arena with the UK. Norway, France, Italy, Belgium, and Ireland all had a mix of public and private banking; Sweden, Denmark, and Finland all had little public finance.

Literature about these countries' financial systems has typically focused on the political economic forces – specifically, most of these countries had a corporatist governing framework, that either managed corporate finance directly (countries with many publicly owned financial intermediaries) or indirectly through significant regulations about how, to whom, and in what forms banks could lend. (Pagano and Volpin, 2001, McCann, 2010)

Portugal, Spain, and Greece all had nationalized financial sectors, with varying levels of political regulation of bankers' activities. Under these countries' dictatorships, partnerships between political elites and the state tended to manage different industries, including the financial sector. Salvador Giner argues that in these countries, as in Italy, financial insularity may have been a response to oppressive economic relationships that they had had with England, France, and other core European economic powers. (Giner, 1982) These states' financial systems were characterized by restrictions on outside investment, as well as state intervention and ownership of different financial intermediaries. (Giner, 1982, Royo, 2000)

Table 2.2: Financial Organization of Western Europe, 1970s – 1980s

Liberalization/Public vs.	More Open/Less	More Closed/ More Regulated
Private	Regulated	
More Private Finance	Britain, France	
	The Netherlands, Belgium Scandinavia	Ireland, Spain
More Public Finance	Germany, Austria	Iceland, Italy
		Greece, Portugal

(Sources: See Table 1)

Members of the more financially regulated and closed side of the matrix would not begin to liberalize until the 1970s and 1980s. Germany, the UK, and the Netherlands continued to liberalize and deregulate their financial sectors throughout this period. At the same time, France, Belgium, Scandinavia, and even Ireland began to liberalize their financial sectors, though to different degrees. In France, one ruling political party would liberalize and

privatize the financial sector, and then the next ruling party would re-regulate and nationalize major portions of the French financial sector. (Quenouëlle, 2005, Abdelal, 2006) This process went back and forth until 1985, when Francois Mitterrand's minister of finance Jacques Delors instituted a major and heretofore sustained financial liberalization and privatization. (Abdelal, 2006) Abdelal notes the irony that the French left wing, which had made such an effort to prevent the liberalization and privatization of French finance, ultimately did the most to open up French finance to the world. (Abdelal, 2006) In Scandinavia and Belgium, sustained financial liberalization and privatization processes also took hold in the eighties.

The mainstream explanation of these shifts appears to be a rise in both domestic and international banking competition, across all countries; very little literature modifies this explanation with arguments about political motivations (Perez and Westrup, 2008), a changing role of the state, or demographic changes (Claessens and Perotti, 2007). Deeg argues that competition between the three sectors of banks was the key driver of the liberalization of the German financial sector, but doesn't explain what underlay the sudden increase in competition between sectors of the banking system. Prast and van Lelyveld give a similar argument for the Netherlands – competition increased, banks began to merge, and to successfully lobby the government for more deregulation. (2004)

However, the competition argument seems incomplete – a more comprehensive story should explain who within the financial sector reacted to diminishing profits by arguing in favor of deregulation and liberalization. The link between inequality and financial deregulation is one possible path: as wealth holders of a society come to believe that financial activity is essential to the creation and growth of their wealth, they are likely to vote

in governments that initiate financial deregulation and liberalization. (Claessen and Perotti, 1997) This dynamic could create a positive feedback loop, where deregulatory policies further enrich the top percentage of the income distribution, who then have a renewed incentive to maintain the political power of those pro-finance political parties. (Boyce, 2002)

In France, Belgium, and Scandinavia, political shifts to the right help explain the changes in financial policy. (Quenouëlle, 2005, Abdelal, 2006, Iverson and Thue, 2008)

When it comes to Greece, Ireland, Italy, Portugal, and Spain, several changes help explain the shift to liberalized and deregulated finance. First, political shifts, like the end of dictatorships helped influence decisions to liberalize finance. Broad economic policy shifts – gradually liberalizing trade sectors, the emerging institution of the EU, and international competition – influenced different countries' move to liberalize and deregulate finance.

(Perez and Westrup, 2008) Finally, social shifts are likely to have played a role. Inequality increased throughout Europe in this period of time; if richer classes and businesses benefitted more from liberalized finance, then they are likely to have lobbied governments for more financial deregulation. (Claessens and Perotti, 1997)

Through all of this, Greece, Ireland, Italy, Portugal, and Spain took until the 1990s to fully liberalize their financial systems by legalizing security markets, freeing capital flows, opening to international bank ownership, and diminishing restrictions on financial sector economic activity. (McCann, 2010) However, their liberalization processes began in the 1980s, and typically started with foreign ownership liberalization. While Spain's post-dictatorship government and economic elites actively embraced liberalization in trade and financial sectors, others resisted full liberalization of capital flows, assets and lending, and interest rates. (Perez, 1997) Ireland, for example, opened its financial sector to other UK

nations' financial intermediaries, and allowed foreign banks to open branches. These banks gradually edged out existing public banks, which shifts the position of Ireland in the matrix above into the top right-hand corner. Similarly, Spain, Italy, Portugal, and Greece opened their financial sectors to foreign bank ownership, but these different nations did not all liberalize in the same ways, at the same pace, or at the same time. (Giner, 1982, Royo, 2000, Lucey, 1995, McGowan, 1988)

Part of these nations' motivation came from the urge to join the EU, before the concept of EMU was fully formed. By the 1980s, the framework of the EU demanded openness to foreign bank branch ownership within a would-be member's state. This fact fits with the premise that countries motivated to join an economic union for non-financial benefits may have been coerced into other sorts of financial deregulation and liberalization. (Story and Walter, 1997)

# 2.3 Evolution of EMU Financial Policy and Standards

It is important to understand the simultaneous onset of the monetary union debates and initiatives in Western Europe starting in the seventies, while this financial liberalization process occurred, since the countries that led those processes and the policies that they promoted helped shape the current European financial climate in significant ways. The first attempts to integrate European economies into some common market began in 1957, with the creation of the European Economic Community (EEC). According to Dermot McCann, by 1968, the EEC had succeeded in liberalizing intercontinental trade, but significant financial liberalization would not come until the 1980s. (McCann, 2010)

In the 1970s, following the collapse of Bretton Woods, German and French leaders promoted – twice – the creation of a European economic and monetary union in order to

Monetary System (EMS) failed because the Bundesbank and German policy makers set unreachable currency appreciation bars for would-be member states. By the 1980s, however, enough countries had begun to liberalize their financial systems under the auspices of prevalent counter-Keynesian monetary and financial theory that German proponents of another monetary union found a more receptive audience. (Story and Walter, 1997)

Story and Walter describe the origins of EU and EMU financial policy in the tension between the UK and German desire for a more liberalized financial arena, and French desire for a currency union. In their description of the negotiations between these three entities, they argue that once the Germans and French realized that the British would not give up the pound and join a currency union, Germany realized that it could gain a competitive financial edge over Britain if it still joined a currency union, as long as that union reflected Germany's financial vision. (Story and Walter, 1997)

While McCann argues that German policy makers crafted the lion's share of the terms of the Maastricht Treaty, which would form the basis for the EMU, largely because of Germany's paramount focus on price stability, Story and Walter present a more conflicted picture of the European response to Germany's financial demands. While the Netherlands, Belgium, Spain, and Scandinavia supported the German financial vision for the EU and EMU, France and other nations with a history of corporatist economic systems resisted the extent of financial deregulation that Germany demanded of the EMU. Eventually, France and other nations' desire to join a currency union, as articulated in the Maastricht Treaty seems to have won out over objections that national policy-makers may have had to financial liberalization and deregulation. (Story and Walter, 1997)

By 1991, the Maastricht Treaty had laid the framework for the EMU in different economic arenas. As in monetary policy, the German contributors lobbied successfully for a financial policy that reflected the German system's, which had a long history of openness unmatched by many other European countries' financial sectors. The EMU called for financial integration and capital control liberalization, on the rationale that:

"[An] integrated stock market works as an insurance system. The risk of a negative shock in one country is shared by all countries. As a result, the impact of the negative output shock on the income of the residents of that country is mitigated. A similar mechanism works through the integrated bond market... mortgage market ... [and] banking system." (de Grauwe, 2004, 226)

The architects of the EMU wanted to shift from a bank-based financial system to a markets-based financial system. (McCann, 2010) To this end, key financial components of the EMU included "the abolition of restrictions on capital movements as they related to current payments," the creation and aggressive promotion of a securities market (through the Investment Services Directive), as well as the passage of:

"the Second Banking Directive [that] created a 'single passport' system that enabled banks authorized to act as such in any single member state to set up branches or offer services in every other member state, without having to gain authorization from the host country. Under this system, the responsibility for supervising a bank wherever it operated in the EU fell to the banking authority that had first authorized its operation in one country." (McCann, 2010, 92-93)

McCann argues that these shifts stemmed from a "more general ... change of view within the EU and among a significant number of member states about the role of the financial sector... The development of this perception reflected broad opinion in the financial industry itself," and were illustrated clearly through the Financial Services Action Plan (FSAP). (McCann, 2010, 95-96) The core objectives of the FSAP were:

- "To create a single EU wholesale market for securities and derivatives...
- To establish open and secure retail markets...
- To create a secure system of prudential rules and supervision..." (McCann, 2010, 97)

At the same time, the European Central Bank followed the framework of the Bundesbank – namely, the promotion of price stability above all else, rather than the promotion of maximum employment, price stability, and financial stability – and took it to a higher level. (de Grauwe, 2004) This combination of an independent central bank that strictly targeted inflation and promoted financial liberalization would lay the groundwork for the current crisis/austerity battle going on in the EMU. Chapter five augments this story about lobbying by financial actors within these different countries.

If a country wanted to join the EMU, it needed to submit to the policies designed primarily by German financial policy makers and condoned by European policy-makers convinced by the ideal of the efficient financial market theory. In practice, this consisted of liberalization and deregulation of banking in would-be member states in order to demonstrate openness to EMU foreign capital. The deregulation and liberalization of these countries' financial sectors to the standards laid out by the Maastricht Treaty took longer than the mandated deadline of 1992 – Greece, Ireland, Italy, Portugal, and even relatively profinancial liberalization Spain required extensions for their financial liberalization process. (Story and Walter, 1997)

Table 2.3: Financial Organization of Western Europe. 1980s – 2000s

Liberalization (Public or Many Oran/Lera Paralleted Many Classed/Many Depulated		
Liberalization/Public vs.	More Open/Less Regulated	More Closed/ More Regulated
Private		
More Private Finance	Britain, France, Greece	Sweden, Denmark
		,
	The Netherlands, Belgium	Finland (Though less regulated
	, 2	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	Italy, Portugal, Ireland	than Sweden)
	, , , , , , , , , , , , , , , , , , , ,	,
More Public Finance	Germany, Austria	Norway
		- · · · · · · · · · · · · · · · · · · ·
		Iceland (beginning to move to the
		reciain (espining to move to the
		top right square)
		top right square)

(Sources: See Table 1.)

Banking crises have increased throughout Western Europe from the 60s and 70s onward. England, Germany, and the Netherlands have had sporadic financial crises since the 1960s and 1970s. (Prast and Van Lelyveld, 2004, Mullineux, 1987, Deeg, 1999) France's liberalization period was protracted due to dipping back into crisis several times after earlier liberalization episodes, until a political party ideologically invested in the process came to power. (Abdelal, 2006) Smaller countries that liberalized later were also affected – Spain, Portugal, and Greece all had currency crises in the 1990s. (Salas and Saurina, 2003) Despite these initial experiences, most countries that experienced financial crises in the sixties, seventies, eighties, and even nineties did not re-regulate their financial systems.

Scandinavia is the exception. The major financial crises there in the early and mid
1990s seem to have pushed their governments back into accepting certain 'repressive'
financial policies. Finland is the lone Scandinavian member of the EMU (Denmark and
Sweden are EU members, but not EMU members). In fact, Scandinavian experiences seem to

have influenced most of those nations' decision not to join the EMU. (Anderson, 2009, Hansen, 2003, Honhapohja, 2009, McCann, 2010)

### 2.4 Post-EMU Financial and Economic Climate in Europe

Prior to 2006, EU lending within (and outside of) the EU and EMU increased, as did the issuance of securities and bank ownership of non-financial securities. (Lane, 2006, Angeloni and Ehrmann, 2003). At the same time, intra EMU lending to homeowners and non-financial institutions has declined as a percentage of EMU bank lending. (Angeloni and Ehrmann, 2003) Housing prices increased across the EMU – the greatest increases occurred in Ireland, Spain, and Greece. Across the EMU, there have been major reductions in public banking across traditional bastions of public finance, and a hugely diminished role of the state as a regulator. (Italy, Austria, and France, according to William R. White, in the 1998 paper "The Coming Transformation of Continental European Banking") Meanwhile, financial supervision has diminished across the region, with the major exception of Scandinavia's non-EMU members. (European Economic Commission, 2009) These effects have combined to allow unprecedented capital flows within European states, while simultaneously encouraging capital flows with the rest of the world. I believe that these dynamics have helped to facilitate the incidence of crisis within these states. Chapter three charts trends in financial flows, securitization, and other macroeconomic variables in the late twentieth century, alongside increasing incidence of financial crisis, and chapter four analyzes the statistical correlations of these trends.

#### **CHAPTER 3**

### CHANGES IN EUROPEAN FINANCE, DESCRIPTIVE STATISTICS

#### 3.1 Introduction

In order to understand the European financial crisis, it is essential to understand how Europe's financial deregulation and liberalization over the past 25 years and the onset of EMU facilitated borrowing and lending, increased financial volatility and leverage, and generally destabilized Europe's economy. These changes led to substantial increases in borrowing and lending within Europe, increasing financial volatility and incidence of bubbles, higher leverage throughout Europe's core and periphery, more securitization that opened banking systems to new forms of financial instability, and, ultimately, greater interest rate fluctuation between the Northern and Southern Europe.

This argument runs counter to certain mainstream hypotheses that the primary causes of the European financial crisis were out-of-control welfare spending by member states' governments, the convergence of interest rates between Northern and Southern Europe, diverging sovereign debt and current account balances, and financial contagion. (Gardiner, 2012, Krugman, 2011, Feldstein, 2011, De Grauwe, 2010, et al.) While some features of that story may be true – convergence of interest rates may, for example, explain some of the rise in borrowing by peripheral European states – the mainstream has largely ignored the role financial liberalization and deregulation played in facilitating diverging capital and current accounts, converging interest rates, and financial contagion.

There are other problems with the general narratives common in the literature. The welfare state story is inaccurate, and has been debunked even within the mainstream analyses.

((Featherstone, 2011, de Grauwe, 2010, Krugman, 2011, et al.) Most European debt preceding the current crisis has been private, either household debt or corporate debt, particularly in the business of real estate. (Krugman, 2011, et al.) Explanations of the European crisis that rely primarily on diverging current accounts and German export-led growth are incomplete. The primary driver of Germany's trade surplus and the peripheral Euro-area countries' trade deficits was trade with China, but financial flows from the Euro-area core to the Euro-area periphery were significant factors in capital account divergence leading up to the crisis. (Chen, Milesi-Ferretti, and Tressel, 2013) Further, current-account divergence and interest rate convergence should be expected after the onset of a monetary union. (Endres, 2010) While these stories may help explain the onset or persistence of Europe's sovereign debt crisis, they are incomplete. A macro scale portrait of the European crisis should include the effects of broad financial deregulation, capital account liberalization required for membership in the EMU, and its consequences for European level lending and borrowing, asset bubble development, and sovereign debt development as well.

This chapter presents a brief historical synopsis of changes in the European financial architecture and transmission of capital flows immediately before and after the transition to EMU. It then presents a range of descriptive data charting the change in financial flows over time, as well as changes in the incidence of financial crisis within Europe, foreign direct investment, current account balances, financial leverage ratios, and securitization. It culminates with a brief overview of the power dynamics within the EMU as the global financial crisis of 2008 began to occur in Europe, which will be explored in greater detail in chapters five and six.

#### 3.2 Historical Context

Though the wave of deregulation, privatization, and liberalization of Europe's different financial sectors fits with a global pattern of economic deregulation, liberalization, and globalization in the last quarter of the twentieth century, the extent of Europe's financial change that has occurred over the past fifty years is great. Immediately following WWII, all European countries had substantially regulated financial sectors, designed to promote financial stability above all else. (McCann, 2010, Story and Walter, 1997) In later decades, groups of European countries began to liberalize their financial sectors – the UK, Germany, and the Netherlands began to liberalize as early as the fifties and sixties, France and different Scandinavian countries liberalized and privatized much of their financial sectors in the late seventies and eighties, and a wave of smaller countries liberalized and privatized their financial sectors by the nineties. (Story and Walter, 1997) Chapter two provides more detail about specific institutional changes in Europe's financial architecture, while chapter five creates a theoretical framework for the power dynamics that shaped these processes.

In their 2008 paper "A New Database of Financial Reforms," Abiad, Detragiache, and Tressel outline financial changes across seven dimensions – credit controls, interest rate controls, entry barriers, state ownership in the banking sector, capital account restrictions, prudential regulation and supervision of the banking sector, and securities market policies.<sup>2</sup> Their database reveals that the European countries currently in sovereign debt crisis – Greece, Ireland, Italy, Spain, and Portugal – all liberalized much later than other European countries, and initiated many of these changes in order to qualify for entry to the EMU. Though it is possible that these economies might have liberalized and privatized their financial sectors in

<sup>&</sup>lt;sup>2</sup> Although their database technically charts 'Financial Reforms', many of the reforms they map in the index are deregulatory or liberalizing. As such, a 'perfect' score of 21 represents mostly deregulated and liberalized financial sectors, but with the implementation of the Basel mandated capital adequacy ratio. (Abiad, Detragiache, and Tressel, 2008)

the absence of a motivation to join the EMU, they are unlikely to have done so as quickly or in as wholesale a fashion.

Several trends held throughout this pre-EMU liberalization process. Once a country had begun to liberalize its financial sector, it typically continued to do so, through the creation and early years of the EMU, despite the occurrence of financial crises. Sweden, Norway, and Finland stand out as exceptions that substantially re-regulated their financial sectors following their major banking crises in the early to mid 1990s. In order to join the developing European monetary union, each of these would-be member states began or accelerated the deregulation of their financial sectors in order to enable rapid capital transfer from one EMU state to another.

The key policy components of the EMU's financial mandate included the Single Market Program (SMP) and the Second Banking Coordination Directive of 1989 (SBCD), a harmonization of services provision. The SMP was supposed to provide "four fundamental freedoms: free circulation of people, services, capital, and goods," (Altomonte and Nava, 2005, 63) and required any state that wanted membership to "guarantee ... the right of establishment: the possibility for every national of a member state to exercise his own economic activity in another member state, in a level playing field equal for all economic agents operating within the Union." (Altomonte and Nava, 2005, 67) They needed to remove "cost increasing barriers [and] market entry restrictions," as well as credit ceilings. (Altomonte and Nava, 2005, 73,) In 1990, would-be members of the developing EMU needed to remove restrictions to the inflow of member states' capital. For a few states, including Spain, Greece, Portugal, Ireland, and Italy, this process did not begin until the early 1990s; Italy took until 1999 to fully remove its capital controls. (Christodoulakis, 2009)

The SBCD "introduced a single banking license that [would be] valid throughout the EU, and [establish] the conditions for banks to be licensed." (Berger, Buch, DeLong, and DeYoung, 2004, 338) This directive had several important effects. First, it enabled cross-border banking to an unprecedented extent for Europe:

"By holding this 'passport', a cross-border bank [would] no longer [need] to obtain a charter from a host country, and any limits on a cross-border bank's product mix and branch structure [would be] determined by the regulation of its home country, not by regulations of the host country." (Berger, Buch, DeLong, and DeYoung, 2004, 338)

Berger et al. argue that this licensing system effectively standardized universal banking through the EMU: "Any nation not allowing these powers risked (to the extent that cost and/or marketing synergies exist between banking, securities, and insurance products) putting its own banks at a competitive disadvantage." (Berger, Buch, DeLong, and DeYoung, 2004, 338) The SBCD also enabled a significant and rapid enhancement of European banks' financial intermediary toolkit — as long as a bank qualified for the EMU banking license, it could pursue securitization, underwriting, cross-border financial activities, or anything else that German universal banks had been legally allowed for years preceding EMU.

This sudden shift opened banks up to markets, financial instruments, and activities that they were not legally equipped to monitor or regulate, as well as unforeseen destabilizing shocks. Also, while the SBCD did not require banks to perform all the new forms of financial intermediation that more established universal banks may have provided, the sense of competitive pressure that Berger et al describe, and that financial lobbyists, academics, and policy makers crafting the legislation wrote about extensively preceding the shift may have pressured banks and other financial intermediaries into engaging in transactions that they may not have willingly entered into, except under pressure. (Berger, Buch, DeLong, and

DeYoung, 2004, Deeg, 1999) Chapter five presents a more comprehensive analysis of how the SBCD was implemented, and which groups stood to benefit most from it.

# 3.3 Descriptive statistics

### 3.3.1 Incidence of Financial Crisis and Changes in Leverage

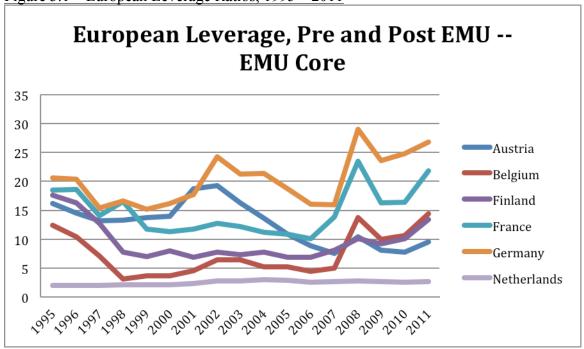
The incidence of banking crises and debt crises has substantially increased in Europe since the aftermath of WWII. (Reinhart and Rogoff, 2008) Reinhart and Rogoff's list of financial crises in "This Time is Different: A Panoramic View of Eight Centuries of Financial Crisis," shows that between 1939 and 1974, zero banking crises occurred in Europe. Prior to 1939, banking crises occurred frequently throughout Europe, and after 1974, banking crises occurred somewhere in Western Europe, on average, every three to five years. There is an extensive literature about the linkage between financial liberalization and the incidence of banking, currency, and sovereign wealth crises, including Glick, Moreno, and Spiegel's Financial Crises in Emerging Markets (2001), Eichengreen and Rose's "Staying Afloat When the Wind Changes: External Factors and Emerging Market Banking Crises," (1998), as well as work by Mendoza and Torrones, James Crotty, Ha Joon Chang, Dani Rodrik, and others. While much of this work has focused on the linkage between financial liberalization and banking crises in emerging markets, there has been little work discussing the implication of rapid financial liberalization in European countries with short histories of financial liberalization. Given that elimination of capital controls and expansion of financial intermediaries' powers were requirements for joining the EMU, the architects of that policy should have expected countries with short histories of financial openness to incur new financial risks, and potentially exhibit some of the trends of past financial crisis under the EMU's new financial architecture.

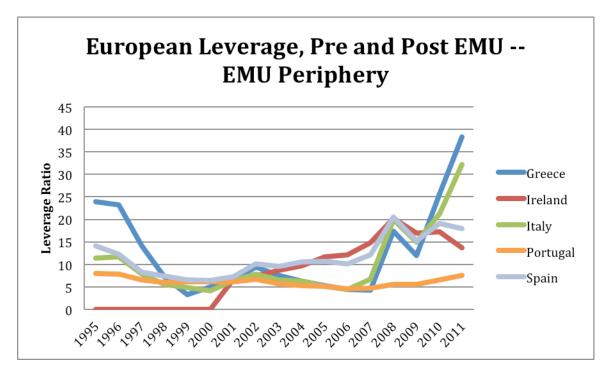
Leverage, as measured by the ratio of the "sum of currency and deposits, securities other than shares, except financial derivatives, and loans ... on the asset of side of the financial balance sheets of Central banks, other depository corporations, and other financial intermediaries, except insurance corporations and pension funds," (OECD) to, "Shares and other equity, except mutual fund shares, recorded on the liability side of the financial balance sheets of Central Bank, other depository corporations, and other financial intermediaries," (OECD) has increased in much of this European sample since the implementation of EMU, though there was an initial phase of broadly decreasing leverage. For several countries, the rise in leverage was gradual, and most of these countries experienced a spike in leverage preceding the global financial crisis in 2008.

As seen in figure 3.1, leverage decreased in most European states in the years preceding the implementation of EMU. These ratios then grew in 2003, the year in which the Euro was introduced into circulation. After 2003, leverage increased for Ireland and Spain, while it fell for most other EMU states, until it spiked in 2008. Immediately following 2008, leverage initially declined in most core EMU states, before beginning to rise steadily after 2019, while in the peripheral EMU states, leverage has increased sharply in Greece and Italy, gradually in Portugal, and begun to decline in Ireland and Spain. This reflects the cascading incidence of financial and sovereign debt crises in these different states, as well as the nature of how growth had been financed in the years preceding the global financial crisis.

These sorts of changes can be predicted when financial liberalization occurs. As capital flows increase in economies that had previously been insulated from financially driven booms and busts, we can expect large influxes of capital, as well as diminished capacities to regulate and monitor the safety of new sources of capital. The scope

Figure 3.1 – European Leverage Ratios, 1995 – 2011





of the increase in gross financial flows throughout Europe ought to have triggered some concern for sustainability and risks of crisis, both in the regional and in the global context.

#### 3.3.2 Changes in Lending and Borrowing

European claims and liabilities increased substantially after the implementation of EMU. Figure 3.2 shows the changes in total lending and borrowing as a percentage of European countries' GDP over the course of implementing EMU, and through the present.<sup>3</sup> European claims and liabilities against other European States also increased steadily from the early 1990s onward, with accelerations at different phases of the implementation of EMU. These capital flows both increased in absolute terms, and as percentages of the lenders' and borrowers' GDP, indicating increased financial integration within Europe.

These rates of increase have increased following 2003, when the EMU issued the Euro currency. In some cases, there have been brief spikes in capital claims in 2007 – from Italy to Austria and Germany, and from Ireland to Germany and the UK, perhaps demonstrating capital flight. For most European countries, there has been a sharp decline in borrowing and lending to other European partners following 2008, both in absolute terms, and relative to GDP. While Germany, France, and the UK often emerge as the largest capital flow providers to other EMU economies, certain strong lending relationships seem to have a historical basis between regional neighbors, like the Netherlands and Belgium, Ireland and the UK, Spain and Portugal, and among the Nordic economies.

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<sup>&</sup>lt;sup>3</sup> The BIS defines international claims as the "sum of cross-border claims in any currency and local claims of foreign affiliates denominated in non-local currencies," and foreign claims as "financial claims on residents of countries other than the reporting country, i.e., claims on non-residents of the reporting country... foreign claims are calculated as the sum of cross-border claims and local claims ... of reporting banks' foreign affiliates." (BIS, 54 – 55, 2014)

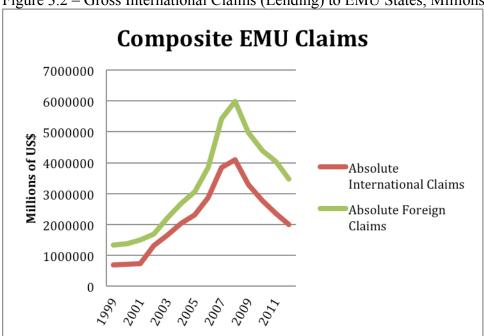
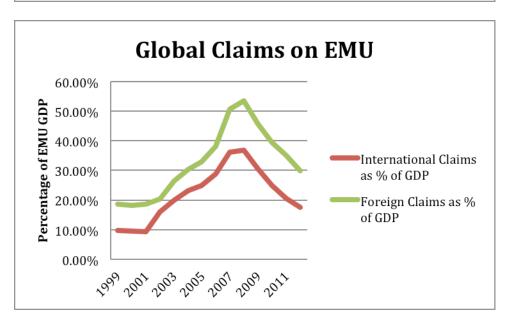


Figure 3.2 – Gross International Claims (Lending) to EMU States, Millions of US\$



Source: BIS, Consolidated Banking Data

Outside of the EMU, European lending and borrowing has increased, but to different extents. Swiss and UK lending to EMU partners has increased between 2003 and 2007, relative to both countries' GDP. Nordic countries have lent and borrowed large percentages of their relative GDPs with other Nordic partners, but lending from different Nordic countries

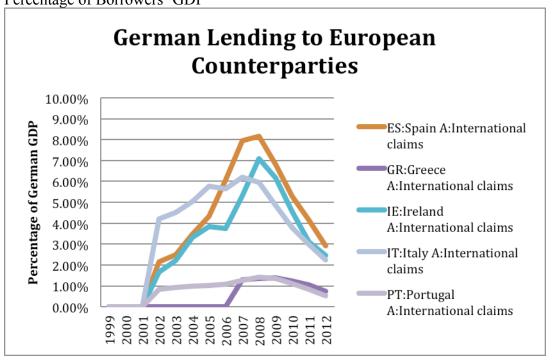
to non-Nordic European countries has not changed much, and accounts for a very small percentage of those countries' GDP. The UK appears to be the largest lender to the largest economies in the EMU – Germany, France, and the Netherlands – both as a percentage of the UK GDP as well as those respective countries' GDP, and the UK also has borrowed the most from Germany, France, and Switzerland.

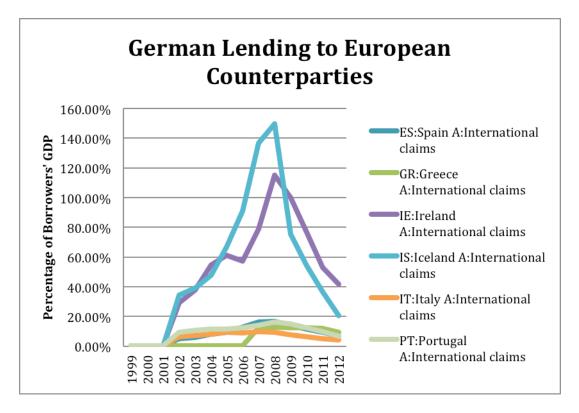
These BIS data support the hypothesis of increasing potential for financial contagion as a consequence of European financial liberalization, both within and outside of the EMU. As lending and borrowing has increased within Europe, the volumes and value of those capital flows relative to GDP have increased, and increased the risk of potential bank failures throughout Europe in the event of crisis in one market. The UK, Germany, the Netherlands, and France, in particular, have lent and borrowed large volumes from each other, while simultaneously lending large volumes to the other members of the EMU. There is a disparity between capital flows as a percentage of lenders' GDP relative to the borrowers' GDP. For example, in 2008, Germany lent 6% of its GDP to Ireland, a volume that was worth 84% of Irish GDP. (Refer to Figure 3.3.) In the same year, French financial intermediaries lent 3.5% of the French GDP to Ireland, which was equivalent to 38% of Irish GDP. These sorts of financial flows are more likely to have disruptive effects for the borrower than for the lender, and reflect the potential power disparities within the newly liberalized financial environment of Europe, post EMU.

Between 1999 and 2011, Germany led other European countries – EMU and non-EMU – in sending these potentially disruptive capital flows to borrowers. In 2007, it lent 1.23% of its GDP to Portugal, which represented 17.68% of Portugal's GDP, 8.05% to Spain, which represented 18.56% of Spain's GDP, .48% of its GDP to Iceland, which represented 42.58%

of Iceland's GDP, and 5.03% to Ireland, which represented a 64.35% of Ireland's GDP. (See figure 3.3) Germany also lent larger percentages of its own GDP – which led Europe's national GDPs – to peripheral EMU nations relative to its lending to richer European economies. This sort of lending practice from relatively sophisticated financial centers to countries with less recently established financial sectors would destabilize European financial systems more vulnerable to rapid capital inflows, and could set up conditions for large-scale capital flight in the event of a crisis.

Figure 3.3: Comparison of German Lending as a Percentage of German GDP, and as a Percentage of Borrowers' GDP





Source: OECD Statistics, 2013

The rapid decline in interstate liabilities – in volume and as a percentage of most European countries' GDP – following the crisis of 2008 demonstrates the increased fragility of the European financial and economic system post financial liberalization. Prior to EMU, states had the option of capital controls, which prevented capital flight, whether initiated by national elites or banks in different European countries, and would not have seen such dramatic downturns that exacerbated the soon to come sovereign debt crises.

# 3.3.3 Changes in Interest Rates and Current Account Balances

Critics of the EMU's policy design tended to focus on the role that a convergence of interest rates would have on national borrowing trends in lower income members. The chief concern was that as interest rates converged under the currency union, countries accustomed to high interest rates suddenly faced artificially low interest rates. In reaction, these states –

Spain, Portugal, Italy, Ireland, and Greece – went on borrowing binges; countries used to lower interest rates did not change their borrowing and lending behavior. (Krugman, 2011, Feldstein, 2011)

Mainstream analyses of the European crisis have attributed great weight to current account divergence within the EMU. However, these discussions fail to acknowledge the different contexts and timing of those deficits, as well as the nature of lending that generated deficits. It would not have been feasible for these states to incur such significant inflows that have resulted in crisis without the capital control free terrain of the Single Market and the new global financial architecture. Current accounts have diverged throughout Europe, particularly between EMU members, but this has always been a potential consequence of facilitating the transmission of goods and capital flows through the different economic and monetary union arrangements policy-makers have instituted. In all of the current sovereign crisis states, current account deficits grew larger than those in France and Belgium – in 2006, prior to the onset of the crisis, these states' current account deficits ranged from 1.99% in Belgium and -.58% in France, to -2.49% in Italy and -3.54% in Ireland, to -8.94%, -10.75%, and -11.26% in Spain, Portugal, and Greece, respectively. As the financial crisis and sovereign debt crisis grew in Europe, these balances changed, by 2008, to -1.32% and -1.75% in Belgium and France, to -3.16% and -5.66% in Italy and Ireland, to -9.62%, -12.57%, and -14.69% in Spain, Portugal, and Greece.

All of these EMU states with negative current account balances – from small deficits to large deficits – had low indices of financial reform in the early 1970s, when Germany and the Netherlands both had relatively open and deregulated financial sectors, according to Abiad, Detragiache, and Tressel's analysis (2008). In 1973, Germany and the Netherlands

had scores of 13, starting with light credit reserve requirements, an absence of credit and interest rate controls, and relatively lenient (though not totally deregulated) policies governing international capital flows and securitization. By contrast, in 1973, Italy, France, and Belgium had relative scores of 3, 6, and 8.5. Italy lightened credit reserve requirements to the authors' most lenient standard<sup>4</sup> by 1997, and released international capital flow barriers by 1992, compared to Germany and the Netherlands record of liberalizing cross border financial flows in 1974 and 1980, respectively. France and Belgium deregulated capital flows in 1990 and 1991, respectively. While Germany and the Netherlands achieved their maximum financial reform scores of 19 and 20<sup>5</sup> by 1993 and 1992, respectively, most of the countries in current crisis did not reach their maximum financial reform index score until the mid or late 1990s. Greece reached 18 by 2003, Italy reached 20 by 2003, Portugal reached 17.5 by 2000, and Spain reached 21 in 1998. Fireland, an exception, reached 21 by 1993.

The ten year lead Germany and the Netherlands had in accepting international financial flows may have educated those countries' financial actors about the vagaries of the international capital market, in ways that countries that liberalized later would not have

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<sup>&</sup>lt;sup>4</sup>For a 'DirectedCredit' score of three, countries' capital reserve requirement had to be less than 10%, there could be no requirements that banks provide a certain amount of credit to particular sectors within the country, and banks cannot subsidize credit to certain sectors. (Abiad, Detragiache, and Tressel, 2008)

<sup>&</sup>lt;sup>5</sup> Germany has a lower 'financial reform score' than other countries represented, since the authors appear to lack data about whether Germany had credit ceilings, and because Germany maintains a large public banking operation, the Landesbanks. Holland's pre-2002 score of 20 represents its failure to implement Basel capital adequacy ratios.

<sup>&</sup>lt;sup>6</sup> Greece lagged on lifting credit controls, improving financial supervision, and privatizing banks. Italy lagged on improving financial supervision, lifting credit controls and entry barriers to international banks, privatizing banks, and lifting capital controls. Portugal lagged in lifting credit controls, implementing banking supervision, and privatization of finance. Spain lagged in financial privatization.

<sup>&</sup>lt;sup>7</sup> This might be related to Ireland's close ties with the UK, another state that achieved its maximum financial liberalization score relatively early.

understood. Further, with that experience, German and Dutch financial actors may have learned arbitrage and other financial intermediation techniques that they could use to profit in newer, less experienced markets. These diverging current accounts reflect an imbalance of power within the EMU. The states in recent and contemporary crisis have either had chronically underproductive real sectors, large housing bubbles, or significant banking crises that national government's attempted to resolve through guarantees of banks' liabilities.

# 3.3.4 FDI and Real Estate Market Changes

A comparison of FDI, in figure 3.4, between European countries, as well as FDI into different European states by industry reveals a disconnect between the types of enterprises that received direct investment under the new parameters of the Single Market.

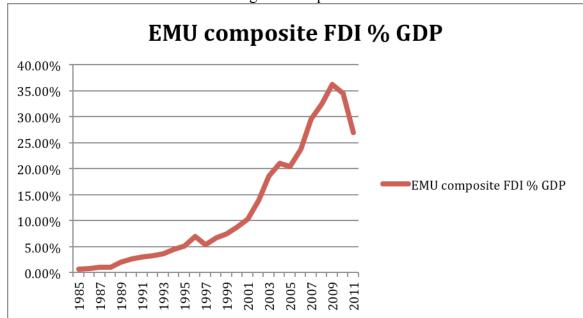


Figure: 3.4: FDI to EMU States as a Percentage of Composite EMU GDP

Source: OECD Statistics

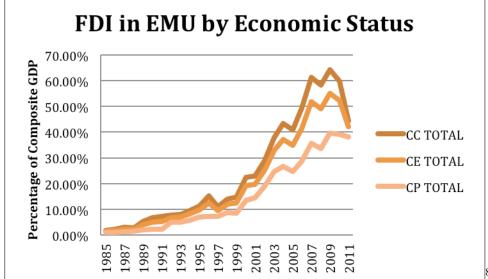
Countries in the EMU sent increasing outflows of FDI to European partners, in absolute amounts as well as relative to GDP; further, states in the EMU's core received larger inflows

of FDI for all industries, as a percentage of GDP, relative to the EMU's peripheral states. (See Figure 3.5)

As current accounts diverged, total economic debt as a percentage of GDP has increased throughout Europe – particularly in Ireland and the Netherlands, where debt of the total economy as a percentage of GDP grew from 754% to 1360% and from 871% to 1030% between 2001 and 2006. The primary source of this growth appears to have been in the financial sector. Government debt as a percentage of GDP fell or held constant for most EMU nations (with the exception of Portugal, where government debt as a

Figure 3.5 – FDI in Core and Peripheral EMU States, as a Percentage of Composite GDP

FDI in EMU by Economic Status 70.00%



Source: OECD Statistics, 2013

percentage of GDP grew steadily), until 2007, when government debt began to increase as a percentage of GDP for all core members of the EMU (Austria, Belgium, France, Germany, and the Netherlands), by about 20 percentage points through the present. However, debt of

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<sup>&</sup>lt;sup>8</sup> CE – Composite EMU – Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Spain, Portugal

CC - Composite Core - Austria, Belgium, Finland, France, Germany, the Netherlands

CP – Composite Periphery – Greece, Ireland, Italy, Portugal, Spain

financial corporations as a percentage of GDP grew throughout Europe – to significantly higher levels in the Netherlands and Ireland, followed by the core of the EMU, and followed then by the peripheral nations. The increased propensity of financial sectors to take on debt and increase leverage increased European financial intermediaries propensity for crisis in the event of a domestic or international downturn. Financial systems in countries with longer histories of financial liberalization may have had more credit resources, but in the moment of the global financial crisis, losses throughout Europe were significant, and most European governments used a combination of strategies to lessen the financial costs by guaranteeing banks' liabilities, bailing out banks, or both.

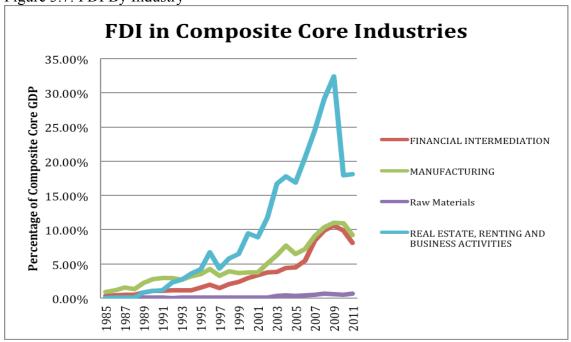
Throughout EMU, FDI in real estate and financial intermediaries has increased as a percentage of total FDI. (See Figure 3.6)

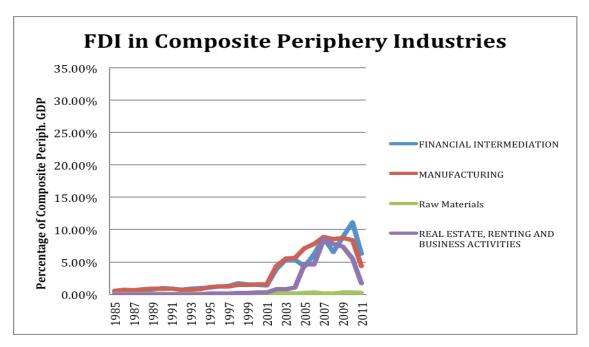
**FDI in Composite EMU Industries** 35.00% Percentage of Composite EMU GDP 30.00% 25.00% FINANCIAL INTERMEDIATION 20.00% MANUFACTURING 15.00% Raw Materials 10.00% REAL ESTATE, RENTING AND BUSINESS ACTIVITIES 5.00% 0.00% 993 1995 1999 1997

Figure 3.6 – FDI in EMU Industries – Composite EMU, Core EMU, and Peripheral EMU

Source: OECD Statistics, 2013

Figure 3.7: FDI By Industry





Source: OECD Statistics, 2013

Within the EMU's core and periphery, there are similar trends, but FDI in real estate in the EMU's periphery appears to spike in 2003, concurrent with the introduction of the Euro. (See

Figure 3.7) These changes dovetail with rising property prices through much of the EMU, particularly in certain peripheral members of the EMU.

The Financial Times index of European property price changes shows low to no growth in property prices in Germany and Austria from the nineties onward, steadily increasing property prices in Portugal and the Netherlands from the mid nineties through 2009, and steep price increases in France, Belgium, Ireland, Italy, and Spain. The Eurostat Housing Price Index, which includes housing as well as electricity, gas, and water costs, shows similar trends. (See Figure 3.8) The Eurostat housing price index shows increasing housing prices from 2005 onward. After 2005, Belgium, Ireland, Italy, Greece, Portugal, and Spain all see housing price indices rise above the EMU average, while the Netherlands, Germany, and Austria maintain housing price indices below the EMU average. France's housing price index seems to track the EMU price index average closely, post 2005. The distortionary effects of this shift are significant, since GDP per capita in Germany, the Netherlands, Austria, and France has been significantly higher than GDP per capita in Spain, Portugal, Italy, and Greece during this period. Ireland's GDP per capita grew to a level greater than the Netherlands' by 2007, but post 2008, as Irish GDP per capita dropped, so too did housing prices, so that after 2008, the Irish housing price index is below the EMU average. These changes in regional real estate prices – bubbles in the EMU's peripheral members while prices in most of the core were lower or roughly equivalent to average European real estate prices – illustrate yet another path that European financial liberalization helped facilitate the European financial crisis, with particularly disproportionate costs for Europe's periphery.

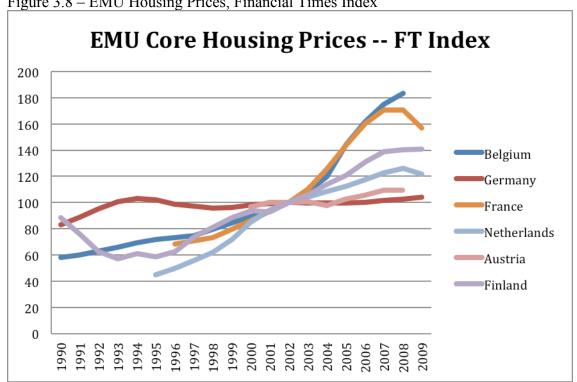
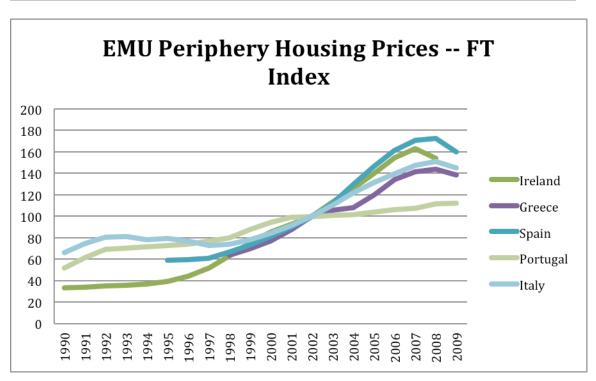


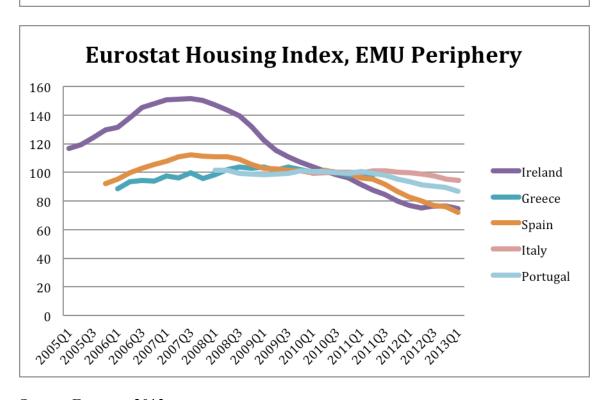
Figure 3.8 – EMU Housing Prices, Financial Times Index



Source: Financial Times, http://www.ft.com/intl/cms/s/0/1dd8c5b6-51a8-11dd-a97c-000077b07658.html#axzz3012zHKVY, 2013

**Eurostat Housing Index, EMU Core** 120 Belgium 100 Germany (until 1990 80 former territory of the FRG) 60 France 40 Netherlands 20 0 2006Q3 2007Q1 2007Q3 2008Q1 2008Q3 2009Q1 2010Q1 2010Q1 2011Q3 2011Q3 Austria Finland

Figure 3.9: Eurostat Housing Index



Source: Eurostat, 2013

Policies that facilitated capital flows between European nations, as well as broader financial liberalization that opened Europe's economies to capital flows from outside of

Europe have had disparate effects within the EMU. With one notable exception, the members of this composite of EMU have lent and invested larger portions of FDI relative to their GDPs to EMU core nations. Germany and Portugal both lent and directly invested amounts that accounted for larger percentages of their respective GDPs to the EMU's periphery. As discussed earlier, capital flows from Germany in particular represented much smaller percentages of German GDP than recipient countries' GDP. The relative state of development of these peripheral countries' financial sectors and abilities of local financial intermediaries to absorb these flows in ways that did not result in spikes in asset prices may account for the broader incidence of housing bubbles, which have led to larger household costs in the ensuing global and domestic crises in Europe.

# 3.3.5 Changes in Securitization

In the years preceding the global financial crisis, the number of financial and monetary institutions in Europe has decreased, and the amount of securitization has increased throughout the region. Some have argued that the increase in European financial competition has encouraged European banks to shift the focus of their economic activity away from traditional lending toward an increased participation in the global international capital market. While there are some indications that financial competition throughout Europe, particularly within the EMU, has increased, the benefits of that development are ambiguous.

Some have argued that competitive pressure may have encouraged preemptive deregulation and liberalization in states with less efficient finance prior to EMU, which made the point of cross-border mergers moot. (Berger, et al, 2004) There are simultaneous indicators that intra-state financial mergers and acquisitions increased, particularly in states with longer histories and/or more experience with universal banking. The number of banks,

"constituting the three pillars of German banking declined from 4,177 to 2,160 between 1991 and 2003." (Koetter, 2005, 2) ECB data about bank entries and exits indicate that European numbers of credit institutions and mutual funds both decreased, throughout the EMU and the EU. Even as new countries entered both the EMU and the EU, those numbers steadily declined, though a few exceptional cases exist. IMF data about credit intermediation – the share of loans granted by the financial sector to other sectors of the economy over the total liabilities of those other sectors – and financial intermediation – total financial corporations' assets over the total economy's financial assets – show that both increased in Europe, inside and outside of the EMU. While these data may indicate increased private lending, they do not necessarily indicate greater financial efficiency.

Jumping off of Crotty's theories of fraternal versus fratricidal competition<sup>9</sup>, there is reason to be suspicious about the possible sustainability and stability effects of banks rapidly deregulating and liberalizing the services that they offer and receive in order to avoid being taken over by foreign banks. (Crotty, 2003) Fratricidal competition in the financial sector would likely consist of financial competitors attempting to undercut their opponents in a 'race to the bottom,' by cutting costs and courting different kinds of risk as they deregulate further. (Crotty, 2003) Barry Eichengreen argued in 2008 that the global financial crisis owed much to financial competition taken to an extreme, and speculated that German investment in toxic securities had much to do with in-state financial competition. (Eichengreen, 2010)

Since the implementation of the Banking Passport, European securitization and consumption of exotic financial derivatives and other securities has increased substantially.

<sup>&</sup>lt;sup>9</sup> In which fraternal competition is likely to engender positive outcomes for firms and consumers, in the form of higher wages, safety oversight, more research and development, and other factors, while fratricidal competition is likely to drive prices down, as well as wages, safety oversight, and research and development, and result in bankruptcies.

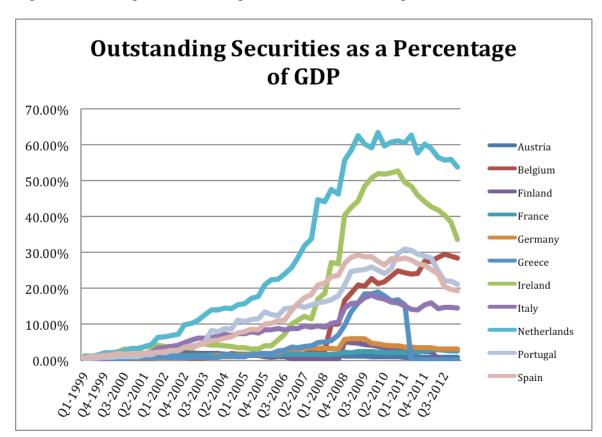


Figure 3.10: Change in Outstanding Securities as a Percentage of GDP

Data Source: Securities Industry and Financial Markets Association (SIFMA), and Association for Financial Markets in Europe (AFME), 2013

European banks hold nearly half of the 385 billion dollars worth of foreign owned US originated ABSs: the value of those holdings increased by the billions from the early 2000s until shortly preceding the global financial crisis. (Kamin and Pounder DeMarco, 2010) These patterns varied considerably across EMU member states – Germany, the Netherlands, Spain, and Ireland emerge as the four countries whose financial sectors either acquired or underwrote the highest volumes of securities, mortgage backed and otherwise. The manner in which banks used these derivatives and securities also differed significantly between countries.

As in the US, there is a linkage between banks' engagement in securitization, consumption of securitized assets, and the incidence of financial crisis across different European banking systems.

**Outstanding CMBS -- Percentage of GDP** 8.00% Austria 7.00% Belgium 6.00% Finland 5.00% France 4.00% Germany 3.00% Greece 2.00% Ireland 1.00% Italy 0.00% Q4-2008 Q3-2009 03-2003 04-2005 03-2006 02-2007 Q1-2008 Netherlands Spain

Figure 3.11: Outstanding Commercial Mortgage Backed Securities, Percentage of GDP

Source: Securities Industry and Financial Markets Association (SIFMA), and Association for Financial Markets in Europe (AFME), 2013

Outstanding securities have increased substantially as a percentage of GDP throughout Western Europe following the onset of EMU. (See Figure 3.9) In most western European countries, there was a decline in outstanding securities as a percentage of GDP beginning in 2009, after the onset of the global financial crisis in 2008. Breaking down outstanding securities into different assets, we see similar trends for commercial mortgage backed securities (Figure 3.10), and residential mortgage backed securities (Figure 3.11). Data for outstanding CDOs (Figure 3.12) shows a more varied picture, though outstanding CDOs accounted for much smaller percentages of Western European GDPs.

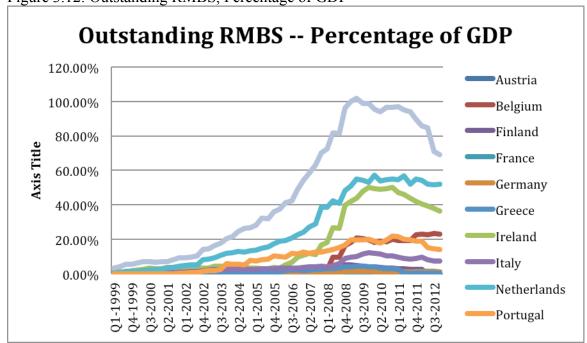
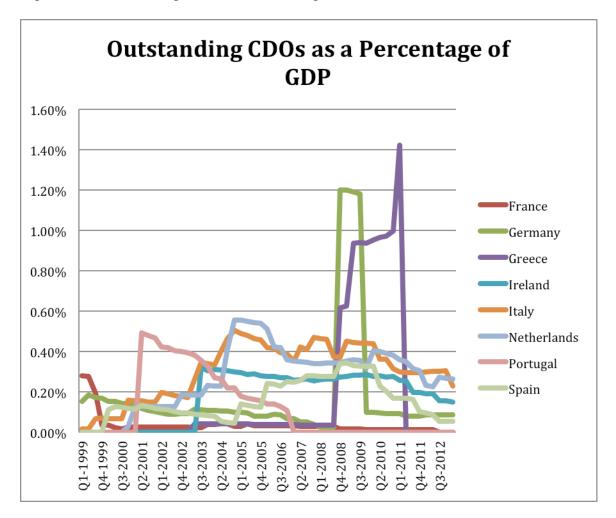


Figure 3.12: Outstanding RMBS, Percentage of GDP

Source: Securities Industry and Financial Markets Association (SIFMA), and Association for Financial Markets in Europe (AFME), 2013

While certain EMU members had comparatively large holdings of CMBS, RMBS, and CDOs prior to the onset of the global financial crisis, specifically, the Netherlands, which had a long history of liberalized financial intermediation, other countries' outstanding securities differed by asset type. For example, Spain dwarfed other EMU members in its level of outstanding RMBS as a percentage of GDP, even after its outstanding RMBS declined as a percentage of GDP beginning in 2009. Outstanding CMBS increased as a percentage of GDP for Ireland, the Netherlands, and Germany preceding the 2008 financial crisis, while other EMU members' levels of those outstanding securities were much smaller – if not negligible – percentages of GDP. However, there is a significant literature that discusses German banks' holdings of CDOs of particularly toxic assets that led to substantial losses in the onset of the global financial crisis. (Lewis, 2011, et al.)

Figure 3.13: Outstanding CDOs as a Percentage of GDP



Source: Securities Industry and Financial Markets Association (SIFMA), and Association for Financial Markets in Europe (AFME), 2013

We would expect the risks of the incidence of financial crisis related to securitization to increase within a banking system for two reasons. First, under the Banking Passport, European countries had more leeway to engage in the creation of securitized and other exotic assets, with consequences that were not necessarily understood. (Lewis, 2010) Second, under the Single Market, EMU banks had access to a broader pool of capital and assets to purchase and securitize in novel fashion. EMU member states' financial intermediaries' holdings of securitized assets increased in absolute terms and as a percentage of GDP from the early

1990s onward, with an apparent increase in that rate of increase from 2002 onwards.

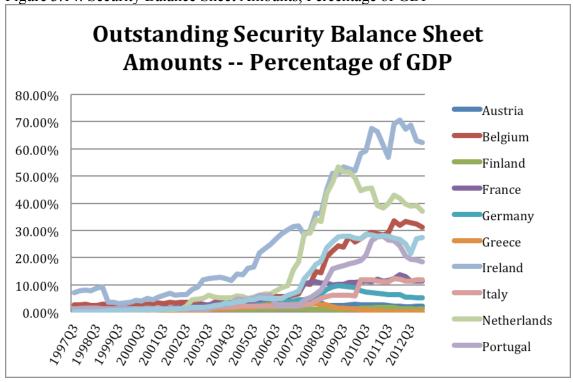


Figure 3.14: Security Balance Sheet Amounts, Percentage of GDP

Source: European Central Bank, Security Issues Statistics, 2013, http://www.ecb.europa.eu/stats/money/securities/html/index.en.html

Part of national divergence in securitization has to do with regulatory differences. Some have argued that states with "Roman" legal traditions (Spain, Portugal, France, and Italy) had stricter laws as of the early 2000s regarding SIVs or SPVs. (Nassarre-Aznare, 2002) For example, Spanish banks faced the same reserve requirements for banks and SIVs and SPVs, which dampened Spanish pursuit of securitization as a means of regulatory arbitrage. (Goddard, Molyneaux, and Wilson, 2009) On the other side of the spectrum, some states have emerged as particular centers for the creation of SPVs and SIVs, through a combination of legal protections and tax benefits — Ireland, in particular, as well as Belgium. (Hirsch and Byttebier, 1997, Jackson, 2010)

Asset backed securities can concentrate banks' risk, rather than dispersing it, and the primary benefits of ABS conduits in the lead-up to the global financial crisis seems to have been to move assets that should have been backed by capital off of balance sheets. (Acharya, Schnabl, and Suarez, 2010) In Europe,

"most countries had similar capital requirements as in the United States until 2004. Full credit guarantees had full regulatory charges, but full liquidity guarantees had no capital charges. The only exceptions were Spain and Portugal which required full capital charges for both full credit and full liquidity guarantees." (Acharya, Schnabl, and Suarez, 2010, 13)

European ABS conduits with lax capital standards were most prevalent in Germany, France, Belgium, and the Netherlands. (Acharya, Schnabl, and Suarez, 2010) Clive Jackson argues that Ireland was also a prime center for ABS conduits. (Jackson, 2010)

Among the Northern EMU nations, German banks and financial intermediaries appear to have been the most enthusiastic in their acquisition of residential mortgage backed securities, wherever they had originated. When US housing prices began to fall, these German banks transmitted the shocks of their losses to other banks with which they had integrated, following the onset of EMU:

"At the beginning of August 2007, the German government was forced to bail out IKB Deutsche Industriebank, one of several European banks to incur large sub-prime-related losses. Within a matter of days, BNP Paribas, one of France's leading financial institutions, took the decision to suspend three of its investment funds, citing a 'complete evaporation of liquidity in certain market segments of the US securitization market' (BNP Paribas, 2007). The ECB responded to this move within a matter of hours, providing nearly €100 billion in short-term financing to banks so as to ensure orderly conditions in the euro area markets. This move was the first of several emergency liquidity measures by the ECB and monetary authorities worldwide./This initial phase of the global financial crisis in Europe claimed a high profile victim in the form of Northern Rock. This UK mortgage provider, which had relied heavily on wholesale money markets as a source of finance, faced serious liquidity problems and was forced to apply to the Bank of England for emergency financial support on 13 September 2007 (Treasury Committee, 2008). This move triggered the first run on a UK bank since 1866, leading to the eventual nationalization of Northern Rock in February 2008." (Hodson and Quaglia,

2009, 940-941)

Hodson and Quaglia note that the increasing integration of EMU banking, "which had led to a number of cross-border bank mergers over the last decade, complicated the task of rescuing European banks." (Hodson and Quaglia, 2009, 941.) As losses spread to UK banks, Irish banks, and other member states' banks began to register losses, too. (Hodson and Quaglia, 2009)

They also describe lower immediate costs of the financial crisis for countries that had not used securitization and shadow banking for regulatory arbitrage — Italy, Spain, Greece, and Portugal would eventually get in trouble because of their current account deficits. Goddard, Molyneaux, and Olson also note that virtually every European government and central bank stepped in to ensure to guarantee local banks' liabilities, so that local banks could continue to lend and promote economic growth, which was important in light of the massive drawback of international lending immediately following the crisis. (Goddard, Molyneaux, and Olson, 2009, Milesi-Ferretti and Tille, 2010) These dynamics reinforce a notion that power dynamics within the EMU have privileged certain countries' risky financial behavior, while eventually penalizing other states for banking failures. Chapters five and six explore the theoretical underpinnings for this, as well as the expression of those dynamics in case studies of Germany, Iceland, and Ireland.

## 3.4 Conclusion

Financial deregulation and liberalization in the late 20<sup>th</sup> century enabled lending and borrowing behaviors that helped pave the way for Europe's expression of the global financial crisis. As European lending and borrowing increased, so too did the incidence of financial crises. European leverage has increased broadly, and so have the practice of securitizing

assets, and acquiring those securitized assets. Each of these developments introduced more sources of financial and economic instability to a geographic area that had previously been insulated by relatively strict and repressive financial regulations. While Europe may have been exposed to financial and economic losses during the global crisis in the absence of such changes, the effects would not have been so broad and deep as they were. Further, in the absence of the regulatory requirements of the EMU, peripheral European states would not likely have borrowed or lent such large volumes, incurred such large asset bubbles, or engaged in securitization behavior that had such potentially destabilizing consequences.

Mainstream analyses of Europe's ongoing financial, current account, and sovereign debt crises neglect the roles that the new global financial architecture, as well as the changed financial landscape of the EMU played in exposing Europe and the EMU to new risks. The increased exposure of European states to other members' financial soundness as lending and borrowing increased created an environment for financial contagion. The increase in real estate prices throughout much of Europe also paved the way for increased household borrowing and lending, which exposed more European households to the potential negative consequences of its fledgling financial arena. While European states with longer histories of financial liberalization have avoided sovereign debt crisis until now, increasing cracks in the façade of European financial soundness emerge.

Chapter four is an econometric analysis of the correlation between financial liberalization and the incidence of crisis in Western Europe from the 1980s onward, as well as the correlation between financial liberalization and the onset of financial crisis, and teases out the relative significance of these different factors, while chapter five creates a theoretical framework for the power dynamics that encouraged certain states to liberalize, and general

consequences of these changes. Chapter six presents a more specific case study of the effects of these changes in one of the EMU's core countries, Germany, a peripheral EMU state, Ireland, and a small state that was neither a member of the EMU nor the EU, Iceland.

#### **CHAPTER 4**

# CRISIS INCIDENCE AND ONSET RELATIVE TO FINANCIAL FLOWS IN WESTERN EUROPE

# 4.1 Introduction – Motivation and Method

In this dissertation, my key hypotheses are that financial liberalization in Europe has increased the probability of financial crisis occurring in this region. In chapter two, I have shown that the European financial architecture changed substantially since the 1960s in terms of its ownership, as well as its openness to external capital flows. In chapter three, I demonstrated the large increase in gross capital flows between European states since the early 1980s, as well as the increase in the incidence of financial crisis. In this chapter, I build on the descriptive statistics of chapter three and will test these hypotheses more formally. In particular, I will test the statistical relationships between gross international capital flows as a percentage of GDP, and different financial liberalization indices (openness to international capital flows, liberalization of security markets, and banking supervision) and the incidence and onset of financial crisis.

A broad literature already exists that analyzes the links between financial liberalization and the incidence of financial crisis in both the developing and industrialized world. These analyses often include substantial efforts to account for the influence of corruption, deposit insurance, and other factors primarily understood to be present in the 'developing' world, making them less relevant to understanding the key factors that may affect the incidence of financial crisis in the developed world. A concurrent literature that is growing in scope discusses the causes of the European financial crisis, focusing primarily on the importance of converging interest and exchange rates, as well as diverging current

accounts and fiscal balances. Many of these analyses have been narrative or editorial, and relatively few have attempted to econometrically determine the relationship between these factors and the European crisis, in its particular geographic context.

Given the large and rapid increase in financial flows within Western Europe following the implementation of different phases of Europe's Economic and Monetary Union, as well as the rapid financial liberalization that occurred in the EMU's periphery, as well as the enduring crisis in a number of member states, it is important to evaluate the effects of that change in the specific political economic context of Western Europe. Focusing on Europe itself allows one to avoid the problems that comparing European outcomes to non-European outcomes might bring, given the broad institutional and developmental differences between them.

This chapter extends existing econometric analyses of the financial, macroeconomic, and regulatory changes in Western Europe and their effects on the incidence of European financial crisis into 2011. It uses a novel set of financial, regulatory, and macroeconomic variables suited to a group of states with relatively uniform institutions, that still vary in terms of the timing of their capital account liberalization, financial deregulation, and other key variables. I hypothesize that financial regulatory and liberalization variables, including gross measures of international capital flows relative to GDP as well as categorical variables measuring the extent of regulation or openness in areas like openness to foreign bank entry and security market liberalization have statistically significant correlations with the incidence of financial crisis in Western Europe. My argument suggests that variables indicative of greater financial liberalization should be positively correlated with the incidence of crisis, while those indicative of financial repression should be negatively correlated with crisis. My

analysis includes macroeconomic variables such as fiscal and trade balances over GDP, interest rates, gross fixed capital formation relative to GDP, and GDP per capita to control for macroeconomic factors that may play a role in fomenting financial crisis, as well as the institutional variables of EMU and EU membership. I test these hypotheses on panel data, using OLS, logit, and time series techniques.

In the following sections, I present a brief literature review of econometric analyses of the influence of financial liberalization on the incidence of financial crisis. I follow with more detailed explanations of my hypotheses, my models, and my variables, and then with my econometric results, and interpretation of my findings. My results show that increasing gross international capital flows as a percentage of GDP increase the probability of a financial crisis occurring and being in progress. These findings cast doubt on the common conclusion in other literature that financial liberalization does not cause financial crises in countries with more "sophisticated financial markets".

#### 4.2 Literature Review

An extensive econometric literature analyzes the correlation between financial liberalization and the incidence of financial crisis. There are broad similarities throughout this literature in the type of econometric models used and various control variables, though the analyses vary with regard to sample selection, designation of crisis, and dependent variable representations of financial liberalization. Authors of these works differ in their conclusions regarding the role that financial liberalization plays in the incidence of financial crisis. Some argue that financial liberalization is associated with greater incidence of financial crisis – particularly banking crises – in both developing and industrialized countries, while others argue that the correlation only holds for developing countries, and that

the existence of more sophisticated banking regulations in the developed countries explains the difference. Some argue that though financial liberalization may be correlated with financial crisis, the correlation between financial liberalization and economic growth more than compensates for the difference. There is relatively little role or analysis attributed to the role of increasing financial flows between countries and the incidence of crisis, however, which I want to remedy with this contribution.

Econometric analyses of the relation between financial liberalization and financial fragility or crisis tend to fall in two categories. Some, such as Detragiache and Demirgüc-Kunt (1998), Eichengreen and Arteta (2000), Hutchison (2002), et al, attempt to show the relationship between financial liberalization, using different proxies and measures, and the probability of the incidence of crisis, with either probit or logit models. Others, for example, Prasad, Rogoff, et al (2007), Claessens, et al (2010), Lane and Milesi-Ferretti (2010), et al use a different set of dependent variables – such as change in the growth of GDP, consumption, or changes in volatility – relative to financial liberalization and the incidence of financial crisis. Many papers within this literature attempt to determine whether the costs of financial crisis outweigh the potential contributions financial liberalization can make to economic growth. These different econometric models tend to use several categories of independent variables – financial liberalization and other financial variables, macroeconomic variables, institutional variables, and other controls, typically some form of GDP or GDP per capita.

There is a broad econometric literature using panel probit and logit models, with a dependent variable representing the probability of the incidence of financial crisis in a given year. Eichengreen and Arteta (2000) survey and develop a probit model of the probability of

the incidence of a crisis relative to various independent variables. Shehzad and De Haan (2009) use a two-stage probit model to "consistently suggest that financial liberalization reduces the likelihood of systemic crises." (Shehzad and de Haan, 2009, 1) Ilan Noy (2004) uses probit models with panel data about the probability of the incidence of a banking crisis relative to different macroeconomic and financial independent variables. Hutchison (2002) presents a probit analysis of the probability of banking sector distress and banking crisis relative to various macroeconomic, institutional, and financial variables, with a special focus on Europe.

Barrell, Davis, Karim, and Liadze (2010) use a logit crisis model for OECD countries; in a 2013 paper, the same authors use a logit model to begin to analyze the correlation between off-balance sheet exposures to sub-prime mortgage assets and the global financial crisis. Detragiache and Demirgüc-Kunt (1998) put together a logit analysis of the incidence of systemic and non-systemic banking crises relative to various macroeconomic and financial liberalization variables. Reinhart and Rogoff (2011) develop a multinomial logit analysis with panel data, using the first year of a banking crisis as the dependent variable.

By contrast, other studies show the correlation between financial liberalization and the performance of various macroeconomic variables. Claessens, Dell'Ariccia, Igan, and Laeven (2010) use the following dependent variables to measure the consequences and extent of the global financial crisis across a number of countries: duration of negative real growth, severity of decline, decline in average growth from 2003-2007 to 2008-2009, GDP growth in 2008 and 2009, and a financial stress index, which "summarizes seven indicators" including "the banking sector beta, the TED spread, inverted term spread, stock market return, stock market return volatility, sovereign debt spread, and exchange market volatility." (Claessens et al,

2010, 282) Prasad, Rogoff, Wei and Kose (2007) measure the impact of financial liberalization on the different macroeconomic variables, particularly the annual growth rates of different macroeconomic variables – output, income, consumption, total consumption, and the ratio of total consumption to GDP. Kaminsky and Schmukler (2003) use the duration of booms and busts as dependent variables relative to various macroeconomic and financial liberalization variables. Lane and Milesi-Ferretti (2010) measure the severity of financial crisis using the change in average GDP growth between 2004 and 2007 and average GDP growth between 2008 and 2009 as a dependent variable relative to different macroeconomic, financial, and control independent variables. They perform a secondary analysis of the effect of different macroeconomic and financial variables, including a financial vulnerability variable, on the consumption rate between 2008 and 2009.

Authors vary in how they designate the incidence of banking crises, in terms of the criteria for classification, as well as the list of crises used in analysis. Some use the list of crises in the IMF Crisis Episodes database. Barrell, Davis, et al (2010) authors use 14 systemic and non-systemic crises in OECD countries taken from the IMF Financial crisis episodes database that covers the period from 1970 through 2007. Their chief criteria for a crisis episodes is that, "The proportion of non-performing loans to total banking system assets exceeded 10%, or the public bailout cost exceeded 2% of GDP, or systemic crisis caused large scale bank nationalization, or extensive bank runs were visible and if not, emergency government intervention was visible." (Barrell et al, 2010, 2256)

Most authors adopt the criteria used by Caprio and Klingebiel (1996), who compiled a list of systemic and nonsystemic banking crises in 69 countries from the late 1970s onward, and defined systemic crises as crises in which, "a country's corporate and financial sectors

experience a large number of defaults and financial institutions and corporations face great difficulties repaying contracts on time," (Laeven and Valencia, 2008, 5) as well as more isolated banking distress episodes. (Caprio and Klingebiel, 1996) Others refer to Demirgüc-Kunt and Detragiache's list of financial crises, first compiled in the 1998 paper "Financial Liberalization and Financial Fragility." Their initial study examined 53 countries from 1980 through 1995, and classified a "full-fledged crisis," as consisting of "at least one of the following conditions... the cost of the rescue operation was at least 2 percent of GDP; banking sector problems resulted in a large scale nationalization of banks; extensive banking runs took place or emergency measures such as deposit freezes, prolonged banking holidays, or generalized deposit guarantees were enacted by the government in response to the crisis." (Detragiache and Demirgüc-Kunt, 1998, 15)

Most analyses reviewed here include a mix of OECD and non-OECD countries in their samples. One exception is Barrell, Davis, et al (2010), which uses a small sample of OECD countries. This has some implications for which independent variables, particularly with respect to institutional quality. The timeframe of analysis ranges, partially due to the range in publication date of the papers, but also due in part to the data sets authors used to derive crisis data. Authors use different methods of describing financial liberalization in these analyses. Some rely on the index of financial liberalization created by Detragiache and Demirgüc-Kunt (1998), which captures the year of deregulation of bank interest rates. Different authors use similarly simple proxies for financial liberalization, such as the existence of capital account controls, or presence of equity market controls. By contrast, Barrell, Davis, et al (2010) use a liquidity ratio — "the ratio of the sum of cash and balances with central banks and securities for all banks over the end of year assets as shown by the

balance sheet," (Barrell et al, 2010, 2256), an unweighted capital adequacy ratio — leverage — "the ratio of capital and reserves for all banks to the end of year total assets as shown by the balance sheet," (Ibid.), and real property price growth. They find that since 'financial liberalization is present for all the crisis periods, ... when we include it, the logit suffers 'complete separation' and the variable, like deposit insurance, is unusable." (Barrell et al, 2010, 2259)

Other authors use the index created by Abiad, Detragiache, and Tressel in their 2008 paper for the IMF, "A New Database of Financial Reforms", which measures the existence of credit controls and reserve requirements, various interest rate controls, foreign entry barriers, state ownership in the banking sector, capital account restrictions, securities market policies related to entry, ownership, and regulation, as well as 'prudential regulations and supervision of the banking sector." (Abiad, Detragiache, and Tressel, 2008, 7). Higher scores in this index are associated with fewer regulations, with the exception of the prudential regulations component of the index. Other authors use some or all of the different variables included in Abiad, Detragiache, and Tressel's 2008 index as individual dummy variables for financial liberalization.

These various analyses use a number of control variables, which include international macroeconomic variables, institutional variables, and development variables. Commonly used macroeconomic variables include trade openness and other trade variables, GDP growth rates (in terms of output and consumption), government spending data, monetary variables related to exchange rate regimes and various reserve holdings, and inflation rates or changes in inflation rates. Most of the papers surveyed include different institutional quality variables as controls. These tend to include deposit insurance systems, government ownership of

financial institutions, legal system quality and ability to enforce financial regulations and property rights, corruption indices, and so on. However, Barrell, Davis, et al (2010) exclude such variables, since all countries in their sample are assumed to have similar institutional quality. Finally, many authors include variables such as GDP, GNP, or GDP or GNP per capita, as well as dummy variables such as developing, OECD, or oil producing country.

Most of these analyses are in agreement that financial liberalization is associated with the increased likelihood of the incidence of crisis, particularly in countries that lack sufficient banking supervision. They vary with regard to effect that financial liberalization is likely to have on the duration or scale of damage that a financial crisis is likely to have. However, the common theme of these analyses is an assumption that developed countries are less likely to suffer the ill effects of financial liberalization, due to the existence of institutions like deposit insurance and macro-prudential regulations, and a general lack of corruption.

## 4.3 Econometric Model

## 4.3.1 Question

My primary question is to determine whether financial liberalization contributed to the incidence of financial crisis in the Eurozone. Analyses of the European financial crises have focused predominantly on the role of converging short-term interest rates, fiscal policy, and current account deficits, but ignores the role that increasing capital flows have played in facilitating the European expression of the global financial crisis, as well as exacerbating the effects in various state level crises – banking and sovereign debt – that have occurred since 2008. Most recent analyses of the effects of financial liberalization on financial crises have studied large samples of both developing and industrialized countries and included lots of variables. By focusing instead on a sample of developed countries with varying levels of

financial development, I hope to refocus the role broad financial liberalization and rapidly increasing capital flows can have on crisis incidence in the 'first world'. The states included in my sample include Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Portugal, the Netherlands, Norway, Spain, Sweden, Switzerland, and the UK. All the countries in this sample belong to the OECD; many belong to the EMU, some belong only to the EU, and a few (Iceland, Norway, and Switzerland) do not belong to the EU. By focusing on this concentrated sample, I avoid needing to include controls for the existence of factors such as deposit insurance or corruption.

In later versions of my model, I also tested the relation between the above listed independent variables and the onset of financial crisis, or whether a country was experiencing the first (or single) year of a financial crisis. My rationale was the determination that certain variables in the model might be good predictors of the likelihood of a crisis occurring, but not explaining its continued duration. For example, variables that capture institutional capital flow deregulation, such as the removal of capital controls or the imposition of prudential regulations might contribute to the likelihood of a crisis beginning, without doing much to explain prolonged experience of a financial crisis, while other variables, such as capital flows over GDP, and trade or fiscal deficits over GDP, might contribute both to the incidence and the duration of a crisis. There is some precedent for this sort of analysis – Reinhart and Rogoff (2011) use the initial onset of a financial crisis (equal to 1 in the first year of a crisis, and zero thereafter) as their dependent value.

#### 4.3.2 Variables

This model uses the experience of financial crisis and the onset of financial crisis as dependent variables. Laeven and Valencia (2012) et al define the incidence of financial crisis as country's banks experience of one or more of the following outcomes:

"Extensive liquidity support (5 percent of deposits and liabilities to nonresidents), [bank] restructuring gross costs (at least 3 percent of GDP), [significant] bank nationalizations, [significant] guarantees put in place, [significant] asset purchases (at least 5 percent of GDP), [and deposit] freezes and/or bank holidays." (Laeven and Valencia, 2012, 5)

Incidence of financial crisis is a variable set equal to one for countries in years in which their financial sectors could be described as experiencing the above. The onset of financial crisis variable is set equal to one for countries in the first year of a crisis. I use data initially compiled by Beck et al that has been extended by Reinhart, Rogoff, Laeven, and Valencia until 2011. The virtue of changing the model specification from the incidence of crisis to onset of crisis is that it allows us to distinguish between factors the prompted the onset of a financial crisis, relative to others that were likely to contribute to the duration of financial crises.

I used lags of one year for all of my independent variables, in order to account for time effects. My independent variables comprise three categories – financial liberalization measures, macroeconomic variables, and institutional controls. The financial variables include categorical and dummy variables for the relative liberalization of capital controls, security markets, and foreign banking entry, as well as prudential banking regulation. I use Abiad, Detragiache, and Tressel's measures for the categorical and dummy variables related to financial liberalization. (2008)

I also include continuous measures of gross international capital flows as a percentage of GDP, and change in gross fixed capital formation (domestic investment) as a percentage of

GDP. My capital flow data comes from the Bank of International Settlement's database of locational capital flows; it is the sum of locational foreign claims and liabilities on non-residents, "the residents of other countries other than the reporting country." (BIS, 2014)

These data capture international lending and borrowing by banks in a home country to non-residents outside of their countries' borders. My gross fixed capital formation data comes from the OECD's statistical database.

The macroeconomic control variables I include are fiscal balances and trade balances over GDP, to capture the potential effect of current account deficits and sovereign borrowing on the incidence and onset of financial crisis, as well as GDP per capita to control for the size of the relevant economies. I use OECD data for these variables, as well. Finally, I include institutional controls for EMU membership and EU membership, in order to account for the political and economic environment in which these states operate.

Two variables I intended to include in the model are domestic lending as a percentage of GDP, defined as lending to the domestic non-financial sector – namely, non-financial firms and the household sector, as well as short-term interest rate data. Due to data availability constraints, I only had consistent domestic lending data available from 1995 onward, and consistent short-term interest data from 1990 onward. In both cases, my panels were still unbalanced. My attempts to run regressions on samples beginning in 1995 had serious multicollinearity problems, and domestic lending failed to register as a statistically significant variable, so I ultimately dropped domestic lending as a percentage of GDP as a dependent variable. Short-term interest rates present a similar challenge. When my model included data from the years 1990 through 2011, I found that short-term interest rates registered as statistically significant indicators in the onset of crisis, but not for the incidence

of crisis. My analysis includes regression output that includes short-term interest rates as an independent variable in samples that begin in 1990 and end in 2011, as well as tests that exclude that variable and last from 1983 through 2011.

A detailed variable list and list of sources is included in Appendix A.

## 4.3.3 Method

## Initial Model Specifications

My first iterations used the dependent variable financial crisis incidence as a function of gross international capital flows over GDP, fiscal balances over GDP, current account balances over GDP, change in gross capital formation over GDP, GDP per capita, the existence of security market liberalization, prudential banking regulations, and openness to foreign bank entry, as well as EMU membership. In tests running from 1990 through 2011, it also includes short-term interest rates. I ran both OLS panel regressions – linear probability models – and panel logit analyses. In subsequent iterations of my analysis, I used the onset of financial crisis as my dependent variable, using the same independent variables. I expected gross international capital flows relative to GDP, capital market openness, and security market liberalization to have positive coefficients, and the macro-prudential supervision and domestic investment over GDP variables to have negative coefficients.

Because my dependent variable in both versions of this model is a binary variable, I interpreted coefficients in OLS panel regressions as linear probabilities that a one percent change in independent variables that represented a percentage of country's GDP, or a one unit change of independent variables that were not percentages of GDO, or the binary status of institutional variables such as the lack of capital controls in a given country in a given year would be experiencing financial crisis, or the first year of a financial crisis.

# Findings:

In early versionsol of my econometric model, panel OLS regressions and panel logit regressions, I found statistically significant, and generally robust correlations between one-year lagged locational capital flows over GDP (positive) and domestic investment (negative) and the incidence of crisis, and statistically significant and generally robust relationships between one-year lagged locational capital flows and fiscal balances over GDP (both positive) and the incidence of crisis. (See chart 4.1) Trade balances over GDP were consistently negatively correlated with the incidence of crisis, but only statistically significant in panel OLS regressions of the incidence and onset of crisis. Short-term interest rates were positively and statistically significantly correlated with the onset of crisis in panel OLS and panel logit analyses that began in 1990.

Coefficients of most of the dummy and categorical variables about financial liberalization fit my hypotheses, but results were rarely statistically significant or robust. In panel logit analyses, banking supervision was consistently associated with reductions of the probability of the incidence and onset of financial crisis, though it had positive coefficients in panel OLS regressions. Security market liberalization was another categorical variable with non-robust coefficients and statistical significance.

Models testing the relationship between these independent variables and the onset of crisis told similar stories, though certain variables did not retain their sign or statistical significance. (See chart 4.2) Gross international capital flows over GDP maintained a positive coefficient and high statistical significance in relation to the onset of financial crisis, and it maintained this sign and high statistical significance in each early permutation of the econometric model. Domestic investment over GDP kept a negative coefficient and

maintained high statistical significance in panel OLS and panel logit tests of the onset of financial crisis. Trade balances over GDP maintained a negative coefficient, but fiscal balances over GDP had a positive coefficient; both of these variables were only statistically significant in the panel OLS tests of the relation between these variables and the onset of financial crisis. The existence of capital control regulations seems to increase the likelihood of the onset of crisis. Finally, short-term interest rates had a positive sign and a high statistical significance in relation to the onset of financial crisis, though this might simply reflect the market having captured the greater risk of crisis in certain countries.

These initial results suggest a story that increasing gross international capital flows relative to GDP was likely to increase the probability of a crisis occurring by close to 0.01%, while domestic investment and trade surpluses were likely to reduce the chances of financial crises occurring or persisting.

Table 4.1: Panel OLS and Logit Models of the Incidence of Crisis, 1983 – 2011, and 1990 – 2011

Test	Panel OLS	Panel Logit	Panel OLS	Panel Logit
Dependent				
Variable	Crisis	Crisis	Crisis	Crisis
Starting Year	1983	1983	1990	1990
Estimate	Coef.	OR	Coef.	OR
Locational Capital				
Flows/GDP	0.0011919***	1.027938***	0.0013554***	1.026689***
	0.0002	0.005	0.0002	0.0056
Fiscal				
Balance/GDP	-0.0118153**	0.8956778	-0.009519	0.8532624
	0.0056	0.079	0.007	0.0927
Trade			-	
Balance/GDP	-0.2309705***	0.44942	0.2245023***	0.7908812
	0.5397	0.3864	0.0633	0.733
GDP/Population	0.00000399	0.9998903	0.00000249	0.9999867
	0.00000678	0.0001	0.00000907	0.0001

Change in Domestic				
Investment/GDP	-0.0548179***	0.655615**	0.0570546***	0.6527042**
	0.0128	0.1107	0.015	0.1207
Supervision				
Dummy	0.0206773	0.7189227	0.0268944	0.4543751
	0.0329	0.3526	0.0423	0.254
EMU				
Membership	0.0579418	1.243478	0.0536816	2.677799
	0.0543	0.9141	0.0651	2.3682
Presence of				
<b>Entry Barriers</b>	0.0615369	3.12784	0.0551364	2.451579
	0.0459	2.4901	0.0639	2.1151
Presence of				
Capital Controls	-0.0776737	0.6990655	-0.1121555	0.768129
	0.0506	0.5652	0.0727	0.6944
Security market				
Liberalization	0.0261729	2.245362	-0.2053924	0.4373013
	0.0645	0.2454	0.1898	0.68
Short Term				
Interest Rates			0.0042951	1.15412
			0.0096	0.1295
Constant	-0.2074332		0.5983251	
	0.234		0.6755	

(Standard Errors italicized; \*\*\* p<0.01, \*\* p≤.05, \*p≤.1)

Table 4.2: Panel OLS and Logit Models of the Onset of Financial Crisis, 1983 – 2011 and 1990 – 2011

Test	Panel OLS	<b>Panel Logit</b>	Panel OLS	Panel Logit
Dependent				
Variable	Onset	Onset	Onset	Onset
Starting Year	1983	1983	1990	1990
Estimate	Coef.	OR	Coef.	OR
Locational Capital				
Flows/GDP	0.0005898***	1.013696	0.0005388***	1.005361
	0.0001	0.0044	0.0002	0.0045
Fiscal				
Balance/GDP	0.013069**	1.41105	0.0108364**	1.256352
	0.004	0.1641	0.0048	0.1967
Trade				
Balance/GDP	-0.1141749**	0.2137607	-0.0735923*	1.772452

	0.0386	0.2246	0.0438	2.843
GDP/Population	-0.00000505	0.9998318	0.000000939	1.000357
	0.00000485	0.0001	0.00000627	0.0002
Change in Domestic				
Investment/GDP	-0.0056495	0.9933633	0.00136	1.02177
	0.0091335	0.1694	0.0103	0.2122
Supervision				
Dummy	0.0058612	1.229078	0.0294515	0.9828326
	0.0235	0.8503	0.0292	0.8909
EMU				
Membership	0.0005638	1.330898	0.0372087	12.01162
	0.0388	1.4107	0.045	20.7486
Presence of				
Entry Barriers	-0.0013634	0.929419	0.0054679	0.6220307
	0.0328	0.9163	0.0441	0.7185
Presence of				
Capital Controls	0.0060982	1.19844	0.0166953	1.27843
	0.0362	1.2956	0.0502	1.9856
Security market				
Liberalization	-0.0319365	0.4092349	-0.3402257**	9.78E-12
	0.046	0.4596	0.1311	1.63E-08
Short Term				
Interest Rates			0.0236064***	1.930237***
			0.0066	0.3977
Constant	0.2579577		0.7289984	
	0.1673		0.4666	
	·			

(Standard Errors italicized; \*\*\* p<0.01, \*\* p≤.05, \*p≤.1)

# Econometric Specifications:

Given the small size and inter-connection of my sample of countries, and the relatively short breadth of years, it made sense to test for serial correlation, cross-sectional dependence. Given trends in cross-border lending identified in chapter 3, it also made sense to test for unit-roots and structural breaks in the data.

I rejected the null hypothesis of no serial correlation in both of my models — incidence and onset of financial crisis — using the Wooldridge test for serial correlation.

These findings were robust for specifications of the model that used incidence of crisis and

onset of crisis as dependent variables, as well as a later variation of the model that used first-differences of several variables to address unit root issues for various independent variables. See Table 4.3.

Table 4.3: Autocorrelation Test Output

Wooldridge Test for Autocorrelation in Panel Data
Null Hypothesis: No first-order autocorrelation

	Starting	F	Reject
Model	Year		Null?
Incidence of	rear	Statistic	TTGII.
Crisis	1983	30.737	Yes
Incidence of			
Crisis	1990	23.001	Yes
Onset of Crisis	1983	27.851	Yes
Onset of Crisis	1990	6.848	Yes
Onset of Crisis			
FD	1983	18.838	Yes
Onset of Crisis			
FD	1990	9.937	Yes

(\*\*\* p<0.01, \*\* p≤.05, \*p≤.1)

Because my sample had more time periods than countries, I used the Pesaran cross-sectional dependence test, and rejected the null hypothesis of no cross-sectional dependence within the sample for models of both the incidence of crisis and the onset of crisis. This finding was robust to different time specifications, including and excluding the short-term interest variable, and substituting first-differenced variables, as in the auto-correlation tests. (See Table 4.4)

Table 4.4: Cross-Sectional Dependence Test Output

Pesaran's Test of Cross-Sectional Independence				
Null Hypothesis: No cross-sectional dependence				
	Starting		Reject	
Model	Year	Statistic	Null?	

Incidence of			
Crisis	1983	22.88	Yes
Incidence of			
Crisis	1990	20.031	Yes
Onset of Crisis	1983	31.82	Yes
Onset of Crisis	1990	29.043	Yes
Onset of Crisis			
FD	1983	30.531	Yes
Onset of Crisis			
FD	1990	29.657	Yes
(*** p<0.01, ** p≤.05, *p	≤.1)		

Next, I tested for both unit roots and structural breaks in my models for both the incidence and onset of financial crisis. Using Fisher-Type unit tests, augmented Dickey-Fuller tests, I failed to reject null hypotheses of non-stationarity for the variables crisis incidence, gross capital flows over GDP, trade balances over GDP, GDP per capita, and short-term interest rates. (See table 4.5)

Table 4.5: Unit Root Test Output

	unit-root test ots Present in		ased on au	ugmented Dicke	y-Fuller Tests		
Variable	Cross Sectional Means:	Time trend:	Drift term:	Inverse chi- squared(34) P	Inverse normal Z	Inverse logit t(89) L*	Modified inv. chi- squared Pm
Crisis Incidence	n/a	Absent	Absent	14.8822	3.4872	3.3539	-2.3184
Crisis Incidence	Removed	Absent	Absent	78.1732***	-2.5502***	-3.6238***	5.3568***
Onset of Crisis	Included	Absent	Absent	201.6523***	- 11.4345***	- 13.5515***	20.3308***
LOC Over GDP LOC Over	n/a	Absent	Absent	18.3875	3.4276	3.4524	-1.8933
GDP	Removed	Absent	Absent	55.132**	-1.0278	-1.602*	2.5626***
LOC Over	n/a	Present	Absent	95.2723***	-1.251	-3.9009***	7.4304***
LOC Over GDP	Removed	Present	Absent	59.0111***	-1.1987	-1.8562**	3.033***
LOC Over GDP	Removed	Absent	Present	111.6437***	-6.5453***	-7.1768***	9.4157***

Fiscal Surp							
Over GDP	n/a	Absent	Absent	76.9746***	-4.3047***	-4.403***	5.2114***
Trade Bal							
over GDP	n/a	Absent	Absent	22.398	2.9166	2.9216	-1.4069
Trade Bal							
over GDP	Removed	Absent	Present	66.3893***	-2.9414***	-3.0573***	3.9278***
GDP per							
Capita	n/a	Absent	Absent	21.9747	1.2934	1.1909	-1.4583
GDP per							
Capita	Removed	Absent	Present	81.6254***	-5.1109***	-5.0727***	5.7754***
Short							
Term							
Interest							
Rate	n/a	Absent	Absent	40.3374	-0.1642	-0.5945	0.7685
Short							
Term							
Interest							
Rate	Removed	Absent	Present	81.6254***	-5.1109***	-5.0727***	5.7754***

(\*\*\* p<0.01, \*\* p≤.05, \*p≤.1)

When cross-sectional means were subtracted, I could reject the null hypothesis of non-stationarity for crisis incidence. When cross-sectional means were subtracted and a drift term was included, I could reject the null hypothesis of non-stationarity for locational capital flows over GDP. When drift terms were included, I could reject the null hypothesis of non-stationarity for GDP per capita, trade balance over GDP, and short-term interest rates.

Finally, I tested for structural breaks in both models of the incidence of financial crisis and the onset of financial crisis. (See Chart 4.6) I predicted that structural breaks could possibly

Table 4.6: Structural Breaks Test

Tuote 1.0. Structurur Br	cans rest		
<b>Dependent Variable</b>	Starting Year	<b>Break Year</b>	F Statistic
Crisis Incidence	1983	2008	46.68***
Crisis Incidence	1983	2002	4.9***
Crisis Incidence	1983	1999	0.38
Crisis Incidence	1983	1990	1.02
Crisis Incidence	1990	2008	45.42***
Crisis Incidence	1990	2002	6.42***
Crisis Incidence	1990	1999	1.93
Crisis Incidence	1990	1990	.36

Onset of Crisis	1983	2008	9.31***
Onset of Crisis	1983	2002	0.23
Onset of Crisis	1983	1999	1.88
Onset of Crisis	1983	1990	2.06
Onset of Crisis	1990	2008	8.5***
Onset of Crisis	1990	2002	1.93
Onset of Crisis	1990	1999	1.38
Onset of Crisis	1990	1990	2.75**
Onset of Crisis FD	1983	2008	4.08***
Onset of Crisis FD	1983	2002	0.11
Onset of Crisis FD	1983	1999	6.12***
Onset of Crisis FD	1983	1990	1.83
Onset of Crisis FD	1990	2008	2.03
Onset of Crisis FD	1990	2002	0.11
Onset of Crisis FD	1990	1999	3.44*
Onset of Crisis FD	1990	1990	6.95***

 $(*** p<0.01, ** p\leq.05, *p\leq.1)$ 

occur in 2008, the year of the onset of the global financial crisis, 2002, the year in which the Euro was introduced into broad circulation, 1999, the year the euro was introduced into limited circulation, and 1990, the year the European Currency Unit (a precursor to the Euro) was introduced. I used Chow Tests for structural breaks in both models.

In models for which the incidence of crisis was the dependent variable, I rejected null hypotheses of no break in 2008 and 2002, with datasets beginning in 1983 and 1990, including short-term interest data in the sample beginning in 1990. In models for which the onset of crisis was the dependent variable, using my initial model that included levels of locational capital flows over GDP, trade balances over GDP, etc, I rejected null hypotheses of no break for crisis onset in 2008, and weakly reject the null hypothesis of no structural break for crisis onset in 1990, when I included short term interest rates as an independent variable, in a sample that ran from 1990 through 2011.

To account for unit roots in different independent variables, I also respecified my econometric model that used the onset of crisis as a dependent variable. (See chart 4.5) This

version of the model used the change in locational capital flows over GDP and change in trade balances over GDP for samples that began in 1983, and it also included change in short-term interest rates in samples that began in 1990. I tested these specifications for breaks as well. For samples beginning in 1983, that did not include change in short-term interest rates, I rejected the null hypothesis of no structural break in 2008 and 1999. In tests that included change in short-term interest rates, beginning in 1990, I strongly rejected the null hypothesis of no break in 1990 and weakly rejected the null hypothesis of no break in 1999. It's not clear to me how to interpret these last findings, but the earlier ones indicate that there is statistical grounding of the notion that different independent variables changed categorically in their growth following the different stages of implementing Europe's EMU.

These findings suggest that these initial specifications should be altered to account for these econometric issues. The presence of heteroskedasticity raises issues about the significance of the logit analysis findings, and my standard errors calculated in panel OLS regressions are likely to be misestimated. The presence of unit roots points to a larger problem – unless my variables with unit-roots are cointegrated, then my previously calculated regressions may be spurious.

# Respecifying the model:

To deal with the problems of my data, I changed my model in the following fashions. Given the presence of unit roots in the crisis incidence variable, I shifted focus to my model that used the onset of financial crisis as a dependent variable, since that variable did not demonstrate a unit root. Where possible and when it made sense for the model, I used first-differenced values of variables that demonstrated unit roots. It is plausible that the change in gross locational capital flows and trade balances over GDP, as well as changes in short-term

interest rates could contribute to the incidence of financial crisis. I also shifted to using panel analysis with Driscoll-Kraay standard errors, which have been transformed to account for cross-sectional dependence, auto-correlation, and heteroskedasticity. For comparison's sake, I also used this regression technique on my earlier version of the model.

When I initially re-ran panel OLS regressions with my originally specified financial crisis incidence and onset models, I again found robust and statistically significant predictions of positive correlations between gross locational capital flows and the incidence and onset of financial crisis, both in models that began in 1983 without including short-term interest rates, as well as samples beginning in 1990s that did include short-term interest rates. The effects of trade balances and domestic investment relative to GDP both have robust and statistically significant negative correlations with the incidence of financial crisis, but those effects do not uniformly carry in the model that uses the onset of financial crisis as a dependent variable. (See Table 4.7)

In my econometric model that uses mostly first-differenced independent variables, I found that change in locational capital flows over GDP continued to have a positive correlation with the onset of financial crisis, though at a much lower statistical significance  $(P \le .1)$  than in previous iterations of this model. (See Table 4.8) Several other variables were statistically significant in this newly specified model for data that started in 1990, including GDP per capita, the categorical variable for prudential banking regulation, and the change in short-run interest rates. All of these variables had small but positive coefficients.

Table 4.7: Panel OLS Regressions of the Incidence and Onset of Financial Crisis, 1983 – 2011, and 1990 – 2011, with Driscoll-Kraay Standard Errors

Driscoll-Kraay Standard Errors						
Test	Panel OLS	Panel OLS	Panel OLS	Panel OLS		

Dependent Variable         Crisis         Crisis         Onset         Onset           Starting Year         1983         1990         1983         1990           Estimate         Coef.         Coef.         Coef.         Coef.           Locational Capital         Comment of the property of					
Starting Year         1983         1990         1983         1990           Estimate         Coef.         Coef.         Coef.         Coef.           Locational Capital Flows/GDP         0.0011919***         0.0013554***         0.0005898**         0.0005388**           Fiscal Balance/GDP         -0.0118153         -0.009519         0.013069         0.0108364           D.0082         0.0068         0.008         0.0066           Trade         -         -         -           Balance/GDP         0.2309705***         0.2245023***         -0.1141749*         -0.0735923           0.0575         0.0573         0.0581         0.0514           GDP/Population         0.00000399         0.00000249         -0.00000505         0.000000939           Domestic         -         -         -         -         -           Investment/GDP         0.0548179****         0.057546****         -0.0056495         0.00136           Dummy         0.0206773         0.0268944         0.0058612         0.0294515           Dummy         0.0579418         0.0536816         0.0005638         0.0372087           Presence of         -         -         -         -         -         -	•				
Estimate   Coef.   Coe					
Locational Capital   Flows/GDP					
Capital   Flows/GDP	Estimate	Coef.	Coef.	Coef.	Coef.
Flows/GDP         0.0011919***         0.0013554***         0.0003         0.0002           Fiscal         0.0002         0.0003         0.002           Balance/GDP         -0.0118153         -0.009519         0.013069         0.0108364           0.0082         0.0068         0.008         0.0066           Trade         -         -         -           Balance/GDP         0.2309705***         0.2245023***         -0.1141749*         -0.0735923           0.0575         0.0573         0.0581         0.0514           GDP/Population         0.00000399         0.00000249         -0.00000505         0.00000034           Domestic         - <td>Locational</td> <td></td> <td></td> <td></td> <td></td>	Locational				
Fiscal Balance/GDP	Capital				
Fiscal Balance/GDP	Flows/GDP	0.0011919***	0.0013554***	0.0005898**	0.0005388**
Balance/GDP         -0.0118153         -0.009519         0.013069         0.0108364           Trade         -         -         -           Balance/GDP         0.2309705***         0.2245023***         -0.1141749*         -0.0735923           GDP/Population         0.00000399         0.00000249         -0.00000525         0.00000394           Domestic         -         -         -         -           Investment/GDP         0.0548179****         0.0570546****         -0.0056495         0.00136           Dummy         0.0206773         0.0268944         0.0058612         0.0294515           Dummy         0.0206773         0.0268944         0.0058612         0.0294515           Membership         0.0579418         0.0536816         0.0005638         0.0372087           Presence of         0.0672         0.0628         0.0196         0.03           Entry Barriers         0.0615369**         0.0551364         -0.0013634         0.0054679           Presence of         0.0295         0.0428         0.0209         0.0368           Presence of         0.0502         0.0469         0.0228         0.0233           Security market         Liberalization         0.0261729         -0.2053924 <td></td> <td>0.0002</td> <td>0.0002</td> <td>0.0003</td> <td>0.002</td>		0.0002	0.0002	0.0003	0.002
Trade Balance/GDP 0.2309705*** 0.2245023*** -0.1141749* -0.0735923 0.0575 0.0573 0.000000526 0.000000526 0.0000075 0.00000327 0.0000327 0.0000327 0.00136 0.0136 0.0148 0.0149 0.0058612 0.0294515 0.0443 0.045 0.0164 0.0321 EMU Membership 0.0579418 0.0536816 0.0005638 0.0372087 0.0672 0.0628 0.0196 0.03 Presence of Entry Barriers 0.0615369** 0.0551364 0.0013634 0.0054679 0.0295 0.0428 0.0209 0.0368  Presence of Capital Controls 0.05702 0.0469 0.0228 0.033 Security market Liberalization 0.0261729 0.02653924 0.0319365 0.03402257 0.0443 0.2105 0.036 0.21 Short Term Interest Rates 0.0042951 0.0236064** 0.0099 Constant 0.0274332 0.5983251 0.2579577 0.7289984	Fiscal				
Trade Balance/GDP O.2309705*** 0.2245023*** O.0575 O.0573 O.0581 O.0514  GDP/Population O.00000399 O.00000249 O.00000327 O.00000327 O.00000304  Domestic Investment/GDP O.0548179*** O.0570546*** O.0148 O.0149 O.0132 O.009 Supervision Dummy O.0206773 O.0268944 O.0056495 O.0043 O.0443 O.045 O.0164 O.0321  EMU Membership O.0579418 O.0570546** O.0612 O.0672 O.0628 O.0196 O.03 Presence of Entry Barriers O.0615369** O.0295 O.0428 O.0209 O.0368  Presence of Capital Controls O.0502 O.0469 O.0228 O.033 Security market Liberalization O.0261729 O.0443 O.2105 O.0060982 O.03402257 O.0443 O.2105 O.03604** O.036064** O.0321  Short Term Interest Rates O.00433 O.0042951 O.0236064** O.0099 Constant O.02074332 O.5983251 O.2579577 O.7289984	Balance/GDP	-0.0118153	-0.009519	0.013069	0.0108364
Balance/GDP         0.2309705***         0.02345023***         -0.1141749*         -0.0735923           GDP/Population         0.00000399         0.00000249         -0.00000505         0.000000939           Domestic         -         -         -         -           Investment/GDP         0.0548179***         0.0570546***         -0.0056495         0.00136           Dummy         0.0206773         0.0268944         0.0058612         0.0294515           Dummy         0.02443         0.045         0.0164         0.0321           EMU         Membership         0.0579418         0.0536816         0.0005638         0.0372087           Presence of         Entry Barriers         0.0615369**         0.0551364         -0.0013634         0.0054679           Presence of         Capital Controls         -0.0776737         -0.1121555**         0.0060982         0.0166953           Security market         Liberalization         0.0261729         -0.2053924         -0.0319365         -0.3402257           Short Term         Interest Rates         0.0042951         0.0236064**         0.0236064**           Constant         -0.2074332         0.5983251         0.2579577         0.7289984		0.0082	0.0068	0.008	0.0066
Balance/GDP         0.2309705***         0.02345023***         -0.1141749*         -0.0735923           GDP/Population         0.00000399         0.00000249         -0.00000505         0.000000939           Domestic         -         -         -         -           Investment/GDP         0.0548179***         0.0570546***         -0.0056495         0.00136           Dummy         0.0206773         0.0268944         0.0058612         0.0294515           Dummy         0.02443         0.045         0.0164         0.0321           EMU         Membership         0.0579418         0.0536816         0.0005638         0.0372087           Presence of         Entry Barriers         0.0615369**         0.0551364         -0.0013634         0.0054679           Presence of         Capital Controls         -0.0776737         -0.1121555**         0.0060982         0.0166953           Security market         Liberalization         0.0261729         -0.2053924         -0.0319365         -0.3402257           Short Term         Interest Rates         0.0042951         0.0236064**         0.0236064**           Constant         -0.2074332         0.5983251         0.2579577         0.7289984					
GDP/Population         0.0575         0.0573         0.0581         0.0514           GDP/Population         0.00000399         0.00000249         -0.00000505         0.000000327         0.00000304           Domestic         - <td>Trade</td> <td>-</td> <td>-</td> <td></td> <td></td>	Trade	-	-		
GDP/Population         0.0575         0.0573         0.0581         0.0514           GDP/Population         0.00000399         0.00000249         -0.00000505         0.000000327         0.00000304           Domestic         - <td>Balance/GDP</td> <td>0.2309705***</td> <td>0.2245023***</td> <td>-0.1141749*</td> <td>-0.0735923</td>	Balance/GDP	0.2309705***	0.2245023***	-0.1141749*	-0.0735923
GDP/Population         0.00000399         0.00000249         -0.00000505         0.000000327         0.000000304           Domestic Investment/GDP         -<	·		0.0573	0.0581	0.0514
Domestic   -   -	GDP/Population			-0.00000505	0.000000939
Domestic   -   -	, , ,				
Investment/GDP   0.0548179***   0.0570546***   -0.0056495   0.00136   0.0148   0.0149   0.0132   0.009					
Investment/GDP   0.0548179***   0.0570546***   -0.0056495   0.00136   0.0148   0.0149   0.0132   0.009	Domestic	_	_		
Supervision       0.0148       0.0149       0.0132       0.009         Supervision       0.0206773       0.0268944       0.0058612       0.0294515         0.0443       0.045       0.0164       0.0321         EMU       0.0579418       0.0536816       0.0005638       0.0372087         0.0672       0.0628       0.0196       0.03         Presence of       0.0295       0.0428       0.0209       0.0368         Presence of       0.0295       0.0428       0.0209       0.0368         Presence of       0.0502       0.0469       0.0228       0.0233         Security market       Liberalization       0.0261729       -0.2053924       -0.0319365       -0.3402257         Short Term       Interest Rates       0.0042951       0.0236064**         0.0181       0.0099         Constant       -0.2074332       0.5983251       0.2579577       0.7289984		0 0548179***	0.0570546***	-0 0056495	0.00136
Supervision         Dummy         0.0206773         0.0268944         0.0058612         0.0294515           0.0443         0.045         0.0164         0.0321           EMU         Membership         0.0579418         0.0536816         0.0005638         0.0372087           0.0672         0.0628         0.0196         0.03           Presence of         Entry Barriers         0.0615369**         0.0551364         -0.0013634         0.0054679           0.0295         0.0428         0.0209         0.0368           Presence of           Capital Controls         -0.0776737         -0.1121555**         0.0060982         0.0166953           Security market         Liberalization         0.0261729         -0.2053924         -0.0319365         -0.3402257           Short Term         Interest Rates         0.0042951         0.0236064**           0.0181         0.0099           Constant         -0.2074332         0.5983251         0.2579577         0.7289984	investment, abi				
Dummy         0.0206773         0.0268944         0.0058612         0.0294515           EMU         0.0443         0.045         0.0164         0.0321           EMU         0.0579418         0.0536816         0.0005638         0.0372087           0.0672         0.0628         0.0196         0.03           Presence of Entry Barriers         0.0615369**         0.0551364         -0.0013634         0.0054679           0.0295         0.0428         0.0209         0.0368           Presence of Capital Controls         -0.0776737         -0.1121555**         0.0060982         0.0166953           Security market Liberalization         0.0261729         -0.2053924         -0.0319365         -0.3402257           Short Term Interest Rates         0.0042951         0.036064**         0.0099           Constant         -0.2074332         0.5983251         0.2579577         0.7289984	Supervision	0.01 10	0.01 13	0.0132	0.003
EMU  Membership	•	0 0206773	0 02689 <i>44</i>	0 0058612	0 0294515
EMU         Membership         0.0579418         0.0536816         0.0005638         0.0372087           0.0672         0.0628         0.0196         0.03           Presence of Entry Barriers         0.0615369**         0.0551364         -0.0013634         0.0054679           0.0295         0.0428         0.0209         0.0368           Presence of Capital Controls         -0.0776737         -0.1121555**         0.0060982         0.0166953           0.0502         0.0469         0.0228         0.0233           Security market Liberalization         0.0261729         -0.2053924         -0.0319365         -0.3402257           0.0443         0.2105         0.036         0.21           Short Term Interest Rates         0.0042951         0.0236064**           0.0181         0.0099           Constant         -0.2074332         0.5983251         0.2579577         0.7289984	Daminy				
Membership         0.0579418         0.0536816         0.0005638         0.0372087           Presence of Entry Barriers         0.0615369**         0.0551364         -0.0013634         0.0054679           Presence of Capital Controls         -0.0776737         -0.1121555**         0.0060982         0.0166953           Security market Liberalization         0.0261729         -0.2053924         -0.0319365         -0.3402257           Short Term Interest Rates         0.0042951         0.0236064**           Constant         -0.2074332         0.5983251         0.2579577         0.7289984	FMII	0.0443	0.043	0.0104	0.0321
Presence of Entry Barriers		0 0579 <i>4</i> 18	0.0536816	0 0005638	0 0372087
Presence of Entry Barriers	Wiembership				
Entry Barriers       0.0615369**       0.0551364       -0.0013634       0.0054679         0.0295       0.0428       0.0209       0.0368         Presence of Capital Controls -0.0776737 -0.1121555** 0.0060982 0.0166953         0.0502       0.0469       0.0228 0.0233         Security market Liberalization 0.0261729 -0.2053924 -0.0319365 -0.3402257 0.0443 0.2105 0.036 0.21         Short Term Interest Rates 0.0042951 0.0042951 0.0236064**         0.0181 0.0099       0.0099         Constant -0.2074332 0.5983251 0.2579577 0.7289984	Presence of	0.0072	0.0020	0.0130	0.03
Presence of Capital Controls -0.0776737 -0.1121555** 0.0060982 0.0166953 0.0502 0.0469 0.0228 0.0233  Security market Liberalization 0.0261729 -0.2053924 -0.0319365 -0.3402257 0.0443 0.2105 0.036 0.21  Short Term Interest Rates 0.0042951 0.0236064** 0.0099  Constant -0.2074332 0.5983251 0.2579577 0.7289984		0 0615360**	0.0551364	-0 001363/	0.0054679
Presence of Capital Controls	Liftly Darriers				
Capital Controls         -0.0776737         -0.1121555**         0.0060982         0.0166953           0.0502         0.0469         0.0228         0.0233           Security market           Liberalization         0.0261729         -0.2053924         -0.0319365         -0.3402257           0.0443         0.2105         0.036         0.21           Short Term           Interest Rates         0.0042951         0.0236064**           0.0181         0.0099           Constant         -0.2074332         0.5983251         0.2579577         0.7289984		0.0293	0.0428	0.0203	0.0308
Capital Controls         -0.0776737         -0.1121555**         0.0060982         0.0166953           0.0502         0.0469         0.0228         0.0233           Security market Liberalization           Liberalization         0.0261729         -0.2053924         -0.0319365         -0.3402257           0.0443         0.2105         0.036         0.21           Short Term Interest Rates         0.0042951         0.0236064**           0.0181         0.0099           Constant         -0.2074332         0.5983251         0.2579577         0.7289984	Drosonso of				
O.0502     O.0469     O.0228     O.0233       Security market     Liberalization     0.0261729     -0.2053924     -0.0319365     -0.3402257       O.0443     O.2105     O.036     O.21       Short Term     0.0042951     0.0236064**       Interest Rates     0.0181     0.0099       Constant     -0.2074332     0.5983251     0.2579577     0.7289984		0 0776727	O 1131EEE**	0.0060093	0.0166052
Security market         Liberalization       0.0261729       -0.2053924       -0.0319365       -0.3402257         0.0443       0.2105       0.036       0.21         Short Term         Interest Rates       0.0042951       0.0236064**         0.0181       0.0099         Constant       -0.2074332       0.5983251       0.2579577       0.7289984	Capital Controls				
Liberalization       0.0261729       -0.2053924       -0.0319365       -0.3402257         0.0443       0.2105       0.036       0.21         Short Term         Interest Rates       0.0042951       0.0236064**         0.0181       0.0099         Constant       -0.2074332       0.5983251       0.2579577       0.7289984	Caarriteraaaalaat	0.0302	0.0409	0.0228	0.0255
0.0443     0.2105     0.036     0.21       Short Term     0.0042951     0.0236064**       Interest Rates     0.0181     0.0099       Constant     -0.2074332     0.5983251     0.2579577     0.7289984	•	0.0264720	0.2052024	0.0240265	0.2402257
Short Term         Interest Rates       0.0042951       0.0236064**         0.0181       0.0099         Constant       -0.2074332       0.5983251       0.2579577       0.7289984	Liberalization				
Interest Rates       0.0042951       0.0236064**         0.0181       0.0099         Constant       -0.2074332       0.5983251       0.2579577       0.7289984	Cl 1 =	0.0443	0.2105	0.036	0.21
0.0181       0.0099         Constant       -0.2074332       0.5983251       0.2579577       0.7289984			0.0042054		0.0226064**
Constant -0.2074332 0.5983251 0.2579577 0.7289984	interest Kates				
	•	0.007:000		0.0==0===	
0 1663	Constant				
(Standard Errors italicized: *** n<0.01 *** n<0.5 *n<1)	(0) 1 1 2	0.1663	0.8056	0.1818	0.6868

(Standard Errors italicized; \*\*\* p<0.01, \*\* p≤.05, \*p≤.1)

Table 4.8: Panel OLS Regressions of the Onset of Financial Crisis, 1983 – 2011, and 1990 – 2011, with Driscoll-Kraay Standard Errors, Using First-Differenced Variables

Driscoll-Kraay Standard Errors		
Test	Panel OLS	Panel OLS
Dependent Variable	Onset	Onset
Starting Year	1983	1990
Estimate	Coefficient	Coefficient
Change in Locational Capital		
Flows/GDP	0.0016055*	0.001425*
	0.0009	0.0008
Fiscal Balance/GDP	0.0029311	0.0008813
	0.0042	0.0031
Change in Trade Balance/GDP	-0.0326182	-0.0318032
	0.061	0.0458
GDP/Population	0.000000939	0.00000195*
	0.00000243	0.00000279
Domestic Investment/GDP	-0.0165132	-0.0265072
	0.0121	0.0114
Supervision Dummy	0.0065679	0.017469**
	0.0162	0.0294
EMU Membership	0.0152235	-0.0014165
	0.0308	0.0259
Presence of Entry Barriers	0.0123816	-0.0182612
	0.023	0.0402
Presence of Capital Controls	-0.0089633	-0.0015828
	0.0274	0.0248
Security market Liberalization	-0.0755603	-0.4857816
	0.056	0.1845
Change in Short Term Interest		
Rates		0.0301676**
		0.0155
Constant	0.2047224	1.453853
	0.1784	0.5154

(Standard Errors italicized; \*\*\* p<0.01, \*\* p≤.05, \*p≤.1)

To reinforce the results described above, I have compiled some descriptive statistics that are informative.

Chapter three outlined the great increases in foreign lending and borrowing that occurred in most western European countries following the onset of European Union and Europe's Economic and Monetary Union. The structural breaks suggested by these econometric data align with the descriptive statistics presented about changes in gross international capital flows, as well as the overall changes in GDP and interest rates that occurred within the economic union. There was a simultaneous increase in the frequency and incidence of financial crisis in the region, also displayed in chapter three. My econometric results support my hypothesis that the increased capital flows facilitated by the changed financial landscape in Western Europe helped facilitate, and possibly exacerbate the incidence of financial crisis in the region.

Using data compiled by Reinhart, Rogoff, Laeven, Valencia, and others, I created a chart mapping the average at means coefficients – equal to the predicted coefficients for the panel OLS models, which were linear probability models – to calculate the increasing probability of a financial crisis starting in a country in a given year based on the difference between gross locational capital flows in the two preceding years. Though this is a crude estimate, it demonstrates both the scale of the increase in gross international capital flows over the years preceding the onset of crises, and some sense of the scale of the importance of those flows in the onset of the ensuing financial crisis. (See Table 4.9)

Table 4.9: Change in Locational Capital Flows Over GDP, and Predicted Increase in Probability of Crisis Starting

			Two Years	One Year		Increased
	Crisis	Coeffi-	Prior	Prior	Change in	Percentage
Country	Year	cient	LOC/GDP	LOC/GDP	LOC/GDP	Chance:

Austria         2008         0.001         208.9676         252.0779         43.1103         4.31103           Belgium         2008         0.001         430.4977         529.7765         99.2788         9.92788           Denmark         1987         0.001         13.3407         19.1626         5.8219         0.58219           Denmark         2008         0.001         156.221         209.1524         52.9314         5.29314           Finland         1991         0.001         30.4629         37.5343         7.0714         0.70714           France         1994         0.001         59.0669         61.2732         2.2063         0.22063           France         2008         0.001         190.8949         254.8402         63.9453         6.39453           Germany         2008         0.001         144.9706         172.8121         27.8415         2.78415           Greece         2008         0.001         45.0419         70.7694         25.7275         2.57275           Iceland         2008         0.001         238.2102         445.2781         207.0679         20.70679           Ireland         2008         0.001         872.6061         1125.5068         252							
Denmark         1987         0.001         13.3407         19.1626         5.8219         0.58219           Denmark         2008         0.001         156.221         209.1524         52.9314         5.29314           Finland         1991         0.001         30.4629         37.5343         7.0714         0.70714           France         1994         0.001         59.0669         61.2732         2.2063         0.22063           France         2008         0.001         190.8949         254.8402         63.9453         6.39453           Germany         2008         0.001         144.9706         172.8121         27.8415         2.78415           Greece         2008         0.001         45.0419         70.7694         25.7275         2.57275           Iceland         2008         0.001         238.2102         445.2781         207.0679         20.70679           Ireland         2008         0.001         872.6061         1125.5068         252.9007         25.29007           Italy         1990         0.001         12.0331         13.3071         1.274         0.1274           Italy         1990         0.001         52.3807         70.1873         17.8066	Austria	2008	0.001	208.9676	252.0779	43.1103	4.31103
Denmark         2008         0.001         156.221         209.1524         52.9314         5.29314           Finland         1991         0.001         30.4629         37.5343         7.0714         0.70714           France         1994         0.001         59.0669         61.2732         2.2063         0.22063           France         2008         0.001         190.8949         254.8402         63.9453         6.39453           Germany         2008         0.001         144.9706         172.8121         27.8415         2.78415           Greece         2008         0.001         45.0419         70.7694         25.7275         2.57275           Iceland         2008         0.001         238.2102         445.2781         207.0679         20.70679           Ireland         2008         0.001         872.6061         1125.5068         252.9007         25.29007           Italy         1990         0.001         12.0331         13.3071         1.274         0.1274           Italy         2008         0.001         52.3807         70.1873         17.8066         1.78066           Netherland         s         2008         0.001         274.0557         346.5712	Belgium	2008	0.001	430.4977	529.7765	99.2788	9.92788
Finland         1991         0.001         30.4629         37.5343         7.0714         0.70714           France         1994         0.001         59.0669         61.2732         2.2063         0.22063           France         2008         0.001         190.8949         254.8402         63.9453         6.39453           Germany         2008         0.001         144.9706         172.8121         27.8415         2.78415           Greece         2008         0.001         45.0419         70.7694         25.7275         2.57275           Iceland         2008         0.001         238.2102         445.2781         207.0679         20.70679           Ireland         2008         0.001         872.6061         1125.5068         252.9007         25.29007           Italy         1990         0.001         12.0331         13.3071         1.274         0.1274           Italy         2008         0.001         52.3807         70.1873         17.8066         1.78066           Netherland         s         2008         0.001         274.0557         346.5712         72.5155         7.25155           Norway         1987         0.001         11.9534         14.6708	Denmark	1987	0.001	13.3407	19.1626	5.8219	0.58219
France         1994         0.001         59.0669         61.2732         2.2063         0.22063           France         2008         0.001         190.8949         254.8402         63.9453         6.39453           Germany         2008         0.001         144.9706         172.8121         27.8415         2.78415           Greece         2008         0.001         45.0419         70.7694         25.7275         2.57275           Iceland         2008         0.001         238.2102         445.2781         207.0679         20.70679           Ireland         2008         0.001         872.6061         1125.5068         252.9007         25.29007           Italy         1990         0.001         12.0331         13.3071         1.274         0.1274           Italy         2008         0.001         52.3807         70.1873         17.8066         1.78066           Netherland         s         2008         0.001         274.0557         346.5712         72.5155         7.25155           Norway         1987         0.001         6.6934         12.7034         6.01         0.601           Norway         1991         0.001         11.9534         14.6708	Denmark	2008	0.001	156.221	209.1524	52.9314	5.29314
France         2008         0.001         190.8949         254.8402         63.9453         6.39453           Germany         2008         0.001         144.9706         172.8121         27.8415         2.78415           Greece         2008         0.001         45.0419         70.7694         25.7275         2.57275           Iceland         2008         0.001         238.2102         445.2781         207.0679         20.70679           Ireland         2008         0.001         872.6061         1125.5068         252.9007         25.29007           Italy         1990         0.001         12.0331         13.3071         1.274         0.1274           Italy         2008         0.001         52.3807         70.1873         17.8066         1.78066           Netherland         s         2008         0.001         274.0557         346.5712         72.5155         7.25155           Norway         1987         0.001         6.6934         12.7034         6.01         0.601           Norway         1991         0.001         11.9534         14.6708         2.7174         0.27174           Portugal         2008         0.001         71.953         85.791	Finland	1991	0.001	30.4629	37.5343	7.0714	0.70714
Germany         2008         0.001         144.9706         172.8121         27.8415         2.78415           Greece         2008         0.001         45.0419         70.7694         25.7275         2.57275           Iceland         2008         0.001         238.2102         445.2781         207.0679         20.70679           Ireland         2008         0.001         872.6061         1125.5068         252.9007         25.29007           Italy         1990         0.001         12.0331         13.3071         1.274         0.1274           Italy         2008         0.001         52.3807         70.1873         17.8066         1.78066           Netherland         s         2008         0.001         274.0557         346.5712         72.5155         7.25155           Norway         1987         0.001         6.6934         12.7034         6.01         0.601           Norway         1991         0.001         11.9534         14.6708         2.7174         0.27174           Portugal         2008         0.001         71.953         85.791         13.838         1.3838           Sweden         1991         0.001         34.2362         50.741	France	1994	0.001	59.0669	61.2732	2.2063	0.22063
Greece         2008         0.001         45.0419         70.7694         25.7275         2.57275           Iceland         2008         0.001         238.2102         445.2781         207.0679         20.70679           Ireland         2008         0.001         872.6061         1125.5068         252.9007         25.29007           Italy         1990         0.001         12.0331         13.3071         1.274         0.1274           Italy         2008         0.001         52.3807         70.1873         17.8066         1.78066           Netherland         s         2008         0.001         274.0557         346.5712         72.5155         7.25155           Norway         1987         0.001         6.6934         12.7034         6.01         0.601           Norway         1991         0.001         11.9534         14.6708         2.7174         0.27174           Portugal         2008         0.001         71.953         85.791         13.838         1.3838           Sweden         1991         0.001         34.2362         50.741         16.5048         1.65048           Sweden         2008         0.001         735.7807         902.4373         1	France	2008	0.001	190.8949	254.8402	63.9453	6.39453
Iceland         2008         0.001         238.2102         445.2781         207.0679         20.70679           Ireland         2008         0.001         872.6061         1125.5068         252.9007         25.29007           Italy         1990         0.001         12.0331         13.3071         1.274         0.1274           Italy         2008         0.001         52.3807         70.1873         17.8066         1.78066           Netherland         s         2008         0.001         274.0557         346.5712         72.5155         7.25155           Norway         1987         0.001         6.6934         12.7034         6.01         0.601           Norway         1991         0.001         11.9534         14.6708         2.7174         0.27174           Portugal         2008         0.001         126.6547         147.1593         20.5046         2.05046           Spain         2008         0.001         71.953         85.791         13.838         1.3838           Sweden         1991         0.001         34.2362         50.741         16.5048         1.65048           Switzerland         2008         0.001         735.7807         902.4373	Germany	2008	0.001	144.9706	172.8121	27.8415	2.78415
Ireland         2008         0.001         872.6061         1125.5068         252.9007         25.29007           Italy         1990         0.001         12.0331         13.3071         1.274         0.1274           Italy         2008         0.001         52.3807         70.1873         17.8066         1.78066           Netherland         s         2008         0.001         274.0557         346.5712         72.5155         7.25155           Norway         1987         0.001         6.6934         12.7034         6.01         0.601           Norway         1991         0.001         11.9534         14.6708         2.7174         0.27174           Portugal         2008         0.001         126.6547         147.1593         20.5046         2.05046           Spain         2008         0.001         71.953         85.791         13.838         1.3838           Sweden         1991         0.001         34.2362         50.741         16.5048         1.65048           Switzerland         2008         0.001         735.7807         902.4373         166.6566         16.66566           UK         1984         0.001         735.7807         902.4373	Greece	2008	0.001	45.0419	70.7694	25.7275	2.57275
Italy       1990       0.001       12.0331       13.3071       1.274       0.1274         Italy       2008       0.001       52.3807       70.1873       17.8066       1.78066         Netherland       8       2008       0.001       274.0557       346.5712       72.5155       7.25155         Norway       1987       0.001       6.6934       12.7034       6.01       0.601         Norway       1991       0.001       11.9534       14.6708       2.7174       0.27174         Portugal       2008       0.001       126.6547       147.1593       20.5046       2.05046         Spain       2008       0.001       71.953       85.791       13.838       1.3838         Sweden       1991       0.001       34.2362       50.741       16.5048       1.65048         Sweden       2008       0.001       142.0076       172.8656       30.858       3.0858         Switzerland       2008       0.001       735.7807       902.4373       166.6566       16.66566         UK       1984       0.001       .       92.7565       .       .         UK       1995       0.001       150.8642       156.2875 <t< td=""><td>Iceland</td><td>2008</td><td>0.001</td><td>238.2102</td><td>445.2781</td><td>207.0679</td><td>20.70679</td></t<>	Iceland	2008	0.001	238.2102	445.2781	207.0679	20.70679
Italy         2008         0.001         52.3807         70.1873         17.8066         1.78066           Netherland         s         2008         0.001         274.0557         346.5712         72.5155         7.25155           Norway         1987         0.001         6.6934         12.7034         6.01         0.601           Norway         1991         0.001         11.9534         14.6708         2.7174         0.27174           Portugal         2008         0.001         126.6547         147.1593         20.5046         2.05046           Spain         2008         0.001         71.953         85.791         13.838         1.3838           Sweden         1991         0.001         34.2362         50.741         16.5048         1.65048           Sweden         2008         0.001         142.0076         172.8656         30.858         3.0858           Switzerland         2008         0.001         735.7807         902.4373         166.6566         16.66566           UK         1984         0.001         92.7565         .         .           UK         1991         0.001         140.4602         156.2875         15.8273         1.58273     <	Ireland	2008	0.001	872.6061	1125.5068	252.9007	25.29007
Netherland       S       2008       0.001       274.0557       346.5712       72.5155       7.25155         Norway       1987       0.001       6.6934       12.7034       6.01       0.601         Norway       1991       0.001       11.9534       14.6708       2.7174       0.27174         Portugal       2008       0.001       126.6547       147.1593       20.5046       2.05046         Spain       2008       0.001       71.953       85.791       13.838       1.3838         Sweden       1991       0.001       34.2362       50.741       16.5048       1.65048         Sweden       2008       0.001       142.0076       172.8656       30.858       3.0858         Switzerland       2008       0.001       735.7807       902.4373       166.6566       16.66566         UK       1984       0.001       92.7565       .       .         UK       1991       0.001       140.4602       156.2875       15.8273       1.58273         UK       1995       0.001       150.8642       155.7005       4.8363       0.48363	Italy	1990	0.001	12.0331	13.3071	1.274	0.1274
s       2008       0.001       274.0557       346.5712       72.5155       7.25155         Norway       1987       0.001       6.6934       12.7034       6.01       0.601         Norway       1991       0.001       11.9534       14.6708       2.7174       0.27174         Portugal       2008       0.001       126.6547       147.1593       20.5046       2.05046         Spain       2008       0.001       71.953       85.791       13.838       1.3838         Sweden       1991       0.001       34.2362       50.741       16.5048       1.65048         Sweden       2008       0.001       142.0076       172.8656       30.858       3.0858         Switzerland       2008       0.001       735.7807       902.4373       166.6566       16.66566         UK       1984       0.001       92.7565       .       .         UK       1991       0.001       140.4602       156.2875       15.8273       1.58273         UK       1995       0.001       150.8642       155.7005       4.8363       0.48363	Italy	2008	0.001	52.3807	70.1873	17.8066	1.78066
Norway         1987         0.001         6.6934         12.7034         6.01         0.601           Norway         1991         0.001         11.9534         14.6708         2.7174         0.27174           Portugal         2008         0.001         126.6547         147.1593         20.5046         2.05046           Spain         2008         0.001         71.953         85.791         13.838         1.3838           Sweden         1991         0.001         34.2362         50.741         16.5048         1.65048           Sweden         2008         0.001         142.0076         172.8656         30.858         3.0858           Switzerland         2008         0.001         735.7807         902.4373         166.6566         16.66566           UK         1984         0.001         92.7565         .         .           UK         1991         0.001         140.4602         156.2875         15.8273         1.58273           UK         1995         0.001         150.8642         155.7005         4.8363         0.48363	Netherland						
Norway         1991         0.001         11.9534         14.6708         2.7174         0.27174           Portugal         2008         0.001         126.6547         147.1593         20.5046         2.05046           Spain         2008         0.001         71.953         85.791         13.838         1.3838           Sweden         1991         0.001         34.2362         50.741         16.5048         1.65048           Sweden         2008         0.001         142.0076         172.8656         30.858         3.0858           Switzerland         2008         0.001         735.7807         902.4373         166.6566         16.66566           UK         1984         0.001         92.7565         .         .           UK         1991         0.001         140.4602         156.2875         15.8273         1.58273           UK         1995         0.001         150.8642         155.7005         4.8363         0.48363	S	2008	0.001	274.0557	346.5712	72.5155	7.25155
Portugal         2008         0.001         126.6547         147.1593         20.5046         2.05046           Spain         2008         0.001         71.953         85.791         13.838         1.3838           Sweden         1991         0.001         34.2362         50.741         16.5048         1.65048           Sweden         2008         0.001         142.0076         172.8656         30.858         3.0858           Switzerland         2008         0.001         735.7807         902.4373         166.6566         16.66566           UK         1984         0.001         92.7565         .         .           UK         1991         0.001         140.4602         156.2875         15.8273         1.58273           UK         1995         0.001         150.8642         155.7005         4.8363         0.48363	Norway	1987	0.001	6.6934	12.7034	6.01	0.601
Spain         2008         0.001         71.953         85.791         13.838         1.3838           Sweden         1991         0.001         34.2362         50.741         16.5048         1.65048           Sweden         2008         0.001         142.0076         172.8656         30.858         3.0858           Switzerland         2008         0.001         735.7807         902.4373         166.6566         16.66566           UK         1984         0.001         92.7565         .         .           UK         1991         0.001         140.4602         156.2875         15.8273         1.58273           UK         1995         0.001         150.8642         155.7005         4.8363         0.48363	Norway	1991	0.001	11.9534	14.6708	2.7174	0.27174
Sweden         1991         0.001         34.2362         50.741         16.5048         1.65048           Sweden         2008         0.001         142.0076         172.8656         30.858         3.0858           Switzerland         2008         0.001         735.7807         902.4373         166.6566         16.66566           UK         1984         0.001         92.7565         .         .           UK         1991         0.001         140.4602         156.2875         15.8273         1.58273           UK         1995         0.001         150.8642         155.7005         4.8363         0.48363	Portugal	2008	0.001	126.6547	147.1593	20.5046	2.05046
Sweden         2008         0.001         142.0076         172.8656         30.858         3.0858           Switzerland         2008         0.001         735.7807         902.4373         166.6566         16.66566           UK         1984         0.001         92.7565         .         .           UK         1991         0.001         140.4602         156.2875         15.8273         1.58273           UK         1995         0.001         150.8642         155.7005         4.8363         0.48363	Spain	2008	0.001	71.953	85.791	13.838	1.3838
Switzerland       2008       0.001       735.7807       902.4373       166.6566       16.66566         UK       1984       0.001       .       92.7565       .       .         UK       1991       0.001       140.4602       156.2875       15.8273       1.58273         UK       1995       0.001       150.8642       155.7005       4.8363       0.48363	Sweden	1991	0.001	34.2362	50.741	16.5048	1.65048
UK       1984       0.001       .       92.7565       .       .         UK       1991       0.001       140.4602       156.2875       15.8273       1.58273         UK       1995       0.001       150.8642       155.7005       4.8363       0.48363	Sweden	2008	0.001	142.0076	172.8656	30.858	3.0858
UK       1991       0.001       140.4602       156.2875       15.8273       1.58273         UK       1995       0.001       150.8642       155.7005       4.8363       0.48363	Switzerland	2008	0.001	735.7807	902.4373	166.6566	16.66566
UK 1995 0.001 150.8642 155.7005 4.8363 0.48363	UK	1984	0.001		92.7565	•	•
	UK	1991	0.001	140.4602	156.2875	15.8273	1.58273
UK 2008 0.001 445.4698 556.1003 110.6305 11.06305	UK	1995	0.001	150.8642	155.7005	4.8363	0.48363
	UK	2008	0.001	445.4698	556.1003	110.6305	11.06305

This chart shows the change in gross international capital flows as a percentage of GDP between the two years preceding the first year of a financial crisis between 1983 and 1990, as well as the predicted percentage increase in the probability of a crisis beginning in that state. One detail that stands out from this chart is the large increase in gross international capital flows that occurred from year to year just prior to some of these crises. For example, gross capital flows in Belgium increased by almost 100 percent of its GDP from 2006 until 2007; this increase in gross international capital flows as a percentage of GDP is predicted, using the coefficient calculated, to increase the probability of a financial crisis occurring in 2008 by 9.9%. Another feature apparent from this data is the difference between the scale of

financial flows as a percentage of GDP in the early 1990s and prior to the global financial crisis in 2008. These changes over time merit more investigation into the specific contexts of those crises, and to account for structural breaks in numerous variables included in this model. See chapter 6 for a more detailed study of some of these cases.

## 4.4 Conclusions

Several factors prompted this study. First, there is a proliferation of econometric investigations of the effects of capital market liberalization on financial instability, but this literature often gives short shrift to the incidence of financial crisis in so-called developed countries. Second, my descriptive statistic survey of Europe's financial development in the late 20<sup>th</sup> century, particularly following the ratification of the Maastricht Treaty and the onset of EU and EMU prompted unprecedented international capital flows, particularly between European states, as well as an increasing frequency of the incidence of financial crisis since those changes were enacted. In the aftermath of the Global Financial Crisis, and the prolonged experience of the Eurozone crisis, attempts to understand the cause and determinants of the duration of such crises is especially important, as states regroup, and change or maintain their existing financial and monetary architectures.

Initial permutations of this analysis used simple panel OLS and panel logit methods to model the relation between different financial, regulatory, and macroeconomic variables on the incidence of financial crisis. Eventually, I expanded these models to test the relation between these different independent variables and the onset of financial crisis. In preliminary analyses, gross locational capital flows over GDP repeatedly emerged as a positive and statistically significant determinant of the incidence of financial crisis, as well as the onset of financial crisis. Other significant variables included domestic investment over GDP and trade

balances over GDP, both of which were negatively correlated with the incidence or onset of financial crisis, though neither was as consistent as locational capital flows over GDP.

After testing the model and data for the presence of problems of heteroskedasticity, autocorrelation, and cross-sectional dependence, and after correcting for these issues, I continued to find robust, positive, and statistically significant values for the correlation between locational capital flows over GDP and the incidence and onset of financial crisis, while other variables lost their statistical significance. Finally, in an attempt to correct for the presence of unit roots, I specified a new model of the onset of financial crisis, which did not express a unit root, as a function of the first difference of locational capital flows over GDP, trade balances over GDP, and short-term interest rates over GDP, in addition to the other variables in the model. Though its statistical significance was diminished from .000 level to the .1 level, the change in locational capital flows over GDP maintained a statistically significant and positive relation with the onset of crisis.

These findings are important. First, when the onset of financial crisis was the dependent variable of the model, the statistical significance of fiscal balances over GDP and trade balances over GDP progressively declined as I corrected the model for the various problems with autocorrelation, heteroskedasticity, and cross-sectional dependence. These variables maintained some significance in the model that used crisis incidence as the dependent variable, which should help shift the discussion about the role that these factors have played in Europe's crisis toward examinations of how they affect the duration of a country's financial crises. The robustness of the sign and statistical significance of the independent variable locational capital flows over GDP, even when using the change in locational capital flows over GDP per year, in models of crisis incidence as well as the onset

of crisis indicate that these flows have the potential to pull a country into crisis, and possibly to prolong that experience as well. The sign and relative significance of domestic investment over time indicates that countries that were able to substantially invest in physical capital may have been better able to stave off the onset of crisis, and that they could recover from crises earlier.

In the context of international debates about the relative roles that fiscal policies and trade deficits have played in destabilizing the European economy, these are important relationships to examine. If capital flows as a percentage of GDP are more statistically significant and robust contributors to the incidence and onset of crisis than fiscal balances over GDP and trade deficits over GDP, then the motivation to impose austerity measures in order to better stabilize the European economy is misguided. If fiscal balances contribute to the duration of crisis, then the context in which countries have generated fiscal deficits is also an important consideration for policy-makers. Numerous governments in Western Europe bailed out and insured private banks in an attempt to maintain confidence in local finance, and prevent the spread of the crisis to the real sector. Further, the relative dominance of certain countries in Europe maintain as chief exporters of goods and services should have an impact on the relative duration of their crises, while other countries that have not grown because of rising exports are likely to be stuck in crisis longer. States in crisis have far less leverage on the European policy-making stage, and these relative disparities may entrench economic divisions between Europe's core and periphery. I explore some of these relationships in chapters 5 and 6.

There is substantial work left to pursue in this field. First, an extensive and comprehensive evaluation of the possible cointegration of this models' variables is

warranted; depending on the results of this, it may make sense to generate new model specifications that account for the presence of structural breaks in the data (present in 2008) and 2002 for crisis incidence, and present in 2008 and 1990 for financial crisis onset). Finally, it is possible that the various regulatory variables failed to consistently measure the full nature of the regulatory changes that were made and therefore the results I found of their effects do not properly reflect the impacts on liberalization on crises. For example, the negative coefficient on the categorical variable for openness to foreign bank entry might capture some different economic fundamental as to why European countries with barriers to foreign bank entry in the 1980s and 1990s were more prone to financial crisis; security market liberalization variables in this model do not account for much complexity or difference between this sample of states. More comprehensive variables measuring, for example, the rate of entry of foreign banks, or the average reduction in the number of banks in a state, or the change in bank ownership of securitized assets may be a valuable tool for measuring the effects of more sophisticated financial instruments on the incidence and duration of European financial crises.

#### **CHAPTER 5**

#### POWER ASYMMETRIES AND EUROPEAN FINANCIAL DEVELOPMENT

#### 5.1 Introduction

Power asymmetries between Western European states have allowed national, class, and industrial interests to successfully promote and implement Europe's evolution from contained and constrained finance to a globalized, liberalized, and – largely – privatized financial regime that would help bring about Europe's financial crisis. Power asymmetries between interest groups – class and industrial interests – within these states also help explain the scope, pace, and moment in which policy-makers liberalized and privatized their respective financial sectors. Simultaneous paradigm shifts in academic economics from the view of markets, particularly financial markets, as unstable and threatening to political stability, to efficient market theories that privileged markets above any government intervention, bolstered these political movements away from constrained finance to globalized and liberated finance. The interplay between policy makers, political, economic, and social interests, and economic academia provided momentum to this shift. The result was that banks in countries with longer histories of financial liberalization lent heavily to banks in countries with shorter histories of financial development and liberalization, both to facilitate more borrowing in states with stagnant economies, and to profit from bubbles in real estate and money markets. The result has been that, in the wake of Europe's crisis, smaller European economies with less developed financial systems and shorter histories of financial liberalization have born the brunt of Europe's financial crisis after attempting to bail out private sector banking interests. Meanwhile, countries whose banks were net lenders to

countries with net deficits demand that deficit countries impose austerity measures in order to qualify for bailouts, which will be used to pay off the private lenders that helped facilitate the bubbles and deficits in the first place.

Mainstream discussions of Europe's move towards financial integration and liberalization rely heavily on the role of market forces and the pursuit of efficiency and greater credit opportunities in motivating states to join. This chapter introduces the notion that power dynamics played a significant role, particularly with respect to financial liberalization under the Single Market system. Europe's economic and financial periphery would not have liberalized as fast, and not necessarily as extensively, as it did if not for the external pressure of joining the EMU. Certain European states – particularly Europe's historically central economies of Germany and France – had disproportionate influence in setting the financial terms of membership –even to the extent of making financial liberalization a component of membership – over other states' interests. Liberalizing the wide extent of Europe's financial systems provided potential markets for Europe's core exporting economies and financial centers. In turn, Europe's core advanced the explicit notion that European states that joined the EMU would benefit from increased access to trade and finance at the European level, as well as additional stability from global economic shifts due to other components of the EMU's economic architecture. They also leveled the implicit threat that states unwilling to participate would suffer from increased instability and lack of access to their historically largest trade and credit partners. (Moravscik, 1993)

This project privileged elite interests in states with longer histories of financial liberalization, which were likely to benefit directly and indirectly from the widened financial arena; it also gave local elites the ability to move capital more freely in the event of crisis. In

domestic political arenas, these elite interests regarding financial liberalization largely trumped workers' interests in core countries, while workers in the European periphery largely ignored the financial components of EMU. (Wallace and Wallace, 2000) In states that liberalized their financial sectors later, elite financial interests tended to oppose financial liberalization, while technocrat policy-makers and academics tended to use the motivation of convergence as a means of accelerating that liberalization. (Dyson and Featherstone, 1999, Abdelal, 2007) The contemporaneous academic paradigm shift away from Keynesian/Bretton Woods style financial repression to a neoliberal and globalized vision of financial liberalization trained future policy makers throughout Europe in new arrangements that they would promote at home, in the process, entrenching these financial shifts at the national and supranational level as Europe integrated in the EMU. As these technocrats' influence proliferated throughout Europe, their ideas and practices generated momentum that could effectively veto attempts to reverse course at the national level, while technocrat consensus at the European level could prevent errant attempts to reverse the effects of the Single Market and Banking Passport policies. These policies created feedback loops that empowered financial actors and local elites to promote economic policies that better served their interests, with the consequences of increased inequality and instability. The European countries best able to resist the financial liberalization components of EMU were generally large or strong economies, including the UK, Sweden, Denmark, and Norway, which could rely on historic economic relationships or economic depth to avoid the potential cost of tariffs when dealing with new EMU economies. The chapter explores these dynamics (also see the outline in appendix A), while setting the stage for the empirical analyses and case studies in chapter six.

#### 5 2 Power Axes

Though the European economy of the 1980s and early 1990s did not precisely mirror Immanuel Wallerstein's 1976 definitions of core/periphery relations in the world system, Europe's economic shift in favor of financial liberalization and deregulation, particularly at the expense of certain countries' longer term economic stability, echoes his argument that relative national economic power and class interests help determine trajectories of global economic development. (Wallerstein, 1976). The two dynamics that Wallerstein describes predict different political and economic mechanisms that drove the continental shift toward neoliberal finance:

"The dichotomy of class, bourgeois versus proletarian, in which control by ruling groups [operates] primarily through access to decisions about the nature and quantity of the production of goods (via property rights, accumulated capital, control over technology, etc.) [and] the spatial hierarchy of economic specialization, core versus periphery, in which there [is] an appropriation of surplus from the producers of low wage (but high supervision), low-profit, low-capital intensive goods by the producers of high wage (but low supervision), high-profit, high-capital intensive, so-called 'unequal exchange." (Wallerstein, 1976, 450-451)

In a core/periphery relation, the core benefits "from the technical progress of the periphery, through the lowered prices for the latter's commodities, whereas peripheral populations suffer from technical progress in the core, in virtue of the relative increase in the real prices they must pay for the core's commodities." (Wallerstein and Hopkins, 1977, 117) Complex power relations characterize the interactions between regional spheres of the world system, in which core nations may influence the policy directions of peripheral nations, but may compete or unsuccessfully counter the political and economic directions of other core powers. (Wallerstein and Hopkins, 1977) Where Wallerstein and Hopkins refer to finance, their predictions also mirror Europe in the late 20<sup>th</sup> and early 21<sup>st</sup> century – namely that in moments of economic expansion, semi-peripheral economies will import more industrial

goods from core economies, and that investment flows will increase from the core to the periphery and semi-periphery.

# 5.2.1 European Core and Periphery – Real Sector

Countries traditionally considered part of Europe's core include Germany, France, the Benelux countries, and (though recently debatably) Italy. Germany has had a long history of economic growth, a traditionally strong export sector, and its stable currency over the late 20<sup>th</sup> century motivated France to approach Germany about the notion of creating an integrated European economic union. (Eichengreen, 2008, Storey and Walter, 1998) The Netherlands and Austria, likewise, have an established history as financial and specialized industrial centers, and France has a similar history of economic growth and exports as well as a historic role – along with UK – as a leader of Western European political trajectories. (Moravscik, 1991, Dyson, 1999, Eichengreen, 2008) Though it lagged behind other early members of Western Europe's core, Italy has also had a relative history, since the Second World War, of being an industrial center, particularly in response to increased global aggregate demand in the late 1950s and early 1960s. (Eichengreen, 2008) Though each of these nations has regional variation with respect to relative industrialization, output, and so on, Germany, Austria, the Netherlands, France, and Italy have generally been among Western Europe's strongest economies. (Eichengreen, 2008)

By contrast, Europe's historic periphery has been characterized by countries with predominantly agricultural and resource extractive industries, and frequently by long periods of civil strife and/or dictatorship into the second half of the twentieth century. Ireland has been a small economy in the shadow of the United Kingdom, with a significant history of expropriation and civil war, with an overwhelmingly agricultural economy well into the 20<sup>th</sup>

century, and industrial centers that would experience major losses under Margaret Thatcher's tenure as prime minister. (McCann, 2010) Spain is currently a larger peripheral European economy, though it has had a long history of being closed to trade and finance with the rest of Europe and the world under Franco's dictatorship. Post-Franco, Spain's elites and bourgeoisie moved quickly and vocally to liberalize in different economic arenas. (Eichengreen, 2008) Portugal has historically been a smaller and less socially developed economy – Eichengreen notes that prior to the Portuguese revolution in 1974, "as late as 1970, illiteracy among persons at least ten years old was more than twenty-five percent," while also maintaining a balanced budget with little fiscal stimulus. (Eichengreen, 2008, 205, Lains, 2002) Unlike Spain, post independence, Portugal was slow, even resistant, to liberalizing its economy in terms of trade and finance. (Eichengreen, 2008, Leao, Palacio-Vera, 2011) Finally, Greece has consistently held a position among Western Europe's periphery, with a history of civil strife, political back and forth between socialist and nonsocialist governments in the 1980s and onward, and resisted economic liberalization well beyond the examples of other peripheral nations like Ireland, Spain, and Portugal.

As Europe's recent economic history has progressed, peripheral and semi-peripheral European nations—Iceland, Portugal, Greece, Spain and Ireland—have imported more goods, industrial and otherwise from core European nations like Germany and France. Investment flows have increased significantly from core financial states like Germany and the Netherlands to Europe's periphery and semi-periphery. (Eichengreen, 2008) Europe's periphery does not typically export raw materials to Europe's core any longer, as Wallerstein's model predicted, but real productivity in Portugal and Greece stagnated or declined in the years following entry to the Eurozone, and the financial sectors of Europe's

financial core thrived – in the lead-up to the global financial crisis – on direct investments in real estate, and on lending that financed peripheral Europe's consumption of industrial and finished goods from Europe's productive core. (Leao and Palacio-Vera, 2011, Roubini, 2011, Jaumotte and Sodsriwiboon, 2010) In this context, Europe's core aggressively marketed the political and economic project of EMU. (Moravscik, 1993)

# 5.2.1.1 Relative Financial Development/Liberalization

There is significant, but not perfect, correlation between historic financial liberalization and core status among Western European states. Shortly after the end of World War II, most of Europe had well regulated and often state controlled financial sectors. (Eichengreen, 2008) However, by the early 1980s, when Germany and France's efforts to create a European economic union that could rival the United States in the wake of the Bretton Woods system's demise, Europe's financial landscape had two distinct plains. Some Western European countries had begun to privatize and deregulate their financial sectors quite soon after the end of WWII, while others maintained financial sectors that were largely state controlled and tightly regulated. (McCann, 2010, Storey and Walter, 1997) Some of these financially 'laggard' states deregulated and privatized their banking sectors quickly during the 1980s – France, Scandinavian states, Belgium, and Ireland are examples – and others took until the late 1990s to dismantle capital and interest rate controls, like Italy and Portugal. (Abiad, Detragiache, and Tressel, 2008) The circumstances under which the 'laggard' states liberalized their financial sectors tracks closely with the process of Europe's core's pronounced push for financial liberalization as a key requirement for membership in the incipient EMU. Though most of Europe's periphery took longer to liberalize financially, some peripheral nations had relatively liberalized financial sectors prior to the ratification of

the Maastricht Treaty, which mandated the Single Market for trade and capital, as well as the Banking Passport, which required states to authorize national financial institutions to perform a variety of financial intermediation tasks traditionally performed by German universal banks.

#### 5.2.1.2 Financial Liberalization Leaders and Laggards

Among Europe's real-sector core countries, Germany and the Netherlands have had the longest histories of financial liberalization, as well as the deepest capacities for financial intermediation, due in part to their respective historic focuses on universal financial intermediation, and financial innovation. Despite having a substantial public finance sector in the form of regional Landesbanks, Germany has had a longer history of financial liberalization than most western European nations. Its history of an autonomous central bank as well as its promotion of large universal banks as early as the late 1800s has lasting impacts for German financial culture, and has come to define key financial components of EMU policy. The evolution of German finance that has embraced greater financial competition and the acquisition of securitized assets will be discussed later in this chapter, as well as in a subsequent chapter in greater detail.

Benelux nations, particularly the Netherlands and Luxembourg also have longer histories of financial liberalization than other western European nations, even among the core, and financial openness, which has possibly been a historic reaction to having a small economy. The financial culture of the Benelux is also characterized by a strong intra-regional banking relationship that has persisted throughout the 20<sup>th</sup> century. Among Western Europe's real sector core, France is somewhat exceptional. France had a highly regulated and public banking orientation until the 1980s, when the country reversed its position on financial

privatization and liberalization 3 times in 5 years, finally settling on largely privatized and liberalized financial status in 1984 under Mitterand. (Storey and Walter, 1997) After the final move to liberalize and privatize French finance, France proceeded to lobby on behalf of the Single Market proposal in order to maintain German support for EMU. (Storey and Walter, 1997, Dyson, 1999)

Among Western Europe's real sector periphery, Ireland made the earliest moves toward financial liberalization, due, in part, to significant trade and banking history with the UK, another country that liberalized and privatized its financial system relatively soon after WWII. Despite its early financial liberalization, Ireland still had several components of liberalization necessary to complete in order to qualify for EMU membership by the late 1990s. (McCann, 2010, Abiad, Detragiache, and Tressel, 2008) Similarly, in Spain, post-dictatorship, there was broad bourgeois and elite interest in reorganizing the national economy along liberal market lines, in the arenas of trade and finance, which provided Spain's strong internal motivation to liberalize and privatize national financial intermediaries. (Tavares, 2004, Pagoulatos, 2004)

Within Western Europe's core, a number of nations emerged that opposed significant liberalization of finance. Italy has had a strong institutional history of publically owned and highly regulated financial intermediaries and capital controls; strong internal resistance to liberalizing, and only pursued financial liberalization after the commitment to join EMU. (Guerrieri, 2011) Scandinavian states, by contrast, privatized and liberalized financial markets in the 1980s, but subsequently experienced significant financial crises in the late 1980s and early 1990s; Norway, Sweden, and Denmark re-regulated and opted out of EMU, while Finland maintained financial setup in accordance with EMU regulations, and joined

that economic union in the 1990s. (Storey and Walter, 1997, Eichengreen, 2008) In Western Europe's periphery, both Portugal and Greece resisted substantial liberalization of their financial sectors well in the 1990s. This had partly to do with elites' control over the financial system and power within state policy making frameworks, and partly with policy-makers' concern about relative development and the likelihood of financial crisis in the absence of controls. (Dyson and Featherstone, 1999, and Abdelal, 2007)

# 5.2.1.3 Interstate Power Dynamics

The relative development and ability of each European nation's banking and regulatory apparati to evaluate and guard against financial crisis varied across a wide spectrum. This regional regulatory disparity substantially influenced inter-state credit dynamics that arose after Europe's waves of financial liberalization. There is a substantial literature about the relative soundness of rapid financial liberalization in developing countries that considers the destabilizing effects of such transitions on overall economic soundness, but very little attention to such potential destabilizing effects in newly opened European financial markets, in the literature produced at the time of such discussions and changes, or even now. (Frieden, 1988, Rodrik, 2005) Michael Lewis and others have written about the predatory character of investment bankers, and their willingness to exploit asymmetries of information in order to secure rents. (Lewis 2010) The move to liberalize a broader European financial market had the potential to open opportunities for western European financial centers, as well as for core European economies to increase their export share as an indirect response to freer flows of credit. (Roubini, 2011)

After the creation of the EMU, financial flows – absolute and relative to GDP – increased significantly in all of these new member states, though the largest flows appear to

be toward states experiencing large real estate bubbles (Spain and Ireland in particular).

Larger capital flows also occurred between nations and regional neighbors –for example,

Spain and Portugal, the Netherlands and Belgium, and the UK and Ireland. However,

Germany led other EMU members in lending to virtually all of these member states, when

examining those flows relative to the other states' GDPs, while Germany's capital outflows

constitute a relatively small percentage of Germany's GDP. (OECD Statistics, 2013)

Though a key feature of the rhetoric promoting the shift to liberalized finance in the form of the Single Market centered on the ability of such flows to bolster real sector development, the evidence of such a connection has been ambiguous, post EMU. In the arena of European debate over the terms of EMU, Germany and France led, while other European states debated the nature of the terms of the agreement. By promoting policies such as subsidies for infrastructure development to peripheral European nations, as well as suggesting the market advantages to be reaped by major industrial and financial actors, these nations courted core and peripheral support, though not necessarily through the same demographic channels. When reaching out to Western Europe's core, the chief architects of EMU emphasized the importance of the Single Market and Banking Passport alongside discussions of the nature of fiscal and monetary policy; in their attempts to attract support from Europe's periphery, these architects primarily advertised the imminent subsidies and potential benefits to be gained from access to a globalized European marketplace, simultaneously leaving peripheral countries to imagine a counter-scenario of being excluded from such a community if they failed to liberalize to the mandated degree. (Moravcsik, 1991) However, the initial result of the early and mid 1990s, in which the European rejecters of EMU included the core nations of the UK, Denmark, Norway, and Sweden, indicates that the countries willing to risk exclusion from the prized local economic network of the EMU required a certain economic and political autonomy in order to withstand the pressure from Europe's other core states.

## 5.2.2 Interest Group Power Dynamics

In order for Western Europe's core nations to convince other core nations as well as semi-peripheral and peripheral European countries to submit to economic policies that could threaten their financial and broader economic stability, actors within those countries needed to buy in. Populations in Europe's core and periphery were not uniform in either support for or opposition to those policy shifts; as such, it is necessary to understand how the actors that supported financial deregulation and liberalization were able to outweigh the actors that opposed financial deregulation and liberalization.

#### 5.2.2.1 Class Interests, Financial Liberalization, and EMU

On average, national European elites have tended to support the financial principles of EMU, while middle and working class Europeans either opposed or were indifferent to the financial components of EMU. (Hooghe and Marks, 2004, Wallace and Wallace, 2000, Eurobarometer data, early 1990s.) The relative likelihood of voting power by class can help determine which direction a country will go with respect to liberalizing capital accounts and otherwise deregulating finance. (Horowitz, 2001) Capital holders in a society – rentiers, skilled laborers, and bourgeoisie – are more likely to demand financial liberalization so that their money can make them more money. If upper and elite interests hold disproportionate voting power, or are able to influence electoral outcomes through donating to campaigns, then governments' choices will likely skew in the direction of liberalizing finance. Dispersed interest groups are likely to be more "more weakly mobilized than concentrated interest

groups." (Horowitz, 2001, 16) Thus, even if a country's bourgeoisie, organized labor, and service sector strongly oppose financial liberalization, then a government could move to liberalize and deregulate finance with impunity regarding public voting.

In practice, working and middle class support for EMU has tended to center about expectations of how the single economy would affect future wages and country infrastructure: if workers believed that their conditions would worsen or that their governments would not receive funding for infrastructure improvements, then they tended to oppose the EMU as a whole, while workers in countries that EMU would lead to increased wages and subsidized infrastructure investment tended to support. (Hooghe and Marks, 2004) Eurobarometer surveys from the 1980s and 1990s indicate a correlation between the support for the Single Market's terms regarding capital controls with income level and business affiliation in richer European countries, and with ambiguous or apathetic responses among households with lower incomes and countries with lower income levels in general. Analyses along national lines corroborate this trend – there is a strong correlation between income and wealth in core states like Germany, France, and the Netherlands and support for the financial components of EMU, while there is a negative correlation between lower income groups and the financial components of the Single Market Policy. (Farvaque, Hayat, and Mihailov, 2012)

At the same time, there is an inverse correlation between support for EMU and income in certain peripheral (or semi-peripheral) European economies that have historically opposed liberalizing finance, like Italy and Greece. (Eurobarometer 63, 2005, Wallace and Wallace, 2000) However, in these cases, non-elites in Europe's periphery support for EMU were likely being driven by beliefs about future flows of employment and subsidies, or other

components of the complete package of economic and political reforms contained within EMU. (Gabel, 1998)

This disjuncture in support for the financial liberalization components of EMU has provided a foothold for European class interests in favor of financial liberalization, in both national and supranational decision-making. (Boyce, 2002) This has occurred at the national level – as inequality has increased in different European countries since the 1970s and 1980s, economic elites have accumulated greater influence in the political arena through their ability to donate more to suitable candidates that will elevate the interests of finance, and these elites' interests have been served at the regional level, as non-elites in peripheral European nations ignore the financial liberalization components due to their interest in direct subsidies to industries like agriculture or for the construction of infrastructure. (Wallace and Wallace, 2000, Eurobarometer, De Grauwe and Ji, 2013) Non-elites in core countries, which have seen wages stagnate and inequality increase over the 1980s through the present, have little democratic recourse to reverse their nations' embrace of liberalized finance, and political elites have been able to pursue supranational financial liberalization and deregulation despite the destabilizing effects. (Lapavitsas et al, 2010)

#### 5.2.2.2 Industrial Interest Sectors

Economic interest groups' – financial and real sector – historic efforts and aims on behalf of financial liberalization at the national and European level have often dovetailed with those of European elite classes. The demographic shifts toward increasing inequality since the 1980s that have empowered local elites have – not coincidentally – given economic interest groups greater leverage in the political lobbying process. Industrial associations carry weight in their influence on policy creation, and finance related groups have played

significant roles in the creation and development of financial regulatory policy in both the United States and Europe. (Greenwood, 1993, Partnoy, 2009) Industrial associations – economic interest groups – are more likely to oppose financial integration and liberalization regimes, as contrasted with industrial interest groups affiliated with finance. (Horowitz, 2001) These groups include: "banks, suppliers, and distributors with close links to such traded sector producers, as well as banks, utilities, and other non-traded sector producers vulnerable to competition through direct foreign investment. Since such 'concentrated' interest groups are more strongly affected by international economic policy choices, they are likely to mobilize more effectively and to have a disproportionate influence on policy outcomes." (Horowitz, 2001, 15)

The relative strength of industrial and other economic interest groups relative to other groups that attempt to influence the direction of national and international policy has much to do with uniformity of message, centralization of action, and resources with which to lobby. (Greenwood, 1997, Boyce, 2002) European business groups were among the key actors initiating the European push towards integration in 1986 that created the Single European Act (SEA), a drive that originated "in part from the demands of a group of business leaders from Europe's largest companies, worried about losing out in global competition to Japan, America, and the newly industrializing countries of south-east Asia." (Greenwood, 1997, 1) Interest groups are particularly effective when they can offer highly specialized knowledge – as in the United States, European financial interests have parlayed the complexity of financial dynamics and instruments into bargaining chips that they wield by offering to craft financial policy for the EU and EMU. (Greenwood, 2007)

Because of the industry's wealth, financial interest groups are able to afford offices in Brussels, in order to most effectively and pervasively present its interests in European economic policy making. By contrast, non-profit organizations representing public interests or unionized labor's interests, though eligible for reduced rental rates through the EU, are less able to afford the sustained sorts of pushes that financial interest groups can muster. (Greenwood, 2007) When an institution's influence is tied to the monetary resources it brings to the lobbying process, policies will skew in the direction of the richer interest. Finance seems to hold this role in Europe. As European governments have shifted toward more neoliberal financial architectures, they have simultaneously become more eager to court financial interests in the aim of economic development. As a result, governments, particularly those eager to grow their economies, are more likely to succumb to pressure applied by financial interest groups to liberalize and deregulate, since those groups can later threaten to withhold necessary corporate finance if governments do not play by the financial interests' rules. Further, financial interests have both relatively uniform aims in policy and significant buy-in from powerful members of the European Union, a relationship that will be discussed later in the paper.

The trend of increasing – and largely core-originating – interest group representation in the European Union bolsters the arguments that business interests would have a stronger relative presence in European policy making. They also seem to support the notion that countries like Germany and France had disproportionate influence in decision-making at the European level. From 1992 through 1993, business groups accounted for 67% of total interest groups represented at the European Union; at present, they account for at least 70.9% of total interest groups represented at the European Union. (Greenwood, 1997, Wonka,

Baumgartner, et al, 2009) Different countries have disparate representation among the various interest groups at the EU. In 1992 through 1993, German groups accounted for 11% of total interest groups at the EU, and French groups accounted for 15%. By 2009, Germany's percent share of interest groups had increased to 18.7%, and France's share had declined to 13.4%. (Greenwood, 1997, Wonka, Baumgartner, et al, 2009) In 1992, France was the origin of the largest share of EU interest groups, followed by Germany, then the UK, at 9%, and followed by the Netherlands at 4.7%. By 2009, the same countries were in the top four, but their order changed, slightly: the current ranking of country share of interest groups in 2009 shows Germany leading, followed by the UK (14.0%), France, and then the Netherlands (7.4%). (Greenwood, 1997, Wonka, Baumgartner, et al., 2009) Arndt Wonka, Frank Baumgartner, Christine Mahoney, and Joost Berkhout's 2009 paper "Measuring the Size and Scope of the EU Interest Group Population," includes a regression analysis that finds a positive correlation between a European state's GDP per capita, and its representation among interest groups in the EU. The increased importance of interest group lobbying, and their likelihood of representing core European interests reinforces the economic influence that Europe's core has within the EMU.

These data hint at the feedback effects likely to occur as business interests in Europe's strongest economies increase their representation in EU level governance, while those same states' influence increases – policies at the European level are likely to tilt increasingly in favor of those states' economic interests, particularly regarding arenas like trade and capital liberalization. Greenwood has written about the difficulty for non-unified interests – such as labor or firms in the service industry – to influence EU level policy due to heterogeneous interests, and lack of a unified command structure. When the interest groups likely to protest

liberalized capital and financial deregulation are chronically under-voiced in a policy arena, national policies will reflect that accordingly, and those groups interests will fall to the side of the groups that enjoy national support. (Greenwood, 2007) As Daniel Mügge notes:

"Market liberalization happened in the context of European integration. But rather than neatly transposing European agreements into national arrangements, governments strategically liberalized markets with an eye to the interests of influential national firms. Where liberalization was incompatible with their preferences, governments resisted alleged pressures not only of globalization, but also to implement agreements they had themselves concluded." (Mügge, 2006, 1007)

Appendix A presents a schematic with a key that charts the interplay between different interest groups in order to understand why some countries might have supported joining the EMU, while others did not. The next part of this chapter will discuss how these changes have reflected paradigmatic change in the world's conception of finance, and how they have exacerbated the effects of those changes.

### 5.3 Neoliberal Theoretical Paradigm Shift

At the time that different power dynamics propelled European policy in the direction of financial liberalization, several paradigm shifts were simultaneously moving political and public sentiment in favor of financial liberalization. These arenas included intellectual discourse and the policy-making arena, and the result was a dynamic interplay that strengthened pro-financial hegemony at institutional and academic levels. In Europe, this process had a dialectical quality – governments responded to economic changes by significantly changing their policy course in a monetarist and neoliberal financial direction. Concurrently, European academics training in US universities brought back ideas that confirmed the biases of Europe's first movers in financial liberalization. The political sphere further internalized these academic paradigm shifts, and, in Europe, particularly embraced a

blend of strict monetarism and financial globalization, which fueled further research in support of such ideas. As in the United States, public opinions seem to have adopted the changes occurring within political and economic institutions and academic discourse, so that when financially liberalized and deregulated institutions failed, many populations failed to protest or demand new regulations. Eurobarometer trends have shown repeated support by public in different peripheral European countries for liberalized and globalized macro policies that work to target inflation and promote efficiency. (Wallace and Wallace, 2000)

# 5.3.1 Academic and Policy Paradigm Shifts

Paradigmatic shifts in academic economics and economic policy empowered the sorts of demographic dynamics described above that privileged interests in favor of financial liberalization in Europe and much of the Western world. This section of the paper discusses the concurrent political and academic shifts that enabled elites and business interests to ride the wave of Europe's core's interests in financial liberalization to outcomes that would weight their interests more heavily than those of non-elites, workers, and peripheral European nations.

Following the Second World War, Bretton Woods (BW) represented a compromise between monetary stability (with gold as the base monetary standard for the system) and monetary flexibility (represented by an adjustable peg to the US dollar). (Eichengreen, 2004) In this system, the US was the primary provider of financial intermediation services to the rest of the world "by importing short term capital and exporting long term capital." (Eichengreen, 2004, 11) At the same time, substantial regulations governed what functions investment banks could and could not perform, and most markets in Europe had substantial capital controls meant to prevent capital flight. The reigning view was that the global macro-

economy was not self-stabilizing, and growth could only be assured in the presence of a strong regulatory apparatus that would govern financial flows and currency valuation.

(Dyson, 2000, Endres, 2011)

Germany holds a first-mover status as the European 'leader' in the break away from Bretton Woods. (Endres, 2011, Dyson, 2000, Eichengreen, 2007) This occurred on one direct monetary front – Germany's apprehension about inflation of the dollar and the associated appreciation of the Deutsch Mark prompted it to cut ties with the pegged exchange rate of Bretton Woods. (Endres, 2011, Dyson, 2000, Eichengreen, 2007) Another less explicit break from the Keynesian flavored capital policies of BW was Germany's increasing participation in international capital markets. Story and Walter have written about Germany's relative economic dominance in Europe as exporters – it had steady trade surpluses for decades – and how that success generated significant revenues for Germany's banking and insurance industry. As the pace of economic growth declined from the 1950s through the 1970s, German trade growth decreased alongside an increase in financial activity:

"Domestic business has been a declining proportion of German banking and insurance activities since the early 1970s. As international monetary conditions became more turbulent and lucrative, the German banks ventured into Luxembourg, then joined international groups with other European banks, and by the 1970s were actively participating on the Eurocredit markets. In the 1980s, they entered investment banking. By the end of the decade, they were buying subsidiaries in the United States, the United Kingdom, Italy and Spain, and negotiating cross-shareholdings with their major French counterparts." (Story and Walter, 1997, 171)

Story and Walter specifically argue that "this evolution was driven by the relative decline in business growth, compared to the attractions and risks of doing business in global markets." (Story and Walter, 1997, 171) Once German banks went down this path, their transactions and international assets increased considerably and rapidly. At the same time, the German state began "attempts to export regulations tailored to German requirements into

the international arena." (Story and Walter, 1997, 171) The EU eventually adopted the German universal bank as the model for services that banks needed to provide under the banking passport system. (Story and Walter, 1997) These policy changes predated the broader paradigm shift in mainstream economic thinking about finance. German parties may have pulled away from the BW era fixed exchange rates and capital controls, but proregulatory critics like Tobin and Dornbusch persisted in arguing against full financial liberalization. (Endres, 2011)

At the same time, monetarist and new classical theorists in support of financial integration and liberalization argued that societies with repressed financial systems irrationally limited their economic potential. Post BW, Robert Lucas "repeatedly argued that all capital investment flows should be liberalized, even more so in developing countries," on the assumption that removing capital barriers would eliminate barriers to accessing fixed capital in order to employ workers. (Endres, 2011, 92) Other scholars like Ross Levine argued that the benefits of financial liberalization outweighed the potential for financial crisis, while proponents of efficient financial market theories argued that financial crisis was virtually impossible, since participants had access to all necessary information. In many cases, these new theorists contradicted simultaneous scholarship critiquing information and power asymmetries within a globalized marketplace, and the likely tendency toward crisis in a fully liberalized capital arena with insufficient regulatory apparati. (Endres, 2011) This proliberalization trajectory of financial thought found secure footing in the aftermath of BW:

"[Despite] various episodes of financial crisis in the last quarter of the twentieth century – episodes giving opponents of liberalization more ammunition to stop or at least delay the choice to make international capital movements easier. In the classical doctrine, if capital flows were freer, they would become more stable." (Endres, 2011, 98)

Proponents of capital liberalization and financial integration on theoretical grounds could rarely identify a single likely effect of opening capital accounts on a country's growth trajectory. (Endres, 2011) However, European political entities and economic policy makers came to increasingly subscribe to these New Classical visions of financial integration, as more European countries followed Germany's lead by deregulating, privatizing, and liberalizing their financial sectors by the mid to late 1980s.

# 5.3.2 Neoliberal Financial Policy Shift

Where Germany's internal reforms had previously been focused solely on its own national economic interests, by the 1980s, together with France, Germany began to present the notion of economic union and financial integration to other western European countries. The allied interests of Germany and France, as Europe's strongest economies at the time, presented a unified front against the previous global hegemon, the United States, as well as rising economic entities like Japan. (Dyson, 2000) The integration scheme that Germany and France together presented to Europe was oriented about a strict monetary policy, since Germany's strong currency would provide the basis for the common European currency, as well as a fully liberalized financial architecture. Dyson argues that the strict monetary policy that came to define the European Central Bank (ECB) resulted in part from German dissatisfaction with inflation that arose under BW, and that the large authority Germany demanded for the ECB was also indicative of German economic values:

"This decentralized structure and separation of central banking and supervisory roles reflected the influence of the German model. The Bundesbank's preoccupation was with the problem of moral hazard: the risk that a central bankers' safety net would encourage imprudent behavior in the financial sector and expose the ECB to the risk of excessive involvement in 'bailout' operations. In consequence of creating liquidity in this way, the ECB could find itself forced to compromise on its responsibility for the stability of the German financial system or a role as 'lender of last resort.' It suggested that the ECB should emulate German arrangements, which involved a collaboration with the private

sector in managing banking crises — as a means of avoiding both moral hazard and dilution of its price-stability responsibility." (Dyson, 2000, 35)

By creating the European Union and the EMU, Germany's weight on the global scene would increase by an order of magnitude if it formed a union with other European states, while simultaneously, and theoretically, reducing the vulnerability of individual European economies to global rifts. (Dyson, 2000) At the same time, the new financial architecture – orchestrated by Europe's early financial liberalizers – came to mirror that of the United States, characterized by a greater role for market provision of finance. Dyson writes:

"Emulation of the US model was particularly apparent in Europe's financial markets and in the spread of the concept of shareholder capitalism as the primary measure of corporate performance... The creation of the Euro-Zone was a factor in accelerating the transition to market funding in Europe. With it went fears of an overcapacity in the EU banking sector, with a resultant consolidation within the sector.

The development of global financial markets had been synonymous with the spread of the shareholder capitalism model and of predatory corporate behavior associated with this US model to Europe... By stimulating the rapid growth of a single European capital market, in consequence of eliminating currency/ risk, the Euro-Zone provided an additional catalyst. Companies were encouraged to shift from bank financing to the use of new equity issues and debt markets. With the thriving euro-bond market came a wave of corporate restructuring in Europe, involving hostile takeover bids in telecommunications ... oil ... and in banking." (Dyson, 2000, 35)

Europe's more peripheral economies slated to enter the Euro-Zone had less experience with the asymmetries of information and abrupt changes in the direction of capital that characterize a liberalized financial environment. These economies, though ensconced in an economic union, could fall prey to crisis without adequate regulatory infrastructure, and the EMU did not ensure that all financial systems were protected against such potential outcomes. (Abiad, Detragiache, Tressel, 2008) Abdelal cites interview notes with Jean-Paul Mingasson, former Director-General of the European Commission's Directorate General for Budget (1989 until 2002) and Enterprise and Industry (2002 until 2004), in which Mingasson argues that despite their their objections to the financial terms of EMU, Portuguese, Spanish,

Greek, and Irish policy-makers had few alternatives to joining the EMU, given the combination of public support for joining the EMU, as well as the probability of their suffering negative trade terms by not participating. (Abdelal, 2007) As negotiations for EMU proceeded, the lead negotiators in favor of EMU gained a "cast of objectivity" with respect to virtues of financial globalization, and the general dominance of German, Dutch, and French central bankers in favor of capital account liberalization and broader financial deregulation relative to Europe's peripheral states' negotiators propelled those policies. (Dyson and Featherstone, 1999, 31) The EMU architects' conscious decision to prioritize the enforcement of deficit rules and price stability at the supra-national level, while leaving financial regulation and oversight to member states demonstrated the relative importance they attributed to financial risk in what would become a very integrated financial system. In the following years of EMU, the EC broadly neglected reports by member states' central banks as well as organizations like the IMF and the BIS about the increasing potential for some kind of a financial crisis as lending and leverage increased. (Lynch, 2010) Simultaneous enrichment of financial interests (both banking and real estate related, in countries that experienced housing bubbles) in states throughout the EMU, and increased national level lobbying by those actors created an environment in which opponents of those developments were neutered. (Lynch, 2010, O'Toole, 2010, Collignon and Schwarzer, 2003)

# 5.3.3 The Feedback Loop of Public Thought and Policy

Though Germany and France's initial moves toward financial liberalization occurred before, or at least, simultaneous with, a sea change in academia about the efficiency of financial markets, a new class of 'technocrats' from throughout Europe that came together to craft fully subscribed to such new classical visions of how a globalized European economic

union would function. (Dyson, 2000) This group included central bankers throughout Europe, as well as disciples of wave of German and French officials that broke with the BW system. (Dyson, 2000) Dyson also notes that central banks of the would-be members were shareholders of the new ECB:

"The eleven governors of the [Euro-11] national central banks account for the large majority on the ECB governing council, compared with the six members of the executive board. In addition, the national central banks are shareholders of the ECB rather than its subsidiaries, with the Bundesbank having a 24.5 per cent shareholding, the Banque de France 16.8 per cent, and the Banca d'Italia 14.9 per cent." (Dyson, 2000, 33)

These technocrats found increasingly receptive political environments at home as national governments shifted to the right under the Reagan/Thatcher political zeitgeist.

(Moravcsik, 1991) When newly elected European officials tried to lessen the ECB's importance in the determination of EMU policy, the ECB's increasingly autonomous management vetoed such changes. (Dyson, 2000) As the EMU took form, the design of EU and EMU policy design fostered the direct participation of financial actors, who have written legislation and regulation as in the US that protects their interest, while lobbying against the creation of new regulatory apparati that would monitor developments in financial instrument and security markets. (Bieling, 2006) These groups, whose numbers grow, continue to lobby for lower taxes, which furthers neoliberal aims in the fiscal policy arena. (Gill, 1998)

The combination of international pressures, class pressure, business pressure, and a changing intellectual and policy paradigm related to finance have had significant feedback effects. Financial centers in the core generated historic capital account surpluses and participated in the creation of bubbles throughout the EMU, and inequality has increased throughout the EMU.

If richer classes demand more financial liberalization, and they have any effect on the political process, then more financial liberalization and deregulation is likely to occur. (Quinn, 1997) As income inequality has increased in Europe, the class interests in favor of financial liberalization and integration have seen their political voices strengthened, and have persisted until the moment of global financial crisis in 2008.

#### 5.4 Conclusion

Power asymmetries have played a role in the types of policies that were determined for governing finance in the Eurozone – these dynamics played out at the national, class, and business interest level, in which pro-finance groups prevailed due to disproportionate power in the decision-making process. At the same time, the academic, political, and finally public understanding of the role of finance changed from considering finance a force to be contained, to an essential component of economic growth, with crises an unlikely consequence. Financial deregulation enriched certain countries' financial sectors, allowing them greater sway in the lobbying process that promoted their welfare in EU and EMU policy. The interplay between academia and policy-makers enabled European financial interests at the local, national, and European level to extend their influence through legal avenues as well as economic spheres.

This chapter charts the evolution of thought and practice related to financial liberalization and integration from one heavily favoring financial repression to one allowing virtually free reign to financial intermediaries, even to the point of inviting financial industry lobbyists to write European legislation that was to govern financial operations throughout the Euro-zone. The political structures that developed within the European Union and EMU privileged wealthy interests with views concordant with those the Europe's political and

economic core – opponents of financial integration and liberalization in Western Europe's periphery could not slow the move toward financial integration under EMU, while core interests opposed to the financial liberalization components (as well as other features of EMU) opted not to join. In the context of the EMU's Single Market, fledgling financial systems in Europe's periphery absorbed larger and faster increasing capital flows than at any point in prior history; in the moment of the global financial crisis, different peripheral nations saw similarly large outflows to core financial centers like Germany, France, and the UK.

The disproportionate power that has tilted European economic policy in favor of largely unregulated finance throws doubt on the positives assumed to result from the creation of the EMU, particularly vis-à-vis financial liberalization, and especially in the economic aftermath of the global financial crisis, and Europe's sovereign debt crisis. Further, in the aftermath of the crisis, German and French political interests have set the stage for more disparate decision-making while continuing to privilege finance on the political scene. With each bailout to the periphery that indirectly repays core nations' banks and financial intermediaries for their moral hazard, the core demands further austerity from Europe's periphery and semiperiphery, beginning a process to dismantle Europe's welfare state. In the unequal world of the EMU, nations, elites, and rentiers have little reason to fear not getting their way, while the rest of Europe pays.

The next chapter examines the financial dynamics in Iceland, Ireland, and Germany, to build a better understanding of the interplay between finance and the real sector in Europe's core and periphery, as well as of the interstate dynamics following the implementation of EMU that protected financial and core political interests at the expense of real sector workers and peripheral states.

#### **CHAPTER 6**

# POWER DYNAMICS IN PRACTICE: FINANCIAL CHANGE IN THE WESTERN EUROPEAN CORE AND PERIPHERY

## 6.1 Introduction:

The European path towards finance-led growth has rewarded some parties at the national, industrial, and class levels, but simultaneously played a role in destabilizing economic systems, facilitating and exacerbating economic crises and downturns, and contributed to rising inequality throughout the region. Germany, Ireland, and Iceland present three examples of countries for which development of the FIRE sector of industries has created a source of economic growth for some, at the potential expense of others. These countries also illustrate the negative aftermath associated with financial liberalization, in the forms of bursting asset bubbles, disparate sectoral growth, and the national pursuit of policies that benefit financial interests relative to manufacturing and export interests, and elite interests relative to workers' interests. Despite their varied approaches to financial liberalization and institutional arrangement in their respective financial sectors, these three countries all represent the potential pitfalls of rapid financial liberalization. However, they also reveal the importance of regional alliances and power in the European policy arena: the German state has been able to transfer costs associated with its banks' behavior, while the Irish citizenry has paid the costs of its country's banks' activity. Despite large similarities with the Irish story, Iceland's government has been able to rely on its Nordic allies to defend its interests in the European policy sphere so as to mitigate the public costs of its financial crisis

These different experiences also reveal the complicating factor of Europe's Economic and Monetary Union, particularly the operations of the European Central Bank. In the aftermath of the crisis, as peripheral countries like Ireland have complied with the price-stability preserving ECB, German banks have shifted their lending to the ECB, through the tool of the TARGET-2 funds. By increasingly funding the financial entity that enacts German-flavored policy for the EMU, Germany maintains its financial interests, and continues to promote the interests of its financial actors that bear some of the blame for the asset bubbles that grew in the lead-up to the global crisis, with lasting consequences for the smaller European economies like Ireland and Iceland.

Since late 2008, both Iceland and Ireland have continued to react to the consequences of major financial crises, and have been prominent casualties of the Global Financial Crisis. Though mainstream literature about these countries' financial crises has focused on the roots of their causes in currency and housing speculation, their crises have deeper roots in political economy, class dynamics, and the 'new' global financial architecture. Iceland and Ireland followed different roads to their crises, but their cases bear similarities that indict the 'new' global financial architecture of deregulated, liberalized, and privatized finance. Both demonstrate the social costs of financial excess – in both countries, three prominent banks (Iceland's Glitnir, Kaupthing, and Landsbanki, and Ireland's Allied-Irish Bank, Anglo-Irish Bank, and the Bank of Ireland) operating with complete governmental trust borrowed and made loans far in excess of their abilities to cover, with little to no lasting real sector development to show for it, except for unemployment and other social costs that have resulted from these two financial debacles. The differences in these countries' responses to their circumstances reveal two different paths of recovery – one that placates financial

engineers of the crisis, and one that addresses the needs of the 'rest'. As such, despite these countries' small size and seeming irrelevance to the 'big picture', it is important to pay attention to these two island nations' experiences, both before and after the recent crisis.

The European financial architecture changed tremendously from the mid 1980s onward, and Germany played a central role in that process. Germany's financial mandates for Europe's incipient Economic and Monetary Union (EMU) included that countries open their borders to free financial flows and release restrictions on what services banks could provide, in order for their banks to be recognized within that institution. (Story and Walter, 1997) As countries like Italy, Spain, Portugal, Greece, and Ireland opened their borders to capital flows and enabled their banks to perform new and risky functions like securitization, German (and Dutch, and French, but largely German) capital flooded those financial markets. This lending helped finance real estate bubbles, as well as consumption of imports from the European core, while certain peripheral European economies stagnated.

The failures of Germany's financial sector to critically review the potential for crisis in the EMU's semi-periphery and in the US subprime mortgage market, even as scholarship built warning about such possibilities, throws into question Germany's status as the financial sage of Europe. German banks' embrace of the TARGET-2<sup>10</sup> fund gives it leverage when negotiating for regional policies. These claims help to transfer private credit intermediation to the public sector – as interbank borrowing became increasingly difficult following the global financial crisis, European states' central banks began to increasingly borrow from the

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<sup>&</sup>lt;sup>10</sup> Trans-European Automated Real-time Gross Settlement Express Transfer System 2 funds – "the large-value cross-border payments and settlement system for the Eurosystem," (Cecchetti, McCauley, and McGuire, 2012, 1)

European Central Bank, in order to finance the purchases their citizens made of imports. (Cecchetti, McCauley, and McGuire, 2012)

These three countries each reveal pitfalls of financial liberalization – whether in the form of the creation of asset bubbles in Iceland and Ireland or in the assumption of excess and poorly understood risk in international capital markets, as in the German case. Each also presents an example of a state along a spectrum of experience with liberalized financial markets – Germany had extensive experience with the universal banking structure, Ireland had begun to quickly liberalize its financial structures in the 1980s in time with the changing requirements of the EEC and EMU, and Iceland liberalized rapidly in the late 1990s. Finally, each example has at some point relied on political structures to act in financial actors' interests; Ireland and Iceland's governments have been shown to have suppressed media attention to the growing fragility of their financial systems in the lead-up to the crisis, while Germany has used its clout within the frameworks of the EU and the IMF to shape the parameters of bailouts and limit the provision of haircuts on German bondholders of sovereign debt in the EMU periphery. Iceland and Ireland are of particular interest due to their divergent experiences post crisis, and what that reveals about the role of political allies within the European landscape. While some have argued that membership in the EMU shielded Ireland from the immediate costs of its collapse, one might argue that Iceland's ability to enact capital controls outside of the EMU and its relationship with Norway, Sweden, and Denmark, shielded its taxpayers from paying back the sums that UK and Dutch political interests demanded in IMF negotiations.

This chapter compares the relative financial development of German, Icelandic, and Irish finance prior to the 1980s, and then charts the economic development of these three

states in both their real and financial sectors. It outlines the changes that occurred in both economic arenas and socio-economic conditions in the years following the implementation of EMU and the lead-up to the global financial crisis. It ends with discussion of the current developments in these three states – chiefly, Germany's dominance within the European stage, Iceland's fortune in having Nordic allies that negotiate on its behalf, and Ireland's political and economic misfortune at the hands of the European troika, the European Commission, the IMF, and the European Central Bank (ECB) in the midst of the European response to the Eurozone crisis.

This chapter adds a portrait of the international nuances of financial liberalization in industrialized countries to the literature. Though there is a substantial literature that discusses the challenges and economically destabilizing consequences of financial liberalization in developing countries, there has been little attention to the potential for similar dynamics in first-world countries. Given the rapid transformation of these countries' financial sectors, in a moment of unprecedented financial information in global finance, increased instability should have been expected. It also illuminates shared socio-economic changes in three European countries that liberalized their financial sectors relatively quickly, though at different points chronologically. Rising inequality between financial and non-financial sector employees seems to have been shared, as well as changing composition of national workforces, with rising proportions employed in FIRE industries. Finally, it elaborates on national and intra-European dynamics in the very recent past, and demonstrates the real costs of these crises and disproportionate power dynamics in dealing with various facets of the European crisis.

#### 6.2 Financial Origins

Germany has had a long history of an independent banking system and universal banking, particularly compared to Iceland and Ireland; Germany also led most European nations in liberalizing its financial sector. When France sought German buy-in for the creation of a European economic union, Germany demanded an independent central bank for the union, removal of capital controls, and a significant expansion of the tasks banks could perform within the EMU. (Story and Walter, 1997) These demands were enshrined in the Maastricht Treaty as the Banking Passport System (for a bank to be certified within the EMU, it needed to perform a bundle of tasks, commercial and investment), and the Single Market, which mandated the removal of barriers to trade and capital throughout the EMU.

There is long German history of banks enabling industrial development, and the German financial landscape has traditionally been defined by a three pillar banking system, with three categories of universal banks – privately owned commercial banks, public banks (the Landesbanks), and credit cooperatives. The privately owned commercial banks have historically been Germany's largest, and most profit-motivated. Landesbanks and credit cooperatives served a different role, historically, as lower risk and more secure depository and lending institutions for German households and local economic development. (Bleuel, 2009, 3) Banks played a large role in facilitating the development of major German industry, from the 1890s and through the 1970s. As a key component of the German model of managed capitalism, banks traditionally had significant authority in real sector development and decision-making, and governments trusted those sectors to collaborate effectively for German economic growth. (Deeg, 1999, Lutz, 2000)

For most of their histories, Iceland and Ireland had small, largely public, and heavily regulated financial sectors. Both countries instituted small reforms to modernize those sectors

during the late 1970s and early 1980s, and both significantly deregulated and liberalized their financial sectors in the 1990s. The causes of these financial shifts differed – Iceland's financial liberalization occurred under the auspices of a governing group led by David Oddson, a poet cum prime minister who had formed a right-wing pro-liberalization and antiregulation party in the 1980s specifically to expand the economic options of a nascent nouveau-rich group in Iceland called the Octopus. (Wade and Sigurgeirsdottir, 2010) One of the stated aims of the Eurozone was to liberalize European finance so that capital could move freely and rapidly between member states' banks, with a longer term aim to shift from bankbased financial systems to a securities market-based system like the United States. (McCann, 2010) Ireland's shift had much to do with its bid to enter the EU and the Eurozone, as a consequence.

#### 6.3 Economic Development from 1980s through 2000s

European financial developments in the late 1980s and early 1990s significantly changed Europe's banking landscape, and increased the scope of bank activity across Europe. In the late 1980s, the passage of Europe's "Second Banking Directive" required European countries within the European Economic Community (EEC) to allow other member states' banks to open branches, and perform the following tasks, even if home-state banks did not offer them, including: deposit-taking and other forms of borrowing, money transmission services, trading for the banks' own accounts or others' investment portfolios, security underwriting and issuance services, the 'safekeeping of securities,' and other new financial activities that member states' financial sectors may or may not have histories of performing, while "each nation [retained] its own banking supervisory and regulatory agencies". (Gruson and Nikowitz, 1988, 215; Murphy, 2000, 3) Another feature of the EEC was national

recognition – if a bank from one EEC member state opened a branch in another member state, it needed to respect the regulations of the host state, and could not offer services that were not allowed by the host state's financial regulation scheme. (Murphy, 2000)

From the dissolution of Bretton Woods onward, various European states began to pursue the creation of new economic institutions that could protect either their own national interests, or broader European economic interests in the global arena. These took various forms of monetary and currency unions, and eventually emerged as the EMU initiative. Core European states like Germany and France had substantial power in hammering out the terms of what would become the policy framework of Europe's economic and monetary union.

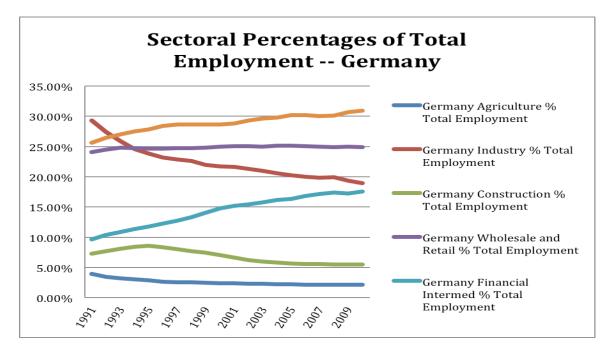
Smaller states like Ireland had relatively little power in the planning, adoption, and implementation of those policies, though they could vote in referenda on the implementation and adoption of those criteria. Iceland and other Scandinavian nations, with the exception of Finland stayed outside of the EMU. Like Norway, Iceland also refrained from joining the European Union. These decisions would have certain economic repercussions in some of the monetary factors that helped fuel Iceland's later financial crisis.

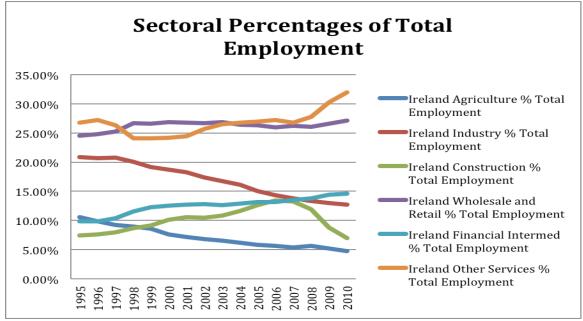
### 6.3.1 Real Sector Development in Germany, Ireland, and Iceland

In the two decades preceding EMU, German and Irish shares of industrial employment declined relative to total employment, while employment in financial intermediation and general services increased simultaneously. (Siebert, 2005, Kirby 2002) Irish employment in agriculture and manufacturing has been declining as a share of total employment since the early 1980s, while employment in services, financial and other, has been increasing as a share of total employment in the same period. (Irish Census Data; cso.ie, 2014) Figures 6.1 and 6.2 show these trends.

Similar trends hold in Iceland – Icelandic shares of manufacturing and industrial employment have decreased as a percentage of total employment, while shares of financial intermediation and real estate have increased significantly as a percentage of total

Figure 6.1 Sectoral Employment in Germany and Ireland





Source: OECD Statistics, 2014

**Sectoral Percentages of Total Employment** 30.00% Iceland Agriculture total 25.00% Iceland Construction 20.00% Iceland Wholesale, retail trade, 15.00% repairs Iceland Financial Intermediation 10.00% and Real Estate 5.00% Iceland Manufacturing 0.00% Iceland Industry 

Figure 6.2 Icelandic Sectoral Employment

Source: Statistics Iceland, 2014

employment from the early 1990s through the present.

# 6.3.2 Financial Sector Development in Germany, Ireland, and Iceland

The changes that occurred in Germany, Ireland, and Iceland's financial sectors, from the 1980s onward represented a sea change. Each of these country's financial systems internalized neoliberal and globalizing trends of the Reagan/Thatcher era, though they demonstrated these trends in different fashions. German banking reflected a newly competitive tenor in a move away from locally driven financial development to an increasingly international and market oriented financial arena. Iceland's government began to deregulate and liberalize its financial sector in the mid 1980s, and would continue to do so at an increasing pace through the 1990s, while simultaneously raising interest rates. Both policies would have significant repercussions for Iceland's financial climate and eventual

crisis in the 2000s. While the Irish economy's real sector expanded significantly in the last decades of the twentieth century, Ireland's financial sector would not come to play such a large role in Irish development until the late 1990s and early 2000s. These trends found support among national political interests, who promoted these changes in legislative strategies that protected the interests of large banks, while implicitly fostering greater competition for banking sectors that had been more risk averse.

In the 1980s, the character of German capitalism shifted from managed capitalism to market capitalism (Deeg, 1999). This has been associated with a shift in financial activity away from lending money to smaller scale and regional development projects to issuing and trading securities, at the same time that large German firms began to increasingly seek funding from large international banks, rather than local banks. (Lütz, 2006) These dynamics increased domestic competition within Germany's three-pillar financial system. According to Susanne Lütz, private banks and the European Banking Federation have brought suits against various Landesbanks for unfair treatment under German financial law and under European financial law, namely on the basis of the Landesbanks' access to political subsidies and alleged receipt of high credit ratings from the German state. (Lütz, 2006) German lawmakers have also steadily eliminated state guarantees for public banks that insured domestic German capital markets' access to capital and creation of new financial products. (Lütz, 2006) In the newly liberalized global financial architecture, the IMF has written reports on the relatively low profitability of Germany's Landesbanks relative to its private banking pillars, despite the fact that the Landesbanks were not primarily designed to be profitable. (Lütz, 2006)

These changes in domestic financial competition were matched with an increasing tendency of German banks to lend internationally, and for German firms to pursue credit

internationally. German banks lent heavily to local EMU economies as well as housing lenders in Eastern Europe experiencing real estate booms in the mid 2000s. Though this lending on a country by country basis accounted for a small percentage of Germany's GDP, the amounts German banks lent constituted much larger percentages of the borrowers' GDPs. German banks opened branches throughout the EMU, particularly in countries issuing large volumes of mortgage loans. This lending could have a significantly disruptive effect on local financial markets and real sector lending, particularly if followed by an abrupt downturn in such lending. These trends presaged developments that would result from under EMU, where, in addition to exporting real sector goods to the European market, Germany also became Europe's largest capital exporter:

"The financial account comprises fundamentally foreign direct investment (FDI) portfolio flows, and 'other' flows that are driven heavily by banks... Put summarily, Germany has been recycling its current account surpluses as FDI and bank lending abroad... The Eurozone has been the main recipient of German FDI, while also competing with the non-euro part of the EU for German lending in the 2000s. Once the 2007-9 crisis broke out, German banks restricted their lending to non-euro EU countries, but continued to lend significantly to EMU countries." (Lapavitsas, et al, 2010, 28)

Though Iceland's state began to liberalize its financial policy in the mid 1980s by relaxing control of its interest and exchange rates, the election of David Oddson to prime minister in 1991 paved the way for the significant financial reforms he would oversee. These included a gradual increase in Icelandic interest rates, starting in the early 1990s, the privatization of Iceland's large public banks, and their new reorganization as three private banks performing hybrid commercial/investment bank functions, Landsbanki, Kaupthing, and Glitnir, and also a significant change in the incentive structure of banks, including "aggressive compensation schemes, stock options for employees and flat organizational structures." (Sigurjonsson, 2010, 9) By the late 1990s, the Icelandic government began to

promote the purchase of shares of those three banks, particularly by Icelandic citizens. (Sigurjonsson, 2010) Oddson's early years as prime minister also coincided with a substantial relaxation of balanced regulatory authority over financial practice. Prior to Oddson's term as prime minister, it had been common practice for a member of each political party to be one of the Central Bank's governors – Oddson was perhaps the first Icelandic prime minister to take advantage of this system by placing an explicitly pro-liberalization Central Banker in one of those positions. (Wade, 2009) These changes represented an aboutface from the Icelandic government's traditional promotion of financial and economic stability. (Danielsson and Zoega, 2009, Sigurjonsson, 2010)

Ireland's financial sector only began to exercise its power to facilitate Irish economic development in the mid to late 1990s, when the Irish economy's growth in real sector production began to slow, and housing construction began to grow. As in Iceland, the state also played a large role in stimulating Ireland's financial transformation in the late 1990s and early 2000s, and Ireland's government maintained a close relationship with its construction industry, almost from the start. When Ireland's first Celtic Tiger moment – an export-led surge in growth had subsided in the early 2000s, one of the Irish government's counter-cyclical policies was to stimulate growth in the housing sector. Irish fiscal policy from the early 2000s on consisted of a series of tax cuts at the corporate and household level and structural increases in spending, largely geared toward municipal construction and property investment. It bolstered what became an unsustainable construction and housing boom, while it eliminated a fiscal safety net that the government would need when Ireland went into recession in 2008. (Honohan, 2008) From 1994 onward, bank lending increased substantially: "In 1994, total private-sector credit amounted to barely more than 40 percent

of gross domestic product. By the end of the decade, it had soared/ beyond 114 percent and showed no sign of reaching a plateau." (Lynch, 2010, 119)

Financial liberalization and deregulation set the trend in this era for the booms in lending that would ultimately increase these nations' financial fragility, as well as the competition that prompted risky profit seeking ventures by formerly well-regulated and risk averse banks. The nature of lending and borrowing varied in Iceland, Ireland and Germany in terms of destination and scope, but each of these states broadened the international spheres in which they lent and borrowed capital. By setting the framework for the financial linkages that would undergird asset bubbles in Iceland and Ireland, as well as the increased pressure for German Landesbanks to compete on the international stage, these states fit the global trend of increasing financial instability, which would have serious consequences in 2008.

- 6.4 Economic Development in the 2000s Approaching the Crisis
- 6.4.1 Germany Export and Lending Leader

German foreign lending, and specifically, its lending to European counterparts increased relative to German GDP in the early years of the 2000s, and rose steadily through 2008 – see figures 6.3 through 6.5. German capital outflows to other members of the EMU may have been relatively small percentages of German GDP, but these flows generally constituted larger percentages of the borrowers' GDPs. An extensive literature has emerged demonstrating and attempting to explain the increased lending within the EMU since the introduction of the euro; another literature, and a growing mainstream media investigation has evolved regarding German exports to and FDI in fellow EMU members. (Baldwin et al, 2008, Chen, Milesi-Ferretti, and Tressel, 2013)

German International Claims and Liabilities as a Percentage of GDP

80.00%
60.00%
40.00%
20.00%
0.00%
Claims % GDP
Liabilities % GDP

Figure 6.3: German Foreign Lending and Borrowing

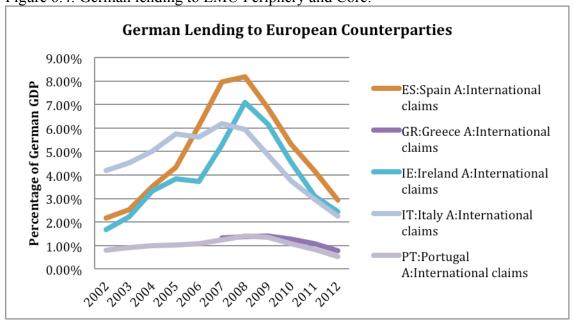
Source: BIS Locational Data Statistics, 2014

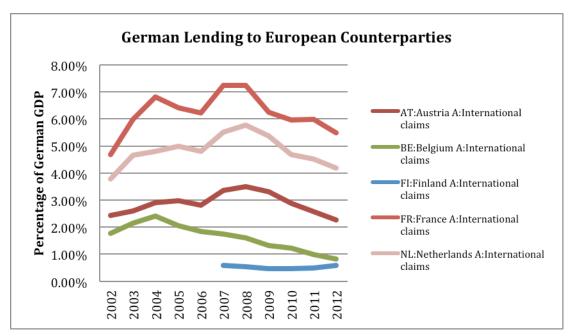
German exports to European neighbors increased significantly in this period, while the trade balances of Europe's periphery declined substantially in the same period. At the same time, German financial flows increased substantially to these countries; the volume of peripheral European debt held by core European states is very large compared to the volume of peripheral European debt held by states outside of the Eurozone, which held much larger volumes of core European debt. (Chen, Milesi-Ferretti, and Tressel, 2013)

In this period, German banks' lending within Germany changed. The proportion of their total lending to manufacturing firms decreased relative to their lending to service sector firms, and German banks, particularly the Landesbanks, began to acquire more international financial assets, rather than lending to local economic actors. These developments arose after EMU banking directives that prohibited the provision of lower-cost financing to public banks went into effect in 2005 – since Germany's Landesbanks, which theoretically were supposed to provide low cost commercial banking services to the populace with low expectations of

profits, they were implicitly forced to seek alternative financing options, which happened to be very risky international financial assets. (Gorn, 2008) Given their lack of experience

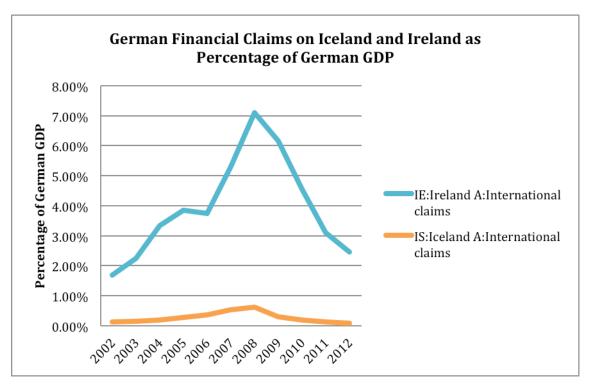
Figure 6.4: German lending to EMU Periphery and Core:

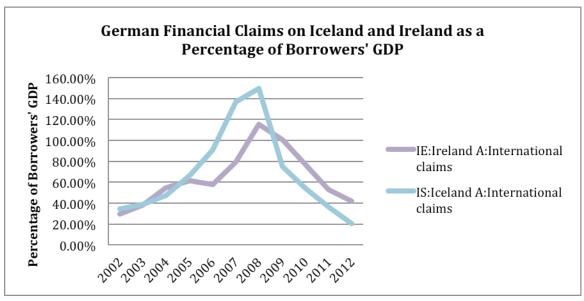




Source: BIS Consolidated Banking Statistics

Figure 6.5: German Financial Claims on Ireland and Iceland as a Percentage of German GDP, and as a Percentage of the Borrowers' GDP





Source: BIS Consolidated Banking Statistics, and OECD Statistics, 2013

with international capital markets leading up that point, Landesbank managers may have lacked the experience to evaluate the relative risk of assets being offered in those markets. In this period, German banks also increased the volume of asset securitization, particularly of home mortgages and small to medium enterprise loans. (Sinn, 2010)

#### 6.4.2 Iceland and Ireland

Iceland and Ireland shared experiences of bubbles, increasing price levels and consumption, and elite empowerment alongside questionable accounting standards and lax regulation of financial activity. In Ireland and Iceland, banks shifted to more aggressive markets for credit, while simultaneously lending extensively to regional banks (in the Irish case) and to the other two hybrid commercial/investment bank hybrids in the Icelandic case. (Lynch, 2010, Wade and Sigurgeirsdottir, 2011) These practices coincided with substantial government involvement in the promotion of financial actors' (and, in the Irish case, home builders') interests, as well as a complicit role for media. Throughout these burgeoning crises, Ireland and Iceland's status as Western European countries may have insulated them from greater regulatory scrutiny from members of the G-7 and other powerful national economic associations.

In both Ireland and Iceland, banks pursued more aggressive strategies for acquiring credit and dispersing it through national economic apparati. Post 2000, Irish banks transitioned from financing lending with deposits, to selling securities on the international market in order to raise capital to lend – citing the IMF in 2001 about the shift from relying on deposits to relying on 'wholesale [interbank] funding.' (Lynch, 2010, 121) This development helped foster the simultaneous boom in construction industry. The Irish government went on to encourage major Irish banks to lend more to home-owners and

construction businesses – this resulted in a wave of lending that far outstripped these banks' capital reserves, and courted insolvency. (Lewis, 2011) Despite warnings from domestic economists and institutions like the IMF and OECD that Ireland's housing bubble and credit bubble had the potential to burst with dangerous effects, the Irish government did little to increase regulatory oversight of these banks' activities, and even relaxed certain regulations. (IMF, 2004, Rae and Van Den Noord. 2006) When the Regulator did raise capital requirements in a nominal attempt to curb high loan to capital ratio loans, it raised the deposit minimum requirement from 4% to 4.8%. (Honohan, 2008)

Ireland and Iceland received little true economic oversight in this period, despite periodic reports from outside of the two countries about growing economic instability. Throughout the period of 2000 to 2008, Iceland's Central Bank performed no significant stress tests, and failed to acknowledge the inherent risks in a country with virtually zero experience in finance becoming the second most leveraged financial system in the world, following Switzerland, a country that had made its proverbial economic name via finance. (Danielsson and Zoega, 2009) This experience mirrored Ireland's. After its entry into the EMU, Ireland's Central Bank found its capacity to regulate local and regional bank behavior through restrictive monetary policy diminished: "At Anglo-[Irish bank], and its largest competitors, meanwhile, there was little fear of the regulator's bite. 'All that the Central Bank could do was write and sort of say 'you're expanding too fast.' But in effect, they had no control, no real control compared to what they had [before the euro], said Murphy. 'Everybody would ignore it.'" (Lynch, 2010, 122-123; and BIS, 2000.)

In both countries, cozy relationships developed between bankers, politicians, and the media. In Iceland, banks bought large shares in Iceland's major media companies, while

media companies bought large shares in the banks. This weird, even incestuous, relationship perverted institutions with a duty to report and deliver information to the public. Icelandic banks also lobbied the news media to present favorable pictures of their financial sector, and journalists felt little need to investigate further. (Wade and Sigurjonsson, 2012) This process at the very least contradicts mainstream theories of efficient finance; in practice, it fueled the actions of a financial sector out of control, misinformed a public about how their country had suddenly started to get rich, and spread the belief that Iceland's financiers could never fail.

In addition to the government and the Central Bank's tremendous involvement in the investment-banking sector, these institutions also lobbied Icelandic citizens and other depositors heavily to buy shares in Iceland's three major banks. (Wade and Sigurgeirsdottir, 2010) After Lehman Brothers' collapse, just days before Iceland's three major banks would go into receivership, "[in] a bid to restore confidence, Oddson ordered Iceland's Central Bank to buy seventy-five percent of Glitnir's shares." (Wade and Sigurgeirsdottir, 2010, 22) At the same time, Oddson's government engaged in something like a PR campaign on behalf of his country's three large banks. Wade and Sigurgeirsdottir describe Oddson's government's actions on behalf of the financial sector, that included defunding university and research programs that criticized Iceland's financial sector, public attacks on academics that wrote critical papers, and even intimidating "Statistics Iceland, the public data agency ... into suppressing information on soaring income and wealth inequality." (Wade and Sigurgeirsdottir, 2010, 28) The Icelandic Chamber of Commerce paid some economists – including Frederic Mishkin and Richard Portes – big fees for papers that lauded Iceland's financial sector, and claimed that Iceland's Central Bank had all things financial in good

working order. (Ironically, Mishkin's paper also praised Iceland's robust civil institutions and lack of corruption.) (Wade and Sigurgeirsdottir, 2010)

While Ireland's government may not have acted so blatantly to minimize criticism of its chief financial players, Ireland's 'Golden Circle,' a network of 39 individuals that held positions on at least two boards of 33 out of 40 major Irish companies, both public and private, worked to protect mutual members' economic and political interests. According to a 2010 TASC<sup>11</sup> report by Paula Clancy, Nat O'Connor, and Kevin Dillon, "Anglo Irish Bank [had] ten links, and Irish Life and Permanent and Bank of Ireland ... each had nine links to other companies. Allied Irish Bank (AIB) also had a large number of links, to seven other firms." (Clancy, et al, 2010, 34) The intermingling of these individuals and institutions generated connections to government agencies and actors, and may well have exacerbated the effects of the financial bubbles that grew between 2000 and 2008 in Ireland. Significantly, members of several banks' boards sat on the boards of other banks, as well as multiple firms' boards.

As in Iceland, a tacit policy of government and media censorship appears to have emerged during the rise of Ireland's housing bubble. Michael Lewis describes the hurdles that Irish academic Morgan Kelly faced when he tried to submit an article critiquing the housing bubble, and arguing that a collapse of the Irish banking system was imminent:

"The [Irish Independent]'s editor wrote back to say he found the article offensive and wouldn't publish it. Kelly next turned to The Sunday Business Post, but the editor there just sat on the piece. The journalists were following the bankers' lead and conflating a positive outlook on real-estate prices with a love of country and a commitment to Team Ireland. ("They'd all use this same phrase, 'You're either for us or against us,' " says a prominent bank analyst in Dublin.) Kelly finally went back to The Irish Times, which ran his article in September 2007." (Lewis, 2011, 5)

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<sup>&</sup>lt;sup>11</sup> TASC is an acronym for the 'Think-tank for Social Change,' an independent Irish think tank that analyzes inequality and public policy.

As in Iceland, when Irish banks' stock values began to drop, and as the risk of a run on one of them increased, Irish government officials and bankers claimed that: "the banks merely had a "liquidity" problem and that Anglo Irish was "fundamentally sound"—that the two could not be reconciled. The government had a report thrown together by Merrill Lynch, which declared that "all of the Irish banks are profitable and well capitalised." (Lewis, 2011, 6)

Through the 2000s, Ireland's major banks persistently and aggressively lobbied the Irish government from as early as 2005 to decrease the deposit to loan ratio and to allow those banks to create and trade mortgage backed securities. (Barrington, 2010) Further, Ireland lacks any "statutory regulation of lobbying." (McGrath, 2009, 256) Irish regional construction and financial interests lobbied their government for preferential treatment, and when Irish elected officials have proposed legislation against lobbying, it was always the Labour Party that would introduce the motion – never Fiona Fàil, the party in charge in the lead-up and immediate aftermath of Ireland's crisis. (Lynch, 2010, Barrington, 2010)

Despite a growing misalignment of short-term assets and long-term liabilities and a small-scale banking crisis in 2006 in Iceland, and an obvious property bubble in Ireland, international regulators did little to intervene. Some of this reticence had to do with the media campaigns in both countries to present portraits of good local economic fundamentals, and some of it may have had to do with these countries' status as Western European nations. In the beginning of the 21<sup>st</sup> century, Ireland's housing market had acquired momentum, and:

"In April 2000, the Financial Stability Forum, representing central banks from the major world economies, examined 37 offshore financial centers and judged Ireland among the best-regulated, those 'generally perceived as having legal infrastructures and supervisory practices, and/or a level of resources devoted to supervision and co-operation relative to the size of their financial activities... that are largely of a good quality and better than in/

other [offshore centers].' There was one cautionary note: the forum ranked Dublin among four locations that warranted 'continuing efforts to improve the quality of supervision.'" (Lynch, 2010, 122-123; BIS, 2000)

Despite this warning, Dublin received little incentive to actually increase its regulatory scope.

In Iceland, a similar dynamic persisted. The Icelandic government and Chamber of Commerce would invite neoliberal economists to write pieces about Iceland's economic and financial standing, and would threaten to defund university departments and other local research institutions that published stories that ran against that narrative. (Wade and Sigurgeirsdottir, 2010) So, too, in Ireland, did the government invite economists to assess the structural soundness of its financial and housing sectors. In addition to this scuffle following one report that the Irish financial and construction sectors were not as healthy as they had been made to appear, the Irish government Department of Finance hired a Merrill Lynch economist to analyze the state of the Irish housing market and financial sector. When Philip Ingram wrote that Irish bankers were making the riskiest loans in the British Isles, two things happened, according to Lewis. First, Anglo Irish bankers phoned Merrill Lynch, and threatened to take their business elsewhere if such a report were allowed to stay out in the open, and then, Merrill Lynch retracted the report, because it, "had been a lead underwriter of Anglo Irish's bonds and the corporate broker to A.I.B.: they'd earned huge sums of money off the growth of Irish banking." (Lewis, 2011, 10) Eventually, after neutering Ingram's report, and "purging it of its damning quotes from market insiders, including its many references to Irish banks," Merrill Lynch would go on to fire Ingram. (Lewis, 2011, 11)

In both Iceland and Ireland, financial development occurred under the supervision of the government, in the sense that attempts by outside parties to monitor changes in lending, borrowing, and overall solvency in both countries could be frustrated by official decree. In this environment, banks grew, and GDPs grew, in rapid and unsustainable fashion. The lack of a uniform regulatory apparatus in the EMU and EEA allowed this development, but international lending to these two countries' financial sectors occurred in the midst of a steady stream of literature that argued that these two countries were due for bursting asset bubbles. These states could not have grown to the extent that they did without the lack of financial oversight by lending parties outside of their borders.

### 6.4.3 Class Stories in Iceland, Ireland, and Germany

Consumption increased across the class spectrum in both Iceland and Ireland, while holding constant in Germany. (See figures 6.6 and 6.7.)

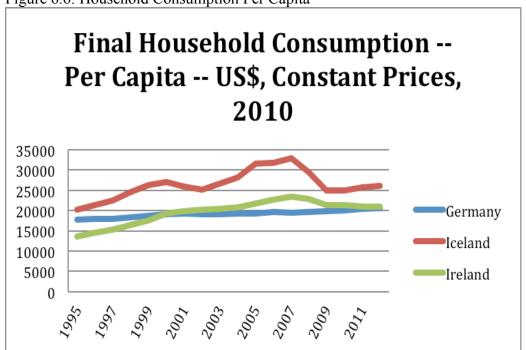


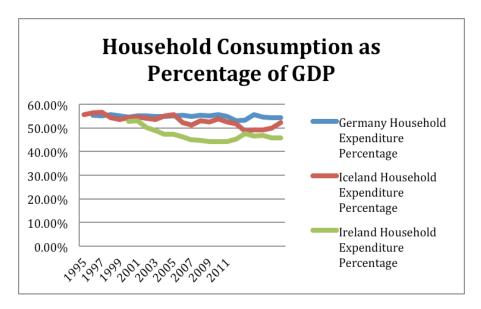
Figure 6.6: Household Consumption Per Capita

Source: OECD Statistics, 2014

Final household consumption did not necessarily increase as a percentage of GDP; this figure held roughly constant for German aggregate households slightly declined for Icelandic

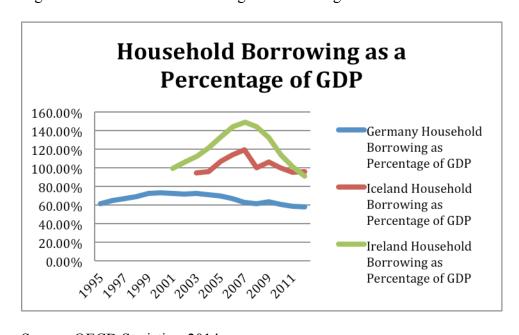
households, and significantly declined for Irish households. However, household borrowing increased relative to GDP in Iceland and Ireland in the lead-up to the global financial crisis, while it declined in Germany. (See Figure 6.8)

Figure 6.7 – Household Consumption as a Percentage of GDP



Source: OECD Statistics, 2014

Figure 6.8 – Household Borrowing as a Percentage of GDP



Source: OECD Statistics, 2014

Much has been written about Irish and Icelandic consumption excesses in this period - Irish consumption largely centered about property investment, new home construction and renovation, while Michael Lewis and others have described Icelandic citizens purchasing soccer teams and hiring Elton John to perform at birthday parties. (Lewis, 2010) However, these narratives fail to discuss the distribution of these changes in consumption behavior, particularly relevant given the increasing gulf between top and bottom income quintiles in these countries. These discussions also fail to consider local contexts for changing purchasing and borrowing behavior. For example: Germany has historically had low home ownership compared to other countries; German household spending may not have increased by as much as household spending in Europe's periphery due to its failure to generate a large housing bubble. The causes of this trend may have to do with exogenous factors like cultural attitudes toward renting and homeownership. The Global Property Guide<sup>12</sup> describes Germany as 'depressingly pro-tenant', which may explain part of low German motivation to buy houses; conversely, Irish generational experience with low tenant protections (the Global Property Guide claims that currently, Irish tenant protections are 'significant but not onerous') is likely to have effected different consumption behavior. (Global Property Guide, 2013, Sierminska and Doorley, 2013, Lynch, 2010) Further, German citizens have historically received significant housing subsidies from their government; these payments defray the costs of rent and the likelihood that households might borrow in order to buy. (Siebert, 2005)

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<sup>&</sup>lt;sup>12</sup> "The Global Property Guide," is a site "for **residential property investors** who want to buy houses or apartments in other countries," with an aim toward maximizing, "Profit!" It compiles data from central banks throughout the world, as well as legal information and real estate listings. http://www.globalpropertyguide.com/Europe/germany/Landlord-and-Tenant

Inequality has increased across these three countries, despite their disparate economic statuses at the start of 2000. These developments have occurred in part due to the changing centers of economic growth in these three nations from origins in the real sector to arising primarily in FIRE industries, but they also owe something to changing fiscal policies that have cut taxes on the wealthiest and diminished social spending. These developments have left segments of the German, Irish, and Icelandic populations at greater risk of joblessness and poverty, and have been brought into relief in the aftermath of these countries' crises.

Icelandic inequality increased substantially from the 1990s through the present, as certain elites capitalized on developments in the real estate and investment banking booms respectively. In Iceland, part of this had to do with participation in the burgeoning investment banking sphere. These changes show up in national inequality figures from 2000 to 2008. Prior to the mid-nineties, Icelandic household income distribution resembled other highly egalitarian Scandinavian countries. However, the process of increasing inequality that had begun when Iceland's government created a market for fishing quotas in the eighties accelerated rapidly as Iceland's financial sector grew and grew between 2000 and 2007. (Lewis, 2009, and Wade and Sigurgeirsdottir, 2010) The Icelandic gini coefficient has grown since the 1990s, but not accounting for the difference in financial earnings masks the increasing disparity in income and wealth from the pre-boom time through 2009. (Olafsson, 2010) Not accounting for financial earnings, the Gini coefficient for Icelandic couples increased by 35.8%. If one accounts for financial earnings, the Gini coefficient for Icelandic couples increases by 74.8% from 1995 through 2008. When Olafsson plots the relationship between income groups and the share of Icelandic financial earnings, it appears that the top

15% of Icelandic families earned approximately 80 percent of financial earnings in Iceland during 2007. (Olafsson, 2010)

Different measures of inequality tell different stories for Ireland. While the Irish Gini coefficient decreased in the years preceding the global financial crisis, and has only begun to increase several years into its austerity response, income inequality measured by quintile distributions of income show increasing inequality in Ireland in the years leading up to the crisis. Irish contractors and real estate developers profited substantially during the inflation of the construction bubble, while the Irish state simultaneously increased fiscal expenditure throughout the country. (Lynch, 2010) Staff economists of the Irish think tank TASC have argued that Ireland consistently ranks poorly among fellow EU nations in terms of inequality; Ireland ranks in the bottom third of the EU in terms of its lowest quintile's share of national income, and Ireland's population at risk of falling into poverty ranks with the bottom third of EU nations on the inequality scale. The TASC economists go on to note that using Gini coefficients to measure the change in Irish inequality over time discounts the immense increase in top-earners income during Ireland's construction boom. In addition, Ireland's poverty rate has been increasing since the early 2000s, even before the onset of Ireland's financial crisis. (2009)

Changing trends in employment and economic growth in Germany worsened workers' status in the years preceding the crisis, as well. Worker compensation in Germany stagnated between 2000 and 2008. Trends have included sluggish employment growth in service sector and low labor force participation, despite having greater employment in the industrial sector than the European average. The German state's attempts to reverse this trend took the form of slashing social pensions in the late 1990s, as well as reducing employers'

required contributions to pensions, and partially privatizing pensions. (Streeck and Trampusch, 2006) Other social benefit reforms in Germany have included reductions in the maximum term of unemployment insurance, as well as in a reduction in the contribution of unemployment insurance to health insurance. Other reforms to German health care have "imposed most of the burden on patients rather than on doctors or drug companies." (Streeck and Trampusch, 2006, 74) German unemployment increased in the 2000s, and only began to fall after 2008. However, much of this increase in employment can be attributed to an increasing proliferation of temporary, low-wage employment, with diminished or nonexistent social benefits included. (Eichhorst and Tobsch, 2013)

These increases in inequality and stagnation of workers' wages coincided with record profits for financial intermediaries and related firms in Germany, Iceland, and Ireland. The disproportionate gains for those involved in finance and construction relative to the general populace mirror stories in the United States, and encourage second thoughts about pursuing finance as a means of national economic development. However, in the moment of financial crisis, the general public of these three states would face much larger costs, mediated substantially by their governments' relative sway in the international negotiations that occurred post-crisis.

#### 6.4.4 The Moment of the Financial Crisis

The onset of the Global Financial Crisis from 2007 to 2008 had wide-ranging economic implications, and Germany, Iceland, and Ireland each felt its effects in different financial arenas. In each, private financial sector losses were considerable; large German banks like Deutsche bank lost billions of dollars in the collapse of the subprime mortgage boom, while Irish and Icelandic banks revealed the extent of their international borrowing to

be in the billions of dollars as well. However, these states' relative ability to deploy policy responses on their behalf significantly affected the policy tracks that they followed in their initial attempts to recover from the crisis, as well as the costs they would assume when the crisis's toll became clearer.

In Germany, the immediate economic impact of the financial crisis showed up on banks', particularly Landesbanks', balance sheets as they had acquired substantial holdings of US mortgage backed securities in the lead-up to the crisis. The first two banks to register major losses in the wake of the financial crisis were a Landesbank – SachsenLB – and the largely private Deutsche IndustriebankAG. (Bleuel, 2009) By the end of 2008, BayernLB registered heavy losses, and later, the WestLB (landesbank) of North Rhine Westphalia revealed major write-downs. Harald Hau and Marcel Thum calculate public German banks' losses in the global financial crisis to be 64% of total German write-downs, despite Germany's public banks holding only 42% of German banks' total assets, as of 2008, and the authors argue that much of this disparity can be explained by incompetence at the board level of the public banks compared to Germany's private banks. (Hau and Thum, 2009) However, Deutschebank and other large private banks had losses that were greater in absolute terms, due its heavy involvement in US subprime ABS markets. (Bleuel, 2009)

The consequences of Iceland's economic collapse have been drastic. Immediately following the three-day period in which Iceland's three major banks went into receivership and when the UK invoked a terrorism law to seize its assets from Iceland, the value of the Icelandic krona plummeted, ultimately, to less than half of its value prior to the crash. Large numbers of international workers from Eastern Europe have emigrated, and in 2009, twice as many people emigrated from Iceland as immigrated into the country. Unemployment rates

rose from 2.3% in 2007 to 7.6% in 2010, and it has since fallen to 4.4% in 2012, though the labor force decreased by 4.3% from 2008 through 2012. (Statistics Iceland, 2014) In the midst of these socioeconomic and demographic shifts, various Icelandic firms have folded, likely because of the interconnectedness with Iceland's unstable financial sector. However, the percentage of the population at risk of poverty (with an income at most 60% of Iceland's median income), which had increased to 10.1% in 2006, prior to the incidence of the 2008 crisis, only grew to 10.2% of the population in 2009, and subsequently fell to 9.8% in 2010, 9.2% in 2011, and fell significantly to 7.9% in 2012. Icelandic GDP per capita in US dollars with constant purchasing power parity did fall during this period, but it has recently begun to increase in 2012. (Statistics Iceland, 2014)

Ireland was the "first EU country to declare itself officially *in recession* in August 2008 and the second EU country to have a structural adjustment program imposed by the IMF/ECB/EU", and the consequences have included changing from the EU nation with the highest level of employment growth to the EU nation with the highest unemployment and emigration rates. (Barry and Conroy, 2012, 1) As in Iceland, private corporate debt transformed into sovereign debt as soon as the Irish state guaranteed "not just *depositors* but also all *bondholders*, secured and unsecured, in Irish banks and credit institutions, including those that had already failed." (Barry and Conroy, 2012, 1)

Both Iceland and Ireland have seen a spike in household debt as a percentage of disposable income, a direct link to the increase in Icelandic and Irish consumption during the boom times. Unemployment has more than tripled in both countries – Iceland's rate has increased from 2.3% in 2008 to 7.8% in 2010, and Ireland's has increased from 4.4% in 2006 to 14.5% in 2011. (From Iceland's Central Bank, and Ireland's Central Statistics Office)

Finally, both countries have significant levels of the population at risk of poverty, and having trouble making ends meet. Though Iceland's at risk of poverty rate has either held constant around 10% (Iceland), or even declined, and Ireland's at risk of poverty rate appears to have decreased, from 16.5% in 2007 to 14.1% in 2009 (according to Ireland's Central Statistics Office), other measures of poverty risk reveal a grimmer story. In Iceland, the percentage of households who say that it is very difficult to make ends meet has risen from 5.9% in 2008 to 13.3% in 2011, and in Ireland, both the consistent rate of poverty and the percentage of households that have experienced two or more forms of deprivation have both increased since 2007 – the consistent rate of poverty has gone up from 5.1% to 5.5% in 2009, and the deprivation rate has increased from 11.8% in 2007 to 17.3% in 2009. It is probable that these figures underestimate current values – 2009 was the most recent measure of poverty data that I could find for Ireland – since the Irish government has been steadily implementing austerity measures since receiving its bailout from the EMU.

Because of the high rate of international investment in both Icelandic and Irish banks, there was a large international reaction when it became clear that neither system was capitalized thoroughly enough to cover the losses outside investors had registered as the systems collapsed. European banks invested millions and billions of dollars in Icelandic banks:

"German banks put \$21 billion into Icelandic banks. The Netherlands gave them \$305 million, and Sweden kicked in \$400 million. U.K. investors, lured by the eye-popping [boom-time] 14% annual returns forked over \$30 billion -- \$28 billion from companies and individuals, and the rest from pension funds, hospitals, universities, and other public institutions." (Lewis, 2009, 10-11)

In addition to massive institutional investment in Icelandic banks, many citizens of the UK and the Netherlands also used retail banking services of IceSave, an e-banking service that

Landsbanki had developed when its revenues had started to decrease in 2006. (Danielsson and Zoega, 2009) Lewis has also described the eagerness among international investors to get in on the Irish construction boom – most of Ireland's major banks' bondholders were not, in fact, Irish, but were major international institutional investors:

"A political investigative blog called Guido Fawkes somehow obtained a list of the Anglo Irish foreign bondholders: German banks, French banks, German investment funds, Goldman Sachs. (Yes! Even the Irish did their bit for Goldman.)" (Lewis, 2011, 13)

Simon Johnson has also written about the major international involvement in Ireland's construction boom and argued that EU members were not eager to have Ireland's banks' books examined too closely, "because it would expose the really bad decisions made by pan-European banks and their regulators over the last decade and create potential fiscal risks in other euro-zone countries." (Johnson, 2010) A New York Times article that Johnson cites notes that Irish banks owe the Royal Bank of Scotland about \$85.6 billion, and that they owe Lloyds approximately \$43.5 billion. Meanwhile, in Germany, "Hypo Real Estate, a property and public sector lender owned by the government after a bailout owed its near collapse largely to problems at Depfa, its subsidiary in Dublin." (Ewing and Werdigier, 2010) There is controversy over the reporting of how much Irish banks owe these different European banks, and that it appears that different EU governments have tried to cover up slips revealing the extent of how much their banks may have leant to Ireland during the boom years. (Ewing and Werdigier, 2010)

Both Iceland and Ireland have registered substantial political responses to their respective crises by voting out the parties in charge in the lead-up to their crises. Further, both Geir Haarde and Bertie Ahern, the Icelandic and Irish prime ministers at the time of the revelation of these countries' crises have been found guilty of various offenses since 2008.

Citizens in both countries have mounted protests in the wake of proposed austerity measures. Protests in Iceland were more immediate, but Irish protests have been steady, if perhaps more muted in the subsequent years since 2008.

By the end of January 2009, Iceland's Independence party had mostly resigned, and Icelanders voted in a coalition government of the Social Democratic Alliance, the Left-Green Movement, and the Centrist-Progressive party that named Johanna Sigurdardottir, a member of the Social Democratic Alliance, to be Prime Minister. Sigurdardottir's parliament subsequently voted to join the EU, only to be faced by opposition from the UK and the Netherlands for assets that they had lost through their investment in different Icelandic banking services. From September 2009 through January 2010, Iceland grappled with UK and Netherlander interests, until the Icelandic president refused to sign the bill committing Iceland to paying the UK and the Netherlands about \$5 million dollars. In the vacuum following the crash, Iceland's government has held its ground about not pursuing fiscal austerity until 2011. It has also continued to negotiate – at times, counter to the interests of the Icelandic parliament – to avoid paying British and Netherland financial interests back (or at least to reduce its obligations to pay those parties back). (Wade and Sigurgeirsdottir, 2010)

Ireland's government, on the other hand, initially guaranteed the assets of its three major banks, and made several billion euro investments into each of the banks, in an attempt to get those banks lending again. When the government then discovered that Anglo-Irish bank had been hiding tens of millions of Euros worth of loans (that it has been lending to other banks and to certain very wealthy clients), it nationalized Anglo-Irish bank. Next, it created the National Assets Management Agency (NAMA) – an "asset management company" meant to purchase loans from Ireland's six major banks – both and good – in order

to "make the banks safer and more secure for depositors and investors and free them to lend again to the productive economy." ("What is NAMA?" 3/30/10) The Fine Gael party's report "Credit Where Credit is Due" argues that by now, the Irish government has paid upwards of 100 billion euros to stabilize the banking system – approximately 60 billion to recapitalize various banks and approximately 40 billion on NAMA's purchase of troubled banks' assets. (Fine Gael, "Credit Where Credit is Due," 2011) Before petitioning the EU and IMF for relief funds, Ireland's government attempted to resolve its fiscal crisis through a combination of fiscal reforms. These included a gradual increase in taxes, with faster and larger rates of increase for middle and high-income earners, reductions in public sector pay and public hiring, and taxes on public pensions. (Lane, 2011) These reforms had repercussions for aggregate demand, the price level, and the tax base – as Lane notes:

"The underlying weak state of the economy and the collapse of the tax base meant that the baseline fiscal deficits in 2009 and 2010 were still extraordinarily large at 11-12 percent of GDP, even before taking into account the one-off costs of recapitalizing the banking system." (Lane, 13, 2011)

However, for all of the Irish government's attempts to recapitalize the banking sector in order to facilitate its ability to promote new real sector development, these practices increased gross government debt, and only one bank, the Bank of Ireland, was able to raise enough capital to function without governmental support. (Lane, 2011) The mission to rescue the financial sector cost the Fiona Fáil party economically and politically in the 2011 elections, in which the Irish people elected a coalition government of the Fine Gael and Labour Parties.

Both the Irish and Icelandic states have created commissions to investigate the causes of their respective financial crises. Iceland's Special Investigation into the activities of its three large banks has revealed both negligence and complicity of Iceland's government and Central Bank in the three banks' excesses, while Ireland's Commission concluded in 2011

that a combination of regulatory failures, financial excess, and the newly liberalized and integrated European circumstances facilitated and exacerbated the effects of Ireland's financial crisis.

Iceland's left-leaning coalition government that was elected in early 2009 pursued membership in the EU as well as the Eurozone, which has led to certain paradoxes in policy. First, to appease EU members whose support would be necessary for admission, Iceland focused on fiscal consolidation, and on repaying debts to the IMF as well as the UK and the Netherlands for part of the losses incurred by online banking activity by IceSave in those respective countries. Popular protest by Icelandic citizens, pressure from Iceland's Nordic allies in the IMF, and the Icelandic President's successful referendum against and refusal to sign the law requiring Iceland to pay back the full amount of €5.5 demanded by the UK and Netherlands governments. In the past four years, however, the Icelandic economy has recovered more "than 90% of the outstanding principle," on that debt from the three failed banks' assets. (Wade and Sigurgeirsdottir, 2012) This government also imposed capital controls soon after coming to power in order to stanch its economy's reserves, as well as continued rounds of austerity measures to reduce the government's fiscal balances. In the vacuum of discontent surrounding these policies, Icelanders re-elected a coalition of the Independence Party and another center-right party that have promised mortgage debt relief and increased fiscal spending.

Ireland ultimately turned to the European Central Bank (ECB) for assistance, because of its inability to cover its banking system's liabilities. In that moment, the ECB argued that it could only provide "liquidity support [if] the process of downsizing the Irish banking system were accelerated." (Lane, 17, 2011) Next, the EMU demanded that Ireland

demonstrate its ability to pay back the loan by massively downsizing its public sector, and by creating more taxes to improve government revenues. If the Fiona Fàil party had not tried to recapitalize the banking system without taking greater control over the banking system in order to redirect its efforts, it might not have found itself in need of such large bailout funds and with such stringent austerity requirements. In November of 2010, the Irish government accepted a bailout of 85 billion euros, approximately 54% of Ireland's 2010 GDP, with an interest rate of 5.8% per year for a seven and a half years, and the attendant austerity terms that the Irish government is expected to enact over the term of the loan, "a discretionary fiscal tightening of  $\in$ 15 billion over 2011 – 2014 with  $\in$ 6 billion of this total to take place in 2011." (Lane, 20, 2011)

The new Irish Taoiseach (Prime Minister), Enda Kenny of the Center-Right Fine Gael party spoke out against Fiona Fàil's decision to guarantee Ireland's big three banks, and attempted to reduce Ireland's obligations to pay back senior bond-holders, the IMF and ECB insisted that those costs hold. (Smyth, 2013) Ajay Chopra, an outgoing IMF-official has claimed that the IMF's rescue policy for Ireland unfairly burdened Irish taxpayers, while "senior bond-holders [got] paid out." (Smyth, 2013)

#### 6.5 Broader Dynamics Post 2008

In the years following the onset of the Global Financial Crisis, trends have emerged that distinguish peripheral states from Europe's core. These include a general alignment of economic strength, at least in the form of current account balances, and political power within the so-called Troika of the European Commission, International Monetary Fund, and the European Central Bank, in which the political authority of the Troika masks the private interests of banks in countries such as Germany and France. Another example of this

dynamic has been the increasing prominence of the TARGET2 system, which was designed to facilitate intra-EMU payments, and increasingly presents a secure destination for Bundesbank capital flows. Finally, there is a narrative of precarious economic growth, alongside increased human costs of the austerity regimes different peripheral states have adopted in exchange for their bailouts. Though the early narrative of the importance of austerity for Europe's periphery, which emerged as revelations of the extent of sovereign debt mounted between 2009 and 2011 seems to have changed somewhat, as increasing dissent emerges from IMF actors, extra-EMU parties like the United States, and popular protest in peripheral countries like Iceland and Ireland.

## 6.5.1 German Experiences Since 2008

In the wake of the financial crisis, Germany has increased pressure on the EMU's periphery to pay back deficits. As the EMU's periphery tries to pay off these capital account deficits, their inability to find private credit has led to an increasing trend of national central bank borrowing to pay off those deficits. As national revenues simultaneously fall due to economic decline, these developments have created a negative feedback loop that increases national deficits. Ironically, several EMU economies had run current account surpluses prior to the onset of the global financial crisis – their dip into deficit resulted chiefly from their public sectors' attempt to maintain private financial integrity, a central element of EMU policy. German promotion of liberated finance, massive flows of German capital into markets, and subsequent German demands that the European periphery pay back what it owes has created the framework of the European sovereign debt crisis. (De Grauwe, 2010)

Germany's status as Europe's chief financial lender, both to European states and to European banks, has imbued it with significant political and economic leverage in the post-

crisis European financial landscape. German banks lent to both national banks and private banks throughout the EMU prior to the onset of the financial crisis. Some EMU countries generated significant current account deficits prior to the onset of the global financial crisis – Portugal and Greece – while others only fell into deficit following the global financial crisis, after national governments attempted to insure private banks' ability to cover liabilities in the months following the crisis. However, since the financial crisis, spreads on sovereign debt bonds have widened for all of the countries currently in deficit. These widening spreads on sovereign bonds in the wake of the global financial crisis have much to do with Germany's sudden insistence that net debtor countries in the EMU begin paying back those deficits after a scare regarding Dubai's ability to pay back sovereign debts. (Eichengreen, 2008; De Grauwe, 2010) As German insistence that countries pay back their deficits mounts, other investors fear that those debtor countries will not pay back the debts, and countries' sovereign debt spreads widen – again, regardless of whether the majority of the debt share was accrued prior to the global crisis or post-crisis. Since Germany has established a role for itself as lender in chief of the EMU, its weight within the European Commission has increased, so that it can effectively force countries with large deficits to accept bailouts, but not before agreeing to austerity measures.

The second financial arena in which Germany maintains leverage is through TARGET2 funds. TARGET2 funds are a means of financing inter-European bank transfers, and became a more prevalent method of financing inter-bank lending following the global financial crisis, when much private credit to peripheral EMU nations' banks dried up. (Mayer, 2011; Dettmann, Möbert, and Weistroter, 2012) In the TARGET2 payments system, the ECB lends to central banks throughout the Eurozone, which then finance intra-European

trade transactions. EMU nations with current account surpluses have become net lenders to the ECB using the TARGET2 system. A consequence of this development has been that peripheral countries "with a balance-of-payments deficit automatically [receive] unlimited funding." (Mayer, 2011) The Bundesbank and other European central banks contribute capital to the ECB; after reserving up to 20% of its annual profits for a general fund, the ECB than reallocates those profits to contributing members, proportional to their contributions. The Bundesbank provides the largest share of the ECB's capital, which first entitles it to the largest payouts when the ECB returns profits in a given year. The ECB has historically had significant sway in the determination of EMU policy relative to the other bodies of the European Parliament and the European Commission, and the ECB's executive board of six members is relatively weak in the generation of monetary policy relative to the role EMU member states' national central bank governors play. (Dyson, 2000) Though the charter of the ECB dictates democratic participation by the ECB's board members and those national central bank governors, critics "of a realist persuasion, focused on the materialist and egoistic foundations of behavior, question whether ... national central bank governors would be able to avoid taking up positions," determined by their national interests, rather than a wider European welfare. (Dyson, 2000, 3) In this institutional context, the disproportionate provision of funding by the Bundesbank relative to other European states' central banks implies disproportionate protection German interests in broader monetary and economic policy at the European level.

Since 2009, the share of ECB credit has increased significantly to Europe's periphery – Greece, Italy, Ireland, Portugal, and Spain – relative to Europe's core. (Eurocrisis Monitor, 2012, CESifo, 2012) Meanwhile, the central banks of the EMU's financial core, chiefly

Germany, have increased their lending to the ECB, relative to lending to their countries' banks and private enterprise. (Mayer, 2011, Lipponer, 2012) The Bundesbank's increased lending to ECB in order to fund TARGET2 claims on the EMU's periphery has another broader implication – if Europe's periphery largely incurred current account deficits in the attempt to ensure their banks' ability to honor liabilities to private banks in Germany, then the Bundesbank's ability to foster the periphery's continued borrowing will further entrench the periphery's deficits. (Kundnani, 2013) Because of this lending to the Eurozone's financial system through the TARGET-2 system, Germany's eminence within the European Commission is likely to increase, as the ECB increasingly borrows from Germany. There is divergent opinion about the likely effects – positive, negative, or neutral – of the TARGET2 funds.

Some, such as Karl Whelan, argue that there is nothing positive or negative about the funds – they are simply a tool for intra-EMU capital flows; others, such as Hans-Werner Sinn, see them as a back-door tool for bailing out the European periphery, since these states would be unable to find credit in the absence of such a program, and would bear more of the costs of the Eurozone crisis. (Whelan, 2012; Sinn, 2011) Ulbrich and Lipponer argue that these balances are likely to decline as soon as EMU member states are better able to find credit in private markets outside of the Eurosystem, and that these balances represent a symptom of the broader economic malaise in Europe and the world. (2012) Critics of the TARGET2 system like Sinn, who believe that in the absence of such a system, peripheral European states would not continue to receive subsidized funding from the Eurosystem ignore the destination of this credit; if European states are consolidating fiscal budgets while simultaneously paying down current account deficits with other European states such as

Germany, the TARGET2 balances are being recycled to the original lenders, and the national banks that lent to the ECB will ultimately see returns in interest.

Between 2000 and 2008, German GDP growth averaged 1.5%, and despite falling to 5.1% in 2009, immediately following the financial crisis, its average rate of growth has increased to 2.67% between 2010 and 2012. However, German GDP growth fell to 0.5% in 2013. (OECD Statistics, 2014) By contrast, in 2013 GDP growth in Ireland was 0.1% and in Iceland it was 1.8%. German unemployment fell from a peak of 7.8% in 2009 to 5.4% in 2013; in 2013, unemployment in Iceland was also 5.4%, and Irish unemployment was 13.6%. The labor force has increased somewhat between 2009 and 2013 in Germany, while it has declined in Iceland and Ireland in the same period. (OECD Statistics, 2014, and Statistics Iceland, 2013) While individual consumption in Germany has increased in this period, controlling for the price level mitigates the increase in consumption substantially (see figure 6.9).

German Individual Consumption in Constant and **Current Prices** 2500 **Billions of US Dollars** 2300 Actual individual consumption, at current 2100 prices and current PPPs, . billions US dollars 1900 Actual individual 1700 consumption, at 2005 prices and PPPs, billions US dollars 1500 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

Figure 6.9: German Individual Consumption, 21st Century

Source: OECD Statistics, 2014

A literature is beginning to emerge that discusses the risks that Germany has assumed in its role as the chief voice for austerity throughout Europe, both with regard to potentially

pent up German demand for fiscal policy and also with regard to European trade relations. (Der Spiegel, 2013, Birnbaum, 2013) The German government was able to borrow at very low interest rates in the years following the global crisis in 2008, due to the perception of German economic stability, which facilitated its preservation of low fiscal balances. (Reisenbichler and Morgan, 2013) Investment in Germany has been consistently low and decreasing since the 2008 crisis. (OECD Statistics, 2014, Tooze, 2014) The re-election of Angela Merkel with a coalition between Germany's Social Democrat party (left of center) and her right-of-center Christian Democrat party may demonstrate German desire for a changing fiscal policy, at home and potentially within Europe. However, declining European demand for German exports is a sign of the new European economic stage of internalized austerity, and may reveal the limits of Germany's growth model.

# 6.5.2 Icelandic and Irish Experiences Since 2008

Both Iceland and Ireland's economies have begun to recover since the global financial crisis in 2008, though Ireland's economy has recovered more slowly. Iceland's recession stopped in 2010 "at 11% below the peak in the first quarter of 2008" (Wade and Sigurgeirsdottir, 2012, 130) It 'graduated' from its IMF bailouts in 2011; however, its GDP had shrunk by 10% from 2009 to 2010, and price increases and higher household taxes have diminished real household disposable income in the same period. (Jónsson, 2013) Iceland briefly increased its social welfare spending post crisis, such that "only 14% of the population say they are finding it 'very difficult' to make ends meet." (Wade and Sigurgeirsdottir, 2012, 130, Oláfsson, 2011) As of 2012, the percentage of Icelanders that found it very difficult to make ends meet shrank to roughly 11 percent of the population, but more than 30 percent of the population found it difficult to make ends meet from 2009

through the present. (Statistics Iceland, 2012) At the same time, however, the Icelandic state reduced government expenditures by 5.1 percent in 2009 6.4 percent in 2010, and 2.5 percent in 2011, while increasing revenues by 3.2 percent, 3.6 percent, and 1.7 percent in 2009, 2010, and 2011. Households coming into arrears on loans increased substantially in 2009, and though these numbers have begun to fall, they are still well above the pre-2008 figures. (Statistics Iceland, 2012) The timing of these recoveries are often attributed to Iceland's ability to use capital controls as well as to its ability to rely on its devalued currency to increase its export competitiveness.

Ireland's recession officially ended in 2011, the first year in which the GDP did not decline, but instead grew by 1%. (Irish Budget Leaflet, 2012) Unemployment began to decline in 2012, the first time it had since 2005. Irish exports have increased since 2008, and its deficit has shrunk relative to GDP substantially. However, despite these (perhaps debatably) positive developments, certain elements of the crisis remain. Personal and pension taxes were increased substantially in the early years of the crisis, largely in order to bring the national deficit in order. Various taxes, specifically pension related, have been increased as recently as the 2013 budget, alongside tax rebates being made available for Irish businesses. The state has continued to cut benefits in arenas like health and other forms of social care, such as cuts in child care credits initiated in 2013. Ireland continues to suffer from low domestic demand, as public employees have seen their pay decreased by at least a third, while many private firms went out of business. There are numerous news stories about the continued privations the public experiences, and myriad anecdotes about families taking advantages of programs like soup kitchens in order to make ends meet. (Alderman, NYTimes, December, 2013) In mid-December of 2013, Ireland officially exited the EU/IMF

bailout, but "the government remains committed to austerity measures ... because its budget deficit and debt levels are too high." (Quinn, WSJ, December, 2013) However, in contrast to Southern European states like Spain, Portugal, and Greece, Ireland has not observed statistically correlated increases in HIV incidence or declining public health outcomes. (Stuckler and Basu, 2013)

Where Iceland and Ireland's outcomes diverge reveals the importance of politicaleconomic alliances. When the UK and the Netherlands presented a block vote against one part of a previously agreed-upon IMF bailout package for Iceland, Norway and Sweden presented a significant political opposition. After Norway and Sweden lobbied on behalf of Iceland, the UK and the Netherlands dialed back their demands for recompense, in terms of time and amount. (IceSave, 2010) Ireland, by contrast, appears to lack such an ally. Its membership in the EU appears to be a millstone that yokes it to the greater EU community's demands, and the apparent docility with which it implements demanded austerity programs is a striking contrast with the violent protests in Spain and Greece. Both Iceland and Ireland are used to being bullied economically by their neighbors. Iceland only gained its independence in the early 20<sup>th</sup> century after having been a Danish, Swedish, and Norwegian colony, and after that dealt with virtual economic attacks by England during the Cod Wars in the 1970s. (Lewis, 2009) Ireland's prolonged experience of English political and economic subjugation seemed to have lifted during the initial Celtic Tiger period; now, Michael Lewis writes, Ireland appears to be re-occupied by ECB bankers. (Lewis, 2011) Iceland's ability to resist EU calls for austerity in order to pay back its [bankers'] debts quicker has something to do with its independence, something to do with its allies, one of which, Norway, is not even a

member of the EU, let alone the EMU, and, paradoxically, may even have something to do with its remarkably small population.

There is a reasonable case to be made that Iceland is not a representative example for Ireland's options for recovery. However, Denmark presents another example of a European state that emerged from 2008 with lots of banks at risk of insolvency. The Danish state also guaranteed the liabilities of its banks, but unlike Ireland, it elected to only guarantee domestic banks. (Kluth and Lynggaard, 2013) The Irish state's willingness to guarantee all banks operating there, as well as all external bond-holders has been recognized as the mistake that doomed it to the Troika's bailouts with required austerity; had the Irish state allowed more banks to fail and exit soon after the crisis, it would have avoided the problem of having the ECB and IMF refuse to let it jettison its guarantee of senior bond holders. (Kluth and Lynggaard, 2013, Smyth, 2013) this is interesting. Regardless of Ireland's behavior prior to its acceptance of the European bailouts, its membership in the EMU constrained its options in its time of crisis, and its lack of strong allies on the stage of the IMF deliberations may have locked it into more severe post-crisis circumstances.

### 6.6 Conclusion

This chapter has sought to answer several questions. Chief among them are: what role did finance and investment play in the growth of the Irish, Icelandic, and German economies in the decade preceding the Global Financial Crisis of 2008? Which groups benefitted from that growth, and were there inadvertent costs of that development? The simple, but possibly misleading, answer is that financial development was good for Germany, given its ability to direct European policy in the aftermath of the global and subsequent national European banking crises; but financial development was destabilizing for Iceland and Ireland, two

small states with limited histories of financial development prior to the 1980s and 1990s. However, the story for Germany is also complex – in the newly liberalized financial landscape of the EMU, one pillar of its banking system that had been specifically designed to provide credit as a public good to the German population revealed that it had acquired very risky assets, and required substantial lending from the Bundesbank in order to maintain solvency. Further, the gains from Germany's financial sector development do not appear to have been shared throughout the German economy.

The apparati of the EMU, ECB, and IMF have allowed Europe's largest economies – which received substantial lending from outside of Europe in the lead-up to the crisis – to recoup financial losses through the auspices of the IMF and ECB bailouts, revealing an under-acknowledged power-asymmetry within Europe. The new landscape of finance in Europe, particularly the scope of muti-lateral financial lending and international sale of securities, enabled certain countries to build up large asset bubbles for which they were unprepared, in an institutional environment that de-emphasized the importance of macroprudential regulation.

Iceland and Ireland's stories illustrate the seductiveness of finance. Their different routes to the privatization and deregulation of their respective financial sectors reveal that countries and states can open up to finance for different reasons – Ireland did so to accord with the proto-EU regulatory orders; Iceland did so because a small cadre of business people wanted to increase the scope of their economic domain. Whether a country liberalizes its financial sector in order to follow rules set by a larger institution like the IMF or a political or economic union, or because it has a small ruling class eager to participate in global financial markets, the outcomes may be equally bad for unsuspecting citizens. Iceland and Ireland's

experiences ought to alert states that contemplate loosening financial regulations in order to attract business.

Iceland and Ireland also demonstrate the pitfalls of a finance-led growth strategy. In both Iceland and Ireland, ordinary citizens consumed media, listened to governments, and followed bankers' advice about what sorts of things they should do with their income and wealth. If ordinary people cannot – or should not – trust the institutions that exist to serve and protect them, then something is wrong with the economy and society. Further, they reveal the intricate complicity of different layers of society and finance: Icelandic and Irish media bolstered the reputations of financiers, and Icelandic and Irish governments penalized critics of the engines of their countries' rapid growth while they laid the groundwork for their bankers to do what they did. Citizens in both countries tacitly and explicitly supported these financial institutions, by some combination of buying houses, taking advantage of exchange rates, and continuing to vote for the political parties that enabled these financiers to destabilize their economies and earn huge profits in the process. These experiences mirror other countries' experiences with financial actors that convince the public of their necessity while undermining the economy at large, and show how much deeper analysis of finance should be than just about interest rates, exchange rates, and lending patterns. (Crotty, 2009)

The EMU's financial structure enabled and encouraged dangerous financial practices. It liberalized financial sectors in countries that had little experience with rapid and large-scale capital transfers, and introduced them to financial instruments and actors with which they had inadequate defenses. If Irish, Icelandic, and European bankers, government officials, and citizens had read pop economic literature about how cutthroat American investment bankers are – Michael Lewis is only one example of the genre – they might have

been more circumspect in their dealings with American investment bankers and global financial equity and bond markets. Further, a literature existed about the burgeoning housing bubble in Ireland, and the rapid and unsustainable appreciation of the Icelandic Krona during the build-up of the global financial crisis; as such, UK, German, French, and Dutch protests that they trusted these states to manage their markets ring hollow. Given the significant political and economic clout held by states such as Germany, small states, European and otherwise, should reconsider the financial path to development. (Wade, 2009, et al)

Recent developments in the literature about Germany also paint a damning picture of the nature of European finance. Germany's narrative about its efficiency and productivity, as well as the quality of its exports belies a story of European borrowing in order to afford those exports. (Milesi-Ferretti, Chen and Tressel, 2013) German financial interests' ability to insist upon bailouts with austerity terms in order to recoup their losses reveals a tremendous moral hazard problem within the Eurozone, at least for the financial interests in the EMU's most powerful states. (Johnson, 2010)

Present inequities on the European political and economic stage threaten to continue to burden the Eurozone's peripheral states with roadblocks to their economic development, without adequately shifting the trajectory of macro-prudential regulation of the broader European financial system. Recent IMF revelations about the inequity of the terms and scope of ECB directed bailouts may show a productive rift in the direction of policies after crisis, but it is too late for the Irish public interests that suffered the consequences. (Smyth, 2013) The irony of Germany's insistence on austerity may be in negative growth rates in the near future, while Icelanders' decision to re-elect the party that launched the financial boom that

generated their globally unprecedented financial crisis are worrisome developments that bode ill for Europe's economic future.

### **CHAPTER 7**

#### CONCLUSION

### 7.1 Introduction

An extensive literature exists that discusses the risks of financial liberalization and integration on a timeline too fast for developing countries. (Reinhart and Rogoff, 2008, Bello, Bullard, and Malhotra, 2000, Detriagache and Demirgüc-Kunt, 1998, Eichengreen and Arteta, 2000, et al) Mainstream and heterodox economists have discussed the theoretical risks of banking crisis and contagion that can occur when capital controls are removed, and financial integration is pursued at a rate too fast for fledgling financial regulatory agencies. In addition there is a proliferation of empirical studies that demonstrate the negative economic costs of financial liberalization in the absence of adequate regulatory apparati. These, however, exist alongside a policy and academic narrative that financial liberalization, the elimination of capital controls, and access to international security markets for wholesale credit finance are essential tools for economic development and fostering robust private sector growth. (Levine and King, 1993, Mishkin, 2007, and La Porta, et al, 2002)

In the planning process of European integration, namely the Maastricht Treaty, the narrative of the importance of liberalized and privatized finance reigned to such an extent that the elimination of capital controls and the establishment of universal banking were key elements of European policy in order to qualify for membership. While that rationale fit the historical moment of the years in which the terms of European economic integration were debated, designed, and implemented, narratives immediately following the global financial crisis and the emergence of European sovereign debt crises failed to acknowledge the

destructive role that uncontrolled financial flows in the context of financial liberalization played in the European economic crisis. Though recent events have fostered some debate about the possibility of financial crisis and contagion emerging from an integrated financial system such as the EMU, there has been little discussion of the role that the EMU's larger lenders' played in transmitting huge capital flows to the EMU's more peripheral members.

A useful literature has begun to emerge from mainstream academics about the importance of implementing a European financial regulatory authority in order better manage the risks of financial integration among diverse nations, and the European Union is taking steps to create such an institution. However, these discussions give little attention to the power asymmetries that exist within Western Europe between nations, financial actors, and non-elites. European states that have pursued financial integration have decision-making structures that cater to economic interest groups such as investment banking entities, while states with larger economies hold disproportionate sway in policy-setting at the European level. As a result, though wealthier European states with large financial sectors lent destabilizing quantities of capital to the EMU's more peripheral states, the Troika of the European Commission, the ECB, and the IMF have authorized bailouts by which peripheral states use state funds to pay back the private debts their national banks owe to those larger lenders.

This dissertation has addressed these gaps in the literature and discourse on the European financial crises that have emerged since 2008. It began with a brief survey of Western European financial development in states that joined and abstained from joining Europe's Economic and Monetary Union. It followed with a statistical survey of Europe's changing financial climate, with analyses of changing capital flows within the EMU, the

emergence of securitization, and changing financial competition and speculated on the causes and effects of that transformation, as well as an econometric investigation of the connection between these changes and the incidence of banking and sovereign debt crises in a selection of Western European states. Next, it outlined a theory of the power asymmetries in European finance along national, class, and industrial lines, and illustrated those themes with a series of case studies of German, Icelandic, and Irish financial development before, during, and following the global financial crisis of 2008.

Numerous themes have emerged. First, each European state examined was susceptible to banking and broader financial failures. However, these potential outcomes were never well discussed prior to the integration of European finance, and have only recently emerged in mainstream discussions of European financial outcomes. Debates about the role EMU has played in the onset of the crises has tended to focus disproportionately on the role that monetary policy played in creating the circumstances of the EMU's sovereign debt crises, without discussing the apparent moral hazard of Europe's largest lenders' decisions to lend amounts that accounted for close to 100% of the borrowing states' GDPs. Larger economies within the EMU such as France and Germany have been best able to weather the financial crisis; however, in the past years, concerns about France's sovereign solvency have emerged, and the German GDP is currently growing at near zero percent rates. Smaller EMU states in crisis have suffered from austerity measures required in order to qualify for bailouts from the ECB and IMF, while peripheral states like Iceland with stronger political allies have avoided imposing the strictest austerity measures. Public health and social costs of these banking generated crises have soared throughout the EMU's periphery; in the meantime, the EMU's core states' ability to sustain growth by exporting goods to that

periphery have declined. In the absence of a more equitable recovery policy that does more to stimulate growth at a European level, while lessening the costs imposed on non-elites, Europe is destined for more economic pain in the future. As I show in the dissertation, the unregulated flows of capital within Europe from the major banks in the lead countries made a significant contribution to these problems. The problem was not simply misguided monetary policy, or irresponsible deficit spending in the periphery.

### 7.2 Current Developments In Europe

The economic consequences of Europe's financial crises have been significant for affected countries. While many states have seen some economic gains since 2008, the economic picture varies substantially for the EMU's core relative to its periphery. Widening our perspective to European employment, consumption, and inequality in the wake of crises reveals troubling and diverging paths.

GDP measured by total expenditure declined in most European states in the moment of the global financial crisis, and has begun to increase since for a number of core states, though GDP appears to have plateaued for many peripheral European states. While absolute GDP measures best demonstrate the relative size of the EMU's economies, GDP per capita tells a clearer story of the relative changes in total expenditure in these states. First, it brings into relief the scope of the increase in consumption that occurred in the tiny states of Ireland and Iceland, prior to the onset of the global financial crisis, but it also helps give lie to the notion that ordinary citizens in Portugal, Spain, and Greece were such profligate spenders compared to residents of the EMU's core. GDP per capita expenditure has been declining for each of the peripheral EMU states included in this sample; Iceland is alone among the European states that experienced a major financial crisis that sees its per capita expenditure

increasing. Further, it demonstrates declining final consumption per capita in most the EMU's periphery at this point. If peripheral states consume a significant share of exports from the EMU's core, than this should be cause for concern among the core EMU states.

Change in Western European unemployment has been more variable than the changes in GDP following the crisis, but some trends emerge. German unemployment had been steadily decreasing since 2005; the other EMU states for which unemployment has fallen since 2008 include Austria and Finland, while unemployment has held roughly constant in France since 2009. Other core EMU states have seen their unemployment rates begin to increase since 2010. In the EMU periphery, unemployment has been increasing at differing speeds since 2008, and is broadly higher than in the EMU core. Ireland is the only EMU state to have its unemployment rate slow to a basically constant rate in the double digits. Iceland, not a member of the EMU, is along among Europe's crisis states to see a significant downturn in the unemployment rate.

However, the labor force participation rates of Ireland, Spain, and Portugal have been falling in the past three to four years, a development that presents a grimmer picture of the status of the job market in these states. Labor force participation has increased in recent years in Germany and Austria, but anecdotes report that the chief driver of employment in Germany at least has been in low paid, service sector industries. (OECD Statistics, 2014) Dispersion of incomes between the top and median deciles and the top and bottom deciles follow divergent patterns for the EMU's core and periphery since 2008. There are preliminary signs of increasing inequality in the core states of the EMU and diminishing inequality in the peripheral EMU – the source of these changes is beyond the scope of this dissertation, but presents an avenue for future research.

There is also a general social welfare story to tell about the aftermath of the European crises and austerity. Stuckler and Basu (2013) have written about the public health costs of cuts in government spending in Southern Europe, including higher incidences of suicide, hospitalization in public facilities, and incidence of communicable but preventable diseases such as HIV. Homelessness has increased in numerous EMU states, including Greece, Ireland, Italy, Spain and Portugal. Citizens throughout Europe have lost access to food benefits; their costs of education have risen, and there have been major cuts in access to child-care services, which has affected families' abilities to work and take care of their children simultaneously. Emigration has increased substantially from the EMU's peripheral states, as unemployment, particularly youth unemployment, has soared. (European Council Commissioner for Human Rights, 2013<sup>13</sup>) Though some of the emigration that has occurred in Europe has gone from peripheral EMU states to centers like Germany, this broad economic decline and lack of opportunity for a generation of young people will likely have lasting social and economic impacts, even if a radical change in fiscal policy or the economic trajectory of Europe were to begin.

The political responses to the crisis have varied within Europe as well. Certain European states have emerged as powerbrokers within the arena of European-wide policy-making in response to the crisis, namely Germany and France. Angela Merkel and the ECB have consistently urged, endorsed, and implemented policies that were designed to preserve European price stability by inhibiting fiscal spending in peripheral states. The ECB and IMF have also failed to allow certain peripheral states to jettison obligations to senior bondholders, until the last several years in which haircuts have been imposed on those

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bondholders. Peripheral states like Spain and Portugal internalized austerity programs in early years of the Eurozone crises, while in recent years, citizens in those states have protested against those policies in street demonstrations as well as by voting in new governments in subsequent elections. Italian, Irish, and Icelandic voters have elected new parties to lead their governments, in rebuke of austerity policies or regimes that did too much to appease European authorities, as in the case of Iceland. Politics in some states have become increasingly polarized – in Greece, far right and far left political candidates have proposed leaving the Eurozone, while centrist parties have advocated implementing the changes mandated by the EC, ECB, and IMF to maintain membership in the EMU.

The EMU's economy is structurally fragmented with four states (Germany, France, Italy, and Spain) producing more than half of the value of the EU's non-financial business activities, and services, financial and other, predominate in different EMU states. (Bianchi and Labory, 2011) It is imperative to examine the causes and consequences of that dispersion, particularly in the context of diminished European aggregate demand. There is an extensive literature about the negative effects the EMU's strict focus on price stability has inhibited the growth of European aggregate demand, as well as the importance of the European market for exports for those key European producers. There is also ample critique of the structural advantages states like Germany and Italy have historically wielded as industrial powerhouses of Europe, compared to states that developed later in the twentieth century, and how that is reflected in the relative export value that these states generate. Given the destabilizing effects that finance can have for an economy, it is equally important to examine which European states add most of the EMU's financial value, since these may be more vulnerable to economic vicissitudes, particularly in the era of financial integration. The

context of uneven European growth, and diverging economic and social outcomes within the EMU, demands a change in the course of European policy, both for the recovery, and for future finance.

## 7.3 Policy Alternatives

As this dissertation has shown, rapid financial liberalization within Western Europe, and within EMU states helped facilitate and exacerbate the effects of the global financial crisis in Europe, and increased the risks of contagion that have occurred in the aftermath of 2008. European states financial liberalization leading up to the issuance of the Euro led to increased financial flows within Europe. Financial liberalization also led states to engage in risky financial behaviors – over-leveraging, lending unsustainable quantities, securitization of high volumes of assets, acquisition of risky financial assets – for a variety of reasons, including lower interest rates, beliefs that the ECB would act as a lender of last resort (Sinn, 2014), internal bank competition, intra-EMU financial competition, the general irrational exuberance of the boom era prior to the implosion of the financial system. The current inequity in the imposition of relief packages and bailouts, and categorical resistance to the implementation of fiscal policies to aid economies that are too weak to grow from private demand alone, as well as the social injustice of the effects of cuts in Europe reflect, perpetuate, and worsen power asymmetries within the EMU, and Europe.

Institutional responses to the European crises can be categorized as monetary, fiscal, and macro-prudential. On the monetary side, the ECB has mirrored the Federal Reserve in its willingness – if reluctant – to decrease interest rates in order to promote lending and borrowing by banks within the Eurosystem. The ECB has increased interest rates several times in the following years, though it has subsequently reduced interest rates multiple times

in the same period, and it reduced reserve ratios in December 2011 in order to encourage lending in the Eurozone. It has periodically suspended the use of different at-risk states' bonds for collateral, including Greece and Cyprus

The ECB waited longer than the Fed did to provide liquidity financing to European financial institutions; indeed, European states' attempts to guarantee their financial intermediaries' liabilities in the early years of the global financial crisis increased the public debts of the EMU's peripheral states in ways that triggered the fears of sovereign debt crises, and helped to usher in the unique Eurozone crises. (Tropeano, 2011) However, in years since the crisis, European banks have offered varying amounts of credit to small and medium enterprises, and at interest rates that vary considerably by state. (Gordon, 2014) The other key arena in which the ECB operates is in the market for covered bonds, which are "bonds secured by a pool of cover assets on the issuer's balance sheet [that] mainly consist of mortgage loans and public bonds." (Tropeano, 2011, 35) To this end, the ECB purchased public bonds from European states in crisis, in order to prevent further dispersion of sovereign wealth spreads through June 2010. (Tropeano, 2014)

In July 2012, Mario Draghi of the ECB argued that senior-bondholders of weak Spanish banks should incur losses on their holdings in the form of haircuts, which European Council members initially rejected out of fears of the effects on broader European financial markets. (Steinhauser, 2012) From early 2013 onward, the ECB has introduced and adapted haircut policies for senior bondholders of particular assets. Toward the end of 2013, the ECB and the European Council have negotiated terms for direct recapitalization – so called 'Bailin' policies through which creditors bear the costs of repairing banks – to be officially implemented in 2018.

This shift toward recapitalization fits within a broader trend toward an increased ECB willingness to bail out troubled financial institutions within the Eurozone. The ECB instituted a second covered bond purchase program in October, 2011, as well as refinancing measures in July 2011, which were renewed for another year in October 2011, and then renewed for another three years in December 2011. (ECB, 2014) In January 2012, the ECB allocated €489,190.75 million for that three year program. Throughout the period following 2009, the ECB has reviewed and approved various European financial assistance programs to peripheral states at risk of or in the midst of sovereign debt crises.

Finally, the ECB has, in tandem with the BIS, worked to increase macroprudential authority and stability within the EMU. The ECB created the European Systemic Risk Board in December, 2010 (ECB, 2014) – since then, it has proposed creating counter-cyclical reserves that could be used as buffers in banking crises, among other policies. It implemented new bank stress-testing measures in 2011, and in December 2013 the European Parliament approved the creation of a single supervisory authority with which the ECB could supervise the activities of 150 of the largest European banks. (European Parliament, 2014) The Basel Three reforms of June, 2011, also outlined major changes in order to improve macroeconomic stability of the financial system. These included the implementation of new criteria for bank reserves – including quality and quantity evaluations, higher reserve requirements, and creating mechanisms for writing-off banks deemed to be nonviable. It provided new guidelines for securitization, such as requiring banks to provide more rigorous evaluations of the risks entailed with securitization and new securitized assets, create reserves for backing up securitization activities, strengthen counterparty risk frameworks to protect trading partners, as well as creating incentives for banks to use central counterparties

for derivative and security transactions. The BIS's Basel committee also approved measures to prevent creation of excessive leverage within the financial system, and to increase disclosure requirements for securities and other financial instruments, as well as the creation of structured investment vehicles, as well as broad regulation of the management of financial enterprises in the arenas of compensation, valuation, stress assessment, and regulatory capital ratios, among other things. It created new global liquidity and oversight standards, and required globally significant financial institutions to demonstrate increased capacity to absorb losses, given their ability to destabilize the global financial and economic system.

These are important developments for improving European finance; however, they fail to address some of the underlying mechanisms by which the European crisis developed and entrenched itself within the unequal power dynamics of the EMU, as well as the role that productive fiscal policy must play in a moment of economic crisis distinct, if initiated, from failures within the banking system. A counter-model for European financial policy and response to financial crisis would be Nordic states that have not joined the EMU. In the 1990s, after substantial financial deregulation and privatization, the Nordic states of Norway, Sweden, and Finland experienced several large financial crises, stemming from major speculation in real estate markets that had contributed to several large and destabilizing housing bubbles.

These states enacted numerous reforms to minimize the autonomy of their states' banking sectors in order to prevent future crises of destabilizing magnitude. Their resolution of their banking crises also placed greater costs on the financial actors. The Swedish government forced bank shareholders to absorb the costs of banks' failures, appropriated the profits of distressed asset sales, and acquired equity in banks that the state rescued. Several

large shareholders responded to these policies by recapitalizing their banks in the absence of government assistance in order to avoid paying higher costs through the government strategy. The Swedish state maintains ownership of nearly 20% of one of Sweden's largest banks long after the banking crises of the early 1990s. (Dougherty, 2008) Norway, similarly, increased its macroprudential regulation of banking following the early 1990s crises. (Westervelt, 2009) Finland, another Nordic state hit hard by the financial crises of the early 1990s, recapitalized banks in crisis, and those banks largely repaid the state for their bailouts later, but it was constrained in its abilities to regulate capital flows and bank practices and nationalize risky banks once it joined the EMU. (Finnish Ministry of Finance, 1998)

Denmark and Iceland, which were not badly affected by the crises of the early 1990s, did not impose substantial regulations in the following decade.

The costs of the recent global financial crisis have varied throughout the Nordic countries, but Nordic states capable of maintaining stricter macroprudential regulations have born lower costs than those that have not. (Westerveld, 2009, Irwin, 2011) Costs incurred by Nordic states have varied considerably – Iceland incurred large absolute losses, and gargantuan losses relative to its GDP, particularly compared to Norway, Sweden, Denmark and Finland. Some of this has to do with macroprudential regulations that states like Norway and Sweden implemented following the crises of the 1990s, while others have to do with the relative size of these states' financial sectors relative to the broader economy. Norway and Sweden have reacted to their current crises in similar fashion, with a combination of monetary policies intended to stimulate local lending as well as a battery of fiscal stimulus programs. (Irwin, 2011, Landon, 2008, and OECD, 2010) Norway's Socialist prime minister Kristin Halvorsen authorized Norways's sovereign wealth fund to purchase up to \$60 billion

more stock, which has generated dividends that the state has used to subsidize fiscal stimulus, and the state has enacted substantial investment in the promotion of entrepreneurship and university research parks. The Swedish state, similarly, has enacted broad fiscal stimulus due to its government's automatic stabilizer programs, which obviate the legal wrangling that has characterized policies in the US, for example. (Irwin, 2011)

Denmark, Finland, and Iceland's recent financial developments have diverged from Norway and Sweden's. Though Finland experienced crises in the early 1990s, its membership in the EMU has constrained its ability to use fiscal policy in order to stimulate growth, the possibility of currency devaluation stimulating exports, and the extent of macroprudential regulation afforded to Norway and Sweden due to their independence from the EMU. Denmark, which did not suffer from the 1990s crises, failed to implement stronger regulations for its banking sector, and incurred larger housing price bubbles and financial losses relative to GDP than Norway did. (Danish Ministry of Business and Growth Report, 2013) The Danish state has responded to its crisis through the application of bail-out packages, and maintained greater accountability for its private banking interests than states like Ireland have in the aftermath of their crises, but has also focused on balancing government budgets post-crisis with "The Budget Act," a law meant to set limits for the size of government deficits relative to GDP. (Kluth and Lynggaard, 2013, Danish Ministry of Business and Growth, 2013) Finland, on the other hand, has applied austerity measures in order to encourage growth, as it has argued that laggard EMU states must, and has incurred a triple-dip recession. (Milne, 2013) I have discussed Iceland in substantial detail in the preceding chapter.

The relative performance of these states, given their recovery policies, is illuminating. Norway leads by a large margin, due in significant part to its oil wealth, but Sweden leads the similarly performing states. Finland trails its Nordic partners in per capita expenditure and consumption. Inequality figures also reveal different outcomes associated with these divergent policies. Norway and Sweden have maintained the lowest ratio of top and bottom deciles of income, while Denmark and Finland approach the ratios of other European states. These outcomes suggest that the EMU would have much to gain from loosening the reigns of fiscal policy, broadly, and by considering a policy to unify European fiscal policy.

## 7.4 Conclusion, and Where to Go Next

A changing narrative is developing about which European states must bear the costs of the European crises, and which states have born the greatest responsibility for the crisis itself. This is reflected in changing public, academic, and official opinions about the value of haircuts on bondholders of sovereign debt of peripheral EMU states, as well as the costs that taxpayers have borne in those states in crisis, while their governments pay for the risks taken by lenders in the EMU's core. The tone of discussions about Germany's role in the EMU has changed too; in early years of the crisis, many upheld Germany a model for the Eurozone, and a driver of European growth. In recent years, the narrative has changed to discussing how German fiscal policy and its mandates for other states presents an impediment to European and global economic recovery.

The European Commission has released a report in 2013 arguing that current austerity programs within the EMU threaten human welfare, and that policy makers must evaluate the costs of austerity programs and establish social welfare floors among other changes. It has also acknowledged the rise of xenophobic and militant right-wing groups and general

political unrest in states experiencing the worst social costs of these ongoing crises, and the need for sensible social policies to stem potential political violence. (European Council, 2013) This is a good start; European policies should reflect these changing attitudes, and states should avoid implementing policies that hurt the most vulnerable sectors of their populations, who played little role in creating the circumstances of the European crises.

However, these recommendations of the EC ignore a broader context in which European states attempt to appease private lenders and supra-national entities like the ECB, EC, and the IMF. They fit in with the history of EMU states protecting financial and industrial interests at the expense of citizens' economic and social welfare, and fail to acknowledge the disproportionate role that certain national leaders play in the arena of European economic and political governance. Policies to date reflect power asymmetries that elevate the interests of the EMU's wealthiest states and economic interest groups. Without explicit attention to the country-specific gains and costs of implementing these policies and movement toward policies that truly elevate common rights and welfare, the EMU courts growing rifts and real limits to the economic progress of even its export powerhouses.

Nordic responses to financial crises – in the distant and recent past – indicate that there are solutions to banking crises that lessen the risk of future failures, without burdening households with little say in the banking operations that generated windfalls of revenue in boom periods, but simultaneously generated great instability. They also demonstrate the potential for fiscal policy and aggressive monetary policy as strategies to stimulate domestic demand as well as to force banks to lend to local household and business interests. The states that have prioritized fiscal spending in response to the crisis have maintained lower inequality, and this has likely avoided the negative welfare developments observed in other

parts of the Eurozone. They also demonstrate the value of strengthened financial regulation – Norway and Finland did not incur financial crises in 2008, despite the broader economic environment.

There is a great deal to explore. Future work should analyze specific developments in Nordic finance, and to draw a better understanding of why Finland opted to join the EMU, while Sweden, Denmark, Norway, and Iceland all refrained. We could also benefit from more study of securitization at the micro level for European states, both the types of securitization pursued, the risk consequences, and their subsequent developments. Given the destabilizing effects of these financial innovations in US finance, and the intertwined nature of globalized finance, studies in this area may illuminate the dynamics of the German crisis in greater detail. The arena of public finance – and the apparent failures German Landesbanks incurred from the 1990s onward – is also a related important topic that needs more work. What motivated those banks to compete and pursue profits, why did their state fail to protect their mandates, and what have been the consequences for the broader German public? Finally, the social consequences of austerity, and power inequity within Western Europe are an important and compelling subject. Power disparities privileged interests that mandated financial liberalization in order for states to join the EMU, which was theoretically supposed to promote their economic interests. At present, the EMU promotes the interests of Germany, while imposing massive costs on the citizenry of Europe's periphery. Finding a way forward that ceases to empower financial interests and endorse moral hazard while improving the welfare of the European periphery is a matter of economic and general human interest.

# APPENDIX A

# VARIABLE LIST

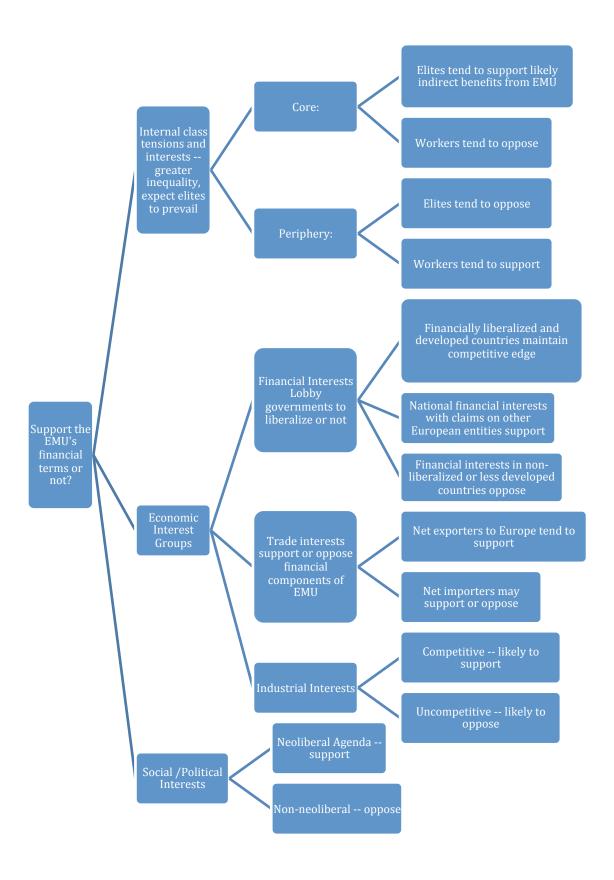
Variable	Description	Source
Incidence of Financial Crisis	Binary Variable – equal to 1 if a crisis, as defined by Caprio and Klingebiel was occurring.	Reinhart and Rogoff, 2009; Laeven and Valencia, 2012
Onset of Financial Crisis	Binary Variable – equal to 1 if year aligned with the first or only year of a financial crisis, as defined above	Reinhart and Rogoff, 2009; Laeven and Valencia, 2012
Capital Account Liberalization Variables	Sum of the following: 1 if the exchange rate system were unified, 1 if banks were "allowed to borrow from abroad without restrictions," and 1 if there were no restrictions on capital outflows. (Abiad, Detragiache, and Tressel, 2008, 16)	Abiad, Detragiache, and Tressel, 2008
Security Market Liberalization	Categorical ranking as follows: 1 if security markets were being formed, 2 if measures to encourage security market formation such as tax exemptions were created, and 3 if 'further policy measures have been taken to develop derivative markets or to broaden the institutional investor base by deregulating portfolio instruments and pensions." (Abiad, Detragiache, and Tressel, 2008,17)	Abiad, Detragiache, and Tressel, 2008
Prudential Regulations	Sum of the following: 1 if Basel risk-weighted capital adequacy ratios were present, 2 if there were a legal framework for the objectives and resolution of banking crises, 2 if bank supervision agents could perform 'effective and sophisticated monitoring', and 1 if all banks were under supervision of such an agency.	Abiad, Detragiache, and Tressel, 2008
Barriers to Foreign Bank Entry	Sum of the following: 1 when the government does not restrict the entry of new domestic banks or financial institutions, 1 when there are relaxed or nonexistent branching restrictions, and 1 if banks "are allowed to become universal banks." (Abiad, Detragiache, and Tressel, 16, 2008)	Abiad, Detragiache, and Tressel, 2008
Gross International Locational Capital Flows Over GDP	Locational claims on non-residents plus locational liabilities on non-residents, over GDP.	BIS, 2013

Domestic Investment Over GDP	Change in gross capital formation, defined by the OECD as "the total value of gross fixed capital formation, changes in inventories, and acquisitions less disposals of valuables for a unit or sector." (OECD, 2014)	OECD, 2014
Trade Balance Over GDP	Difference between exports and imports, over GDP	OECD, 2014
Fiscal Balance Over GDP	Difference between fiscal expenditure and government revenue, over GDP	OECD, 2014
Short-term Interest Rates	"The rates at which short-term borrowings are effected between financial institutions or the rate at which short-term government paper is issued or traded on the market."  (OECD, 2014)	OECD, 2014
GDP Per Capita	Real GDP/total population	OECD 2014
EMU Membership		European Union, 2014

## APPENDIX B

## **EUROPEAN POWER SCHEMATIC**

If a country had more reasons to support EMU policy – stronger elite support, neoliberal social/political agenda, liberalized financial arena, or strong capital and/or trade account surpluses, worker support for other components of EMU, or was likely to receive direct subsidies from the EMU, then it was more likely to support EMU. Economic drivers of a nation are better able to influence national attitudes on membership, particularly under less egalitarian distributions of income and wealth.



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