A meta-risk regulation approach to financial and corporate governance failure: Lessons from Anglo Irish Bank’s Minsky moment

By

Kenneth O’Sullivan

A Thesis Submitted to Kemmy Business School, University of Limerick in Fulfilment of the Requirements of the Degree of Doctor of Philosophy

Supervisor:

Dr. Stephen Kinsella

September 2014
Abstract

This thesis examines the roots of regulation in modern policymaking, with particular attention given to the evolution of financial regulation and corporate governance in Ireland. Through case study evidence of Anglo Irish Bank’s failure, it shows that when banks are systemic in nature, inadequate internal risk controls within a Minsky credit cycle can lead to destabilising macroeconomic conditions, which may prolong the effects of a credit-induced downturn. The thesis proposes the adoption of a supervisory approach based on meta-risk regulation (MRR), which is designed to strengthen the risk management practices of regulators and banks. It also shows that well governed firms operating in weak country-level governance structures receive an ‘investability’ premium. This may provide an incentive for firms in emerging markets, or ones operating in lax regulatory environments, to buffer their internal risk management practices in line with MRR.
Declaration of Originality

No portion of the work referred to in this thesis has been submitted in support of an application for another degree or qualification of this or any other university or institute of learning.

I declare that the thesis represents the results of my own work. Following normal academic conventions, I have made due acknowledgments of the work of others. The work has been completed within the specific word limit with 28600 words, including references and appendices.

Signed: ________________________________

Kenneth O’Sullivan

Copyright Statement

Copyright in text of this thesis rests with the author. Copies (by any process), either in full or of extracts, may be made only in accordance with instructions given by the author.

Signed: ________________________________

Kenneth O’Sullivan
Contents

Abstract ................................................................................................................................. ii

Declaration of Originality .............................................................................................. iii

Copyright Statement .................................................................................................. iii

1. Introduction .................................................................................................................. 1

2. Methodology ............................................................................................................... 7

3. Contribution ................................................................................................................ 10

4. Roots of financial regulation ..................................................................................... 12

  4.1 Alternative regulatory instruments .......................................................................... 15

  4.2 Rationale for financial regulation ........................................................................... 18

5. Evolution of financial regulation in Ireland ............................................................... 22

  5.1 Creation of a single regulator .................................................................................. 25

  5.2 Objectives ................................................................................................................ 26

  5.3 Principles-based regulation .................................................................................... 27

  5.4 Risk-based regulation ............................................................................................ 28

  5.5 Enforcement practices ........................................................................................... 30

6. Corporate governance theory & practice in an Irish context ...................................... 32

  6.1 Ireland’s corporate governance model .................................................................... 36

7. Anglo Irish Bank’s Minsky moment ............................................................................ 38

8. Regulatory failure and the Irish banking crisis ............................................................ 48

  8.1 International experience: Swedish banking crisis .................................................. 49

  8.2 Irish banking crisis ................................................................................................ 51

  8.3 Sweden and Ireland: Compare and Contrast .......................................................... 54
<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Corporate governance failure: director’s loan scandal</td>
<td>56</td>
</tr>
<tr>
<td>10</td>
<td>An institutional architecture for meta-risk regulation</td>
<td>59</td>
</tr>
<tr>
<td>11</td>
<td>External audit, meta-risk and investability</td>
<td>66</td>
</tr>
<tr>
<td>12</td>
<td>Conclusion</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>References</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>Annex I: Published research</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>Annex I: Paper 1</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>Abstract</td>
<td>100</td>
</tr>
<tr>
<td>1</td>
<td>Introduction</td>
<td>101</td>
</tr>
<tr>
<td>2</td>
<td>Command and control regulation</td>
<td>102</td>
</tr>
<tr>
<td>3</td>
<td>Alternate regulatory instruments</td>
<td>104</td>
</tr>
<tr>
<td>4</td>
<td>Uncertainty within Models of Regulatory Behaviour Theory: Case Study Internet Regulation</td>
<td>107</td>
</tr>
<tr>
<td>5</td>
<td>Conclusion</td>
<td>116</td>
</tr>
<tr>
<td></td>
<td>References</td>
<td>118</td>
</tr>
<tr>
<td></td>
<td>Annex I: Paper 2</td>
<td>124</td>
</tr>
<tr>
<td></td>
<td>Abstract</td>
<td>125</td>
</tr>
<tr>
<td>1</td>
<td>Introduction</td>
<td>126</td>
</tr>
<tr>
<td>2</td>
<td>Literature review: financial regulation</td>
<td>127</td>
</tr>
<tr>
<td>3</td>
<td>Evolution of financial regulation in Ireland</td>
<td>131</td>
</tr>
<tr>
<td>4</td>
<td>Single financial regulator</td>
<td>133</td>
</tr>
<tr>
<td>5</td>
<td>Credit bubble</td>
<td>137</td>
</tr>
<tr>
<td>6</td>
<td>Regulatory failure and government intervention</td>
<td>140</td>
</tr>
<tr>
<td>7</td>
<td>Conclusion</td>
<td>144</td>
</tr>
<tr>
<td></td>
<td>References</td>
<td>147</td>
</tr>
</tbody>
</table>
1. Introduction

Banks are inherently fragile (Goodhart, Hartmann et al. 1998; Levine 2004) and have been prone to failure since the sixteenth century (Kindleberger 2005). Since the 1980s, the scale and frequency of these failures has increased (Caprio and Klingebiel 1996; Lindgren, Garica et al. 1996; Bank for International Settlements 1997; Caprio, Klingebiel et al. 2005; Eichengreen and Bordo 2008; Laeven and Valencia 2008; Rogoff and Reinhart 2009), taking its toll on economic growth and public finances (Claessens, Kose et al. 2008; Cecchetti, Kohler et al. 2009; Kinsella 2009; Reinhart and Rogoff 2009).

The majority of these boom and bust cycles have been associated with similar characteristics, such as cyclical downturns in output (Benink and Llewellyn 1995; Kaminsky and Reinhart 1996; Drage, Mann et al. 1998; Llewellyn 2000; Altman 2009), fluctuations in property prices (Gorton 1988; Caprio and Klingebiel 1996; Llewellyn 1998; Woods 2007) or the indirectly malign effects of regulation (Benston and Kaufman 1994; Dowd 1996; Englund 1999).

The reason why some banks fail and others survive in distressed economic conditions is primarily a product of individual corporate governance practices within financial institutions, particularly in relation to risk management (Ciancanelli and Reyes-Gonzalez 2001). For instance, the UK’s Financial Services Authority (FSA) (2009) and the Basel Committee’s Senior Supervisors Group (2009) have both indicated that poor liquidity management and unsustainable funding models were the reasons why some banks, like Northern Rock (Hall 2008) and Bear Stearns (Brunnermeier 2009), were not able to navigate the recent global financial crisis, while others, like HSBC and J.P. Morgan Chase, were more successful (Garleanu and Pedersen 2007; Brunnermeier and Pedersen 2008).

Thus, while a burgeoning literature has developed examining systemic bank failures in a broad context (Bernanke and Gertler 1990; Gay, S.G. et al. 1991; Berg 1998; Gup 1999; Summers 2000) — the Irish banking crisis being a good recent example (Honohan 2009; Bergin, Conefrey et al. 2010; Central Bank 2010; Conefrey and Fitzgerald 2010; O’Sullivan and Kennedy 2010; Regling and Watson 2010; Stewart 2010) — few have examined banking crises in the context of both corporate
A meta-risk regulation approach to financial and corporate governance failure

governance and financial regulation (Macey and O'Hara 2003; Levine 2004; Adams and Mehran 2005; Caprio, Laeven et al. 2007). This is not surprising, as in most cases of international financial crises, the issue of corporate governance is much less debated in academic and media circles, and appears not to be pursued with the “same vigour as in the case of non-financial collapses” (OECD 2004). Instead policy makers have tended to concentrate on reforming regulation and (re)creating institutional structures, as a way to address perceived failures (Wymeersch 2009; Central Bank 2010; Minister of Finance 2010). This is despite the fact that most agree that corporate governance is “the first line of defence” in any supervisory system (Central Bank 2009), is essential “to guarantee a sound financial system” (Basel Committee on Banking Supervision 1999), and issues such as “allocative efficiency” and the “distribution of quasi-rents” are as applicable to banks as to any other type of firm (Andres and Vallelado 2008).

In 2008, Ireland experienced its second instance of multi-bank failure1 since its independence, and the country’s fourth in over 200 years (Detragiache 1998; Laeven and Valencia 2008), culminating in the recapitalisation, and subsequent nationalisation, of Anglo Irish Bank (Anglo). Previously, Anglo’s experiences have been examined in the context of a property crash, international financial crisis or regulatory failure (Central Bank 2009; Honohan 2009; O’Sullivan and Kennedy 2010). While many of the factors associated with Anglo’s story do not deviate greatly from the norm (O’Sullivan and Kennedy 2010), there are a number of elements which make a case study interesting.

The consequences of Anglo’s failure have been much more severe relative to other cases. In addition to its nationalisation and the establishment of a bad bank structure to purchase €36 billion of non-performing assets, the Irish government forecasts that the defunct bank will require a further €10 billion in capital over the next 10 years to cover future losses, in addition to the €12.4 billion it has already received (Minister of Finance 2009). Furthermore, the bank announced a loss of €12.7 billion (Anglo Irish Bank 2010), the largest in Irish corporate history (Carswell 2009), for the 15 months to December 2009, after writing off €15.1 billion of bad loans. The bank also experienced a serious breakdown in corporate governance practices in 2009 (O’Sullivan and Kennedy 2010), damaging

---

1 In 1985, Allied Irish Bank wrote-off a quarter of its capital base when its insurance subsidiary was placed under administration following substantial losses. The bank required government support to ensure its continued viability.
Ireland’s international reputation as well as the stability of the financial system (Minister of Finance 2009). The recent ‘Directors’ loans’ and ‘Anglo tapes’ controversy has the potential to yield further damage to Ireland’s tarnished reputation. These scandals resulted in the establishment of a number of government inquires (Minister of Finance 2010), as well as on-going criminal investigations led by the Director of Corporate Enforcement.

Anglo’s case study is important because its success spurred many other Irish banks to follow their lead in terms of engaging in aggressive lending and balance sheet expansion (O’Sullivan and Kennedy 2010). This quasi-biological phenomenon, where companies tend to copy the best in class, is empirically and conceptually presented in Viegas et al. (2013). Irish banks all contracted the same disease and required the same costly medicine. The total direct fiscal cost of bailing out the Irish banking system currently stands at €41 billion. This is the highest absolute amount for any European Union (EU) Member State during the financial crisis and represents 42.6 per cent of the total net cost across the EU over the period 2007-2011 (Healy 2013).

The impact of the banking crisis on the Irish economy has been enormous and much more pronounced than the international norm. Rogoff and Reinhart (2009) suggest that following a severe financial crisis, GDP per person falls by an average of 9 per cent in two years, the unemployment rate increases by 7 per cent and house prices fall by approximately one third in real terms and take about five years to reach its nadir. Concomitantly, real government debt grows by an average of 86 per cent in countries afflicted by financial crises, reflecting a collapse in tax receipts due to a reduction in economic activity.

In Ireland’s case, the economy experienced a cumulative nominal GDP decline of 21 per cent from Q4 2007 to Q3 2010, while its primary fiscal balance shifted to baseline deficits of 11-12 per cent of GDP in 2009 and 2010. The Irish economy experienced the largest compound decline in GNP of any industrialised economy during 2007-2010. Ireland’s general government debt has increased by 320 per cent over the same period, with its unemployment rate ballooning from 4.8 per cent in October 2007 to 14.9 percent in only three years\(^2\). Up until recently, Irish banks were reliant on liquidity transfers from the European Central Bank to fund its banking system, totalling €157 billion.

at the end of 2010, and loans from the international community to fund a rescue package of €67.5 billion, to keep the economy ticking over. The Irish state used €17.5 billion of its own reserves in the rescue. Already, €35 billion has been apportioned to recapitalising Ireland’s banks in the coming years, with the remainder plugging the gap between government revenues and expenditures.

Finally there is an international dimension underpinning the importance of Anglo’s case study. The rise and fall of Anglo occurred against a backdrop of unprecedented economic growth in Ireland (Hardiman 2005; D’Agostino, McQuinn et al. 2008). Much of this growth was a consequence of the government’s neo-liberal policy agenda and its shift towards a pro-business regulatory regime (Department of the Taoiseach 2004), particularly in relation to the financial services sector (Westrup 2005; O’Sullivan and Kennedy 2007). As outlined by Ireland’s former Deputy Prime Minister, the country’s economic policy was “spiritually a lot closer to Boston than Berlin” (Harney 2000). Therefore, as Ireland was considered a template for economic development for small open economies (Hardiman 2005)— especially amongst new EU Member States (Barry 2003) — the story of how its banking system imploded needs to be understood.

This thesis attempts to address the gaps presented above by mapping out the financial and corporate governance framework in Ireland, and applying this framework to the case study of Anglo during the property bubble. It will suggest that improper risk management practices and information asymmetries arising from fragmented institutional structures were the main contributing factors to the bank’s failure. The thesis places Anglo’s behaviour within a Minsky cycle, where the bank moved from a hedged to a speculative to a Ponzi-financed position as a result of its poor corporate governance.

Various research questions motivated this thesis (Figure 1). The primary one was to understand whether new forms of regulation could be introduced to fix Ireland’s broken regulatory regime and reduce the probability of a similar crisis from reoccurring. To do this effectively, the thesis delineates the roots of regulation: its history, purpose, various types (including meta-risk regulation (MRR)) and theoretical arguments. Research also focused on understanding why the incumbent ‘command and control’ (CAC) regulatory regime was so pervasive in modern policymaking and what were the challenges associated with introducing new forms of regulation (Paper 1).
Next, the thesis examines how regulation and corporate governance operate in the banking system, with particular attention given to exploring the relationship between financial regulations and banking failures through case study evidence of the Irish and Swedish banking crises (Paper 2). The thesis then applies the Minsky credit cycle to explain the Irish banking crisis. It then argues why introducing MRR, with institutional strengthening at the financial regulator, could ameliorate the effects of future Minsky cycles. It shows that firms do not need to rely on regulators to propagate MRR—as it can be adopted through periodically undertaking an external audit of risk management practices at firms (Paper 3). However, adopting MRR could be costly, so the thesis examines what are the benefits to firms in having good governance structures. In this regard, it assesses the relationship between good
governance within firms and investable premia in emerging markets (assuming that regulators in emerging countries would be less likely to adopt MRR). The thesis shows that firms with good governance in poorly governed countries enjoy an ‘investability premium’ as measured by Tobin’s q (Paper 4). Future research will examine whether the costs of adopting MRR at firms and regulators outweigh the benefits.

This thesis is grounded in the theoretical framework of ‘market failure’ and the requirement for government intervention to harmonise the actions of self-interested agents with the interests of society as a whole. It is inspired by theories from previous and current studies of regulatory failure in financial markets, particularly the work of Agenor et al (1999); Allen and Gale (1998); Benston et al. (1986); Bernanke and Gertler (1990); Carron (1982); Drees and Pazarbasioglu (1995); Federal Reserve Bank of Kansas City (1998); Gay et al. (1991); Grossman (1993); Guttentag and Herring (1984); Hunter et al. (1999); Kindleberger (1986); Malliaris and Urrutia (1992); Sachs and Velasco (1996) Sprague (1910), and; Summers (2000).

The thesis is structured as follows. Section 2 and 3 describes the methodology underpinning the thesis and its contribution to the literature. Section 4 delineates the roots of financial regulation with special emphasis on the rationale for government intervention in the financial system. Section 5 maps out the evolution of Ireland's institutional architecture in financial regulation, starting with the establishment of the Currency Commission in 1927 and ending with the 2008 financial crisis. It also outlines the regulatory reforms introduced during this period, such as the creation of the single regulator and the propagation of principles and risk-based regulation. Section 6 presents the theoretical arguments underpinning corporate governance and the current corporate governance framework in Ireland. Section 7 describes and develops the Minskyan framework through case study evidence of Anglo’s practices during the credit bubble in Ireland. In Section 8, the contribution of failed regulation and otiose institutional structures is assessed in the context of the Irish and Swedish banking crisis. In section 9, the thesis delineates the director’s loan scandal that enveloped Anglo since its nationalisation in 2009. Next, in section 10, the thesis introduces an institutional architecture for MRR in the Irish banking system, based on the short-comings exposed in Anglo’s case study. Section 11 investigates whether investors care more about the firm’s corporate governance or the
country’s level of institutional development in emerging markets. The objective was to understand the impact that a firm’s internal governance structure has on the price that international investors are willing to pay for it. Finally, section 12 concludes the thesis.

2. Methodology

The case study framework was deemed appropriate as it allowed the research process to utilise mixed-methods, combining knowledge with empirical and theoretical data. This created a research output that provides a “holistic interpretation” (Gerring 2007) by identifying both the patterns and the processes influencing Anglo’s failure in 2008. In addition, the qualitative structure and naturalistic inquiry offered in the case study affords the opportunity to provide general solutions to observed failures (George and Bennett 2004; Gerring 2004; Alasuutari, Bickman et al. 2008; Porta and Keating 2008). This is important, as the study should not be viewed as cadaver: its modus operandi is to offer new questions for further research by determining the contribution of corporate governance to the failure of Anglo.

Minsky’s approach to economics helped set the theoretical foundations. The focus was not on building complex models, with assumptions that were divorced from reality, to explain the Irish banking crisis. Instead a narrative approach was adopted – expressing concepts and ideas in writing, to explain the Irish banking crisis. Many of the great economists from Adam Smith to John Maynard Keynes to Friedrich Hayek presented their research using this approach (Weldon 2014).

The methodology straddles both quantitative and qualitative sources to help address the questions presented in section 1. Quantitative data was gathered through supervisory reports from the weekly, monthly and quarterly submissions by Irish banks to the regulator; stability reports and monthly statistics from the Central Bank of Ireland (Central Bank) going back as far as 1942; banking publications from the Department of Finance; statistical abstracts from the Central Statistics Office from the late nineteenth century onwards, and; annual reports from the banks.

A new data set on capital and reserves, deposits, loans and total assets of the Irish banking sector was compiled from 1955 – 2008. The data on loans included a breakdown of lending to the following
sectors: agriculture, utilities, manufacturing, building and construction, financial services, other services, mortgage finance and personal lending. Long-term horizon data collection on some individual banks proved challenging due to gaps and inconsistencies in records when reconciling financial information (particularly following bank mergers and acquisitions). However, a full data set on the number of directors, net profits, deposits, number of branches, loans, loan-to-deposit ratio and assets were collected for Allied Irish Bank, based on the annual accounts from Munster and Leinster Bank, Royal Bank of Ireland and the Provincial Bank of Ireland from 1955-65 and Allied Irish Bank from 1966-2008. A data set on the share price of the Irish banking sector together with individual banks’ share price, and their relative performance against the ISEQ index, was gathered from 1965 – 2008 from Datastream, Yahoo! Finance and the Irish Stock Exchange. An intermittent data set, spanning 1965-2008, on the number of employees at banks, their educational profile and wages was gathered from Census records and publications from FÁS, Forfás, the Department of Jobs, Enterprise and Innovation and the Department of Education. In addition, basic economic and monetary data such as the interest rate, inflation rate, unemployment rate, consumer price index, GDP, consumption expenditure and investment rate (as a percentage of GDP) on the Irish economy was captured from 1945-2008, mainly from the Central Bank’s annual statement.

Data was collected to determine the impact that a firm’s internal governance structure has on the price that international investors are willing to pay for it. This could support the argument that firms do not have to wait for regulators to adopt a meta-risk philosophy. Data collection started with sourcing an initial sample of all 2,784 firms from the major markets of the S&P/IFC Emerging Market Database that were deemed investable at any time between 1980 and 2000. Two measures were used to determine the strength of corporate governance. The first measure of corporate governance is an indicator variable that takes the value of one if the firm is a dual-class share firm (DC), and zero for a single-class share firm (SC). To classify firms as either SC or DC, the ‘Currently a Multiple Share Company’ was employed from Worldscope. The second measure of corporate governance, also sourced from Worldscope, is the number of shares held by insiders as a percentage of the total number of shares outstanding. Finally, a number of different measures were adopted to try and capture the
level of country-level investor protection in each of the sample of countries, such as the Kraay, and Mastruzzi (2007) measure of institutional development.

In terms of data analytics, the primary objective was to analyse trends in Irish banking to assess whether the rapid growth in the balance sheets of Irish banks during the 2000s was a cyclical phenomenon or due to the presence of individual factors such as low interest rates. Through quantitative analytical techniques, long-term horizon graphs on Irish banks were constructed to help understand the relationship between a range of variables and banks’ behaviour, such as interest rates and lending through simple regression analysis. Graphs mapping the growth of lending in the Irish banking system from 1955–2007 were very powerful in demonstrating the atypical behaviour of banks during the 2000s. They have been used in a number of papers and at academic conferences. This data set also validated qualitative research in the thesis, particularly when chronicling the evolution of the Irish banking system.

Regression analysis focused on exploring the relationship between investability, corporate governance, investor protection (country governance) and firm value. Replicating Mitton and O’Connor (2012) was the first step in this process, by establishing the existence of ‘investable premia’. Then, how these ‘investable premia’ vary by level of country-level investor protection and corporate governance was examined. Finally, the interaction of country-level investor protection and corporate governance was observed to explain the “investable premia”.

However, qualitative data sources are likely to be more useful in addressing the research questions. In this regard, corporate publications, presentations, interviews and statements from Anglo, the Irish Financial Services Regulatory Authority (IFSRA), Central Bank of Ireland (Central Bank), Minister of Finance and the Taoiseach (Irish Prime Minister) were examined and interpreted. Laws and regulations, particularly those since the 1980s, were examined, with a view to international comparison (particularly in countries with similar legal structures). A regulatory index of freedom was created based on this analysis, which is forthcoming in a future publication outside the scope of this thesis. The forthcoming work of other academics was also explored, particularly those which are attempting to explain and rebuild Ireland’s failed regulatory framework. Furthermore, theories surrounding financial regulation and corporate governance were comprehensively reviewed. Using the
Anglo case study to help substantiate or contradict the prevailing conventional wisdom was a very important component of the study.

3. Contribution

Banking crises are not the product of any one factor. While several papers and reports have dealt with the Irish banking crisis in a broad regulatory or public policy perspective, few have taken a truly multi-dimensional approach. Building from a regulatory and corporate governance theoretical review, this thesis examines the Irish banking crisis in the context of economic history, institutional structure, liberalisation, monetary policy and behavioural economics.

As mentioned above, the thesis was underpinned by a large data set of over 72 variables with 2,667 individual data points. The totality of data collected represents one of the most important and comprehensive data sets ever produced on the Irish banking sector. There is no similar data set, either in public or private, which rivals it, even at the Central Bank. It was used to effectively present the huge growth in banks’ balance sheets during the 2000s. The data will be used in the future to attempt to answer many research questions, such as the relationship between bank productivity and employee levels; loan-to-deposit ratios and risk management, and; the relationship between sectoral lending and economic growth.

This thesis also represents the first application of a meta-regulation theoretical framework to Minsky cycles; the first in the context of the banking sector, and; the first in relation to Irish policymaking. Research into meta-regulation is at an early stage and is generally limited to traditional areas of regulatory focus (such as health and utility regulation). The thesis advances a new strand of research, introducing the concept of meta-risk regulation (MRR) – a new form of meta-regulation, which is centred on assessing the risk management practices of firms. While current bank regulations, such as Basel III, have components of MRR, no researcher has made the connection between meta-regulation and these new forms of financial regulations. Examining these regulations within the correct theoretical framework, and learning how they work in other sectors should advance this field of research and help policy makers design better regulations in the future. The thesis introduced the
first ever institutional architecture for meta-regulation, across all sectors – stressing the importance of coupling regulatory reforms with the necessary institutional adjustments.

This research is novel in that it was the first to apply the Minsky credit cycle to the Irish banking crisis. The stages of Minsky’s financial instability hypothesis provide a robust explanation of the Irish credit boom. Minsky’s hypothesis rests on the assumption that during periods of economic stability, banks, firms and other economic agents become complacent. In the Irish context this compliancy resulted in banks and property developers assuming that the good times would continue to roll and took greater risks in pursuit of profit, which sowed the seeds to the crash, or Minsky moment, during 2008. The objective is that applying the Minsky framework to the Irish banking crisis will firstly, add another case study to this burgeoning field of research, and secondly, help shape future policy decisions during periods of growth and stability in Ireland.

This thesis offers a comprehensive description on the evolution of financial supervision in Ireland from the Free State foundations in the 1920s, Europeanisation in the 1970s, liberalisation in the 1980s, the creation of the single financial regulator in the 1990s and concluding with the financial crisis in the late 2000s. This information is useful in comparing the roots of Ireland’s financial crisis with other international case studies.

However, its contribution to the field of financial regulation and policymaking extends beyond the financial sector. The theoretical research on regulation spawned the first analysis of the resilience of CAC in modern policymaking and one of the few modern literature reviews. Applying MRR in emerging markets resulted in research into ‘investability premium’ with Professor Tom O’Connor at Maynooth University. The research demonstrated that well governed firms (including banks), operating in countries with lax regulatory and corporate frameworks, receive an ‘investability premium’. Also investors care more about corporate governance than institutional structure in emerging markets.

Off the back of this research, four peer-reviewed papers were published, dozens of articles for professional magazines and articles for blogs and forums such as VoxEU, Harvard Business Review and the Harvard Law School Forum on Corporate Governance and Financial Regulation. Research findings in this thesis have been presented at several international conferences.
In summary, applying the ethos of MRR, in combination with institutional strengthening, could reduce the probability of bank failure in the future. There has been much debate of late that the Basel III accord, which mixes a leverage ratio (similar to Basel I) with risk-based capital requirements (Basel II), is too complex and is based on failed ideological foundations. There are also concerns that the inflexible nature of CAC reforms (such as Basel III) may reduce the supply of credit to the real economy and stunt innovation. Regulators need to start looking outside their normal toolkit and adopt meaningful reforms such as MRR. It worked in the nuclear power industry after the Three Mile Island accident and can work in the financial services sector now.

4. Roots of financial regulation

As the state began to divest itself from industries long held in public ownership, governments have sought new ways to control markets. Regulation has long been a favourite interventionist tool used by policymakers, particularly in cases where private law instruments are deemed insufficient to address market failures. According to public interest theories, the regulatory process begins with a necessity to address these market failures (Posner 1974), with a normative goal of creating a Pareto efficient allocation of resources (Arrow 1970; Shubik 1970). Instances of market failure can include anti-competitive behaviour, windfall profits, externalities, information asymmetries and moral hazard. Where market failure is accompanied by private law failure, there is a prima facie case for regulatory intervention to protect the public from undesirable market activity (Baldwin and Cave 1999). Governments use a form of regulation known as command and control (CAC) to intervene in markets. CAC crept into the regulatory lexicon in the early 1980s when it was used in the context of administrative law to represent a proxy for traditional or legislative modes of government intervention (Krier and Stewart 1989; Short 2009). However, types of CAC regulation can be traced back hundreds of years, e.g. the Artificers and Apprentices Act of 1562, which fixed basic wage levels for apprentices in England (Morgan and Yeung 2007). In a CAC regime, the state (or one of its organs) fixes standards on certain activities (the command) and uses legislation to prohibit the behaviour of regulated entities which do not conform to these standards (the control) (Baldwin 1997; Black 2002;
A meta-risk regulation approach to financial and corporate governance failure

Moran 2003). As a result, the public can be confident that the power of the law is being used “as a protective device” (Baldwin 1997). CAC conforms with the style and ethos of autonomous law (Selznick 1978; Selznick 1978; Aalders and Wilthagen 1997), representing “a model of rules...in which legal energies are devoted to ensuring close accountability to those rules” (Rees 1988). It generally operates in a centralistic or unilateral framework, as the state is the only commander and controller (Black 2001). It is also based on a simple cause-effect relationship, represented by a linear progression from policy formation to implementation. CAC creates a stable platform for regulatory participants due to the dependability it creates for the regulator in terms of operational parameters, and for the regulated firm in terms of compliance obligations (Gunningham and Grabosky 1998). Its legitimacy is particularly strong in times of crisis where sentiment demands more perspective, intensive and legalistic rules (Scott 2004). Latin (1985) describes a number of other strengths of CAC, such as reduced information and collection costs, greater accountability and legitimacy, enhanced accessibility of decisions to public scrutiny, reduced opportunities for regulatory capture in response to political behaviour, and increased likelihood that regulations will withstand judicial review. In the German environment sector, the development and enforcement of detailed rules and standards, backed by legal sanctions, has been credited with not only increasing the productivity of firms through technology and managerial improvements (Gunningham and Grabosky 1998) but also in establishing new markets (Fisse and Braithwaite 1993). This is consistent with Porter’s theory of competitive advantage where he argues that stringent regulation can facilitate technology innovation in economies as new firms grapple to comply with regulations (Porter 1990).

Many of these arguments have been hotly disputed and by the end of the 1960s governments started to question the suitability of the incumbent regime—which was said to be collapsing under its own weight (Krier 1992). An array of cost-based arguments against CAC have been given, from price increases (Buchanan and Tullock 1975), market inefficiencies (Dales 1968) and undermining economic growth (Kneese and Bowers 1968). The movement towards a more inclusive approach to regulation was also supported by many socio-legal scholars who suggested that CAC leads to a proliferation of rules and over-regulation (Bardach and Kagan 1982; Stewart 1988; Fiorino 1996; Cox 2003). This “ratchet effect” (Bardach and Kagan 1982) can be explained, in some part, by the high
costs of gaining perfect information required to target rules and standards efficiently (Habermas 1987; Teubner 1987; Tate and Vallinder 1995; Arturs and Kreklewich 1996; Cohen 2002; Sweet 2002) in a centralistic regime (Black 2001). Fiorin (1996) concludes that under CAC “rules beget more rules in a seemingly inevitable process of regulatory expansion” which increases costs and damages innovation and economic growth (Bardach and Kagan 1982). CAC regulations can also place costs on society, as ill-conceived rules may not only fail to achieve their desired objectives (Fenn and Veijanovski 1988; Hawkins 1990; Baldwin 1995; Baldwin 1997; McBarnett and Whelan 1991) but also result in creative compliance on the part of the regulated firm (McBarnet 1994; Parker 2002). As rules are generally fixed, they must not only be accessible to regulated entities (Baldwin 1997) but the appropriate level of standards must be rigid and problems of scope must be overcome.

Notwithstanding, cost-based research, the literature associated with CAC will harbour up phrases such as old (Baldwin 1997; Elliott 2001; Levi-Faur 2005; Boltanski and Thévenot 2006), anachronistic (Stewart 1981; Sunstein 2000), costly (Morgan and Yeung 2007), inefficient (Sinclair 1997; Gunningham and Grabosky 1998), results in ossificantion (Ayres and Braithwaite 1992; Black 2001) due to its legalistic underpinnings (Cox 2003; Moran 2003), bureaucratic (Stewart 1981), restrictive (Breyer 1979) and coercive (Latin 1985). It is also been shown to be conducive to capture (Stigler 1971; Mitnick 1980; Quirk 1983; Wilson 1984; Hood 1994), particularly in the latter stages of Bernstein’s regulatory life cycle (Bernstein 1955; Baldwin 1997; Baldwin and Cave 1999; Esty 2001). However, Baldwin, Scott and Hood (1998) suggest that many of the arguments presented by academics are mainly applicable to the United States (US) and are not as compelling when CAC is adopted in an enforcement system which is more flexible, administrative based and less prosecutorial in nature (such as the UK and Ireland). Additionally, many of the problems associated with CAC, such as enforcement, are not confined to CAC and are issues which effect all types of regulations (Ogus 1994).
4.1 Alternative regulatory instruments

Recognising the limitations and growing disenchantment with CAC, policymakers have sought ways of reforming their regulatory frameworks by experimenting with other types of regulations (Ogus 1994). The neo-liberal hegemony which took root following the stagflation of the 1970s resulted in a pressure, not only to deregulate, but to experiment with other types of regulations (Ogus 1994). In 1972, the British Committee on Safety and Health at Work, published a seminal report suggesting that there were “severe practical limits” on the extent to which better standards of safety and health at work can be achieved through a “negative” CAC regime (Robens Committee 1972). The report stimulated the 1974 Health and Safety Act which shifted the emphasis away from using rules or inspections to achieve regulatory objectives towards adopting a collaborative approach to compliance in which employers, employees and trade unions were jointly responsible for ensuring a safe working environment (Aalders and Wilthagen 1997). The new partnership arrangement proved successful, in terms of reducing costs and regulatory burden and, most importantly, reducing accidents and injuries in the workplace. Since the 1990s, a plethora of regulatory techniques have been designed to steer desired behaviour in means other than “legal compulsion” (Ogus 1994). The main forms include market-based regulation, self-regulation, educational schemes and laissez faire (OECD 2009).

Market-based instruments use economic or financial incentives to change the behaviour of regulated entities (Baldwin and Cave 1999). They are considered a market-based derivative of CAC, in so much as the regulator still controls outcomes through the manipulation of economic or financial incentives. Panayotou (1995) categorises economic instruments into seven broad categories: property rights, market creation, fiscal instruments, charge systems, financial instruments, liability instruments and performance bonds and deposit refund systems. They are seen as cost effective as they give regulated entities the discretion to find the most beneficial solution for their individual operations. Market-based regulations also reduce enforcement costs to the regulator as well as compliance costs to industry (Panayotou 1995). Economic instruments are particularly popular in the environment sector (Atkinson and Tietenbery 1991; OECD 2003). They operate through “changing relative prices” or creating new trading opportunities (OECD 2009). While the enforcement of CAC is subject, of
course, to legal uncertainties, breaching market-based rules is more ambiguous and generally results in the payment of specific sums, reflecting the marginal costs of breaching the rules to firms within the industry and society (Ogus 1994).

Secondly, in its simplest form, self-regulation involves a group of entities coming together to develop rules or codes to regulate behaviour in a particular industry (Page 1986; Baldwin, Scott et al. 1998). It generally takes the form of accreditation and industrial codes and can be voluntary or non-voluntary in nature (Baggott and Harrison 1995). It has been used widely as the primary controlling device in a range of industries, from financial services to advertising and a host of other professional occupations. As it is generally operated by the industry itself, it normally acquires a greater level of technical knowledge and expertise than other approaches, resulting in more fluid and responsive rules with less monitoring, enforcement and compliance costs (Ogus 1995). Regulated firms are also more committed to complying with rules which they helped create (Ayres and Braithwaite 1992).

Thirdly, educational measures are considered the “lightest form” of regulation and are the most widely used alternative to CAC in developed countries (OECD 2002). It seeks to change the behaviour of individual agents or firms through the propagation of greater information. Educational measures address information asymmetries allowing agents to make “informed choices” based on their risk profile and individual preferences (OECD 2002). It is also essential in improving the capacity of regulated entities to address pressing issues (Gunningham and Grabosky 1998). A key function of educational instruments in the environment sector is to “internalise environmental awareness and responsibility” into corporate decision making (Gunningham and Grabosky 1998). Public information campaigns are particularly popular, like drink driving campaigns. Additionally, the government through “exclamation and excoriation” (Morgan and Yeung 2007) may publish league tables indicating the performance of regulated entities as a means to steer behaviour in a certain direction.

The final main alternative to CAC is adopting a laissez faire approach to oversight (OECD 2002). For example, instead of regulating the prices charged by firms, the regulator can use other measures such as competitive bidding or franchise arrangements to achieve the same result (Noll 1989). In proposing a regulatory regime for the UK’s telecommunications industry following its
privatisation in the early 1980s, Littlechild (1983) characterised regulation as “holding the fort until the cavalry of competition arrives”. This approach recognises that regulation is not a panacea. All types of regulations result in some form of transaction costs, information imperfections (National Competitive Council [Australia] 2005) and can damage levels of innovation and competition. Therefore, a laissez faire approach can be more efficient than direct intervention recognising that while the markets can and do fail, failure is not exclusively limited to markets alone, regulation itself can fail (O’Sullivan and Kennedy 2007).

Alternative measures of regulation are not without their faults. In reviewing their performance in the environmental sector, Gunningham and Grabosky (1998) argue that even though these instruments have “something to offer”, they have “substantial limitations as a standalone strategy”. Moving from the incumbent regime creates uncertainty for firms who worry about the extra transactions costs and compliance requirements (OECD 2002). Regulatory change is felt most acutely in industries which are characterised by high levels of investment and sunk costs, like the energy sector, which is now seeing the use of financial instruments that hedge against regulatory change (Irvin 2009). For the regulator, if it decides to pursue alternatives to CAC, they may require new skills and expertise, and in some cases, institutional strengthening. When the UK’s FSA shifted to principles-based regulation in the early 2000s, it suggested the whole process was “complex”, “highly demanding” and “costly” (FSA 2007).

Critically appraising market-based regulation, it can be difficult to harmonise across jurisdictions, is cumbersome to change once “up and running” and can result in regulatory capture (Uzawa 2003; Nordhaus 2008). It can be socially undesirable, resulting in the acquisition of power by rent-seeking firms (Stigler 1971; Peltzman 1976), not accountable to the conventional constitutional channels (Shaked and Sutton 1981; Page 1986; Kay 1988; Ogus 1995). Firms can use their power to earn supra-competitive profits (Friedman and Kurnets 1945; Shilling and Sirmam 1988; Ogus 1995) by designing rules restricting entry and protecting anti-competitive practices. Self-regulation can be costly to governments, due to the expense in approving self-regulatory codes (Ogus 1995). Information and educational measures may lack flexibility and proper monitoring provisions (OECD 2009). They may also fail to address information asymmetries, as information disclosed in many
different products does little to change customers’ decision making as they are either unaware of it, do not understand it, or choose to disregard the information disclosed (Morgan and Yeung 2007). Finally, numerous studies have demonstrated the problems which arise when the state abstains from interference with, or participation in, private industries. Wilson (1980) suggests that adopting a \textit{laissez faire} approach to regulation may result in market abuse by monopoly power, information asymmetries and negative externalities.

Notwithstanding these concerns, alternative modes of regulation have propagated as a means to control markets. Regulators in the financial services sector have been particularly keen on adopting new methods of regulation with varying degrees of success. The deregulation of financial markets in the 1980s and the shift towards principles-based regulation in the 1990s were important milestones in the evolution of financial services in Ireland.

4.2 Rationale for financial regulation

A well-functioning banking system is said to “oil the wheels of the whole economy” (IFSRA 2005) through efficiently allocating resources, increasing capital formation, stimulating productivity growth and acting as a repository of national savings (Barth, Caprio et al. 2004). However, experience suggests that banks are “prone to periods of instability” resulting in large and expensive consequences to the wider economy. One of the main contributing factors to these crises, demonstrated in Asia and Sweden in the 1990s, has been a lack of effective government oversight. Therefore, countries have sought to carefully supervise banks in order to limit the probability of systemic crisis. Regulation has become the favourite interventionist policy tool in this regard. Its economic rationality has been extended in recent years beyond just financial stability, addressing market failures such as monopoly power, information asymmetries and moral hazard.

Two main types of regulations have promulgated: conduct of business (CoB) and prudential regulation. CoB focuses on how financial institutions conduct business with their customers. It is necessary because asymmetries of information exist between consumers and banks, which are further exacerbated due to the complexity of financial products. In many cases, CoB regulation relates to the
establishment of guidelines and rules of acceptable behaviour between banking institutions and their customers. It also deals with unsolicited contact, advertising, complaints and, in some jurisdictions, product intervention, levels of service provision and profitability.

In contrast, prudential regulation focuses on the factors that are essential to the stability of the financial system. Its aim is to minimise the possibility of a breakdown in the financial sector and prevent any adverse effects on consumers and the wider-economy\(^3\). Similar to CoB regulation, prudential regulation is driven by imperfect information. However, this time it relates to a lack of information about the stability of financial institutions. Stability can be achieved by preserving solvency, limiting risk and protecting customer’s deposits. Regulations such as stringent capital and liquidity adequacy ratios and entry restrictions requirements can support this goal, limiting the probability of costly banking failure or at least reducing the social costs of resolution.

Not everyone shares this positive view of regulation and a burgeoning literature has developed in response to its perceived weaknesses. There are “many strands” to this literature (Benston and Kaufman 1996; Dowd 1996; Kane 1997), with arguments ranging from some Chicago School liberals who argue that there are no market failures in financial markets, to others suggest that failures do not warrant regulation on a cost-benefit analysis rationality. Even if government intervention is required, the notion that regulators have sufficient knowledge to design appropriate rules and standards has been long challenged (Hayek 1949), with some suggesting that this “centralistic” regulatory approach can result in unintended and negative consequences (Black 2002). Moreover, Shleifer and Vishny (1998) have suggested that regulators do not always regulate according to their statutory objectives (i.e. helping hand). Instead, in a grabbing-hand fashion, regulation is sometimes introduced to protect institutional or political factions. This alternative perspective is based on the assumption that government failure, is as important and frequent, as market failure (Barth, Caprio et al. 2004) and countries with strong financial regulators will tend to be less efficient.

---

\(^3\) In its strictest sense, prudential regulation is concerned about the soundness of financial institutions vis-à-vis consumer protection while systemic regulation is concerned about the safety of financial institutions for purely systemic reasons. However, for the purpose of simplicity, this paper expands the strict definition of prudential regulation to include systemic regulatory considerations.
A meta-risk regulation approach to financial and corporate governance failure

Focusing on this helping-hand/grabbing-hand taxonomy in financial regulation, empirical research provides mixed results (Barth, Caprio et al. 2009). Highly restricted banking systems are associated with lower capital costs, resulting in improved lending and economic growth prospects (DeLong 1991; Ramirez 1995; Berger and Udell 2006). In contrast, lightly regulated banks have higher levels of operational efficiency, resulting in lower banking charges for customers (Vennet 1999). Barth et al. (2004) find that the probability of banking crises is positively related to levels of regulatory restrictions. While this might not be consistent with conventional wisdom, less regulatory restrictions gives banks the ability to diversify their income sources by engaging in different activities which, in turn, improves their underlying stability.

In terms of institutional structure, historically, prudential and CoB regulation have been the responsibility of (at least) two separate institutions. Prudential regulators have significant powers, such as the ability to revoke banking licences from incumbent financial service providers or refuse an application for authorisation for new entrants. They are traditionally located within the supervisory department of a central bank\(^4\), which in the last number of decades has been given independent powers to safeguard against political interference. Moreover, prudential regulators generally have some say in monetary policy decision-making given their financial stability remit.

CoB regulators generally have less influence in financial economic policymaking. Their enforcement powers are typically limited to the imposition of monetary fines and penalties. The fragmented nature of their institutional make-up further compounds their lack of influence. CoB regulators are generally either part of a wider customer protection agency, annexed to a larger prudential regulator or split between different agencies with specific responsibilities. Many of their goals, such as greater competition, are not necessarily consistent with the Holy Grail of financial stability (Carletti and Hartmann 2003). As a result, CoB regulation is often characterised as being piecemeal and inefficient, leading to ineffective supervisory oversight\(^5\) (Goodhart, Hartmann et al. 1998).

---

\(^4\) In 1994, a study by the IMF indicated that in 75 per cent of European countries, banking supervision was the responsibility of the central bank.

\(^5\) However, the structure of CoB regulation is changing in many countries in response to the 2007-2009 financial crisis. For example, administrations in the US and the UK have both established unified customer protection regulators with enhanced powers, remit and responsibilities.
A meta-risk regulation approach to financial and corporate governance failure

It was not until the mid-1990s, that institutional structure became a popular issue in policy debates, as governments began to question whether the efficiency of their regulatory regime could be influenced by the institutional arrangements encompassing it. There are a number of reasons behind this phenomenon. Firstly, the emergence of universal banking in the early 1990s, posed significant challenges for the traditional regulatory architecture (Goodhart, Hartmann et al. 1998). There were concerns that the fragmented nature of financial markets may not only generate inconsistencies but also result in insufficient oversight of the newly emerging financial conglomerates (Norgren 1998).

Secondly, there was increasing recognition of the growing complexity of financial market operations and the requirement for specialist expertise to be developed and centralised. Finally, instances of regulatory failure, such as the collapse of Barings Bank in the UK, resulted in considerable debate about the robustness of incumbent regulatory systems in the mid-1990s.6

Concomitantly, debates (Peek, Rosengren et al. 2001) have focused (and picked-up recently given plans to create a Eurozone banking union) on whether financial regulation should be divorced from monetary policy. The main argument being that integrating monetary and regulatory policy in a single authority can result in a conflict of interest (Goodhart and Schoenmaker 1995). For example, a reduction in interest rates would support economic stability in times of high inflation—consistent with monetary policy objectives. However, this policy would have adverse effects on financial stability in terms of the profitability and solvency of banks (Vittas 1992). Additionally, during instances of banking failure, financial regulators may want to close a failed bank or affect an orderly wind-down of its operations due to moral hazard concerns. In contrast, fearful of systemic stability and the risk of contagion, officials in charge of monetary policy will want to rescue the institution, regardless of what moral hazard problems this creates.

However, many who are unconvinced by these arguments. As the lender of last resort, the central bank already plays an important role in managing systemic stability in the financial system. Housing regulatory functions within its remit is beneficial, as joint responsibilities make for better supervisory and monetary policy than would result from a single regulator with no economic responsibilities or a

---

6 For example, the UK, Japan, South Korea and Iceland all integrated their regulatory structure into a single supervisor during the 1990s, which were previously the responsibility of a number of specialist authorities and government departments.
monetary policymaker with no involvement in the review of individual banks’ operations (Peek, Rosengren et al. 1999). The argument goes that the evaluation of economic conditions is enhanced by having access to detailed supervisory information or vice versa. Empirically, Friedman and Kuttner (1992) have shown that problems in the banking system can be good indicators of emerging problems in the wider-economy. Additionally, numerous studies (Bernanke and Blinder 1988; Bernanke and Lown 1991; Kashyap, Stein et al. 1993), have demonstrated that the well-being at a point in time in the financial system may impact an economy’s response to monetary policies.

5. Evolution of financial regulation in Ireland

When the Irish Free State emerged in 1922, there already existed a sophisticated and well-integrated banking system, providing credit and other banking services in the economy (Pohl and Freitag 1994). While there was recognition of the need for a distinctive currency in the new state—and the establishment of an issuing authority *a priori*—the social and political unrest during the Irish civil war and the risk of undermining the country’s trade stability prevented an immediate break from Pound Sterling. However, following the passing of the *Coinage Act 1926*, when the Minister of Finance was given the authorisation to issue token coins of limited legal tender, the government established a Commission of Inquiry into Banking to re-examine this issue. The commission, in its final report in January 1927, recommended the adoption of fixed parity with Pound Sterling for the new Irish currency and the creation of a Currency Commission to manage and control its operation. The government accepted these proposals and later that year the Currency Commission was established. The Commission was controlled by a board composing of six commissioners, three elected by the Irish clearing banks and three appointed by the Minister of Finance.

While the Commission of Inquiry into Banking considered creating a central bank type-structure to oversee the Irish financial system, it concluded that this course of action was “not to be recommended as an immediate expedient” (as cited in Pohl and Freitag 1994), and, thus, banks were left (largely) to operate free from government oversight. Instead, the authority’s focus was on the economy, particularly the state of public finances and the country’s trading accounts (Westrup 2005).
This was not atypical for the 1920s, as world governments generally adopted a *laissez faire* approach to banking (Dowd 1996), due to the systems low probability of failure (Benston and Kaufman 1988; Laeven and Valencia 2008; Rogoff and Reinhart 2009), and the prudent risk management practices adopted by the sector (Dowd 1992). For example, during the civil war period in the US, banks were subject “to virtually no federal regulations” (Dowd 1996) and yet had average capital ratios of 40 per cent (Kaufman 1992; Benston and Kaufman 1995). This decreased to 20 per cent at the turn of the twentieth century, as banks were subjected to greater regulations. However, this is still much greater than current levels, notwithstanding the development of the *regulatory state* in the latter half of the twentieth century (Majone 1994; Moran 2003), and the tendency towards over regulation or *verrechtlichung* (Teubner 1987; Sweet 2002).

Despite, the Wall Street Crash and the crisis of confidence in financial markets that ensued, Irish government policy (or lack of) remained constant. However, in 1938, a new *Commission on Banking, Currency and Credit* recommended that a central bank should be established in light of the growing complexities in financial markets. Four years later, after much legislative preparation, the government took the commission’s advice and replaced the Currency Commission with the Central Bank of Ireland (Central Bank). Initially, the authority was given very specific powers and duties despite the commission’s recommendation that the new structure should have similar powers to other central banks. The authority’s main role was to safeguard the integrity of the currency and consistent with Article 45 of the Irish Constitution, to control credit in the economy with the objective of improving the welfare of individuals. Its role was not as expansive compared to other international central banks, in so far as it was not the banker to the government⁷, had no legislative powers to control credit in the economy and did not hold the cash reserves of the clearing banks in Ireland. However, this changed with the passing of the *Central Bank Act 1973*, as the Irish Central Bank started to engage in the supervisory process and acquired the role of *custodian* to the banking system.

Following this Act, the Central Bank became a full-blown prudential regulator, with the responsibility for the direct licensing and supervision of most banks in Ireland⁸. Throughout the

⁷ The Bank of Ireland was the banker to the government until the 31st of December 1971.
⁸ The Department of Finance remained responsible for the bank’s legal framework.
1970s, it introduced strict credit restrictions on bank lending, deposit requirements on net capital inflows and liquidity ratios for licensed banks. Also, after Ireland’s membership of the European Economic Community (EEC) and the passing of various EEC financial directives, the regulatory tools and techniques used by the authority were significantly improved. By the mid-1980s, the Central Bank had created a financial system which was characterised as being one of the most “intensely regulated” in all developed countries (DKM 1984). At that time, an interest rate cartel existed as a key factor inhibiting competition. Moreover, the Central Bank controlled new entrants in the banking sector and entry was practically unattainable except by way of takeover (O’Sullivan and Kennedy 2007). However, the banking system was not free from systemic crisis and in 1985, following the collapse of one of Allied Irish Bank’s insurance subsidiaries (Insurance Corporation of Ireland) due to poor risk management practices, the government was forced to pump over €500 million into the financial system to prevent a potential crash. This investment, later written-off completely, was made despite the crippling level of public debt experienced by the economy during this time.

In the late 1980s, the pace of development of the Irish banking system “increased sharply” (Cullen 1998) as the economy spluttered out of its deep recession. Ironically, many of the regulations which were designed to protect the stability of the Irish banking system were either removed or relaxed, such as a reduction in liquidity requirements and the removal of explicit sectoral guidelines on credit (O’Sullivan and Kennedy 2007). Of particular note, the creation of the International Financial Service Centre in 1987—a purpose built tax environment for foreign financial institutions based in Dublin—encouraged international investment from US banks and changed the profile of the Irish financial sector. The government reacted to this change with the enactment of the Central Bank Act 1989, which extended the Central Bank’s licensing and supervisory powers with respect to wholesale banking and specialist financial institutions.

However, weaknesses in the regime were beginning to surface during the 1990s, specifically related to the relationship between the Central Bank and its regulated entities. Concerns emerged following a government inquiry into the widespread use of off-shore bank accounts in the mid-1990s. The report found that the Central Bank failed to effectively monitor and supervise these accounts and allowed the practice to become endemic in Irish banking. Moreover in 1999, a government committee.
highlighted that the Central Bank did little to prevent the widespread evasion of deposit interest retention tax (DIRT) over a 12 year period. It outlined that the relationship between the Central Bank and banks was “particularly close and inappropriate”, suggesting that the Central Bank was perhaps “too mindful of the concerns of the banks, and too attentive to their pleas and lobbying” (Committee of Public Accounts 1999). The Competition Authority noted that a new regulatory structure was required to restore the “shattered” public confidence in banking oversight (as cited in Westrup 2005).

5.1 Creation of a single regulator

In response to these problems and in line with its wider better regulatory agenda (OECD 2001; High Level Group on Regulation 2002), the Irish government reformed institutional arrangements in financial regulation through the enactment of the *Central Bank and Financial Services Authority of Ireland Act* in 2003. The Act created a single financial regulator, Irish Financial Services Regulatory Authority (IFSRA), with responsibility for prudential and CoB regulation. IFSRA was given responsibility for all financial institutions previously regulated by the Central Bank, the Department of Enterprise, Trade and Employment, the Office of the Director of Consumer Affairs and the Office of the Registrar of Friendly Societies. The new regulator was kept as a constituent part of the Central Bank’s organisational superstructure, but given the “independence necessary for the successful regulation of the Irish financial sector” (McCreevy 2003). At the launch of IFSRA, the then Minister of Finance, Charlie McCreevy, highlighted the importance of “sufficient integration” of IFSRA with the Central Bank to allow for “a continuous exchange of information and expertise” between both authorities. Westrup (2005) argues that this “curious hybrid” structure was effectively a compromise attempt at implementing the main recommendation of the *McDowell Report*, which suggested the regulator should be a “completely new organisation outside, and independent of, the Central Bank” (McDowell Report 1999). The report outlined that there was no significant international precedent for creating a regulator with such a large range of responsibilities within a conventional central bank, suggesting that “no EU Member State has done so or proposes to do so”. Many suggest that the reason that the government decided to keep regulatory functions within the Central Bank was due to intense

---

9 Which was renamed the Central Bank & Financial Services Authority of Ireland.
lobbying from the Central Bank and the Department of Finance (Westrup 2005). The Central Bank’s desire to keep prudential regulation may also be related to developments in 1999, when the European Central Bank assumed responsibility of monetary policymaking in Ireland and the rest of the Eurozone. As such, losing a large chunk of monetary and prudential functions would have severely diminished the Central Bank’s role, relegating it to a bit-player in financial economic policymaking in Ireland.

5.2 Objectives

The government mandated IFSRA to achieve three main goals: to protect consumer interests, to build-up a regulatory framework that supports the stability of the financial system, and to foster the development of a competitive financial industry in Ireland. Despite concerns that the interests of banks would always trump that of consumers, government policy dictated that “public and consumer interest are at one”…prudential supervision and consumer protection are complementary, not conflicting” and the new unified consumer protection structure would be effective in addressing the principle-agency concerns in banking (Harney 2003).

Both the Central Bank and IFSRA had “shared” yet undefined responsibilities to maintain financial stability and develop measures to deal with the negative events of bank failures (Central Bank 2007). Possibly, this confusing “belts and braces” approach to financial stability was designed to create extra redundancy in the regulatory system. If one institution failed in its supervisory responsibilities, the other may prevent a failure. However, this was contrary to the principles of effective bank supervision as propagated by the Bank for International Settlements10 which state that “an effective system of banking supervision will have clear responsibilities and objectives for each agency involved in the supervision of banks.” In reviewing the Northern Rock crisis in the UK, Keasey and Veronesi (2008) suggest that confusion existed between the three parties responsible for financial stability —HM Treasury, the Bank of England and the FSA—and there was a need for a better definition of roles and overall clarity in the future.

10 See http://www.bis.org/press/p970922.htm
Further related to the issue of stability was IFSRA’s final goal: fostering a competitive banking environment. IFSRA suggested that its principles-based regime (PBR) would encourage new entrants into the marketplace and increase competition, which would in turn improve levels of service provision (IFSRA 2008). The regulator’s reform agenda together with a relaxing of entry requirements to the Irish Payment Clearing System, did facilitate the entry of a number of international banks, including: Halifax Bank of Scotland\textsuperscript{11}, Rabobank and Danske. However, advancing competition, if preformed incorrectly, can damage the stability of the financial sector by forcing domestic banks to engage in riskier operations to compensate for an erosion in profit margins (Allen and Gale 2004)\textsuperscript{12}. For instance, while reviewing the Nordic banking crisis in the early 1990s, many commentators (Englund 1999; Jonung 2008) suggested that the process of liberalisation in financial markets during the 1980s, was one of the main causal elements of the subsequent banking crisis. Recently, a report commissioned by the Irish government outlines that the “entry of foreign banks intensified competition in lending” which in turn lowered credit standards (Regling and Watson 2010). Moreover, in August 2010, following the withdrawal of Halifax Bank of Scotland from the Irish wholesale and retail market, the Irish Minister of Finance suggested that foreign banks contributed to the “frenzy” in lending during the later stages of the property bubble (McGee 2010).

5.3 Principles-based regulation

IFSRA adopted a principles-based regulation (PBR) approach in 2003 (IFSRA 2009). Under PBR the regulator set out basic principles or desirable outcomes in a number of different areas such as solvency, governance and consumer protection. PBR is a quasi-market-based and self-regulatory approach to financial regulation. It allows banks to decide how best to align their corporate objectives with pre-defined regulatory outcomes. The rationale being, in part, that it is better for consumers to have a relatively small amount of rules followed in spirit by banks rather than a large number of legislative provisions which are followed to the letter but not the spirit (Black, Hooper et al. 2007).

\textsuperscript{11} Now part of the Lloyds Banking Group.
\textsuperscript{12} However recent contributions to the debate between competition and stability indicate that the relationship is much more complex. In reviewing the Netherland’s financial system, Canoy et al. (2001) posit the notion that gradual entry and effective prudential regulation can tackle most of the destabilising effects of competition.
However, the effective application of PBR requires a high degree of mutual trust between participants in the supervisory framework (Black 2008). It does not work with individuals “who have no principles”, according to the former CEO of the FSA (Sants 2009). Its system of governance relies on self-observing and responsible organisations within its framework (Parker 2002). The Irish banking crisis of 2008 and its spillover effects have raised serious questions over the suitability of PBR, particularly given the prevailing business and cultural environment (See Section 8.2).

### 5.4 Risk-based regulation

Risk management has been progressively seen as a core function of the government (Rose 1999; Fisher 2007), with regulation, or risk-based regulation (RBR), an instrument to monitor and control risks (Hutter 2001). Much of the growth in regulatory frameworks in the EU in the past number of decades has been driven by a desire to control risks (Beck 1992; Scharpf 1996; Hood, Rothstein et al. 2001). RBR allows regulators to allocate their finite resources to areas which pose the greatest threat to achieving their objectives (Black 2006; OECD 2008; Rothstein and Downer 2008). Therefore, in RBR, the risks facing the regulators are important, not necessarily the risks faced by the regulated firms or customer. Adopting RBR requires the regulator to “operationalise its objectives” and introduce new internal procedures and processes (OECD 2008). In particular, regulators are required to establish operational frameworks on how it will deploy resources in the face of various risk scenarios (Black 2009). Authorities also should set the parameters of what constitutes low and high risk in terms of achieving its core objectives, and introduce a methodology for assessing and identifying risk\(^\text{13}\) (OECD 2008). However, this process is fluid and the regulator’s risk profile can change depending on political or societal pressures.

There are a number of reasons why regulators have adopted RBR. On efficiency grounds, it is seen as a practical instrument for creating a better regulatory environment (Better Regulation Commission 2007). It facilitates a transition from costly (Morgan and Yeung 2007) and inefficient CAC as discussed in Section 4. RBR has also emerged in response to failed regulatory systems and a requirement to change the incumbent regime (Black 2005). It also leads to greater awareness of risk.

\(^{13}\) Such as cost benefit analysis, see the Stern Review (2008).
A meta-risk regulation approach to financial and corporate governance failure

by the authority (Hood, Rothstein et al. 2001). RBR provides a unified framework for evaluating risks across an firm, which is particularly useful in situations where a number of different agencies are involved in the regulation of an industry (Black 2009). Specifically in relation to the financial system, a specific form of RBR emerged following the Basel II capital adequacy rules (Barth, Caprio et al. 2004), and the subsequent enactment of the Capital Requirements Directive III in the EU (OECD 2008). This form of regulation related to the supervision of banks’ internal risk-based models for determining minimum capital levels (Danielson 2003). A key feature of the Basel II accord is that minimum levels of capital are “risk weighted”, meaning the greater the risks faced by a bank, the more capital it must carry on its balance sheet and the greater scrutiny it would be subjected to. Therefore, Basel II’s objectives are based more on macro- than micro-prudential dimensions of financial stability (Crockett 2003).

Since its inception, IFSRA used an internal risk-rating system (the new regulator is still using a variant of this system). This system is developed and modified as part of IFSRA’s Strategic Plan, which is published every two years, and kept under constant review during this period. The main objective of the system is to maximise the effective allocation of the authority’s resources. This system represents a “consistent approach” to evaluating risks “inherent” in the financial sector and is used as the basis for allocating its resources (IFSRA 2006). This allows the regulator to concentrate its resources on areas of the greatest risk to customers (IFSRA 2006). IFSRA adopts a different approach depending on the type of institution and sector, as risks tend to fluctuate. For example, in relation to financial service providers’ interaction with retail customers, the regulator assigns greater focus and on-site monitoring. While, wholesale banks attract less scrutiny by the regulator (IFSRA 2006). This gives them the scope to innovate and generate new products and services and remain competitive, given the “dynamic” nature of their business (IFSRA 2006).

The risk-rating system evaluates financial service providers under a number of general and specific headings. General headings include supervisory complexity, structure, corporate governance, capital, contagion and related third-party transactions, business risk, regulatory risk, operational risk and foreign exchange risk. The specific risk categories adopted by IFSRA includes credit, funding, liquidity and market risk provisions. The authority also evaluates the potential impact that financial
institutions have on a number of different stakeholders, before assigning a final risk score. The primary goal of the system is to ensure that the “integrity” of the market is protected by applying solvency and corporate governance standards that conform to international “best practice” standards (IFSRA 2006). Information which supports the process is acquired through various sources such as prudential returns, off-site visits and financial statements. IFSRA also uses on-site visits which it sees as “critically important” in ascertaining whether financial institutions are in compliance with its supervisory standards and requirements (IFSRA 2007). Specifically, on-site visits enable IFSRA to evaluate the corporate governance system in place and assess the general culture at the financial institution. It also gives IFSRA the opportunity to determine the quality of controls and risk management in each of the business areas of the financial institution. Finally, IFSRA will check the “accuracy of financial returns” submitted to its office as part of its on-site visit. For off-site visits, IFSRA has the power to examine banks’ financial statements to ensure it has conformed to prevailing regulatory standards. Additionally, key ratios are monitored, in particular, those related to exposure, liquidity, capital adequacy and solvency margins (IFSRA 2006).

5.5 Enforcement practices

The enforcement regime adopted by IFSRA is very much in line with its principles and risk-based approach to regulation. In the Central Bank and Financial Services Authority of Ireland Act 2003, the regulator acquired new powers which strengthened the sanctions it could impose for prescribed contraventions of laws or regulations. It also created a Financial Services Ombudsman, an independent statutory officer which dealt with customers’ complaints about their individual interactions with all financial service providers. Following the new legalisation, IFSRA’s powers included the ability to refuse an application for authorisation, establish an inquiry to determine whether or not the firm is committing a contravention, impose monetary penalties and revoke banking licences.

IFSRA attempted to design an enforcement process that was as efficient as possible, while still providing clear procedures to ensure that the “natural and constitutional rights” of individuals were
respected (IFSRA 2006). It undertook a significant consultation process with all relevant stakeholders before designing this system. IFSRA tried not to impose sanctions where appropriate given the large costs required to investigate cases. Its overall goal was to “resolve issues to the benefit of customers speedily and efficiently”. Therefore, before IFSRA decided to pursue enforcement, it first determined what other regulatory actions are available to it. Secondly, it examines how serious the breach is and the conduct of the firm after the problem came to light. Also, IFSRA would take into account the previous record of the offending firm before deciding whether or not to impose sanctions. In pursuing sanctions, IFSRA’s strategy was, first and foremost, to try and promote a culture of compliance in the financial services industry. It also took in to account the “public interest” and ensured that the sanction is consistent with its policy of “economic, efficient and effective” measures (IFSRA 2006).

Finally, when legal sanctions have been imposed, IFSRA’s objective was to ensure that the “most cost effective resolution” was adopted (IFSRA 2006). Where a financial institution or individual has voluntary entered into settlement, the terms of the settlement will reflect the resources saved. Finally, IFSRA was committed to publishing the details and sanction levels of successful cases, to create a culture of compliance within the Irish financial services sector and to help promote better corporate governance provisions.

In summary, principles and risk based-regulation in Ireland was blamed for creating an environment where short-term risk taking prevailed against prudent and sustainable long-term growth. However, it was not the principles themselves which created this environment but rather their ineffective application. Banks’ ability to side-step PBR was facilitated by a perceived weakness in monitoring and enforcement by IFSRA. Moreover, Irish banks did not have clear guidance on whether a particular approach would lead to sanctions. Therefore, shareholders and bank customers relied on banks’ own corporate governance structures to keep managers in-check.

The risk-based system adopted by IFSRA was very much influenced by Basel II and the high-degree of freedom given to banks to set their own capital levels. However, this approach proved ill-judged. The financial crisis highlighted that global banks had insufficient capital protection. Basel III introduces a leverage ratio based on total assets, which may be a better predictor of bank distress than a risk-based capital ratio which can be gamed.
6. Corporate governance theory & practice in an Irish context

As agency problems are present in the provision of effective managerial oversight (Berle and Means 1932; Monks and Minow 2004; Owen and Kirchmaier 2008), corporate governance mechanisms have been introduced to protect the interests of minority stakeholders (Grossman and Hart 1980; Bebchuk and Fried 2004; Levine 2004; Becht, Jenkinson et al. 2005; Andres and Valletado 2008). Agency concerns, as best described by Adam Smith’s prophetic observation in, An Inquiry into the Nature and Causes of the Wealth of Nations (Smith 1776), occur in situations where:

“[the] directors of companies, being managers of other people’s money than their own, cannot well be expected that they should watch over it with the same anxious vigilance with which the partners in a private copartnery frequently watch over their own.”

In light of this conundrum, corporate governance regulations have developed in most developed countries with the objective of monitoring and evaluating the performance of managers and executive directors (Grossman and Hart 1980; Weil and Manges 2002; Mallin 2004; Becht, Jenkinson et al. 2005). It represents a system through which the objectives of an organisation are formulated as well as the methods of achieving and monitoring performance (Zingales 1998; OECD 2004). It also includes arrangements in which management are held to account for a lack of proper corporate oversight (Mallin 2004; Australian Securities Exchange 2007).

The process of realigning the interests of managers with that of other stakeholders can take many forms, including: managerial remuneration packages, internal controls, concentrated ownership structures and the creation of a board of directors (Short, Keasey et al. 1998; Becht, Bolton et al. 2005). Boards and, more recently, external auditors have been given a special role, acting as the intermediaries to majority constituencies in each corporation. Specifically, the role and fiduciary duties of boards is central in providing shareholders some assurance that managers will strive to achieve outcomes that are in the shareholders’ interests, particularly in relation to risk management (Brancato, Tonello et al. 2006). In addition to protecting minority stakeholders, robust corporate
governance practices can result in lower equity and debt capital costs in firms, a reduction in labour costs, higher value in products and services from clients and better risk management practices (Becht, Bolton et al. 2005; Owen and Kirchmaier 2008).

In relation to financial markets, greater disclosure in corporate accounts allocates capital to the best operating firms, where investors can get the highest return on their assets invested (Porta, Lopez-de-Silanes et al. 1997; Martynova and Renneboog 2008; Martynova and Renneboog 2009). Recently, the importance of internal governance has also been integrated into ratings provided by rating agencies, such as Standard & Poor’s, who are including governance arrangements into future risk calculation for corporations (Monks and Minow 2004).

Although the practice of managerial oversight is ancient (Monks and Minow 2004), the theoretical underpinnings of the subject is relatively new. It took the development of stock exchanges and the subsequent fragmentation of ownership in the early twentieth century for Smith’s observation to become much more pertinent and, thus, the practice of managerial oversight more relevant. For example, using empirical data from companies in the US, Berle and Mean’s (1932) *locus classicus* on corporate governance in 1932, showed a growing separation of power between management teams of major firms and shareholders. They argued that in the wake of the 1929 financial crisis, owners of large US corporations could not effectively control their organisations through current arrangements and state intervention was required to control “certain aspects” of a corporation’s activities (Berle and Means 1932), a view shared by Mace (1971) and Manne (1965) before this perspective became orthodoxy.

Nonetheless, it was not until the early 1970s, that corporate governance emerged from its limited existence as just a “province of jurisprudence” and became more mainstream in management research (Tricker 2000). Many commentators (Monks and Minow 2004) have suggested that the increasingly litigious climate in the US during the 1970s, which placed greater responsibility on the part of directors, resulted in more checks and balances at board level and a greater appreciation for corporate governance (Auerbach 1973). Additionally, the Securities and Exchange Commission (Securities and Exchange Commission 1972) called for the development of standing audit committees.

---

14 Even though the phrase *corporate governance* had not yet been introduced into the management lexicon.
composed of non-executive directors in 1972, was indicative of the creeping role that regulatory agencies would take in the future organisation of corporate governance arrangements. A similar trend was evident in the EU during this time period, with the European Commission (1972) advocating for legalisation requiring public companies to create audit committees populated by independent directors on the board (Tricker 2000).

However, despite these steps, it was not until various corporate failures in the last few decades (Gordon 2002; Brickey 2003) and the growing awareness of the unreliability of internal controls (Coffee 1988; Ribstein 2002), that national regulating authorities began to assume the role of guardians of financial markets. They took to their new role tentatively, given concerns by neo-liberal proponents from the Regan and Thatcher administrations, but by the mid-1990s a series of sophisticated corporate governance rules and laws had developed in most western economies (Ribstein 2001). Generally, government backed legislation has been developed with the purpose of safeguarding the interests of small shareholders by ameliorating the negative effects of information and transaction costs (Miozzo and Dewick 2002; Levine 2004). Specifically with regard to financial institutions, governments are particularly concerned about the interests of the wider economy, as a well-functioning banking system acts as a “fulcrum around which the economy turns” (O’Sullivan and Kennedy 2010) through efficiently allocating resources, increasing capital formation, stimulating productivity growth and acting as a repository of national savings (Levine 2004). In practice, the development of corporate governance legislation has tended to occur in response to industrial scandals (OECD 2009) and correlated with periods of economic instability (Clarke 2004). For instance, following the collapse of Maxwell Communications in the early 1990s, the UK government’s Committee on the Financial Aspects of Corporate Governance report proved an important publication influencing the corporate governance structures in many developed countries (Mallin 2005; Mallin, Mullineux et al. 2005). Additionally, 2002 represented a watershed moment in the US, with the loss of billions of dollars of shareholder wealth, a series of criminal investigations and prosecutions coupled with some of the largest business failures ever seen in corporate history (e.g. Enron, Tyco, Worldcom, Adelphia and Global Crossing) (Grant and Nuzum 2004; Monks and Minow 2004). The US government’s response was the Sarbanes-Oxley Act (Zhang 2007), which led to significant
changes to the legal and regulatory provisions underpinning publicly quoted companies, particularly in relation to the governance of the accounting and auditing profession (Demirag and Solomon 2003; Coates 2007).

However, the process of designing effective legislation and buffering internal corporate governance mechanisms presents a number of pitfalls for regulating authorities (Ribstein 2001). Firstly, building from the theoretical underpinnings of Coase (1937), various commentators (Manne 1965; Easterbrook and Fischel 1991) have argued that the corporation can be viewed as “fundamentally the product of private contractual relationships” (Easterbrook and Fischel 1991), and, thus, should be entitled to the same assumption of efficiency that contracts acquire (Butler and Ribstein 1990). Following this perspective, the separation of ownership and control might make economic sense, debunking the need for government intervention (Ribstein 2002). Secondly, the interest of society may clash with the interest of stakeholders. For example, the goal of stability on the part of the government may not be consistent with the main goal of shareholders, to increase their wealth (Adams and Mehran 2005). Therefore, the effectiveness of corporate governance mechanisms may be negated through government interventions, like in the case of deposit insurance schemes which restricts the supervision of depositors (Andres and Valledado 2008). Next, there is well established evidence to suggest that regulators can intervene to maximise their own objectives and not necessarily the interest of society (Hamilton, Lay et al. 1788; Buchanan and Tullock 1962). Under such conditions, regulators are seen as self-interested agents and their interactions in the social system are designed to maintain or expand their budgets and resources (Niskanen 1971; Baldwin and Cave 1999). This is supported by McCubbins, Noll, and Weingast (1989), who outline that central authorities can act in ways contrary to their statutory objectives due to bureaucratic drift. Finally, many socio-legal scholars (Breyer 1982) believe that government-backed regulations, as with corporate governance, can lead to a proliferation of unnecessary and complex rules (Bardach and Kagan 1982; Stewart 1988; Fiorino 1996), resulting in verrechtlichung (Habermas 1987; Teubner 1987; Vallinder 1995; Kreklewich 1996; Cohen 2002; Sweet 2002), which can in turn stunt levels of innovation and growth at firms (Bardach and Kagan 1982).
Despite these concerns, corporate governance regulations have proliferated in recent times (Miozzo and Dewick 2002; Andres and Vallesado 2008). They are mainly divided into two perspectives, along geographical lines: the Anglo-Saxon and the Continental/ Japanese model (Aguilera, Williams et al. 2006). The Anglo-Saxon model is based on the fiduciary relationship between shareholders and managers (Kelly et al. 1997; Cernat 2004). It is centred on market dynamics: the belief that the market can self-regulate itself in a balanced and efficient fashion.

In contrast, the Continental or Japanese model is an advocate of the stakeholder theory of firms (Hutton 1999). In this model ‘the stakeholder’, such as employees and trade unions, play an active part in the firm’s decision making process. However, even within these two models, no two individual corporate structures or supporting national corporate governance systems are alike and general rules and practices have developed over time to suit each countries’ individual legal, political and economic environment (Mallin, Mullineux et al. 2005). In fact, these differences can be used as a source of competitive advantage, especially in attracting international capital (Levitt 2000; Demirag and Solomon 2003; Mallin 2005).

6.1 Ireland's corporate governance model

Ireland conforms with the Anglo-Saxon corporate governance model as described by Ooghe and De Vuyst (2002), given the characteristics of low concentration of ownership in listed firms, the importance of institutional investors together with its strong historical relationship with the UK (O'Sullivan 2010). Since 2000, companies on the Irish Stock Exchange have been required to report on how they applied the UK’s Combined Code of Corporate Governance (Combined Code) in their annual report, justifying any instance of non-compliance to their shareholders on a comply or explain basis.15 Irish authorities have also introduced a number of legislative provisions to further strengthen corporate governance arrangements. The system which has been developed is based on legally binding rules rather than principles (Allen and Greene 2007). Above all, the Company Law Enforcement Act 2001 and the Companies (Auditing and Accounting) Act 2003 have mapped out the corporate governance landscape in Ireland. With the Company Law Enforcement Act 2001, the

15 Ireland is one of the few European countries that adopted another country’s corporate governance rules.
establishment of the Office of the Director of Corporate Enforcement (ODCE), a regulator separated from the line ministry, has strengthened and concentrated the enforcement of company law in Ireland (OECD 2004). This office is responsible for improving the compliance environment in Ireland and investigating and prosecuting offences (ODCE 2009). It has the power to initiate a fact-finding company investigation in instances of suspected breaches of company law and issue fines or refer cases to the Director of Public Prosecution, where appropriate (ODCE 2009).

In response to the international crisis in confidence in the auditing profession in the early 2000s, the Companies (Auditing and Accounting) Act 2003 created a new institution, the Irish Auditing and Accounting Supervisory Authority, responsible for overseeing the auditing profession and setting standards in relation to audit independence and the establishment of audit committees. According to the Act, audit committees are mandated to review accounts and compliance statements and monitor the auditor’s work and independence. In this statement, directors are obliged to set out the company’s compliance under various legal and tax obligations. The compliance statement must also delineate the company’s system of internal financial controls and other compliance procedures. Additionally, directors must acknowledge their responsibility in securing compliance and confirm that they have reviewed their internal control systems on an annual basis. There is also additional responsibility for auditors to review these statements each year to determine whether they are fair and accurate.

The European Commission’s overall impression of Ireland’s corporate governance framework is “positive” stating that it is more or less in line with European median scores on a number of different categories (European Commission 2009). Apart from issues related to “director remunerations”, the Combined Code has had a positive impact on corporate governance culture in Ireland (European Commission 2009). Nevertheless, the majority of Irish companies disclose comply-or-explain information on a regular basis and, thus, do not fully conform to the provisions of the Combined Code. Furthermore, despite the best efforts of legislators, there have been a number of instances where corporate governance systems have failed to protect minority stakeholders. The largest corporate failure in Irish history puts the question beyond doubt that Ireland’s corporate governance framework was not all that it appeared to be and needs to be reformed.
7. Anglo Irish Bank’s Minsky moment

Hyman P. Minsky (1986) is credited with systemising the somewhat trite observation that creditors become more lax about lending standards during times of stability (Downe 1987). The central innovation of his, and other financial fragility models (Nell 1996; Kindleberger 2005), is that the economic fact, or variable, which explains the collapse of the system after some time is built into the system (Kinsella 2010). Other models of financial fragility typically assume an agency problem, where a market in equilibrium is shocked from its balanced growth path by an adverse run of poor luck on the markets (Gorton 1988; Bernanke and Gertler 1989; Bernanke and Gertler 1990; La Porta, Lopez-De-Silanes et al. 2002). Instead, Minsky (1986) divided economic units like firms, households, and private banks, into three types: hedge units that can pay principal and interest on any borrowings; speculative units who can pay interest, but have to keep rolling the principal into new loans; and Ponzi units, which cannot even cover the interest, but keep things going by selling assets and/or borrowing more and using the proceeds to pay the initial lender (Wolfson 2002; Kinsella 2009). The key Minskyan (Minsky 1986) insight is that:

“[o]ver a protracted period of good times, capitalist economies tend to move to a financial structure in which there is a large weight of units engaged in speculative and Ponzi finance.”

Modelling an economy in historical time, Minsky showed that profit-seeking firms cycled through hedge, speculative, and Ponzi positions with regard to their assets and liabilities, driven endogenously by the profit motive, which naturally undermines good corporate governance practices in the pursuit of financial innovation (Minsky 1992). As the economy moves through Mitchell’s phases of the business cycle – the quest for profits, revival, peak, and recession/depression, speculative units will become Ponzi units, and the net worth of previously Ponzi units will quickly evaporate (Minsky 1992). Consequently units with cash flow shortfalls will be forced to try to make positions by fire-sales. That is likely to lead to a collapse of asset values.
There are five stages in Minsky’s model of the credit cycle: displacement, boom, euphoria, profit taking and panic (Minsky 1986). Ireland is currently at the fifth stage in Minsky’s model at the time of writing (Magnus 2007; Whalen 2007; Wray 2009). Firstly, a displacement occurs when investors get excited about an event—an invention, such as the Internet, or a war, or an abrupt change of economic policy—something which favours an upswing in investment. Displacement, in the Irish context, can be dated from 1997, during the Celtic tiger phase of the economy (Allen 1999; MacSharry and White 2000) which saw unprecedented economic growth (O’Hogan 2000; Dunford and Smith 2000; Boyle 2002), a large inflow of foreign credit (Grimes 2006), a huge increase in domestic demand (O'Sullivan and Kennedy 2010) and high levels of service exports (Ó'Grada and O'Rourke 2000; Grimes 2006; Sokol 2007). The Irish government pursued a neo-liberal and market orientated agenda, promoting deregulation, privatisation and the propagation of “pro-business” policies (Coulter, Convery et al. 2002), particularly in the financial sector (Westrup 2005). It also reduced tax rates considerably and introduced tax breaks to stimulate home ownership, resulting in a significantly reduced tax intake relative to other European economies (O'Sullivan and Kennedy 2010). Anglo, for its part, pursued a strategy of modest and sustainable growth during this time period, increasing its asset and lending base steadily through organic expansion by (mainly) funding prudent and commercially sustainable projects.

During the boom phase (1999-2001), there was a sharp increase in property investment based on solid supply and demand fundamentals, such as an increasing population (CSO 2007; CSO 2008), rising real wages (O'Sullivan and Kennedy 2010) and property price appreciation (Woods 2007; Central Bank 2008). Anglo started developing and embedding relationships with key property developers in Ireland by loosening the terms associated with its credit application process (PricewaterhouseCoopers 2009). It changed the nature of commercial banking through its relaxed approach to lending, short decision times on credit applications and by delivering exceptional growth to its shareholders. Apart from the deposit market, the bank largely avoided costly\textsuperscript{16} retail banking. It had a return on equity of 30 per cent, 100 basis points higher than Allied Irish Bank and Bank of

\textsuperscript{16} In terms of establishing branch networks and overcoming the inertia associated with acquiring retail customers.
A meta-risk regulation approach to financial and corporate governance failure

Ireland. Although it had a small branch network and employee base, its lending was proportionally much greater than its leading competitors.

Next, the euphoria stage (2002-2005) can be traced to the recovery of the Irish economy in 2002 following the dotcom bubble crash when a degree of speculation crept into the property market. Individuals started to believe that there was an opportunity to benefit from significant capital appreciation and satisfy their innate propensity of home ownership (O'Sullivan and Kennedy 2010). As a result, property prices soared. The average house price increased from €212,943 in 2002 to €303,310 in 2005 (Figure 2). Supply rushed in to meet this demand with the total stock of house units increasing by 284,425 units during this period (Department of Environment Heritage and Local Government 2010) (Figure 3).¹⁷

**Figure 2**: Average Price of Houses in Ireland, 1970-2008.

![Average Price of Houses in Ireland, 1970-2008.](image)

*Source: Statistics from the Department of the Environment, Heritage & Local Government, 2009.*

¹⁷ To put this figure in perspective, from 1970-1990 the total number of house completions was just over 480,000.
Irish banks were caught in a perfect storm of cheap credit (Kinsella 2009) and in an environment of low or even negative real interest rates (Figure 4) (Honohan and Leddin 2006; Lane 2006) and pent-up demand for credit (Kinsella 2010), there was a huge expansion in lending from 2002-2006 (Figure 5). The majority of the expansion was property related, either through the financing of commercial developments or the provision of mortgage credit to the personal sector (Figure 6). Banks supported the boom aggressively by targeting credit to construction and building firms, relative to other sectors of the economy (O'Sullivan 2010). However, because their deposit base could not keep pace with the growth in lending, the banks increasingly relied on external funds from the interbank market (Figure 7). Moreover, the quality of the loans deteriorated further during this time period, in terms of security, type of loans (i.e. a greater proportion of interest-only loans) and duration (O'Sullivan and Kennedy 2010).


---

The European Central Bank pursued a low interest rate strategy during the early 2000s, to stimulate demand and credit growth in the French and German economies. This meant that Ireland, which was experiencing atypically high growth and inflation rates compared with its European partners, was subjected to low or even negative real interest rates from 2000 (see O’Sullivan and Kennedy, 2010).
Figure 4: Real Interest Rates, 1990-2008

Source: European Central Bank monthly reports (various)

Figure 5: Percentage Increase in Lending by Irish Banks, 2001-2008

Anglo was at the forefront of this surge in lending, its loan book to the non-financial sector increased at an average annual rate of over 31 per cent from 2002-2007. Approximately two thirds of its lending was in property developments, a tenth in private and business lending with the remaining associated with land developments (PricewaterhouseCoopers 2009). Its loans were mainly funded, and secured...
by, assets in markets associated with property booms (e.g. Ireland, UK and US). In addition to the bank’s sectoral and geographical concentration, Anglo had 15 customers with loans of in excess of €500 million and close to one third of the bank’s loan book accrued to just 20 customers (PricewaterhouseCoopers 2009).

Next, the profit-taking stage of Ireland’s Minsky cycle (2005-07), is reflected by Anglo’s exceptional results during the mid-2000s, peaking in 2007 with a profit of over €1.2 billion, 2064 per cent its profit levels at the start of the boom phase in 1999 (Figure 8). The bank’s asset base ballooned, growing from €25.53 billion in 2003 to €88.67 billion in 2007, or 36 per cent at an annualised growth rate (Figure 8). Research suggests that any increase greater than 20 per cent growth is unsustainable and a warning sign of unacceptable risk exposure, enhancing the probability of credit quality deterioration (Kraft and Jankov 2005). While, Anglo crossed this threshold on several occasions, market sentiment was still strong and in July 2007, its share price peaked at €17.53, giving the bank a market capitalisation of over €13.3 billion. This represented an 80 per cent increase in share value and 103 per cent increase in market capitalisation in just two years, much stronger than any other Irish bank19 (Figure 9).

**Figure 8:** Percentage Increase in Profits and Assets at Anglo Irish Bank, 1991-2008

---

19 However, one must note that Allied Irish Bank, Bank of Ireland and Irish Life and Permanent were mature banking institutions and at a different stage of their lifecycle in 2003.
By the mid-2000s, the Irish property market which was of such importance to Anglo, was overvalued (OECD 2005) and was showing signs of an asset price bubble, according to the International Monetary Fund (IMF) (2006). The link between asset prices and its fundamental value became detached, resulting in considerable yield compression. For example, in 2006, commercial rents had risen by 5.7 per cent, compared with a rate of capital appreciation of 23.1 per cent (Woods 2007). The Economist (2004), warned that a crash in the property market would “badly hit the balance sheets” of the main banks in Ireland. Anglo refuted this assessment and continued to finance property developments, almost doubling its loan book between 2005 and 2007. The bank believed that “the fundamentals” of the Irish and UK economies were “sound” and its borrowers were “well capitalised” with “robust cash flows” (Anglo Irish Bank 2008).

However, the panic phase commenced in 2008, following a crash in the property sector in Ireland (Honohan 2009). The correction in the domestic property market has been severe, with two-year peak-to-trough capital depreciation of 24 per cent and 49 per cent in private and commercial
property sectors, respectively (Permanent TSB and ESRI 2009; Surveyors and IPD 2009). This has contributed to a 7.25 per cent contraction in GDP in 2009 (ESRI 2009), one of the largest experienced by a developed country since the Great Depression, following a fall of 3 per cent in 2008 (Central Bank 2009). The recession and decline in the property sector has placed a huge strain on Irish banks (Central Bank 2009), particularly hitting Anglo’s property exposed loan book (Citigroup 2008). Since 2008, prospective buyers have been delaying their purchases, instead waiting for prices to reach its base and the Irish economy to return to growth. While property prices have stabilised recently, markets remain skittish. Highly leveraged property loans were built around fast exit strategies and in the new environment of low sales, property developers were finding it difficult to meet their debt obligations. Anglo saw a significant increase in credit defaults and impairments and confidence in the banking system was under threat (O’Sullivan and Kennedy 2008). Following the collapse of Lehman Brothers in mid-September 2008, money markets, a critical source of short term finance for banks, stopped rolling over loans and interbank interest rates soared (OECD 2008). Anglo was particularly susceptible to the liquidity crisis that ensued. Its operations were centred on financing long-term illiquid assets through short-term secured market funding. Given this mismatch and the fact that Anglo had a relatively small deposit base, it was seen by investors and analysts as being particularly reliant on external funding. Therefore, when liquidity started to dry up in 2008, investor confidence diminished which led to significant outflows of free credit balances over a short period (PricewaterhouseCoopers 2009).

Of particular concern, Anglo saw a sudden and dramatic loss of counterparty confidence in repurchase contracts (repos), resulting in a considerable hole in its secured funding base. While this source of financing was always susceptible to rollover risks, Anglo’s over-reliance on overnight repos to fund less liquid assets proved to be problematic. Looking back over this period, Anglo’s former chairman stated that there was “no money available on global markets” (Fitzpatrick 2008), the bank was experiencing “substantial outflows and volatility in funding” (Anglo Irish Bank 2008) and was on the “brink” of collapsing “in a matter of days” (Fitzpatrick 2008). Ultimately, fuelled by the firm’s

---

20 The bank had lost over €5.4 billion in deposits in one week alone during September 2008 according to a report commissioned by the government in 2008 (PricewaterhouseCoopers 2009).
declining stock price and widening credit spreads, and lenders’ unwillingness to provide funding to
the bank, the Irish government issued a blanket guarantee of all debt obligations of six of the main
Irish-owned financial institutions for a period of two years. The decision was taken to remove “any
uncertainty” on the part of creditors, depositors and investors (Department of Finance 2008).
Moreover, the government wanted to address liquidity pressures by helping banks obtain market
funding and access to European Central Bank facilities.

Anglo’s funding position over the decade from 2000 to 2009 emphasises its dependence on
international money markets. Like all operating firms, or at least a significant fraction of such firms,
modern banks are highly interdependent – that is, the returns they will make on capital they borrow
depend on whether other operating firms are able to obtain financing. The success of a given
operating firm in turn depends crucially on other firms’ operations to the extent that the other firms
provide necessary inputs of cheap capital in the case of Anglo, or that the other firms, or those
generating income from them, provide demand for the firm’s outputs, e.g. loans to the Irish
construction sector. This interdependence makes the decision of any given financial institution to lend
to a given operating firm depend not only on the financial institution’s assessment of the firm’s
project but also on its expectations as to whether other financial institutions will lend money to other
operating firms. Thus within a Minsky cycle, a highly interwoven Ponzi-financed unit (or set of units)
can cause a system-wide contagion.

To sum up, Minsky (1992, 1996) and, later, Nell (1996) write of the instability of the
economy as a reflection of the instability of the financial institutions which are embedded within the
economy. Financial intermediaries had taken on large liabilities with respect to residential and
commercial developments, which turned out to be excessively risky. Because the market for the
previously appreciating security on the loan—the property—has disappeared, banks are now faced with
assets that are significantly lower in value than their initial valuations. There are different solutions to
this problem. The large debts held by the banks are either converted into bad debts, or sold off, or the
bank is allowed to fail as a going concern, or the bank and its debts are nationalised or partly
nationalised. The reaction of the government at each stage has been entirely rational, from the point of
view of the self-interested political elite. From a public policy and governance perspective, there are several turns of the wheel yet to run in this crisis.

However, Anglo was only one part of the full story. The failure of financial regulation needs to be examined in the context of the other factors that contributed to the crisis. Before this, the Swedish banking crisis will be examined to demonstrate that regulatory failure is not a uniquely Irish phenomenon.

8. Regulatory failure and the Irish banking crisis

History shows that financial systems are prone to periods of instability and market failure. Since the 1990s, the scale and frequency of banking failures have been common, large and expensive. Eichengreen and Bordo (2008) have identified 139 financial crises between 1973 and 1997 compared with a total of only 38 between 1945 and 1972. Of course, many countries were significantly affected by recent adverse shocks to their financial systems between 2007-2009 (Strauss-Kahn 2009). In all, the IMF estimate that 23 countries experienced a systemic banking crisis during this period, of which, 10 were borderline cases (Laeven and Valencia 2010)\(^2\). This compares to an average of just over 3.4 cases of systemic crisis per year over the period 1970-2007 (Laeven and Valencia 2008).

The majority of banking failures in the recent past have been associated with adverse macroeconomic conditions such as cyclical downturns in output, difficult trading conditions and fluctuations in property prices (Gorton 1988; Caprio and Klingebiel 1996; Kaminsky and Reinhart 1996; Lindgren, Garica et al. 1996; Detragiache 1998). The latter is the main factor causing banking fragility and ultimately systemic crisis (Berg 1998; Gup 1999; Woods 2007). For example, a Federal Deposit Insurance Corporation study in 1997 concluded that price changes in commercial property markets was the main cause of losses at financial institutions during the US banking crises in the 1980s and early 1990s. However, the practices of banks, regulators and the government ex-ante can be seen as the root cause of the majority of financial crises. Some (Drage, Mann et al. 1998; Llewellyn 1998; Altman 2009) suggest that many banking failures in the last 20 years have been in

part a product of a lack of government intervention. Others (Benston and Kaufman 1988; Dowd 1996) attribute the Asian and Nordic financial crises of the 1990s to the indirectly maligned effects of regulatory frameworks and inappropriate banking practices.

8.1 International experience: Swedish banking crisis

The Swedish banking crisis is a good example of a property induced banking crisis and provides an interesting perspective given its similarities with Ireland’s experience in 2008 (O'Sullivan and Kennedy 2010). Historically, credit markets in Sweden were heavily regulated. The Riksbanken set the rate of interest and the size of capital flows within the economy (Jonung 2008). Lending ceilings, placement requirements and interest regulations created an environment of excess demand for credit (Berg 1998). A lack of competition within the banking sector (Woods 2007) contributed to the tight credit conditions as banks were highly cautious when assessing risk. Furthermore, financial institutions in Sweden were intensely scrutinised by the Riksbanken to ensure prudent behaviour was maintained (Englund 1999).

In the early 1980s, the Swedish financial system underwent a period of significant deregulation. Firstly, liquidity ratios were abolished in 1983, followed by the removal of interest and lending ceilings two years later. These factors stimulated an increase in competition amongst banks. Overall lending increased by 73 per cent in real terms (Englund 1999) as risk management criteria were loosened by banks to maintain market share. In the five years following the liberalisation of the financial market, mortgage lenders increased the maximum loan-to-value ratio from 75 per cent to 90 per cent. The expansion of credit in the economy was supported by low or even negative real interest rates (Englund 1999) and a tax system that favoured borrowing. Banks also started to enter new and more risky markets to take advantage of positive conditions. Loans were increasingly used to fund highly-leveraged commercial property investments. However, mortgage lending saw the greatest increase, growing by 129 per cent over a five year period following liberalisation (Englund 1999). This allowed banks and mortgage institutions to expand rapidly and post significant profits.
In Sweden, increased household borrowing was followed by a surge in domestic demand, as the
government instigated an expansionary fiscal regime (O'Sullivan and Kennedy 2010). There was also
a boom in the stock market and financial assets grew from 82 per cent in 1985 to 102 per cent of GDP
in 1988 (Englund 1999). The economy was characterised by full employment, rising consumption and
falling savings rates (Jonung 2008). The national budget deficit turned into a surplus due to the
growth in the property sector, the expansion in consumption and the large increases in high nominal
wages. The occurrence of robust economic growth, financial deregulation and a build-up in credit
demand led to an asset and credit boom in Sweden (Woods 2007). Speculation began to present itself
in the property market and yields on asset values fell from 7 per cent in 1985 to only 4 per cent in
1990. During the second half of the 1980s, real aggregate asset prices increased by over 125 per cent.

However, the process could not continue indefinitely and the bubble burst in the late 1980s,
due mainly to monetary-tightening, tax reforms and adverse macroeconomic conditions. This gave
rise to falling external investment, increasing unemployment and declining tax revenues. Sweden’s
competitiveness was weakened due to its relatively high inflation rates in the late 1980s, resulting in
an overvalued currency. This caused exports to weaken, leading to periods of relatively high nominal
interest rates. Lower income growth and declining asset prices created considerable credit losses for
the banking sector. Property prices fell by more than 50 per cent over an 18 month period (O'Sullivan
and Kennedy 2010). Moreover, real estate losses accounted for 75 per cent of total loan write-down’s
in 1991 and about 50 per cent in 1993. Following the banking crisis, Sweden went through a major
depression between 1990 and 1993, with negative growth rates. The country spent over 4 per cent of
GDP, or 65 billion kronor, to rescue its failed banking system. It issued a blanket guarantee of bank
deposits and liabilities and formed two new agencies, one to supervise institutions that needed
recapitalisation and another to deal with all the non-performing assets on the banks’ balance sheets.
While these policies proved successful and the economy recovered by the mid-1990s, the crisis left a
considerable scar on the banking system and is estimated to have cost the exchequer approximately 2
per cent of GDP. The main thrust of the solutions applied in Sweden is now being used to address the
current difficulties experienced in the Irish banking system. This is not surprising given the inherent
similarities of both crises. In Section 8.3 the Swedish banking crisis will be compared on contrasted with Ireland’s experiences as delineated below.

8.2 Irish banking crisis

On the 31st of May 2010, the newly appointed Governor of the Central Bank published a report examining the role and functions of the Central Bank and IFSRA during the property bubble. The report concluded that a “major failure in terms of bank regulation and the maintenance of financial stability” had occurred. While recognising the limitations of this internal investigation, the report, coupled with analysis in this section, provides a good description of supervisory forces behind the Irish banking crisis.

As noted in Section 5.3, PBR gives financial institutions (not just Anglo) the discretion to expand their operations and exercise judgement with little regulatory oversight. Irish banks applied this discretion to exercise a profit maximisation strategy by ramping-up their credit outflows. This is evident from the excessive appreciation in the aggregate loan book and asset base of Irish banks from 2004 to 2007, compared to the previous 54 years (Figure 10). As with Anglo, the majority of this expansion was property related, either through the financing of commercial developments or by the provision of mortgage credit to the retail sector. Increases in these sectors were atypical and vastly outstripped other areas of lending, such as in the agricultural or manufacturing sectors, where growth in credit remained relatively incremental. The euphoria surrounding property lending was supported by a number of factors, such as full employment, favourable planning laws, a tax system which was biased towards home ownership and property development, and historically low and even negative real interest rates (O’Sullivan and Kennedy 2010). Banks funded this lending through disproportionately high borrowing from the interbank lending markets, as their deposit accounts could not keep pace with the huge growth in lending they experienced. Also, amid aggressive competition, and pressures to maintain growth levels, the terms associated with lending were loosened to widen the pool of potential customers. For example, 5 per cent of the total stock of mortgage lending in 2004 were 100 per cent mortgages, by 2007 this figure increased to 15 per cent. Similarly, the amount of
loans greater than 31 years increased in this time period from 10 to 33 per cent, with the size of mortgages greater than €300,000 growing from 7 to 23 per cent of the total stock of mortgage lending (O’Sullivan and Kennedy 2010).

**Figure 10**: Percentage Increase in Total Assets and Resident Private Credit for Retail Clearing Banks, 1948-2008.

![Graph showing percentage increase in total assets and resident private credit for retail clearing banks, 1948-2008.]

*Sources: Central Bank of Ireland Annual Reports/ Monthly Bulletins (1948-2008).*

Given the scale of the Irish banking crisis and its impact on the stability of the economy, questions have been raised about the failure of its supervisory agencies to recognise the dangers of the Irish banking systems’ over-reliance on domestic property in the face of continued warnings from the IMF (2006). Instead, the Irish government, together with its supervisory agencies, continually defended the practices of bankers, the state of the property market and the banking system and failed to take any corrective action during the bubble. For example, off the back of concerns about the implications of the sub-prime crisis in Ireland, Brian Cowen, former Prime Minister, stated that “the Irish banking system is well capitalised and it is in a healthy state” (Cowen 2008). His assessment was based on analysis from the Central Bank and IFSRA which together had a legal mandate to contribute to the maintenance of financial stability in both Ireland and the Eurozone (see Section 5.2). The Central
Bank’s appraisal of the state of the Irish banking system was presented in its 2007 Financial Stability Report (FSR), where it concluded that banks were “appropriately capitalised” and “solvent” and the system was well placed “to cope with emerging issues” (Central Bank 2007). Despite financial turbulence in the US subprime mortgage market during mid-2007, it said that the bank’s “shock-absorption capacity” was “sufficient” to deal with heightened problems in financial markets (Central Bank 2007). Additionally, through “in-house stress testing” the Central Bank determined that the Irish banking system remained “well placed” to “withstand adverse economic developments” in the short-to-medium term, notwithstanding international financial market fragility. Its sister agency, IFSRA, formed a similar prognosis. In September 2008, following the state guarantee, IFSRA’s CEO, Patrick Neary, suggested “by any estimate” the Irish banking system is “so well capitalised compared to any banks anywhere across Europe” that it could “absorb any loans or any impairments” (Neary 2008).

Subsequently, the Central Bank has admitted they did not realise how vulnerable Irish banks were to property price depreciations, blaming an over reliance on the risk management systems used by banks (Central Bank 2010). A report commissioned by the Minister of Finance indicated that throughout the property bubble, staff at the Central Bank, were not aware of any serious difficulties, let alone insolvency problems, at Irish banks. The newly appointed Governor at the Central Bank, Patrick Honohan, believes that “the failure was clearly of a systemic nature” rather than related to any one individual or department. In relation to previous FSRs, Honohan believes that the “language of successive FSRs was too reassuring” and did “little to induce the banks….to adjust their behaviour to avoid the threats that lay ahead” (Central Bank 2010). With regard to IFSRA, the authority itself has accepted its strategic approach to regulation was inappropriate, suggesting that it was constructed in a “benign environment” where many of the current issues where not foreseen (IFSRA 2009). Particularly, trust in senior managers and directors to construct appropriate risk management systems and internal controls was “misplaced” (IFSRA 2009). As such, supervisory practice focused on “verifying governance and risk management models rather than attempting an independent assessment of risk” (Central Bank 2010).

In light of these and other failures, the Minister of Finance at the time suggested that the “Irish regulatory system badly needs reform” and that “a root and branch review is required” (Lenihan
2009). However, prior to its investigation of the crisis, the Minister announced the establishment of a Banking Commission. The commission would fuse together both the monetary responsibilities of the Central Bank with the supervisory functions of IFSRA into a single, standalone agency. The reorganisation of institutional arrangements in financial regulation was initiated to address perceived failings in the regulatory regime, particularly related to the loss of public confidence IFSRA experienced following the crisis, akin (albeit more pronounced) to the loss of confidence the Central Bank experienced following the DIRT enquiry in the 1990s.

In summary, in models of bureaucracy or politics, risky behaviour can emerge from stable environments in consequence of the actions of individual players, who become emboldened to test the limits traditionally placed on their behaviour by convention, ethics, regulation or law. This is similar to the way in which firms can be endangered by risky behaviour emanating from the CEO, from the ranks of management, or through a failure of labour-management relations.

8.3 Sweden and Ireland: Compare and Contrast

Sweden and Ireland’s banking crisis have much in common, even though both countries’ economies, financial sectors and the global economic environment were quite different in the run-up to their individual crises. Table 1 attempts to bring together the regulatory, fiscal, policy, economic and banking conditions that were present ex-ante to the crisis (up to 10 years), to highlight the similarities and disparities between both case studies.

Table 1: Conditions preceding financial crisis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Ireland</th>
<th>Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset price boom</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Creation of a single financial regulator/</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>institutional overhaul of financial regulatory structures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expansionary fiscal policy</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Full employment</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Huge expansion in real estate</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
There is a remarkable similarity between the conditions preceding both the Swedish and Irish banking crisis. The main difference that stands out is that Ireland did not have control over its monetary policy prior to the financial crisis. However it remains to be seen if the Central Bank would have acted to raise interest rates to dampen the bubble given its prognostication that the property market was not in trouble or overheating. Moreover, there was a general consensus amongst central bankers that they had tamed the business cycle, mastered monetary policy and defeated inflation during the 2000s. The hegemony of low interest rates and cheap money was very much part-and-parcel of western central bankers’ ideology during this time.

Notwithstanding the similarities in the regulatory, fiscal, policy, economic and banking conditions in both countries, the reaction of individual banks and management to the conditions they faced ultimately shaped the severity and scale of both crises. Corporate governance practices at Irish banks during the crisis will be further investigated in the next section, by examining the director’s
loan scandals at Anglo. This example highlights the poor internal control mechanisms and risk management practices which ultimately resulted in the bank’s nationalisation in 2009.

9. Corporate governance failure: director’s loan scandal

To understand the failure of corporate governance at Anglo during the property bubble, it is useful to examine a department within the bank with responsibility for an element of internal control and risk management. However, before this can happen, it is necessary to provide a brief overview of one instance of corporate governance failure, in this case the director’s loan controversy at Anglo, which will be the subject to further analysis in this section. This issue relates to the “inappropriate treatment” of Sean FitzPatrick’s loans over an eight-year period (Department of Finance 2009). FitzPatrick, then chairman of Anglo, temporarily transferred loans of between €87 million and €122 million to Irish Nationwide prior to Anglo’s financial year end, thereby concealing this information from auditors and shareholders. FitzPatrick said that while this transaction “did not in any way breach banking or legal regulations”, it was “inappropriate” and “unacceptable” from a “transparency” perspective (Anglo Irish Bank 2008). Fallout from the incident resulted in the resignation of the CEO and chairman of Anglo, and also the resignation or retirement of five non-executive board members at Anglo together with the CEO of Irish Nationwide and IFSRA. The board of directors at Anglo indicated their disappointment over the management of loans and offered an unreserved apology to all stakeholders (Anglo Irish Bank 2009). But given the bank’s perceived compliance with the provisions of the Combined Code, and the various safeguards that this affords, how could the scandal have taken place?

Speaking to a all-party committee about the incident, the head of the internal audit department at Anglo, Frank Tyrell, outlined that FitzPatrick’s loans where never singled out for further analysis as they were consistent with the bank’s normal course of business operations and they were not identified as “high risk”. Tyrell did not believe that the internal audit department had any extra responsibility in relation to these loans or that there were “any corporate governance issues” (Joint Oireachtas Committee on Economic Regulatory Affairs 2009). While the internal audit department was aware of the chairman’s original loans, it had no knowledge of the short-term refinancing
arrangements with Irish Nationwide, suggesting that it was the responsibility of the credit committee and the external auditors to review such transfers. However, the credit committee was not aware of these transfers, as non-executive director Frank Daly pointed out “movements in or out of the bank would not have come to the attention of the [credit] committee” but rather individual lending executives (Joint Oireachtas Committee on Economic Regulatory Affairs 2009). In retrospect, Tyrell admitted that the internal audit department should have examined FitzPatrick’s loans, suggesting that it was “wrong” and the organisation is now in the process of reforming its structures to ensure that “this does not happen again” (Joint Oireachtas Committee on Economic Regulatory Affairs 2009).

This example suggests that there is evidence of internal fragmentation among the various departments and committees associated with internal controls and risk management. Each department seemed only concerned about their own limited mandate with little attention given to the big picture. For example, the annual approval of the temporary transfer of director loans to Irish Nationwide might have been acceptable behaviour to the credit committee based on its limited terms of reference. However, the internal audit committee would have taken a divergent opinion given its wider concerns for issues such as corporate governance and reputational risk. A similar point could be made in relation to risk management, with the credit risk department reviewing loan approvals, the internal audit department investigating the loan approval process, the group risk management department identifying risks and a group compliance department ensuring that the bank’s practices were in line with regulatory requirements. To further complicate matters, in accordance with the Combined Code, internal controls at the bank were supported by a myriad of committees ranging from the audit and the risk and compliance committee. In questioning Anglo’s officials about the organisation of risk management, Senator Shane Ross indicated that he was “completely lost” (Joint Oireachtas Committee on Economic Regulatory Affairs 2009).

As well as being inefficient, this organisational structure created confusion in relation to roles and responsibilities of various actors in the risk management function. For example, Tyrell incorrectly suggested that it is the responsibility of the credit department to monitor loan transactions. He went on to suggest that the external auditors are ultimately responsible for this. The net effects of this confusion are free-rider problems, with departments relying on each other, which may result in little
monitoring of group-wide risk at the firm. Additionally, there was a presence of organisational silos in Anglo (O'Sullivan 2010), further amplified by the organisational structure in place at the bank. For example, if members of the internal audit department were allowed to sit-in on credit committee meetings, a greater realisation of the risks present within Anglo might have become evident.

Anglo’s interim chairman, Donal O’Connor, accepted that the bank’s internal controls “clearly made mistakes in some of the lending decisions.....particularly in relation to property development in Ireland” (Anglo Irish Bank 2009). The bank’s growth rate and risk management strategies was “imprudent” and “the stark evidence” is its current financial predicament (Anglo Irish Bank 2009). Its chairman has accepted the “hurt, outrage and disappointment” that people felt towards the bank (Anglo Irish Bank 2009). He said that the recent disclosures about the bank’s corporate governance practices has damaged the reputation of the bank and weakened its funding position, which was particularly detrimental in a time of continued uncertainty in relation to financial markets.

Commenting on the release of Anglo’s interim statement in 2009, the Minister of Finance said he was “shocked” by the practices at the bank (Minister of Finance 2009). Specifically, the disclosure of the “inappropriate treatment” of director loans had “severely damaged the reputation of Anglo Irish Bank and the Irish banking system as a whole” (Minister of Finance 2009). The Minister reiterated that the government was “committed to getting to the bottom of the situation” and ensuring that “the full rigours of the law are applied to anyone who is found to have abused the system” (Minister of Finance 2009). He outlined that these matters are now the subject of “ongoing investigations” by IFSRA, the Office of the Director of Corporate Enforcement and the Police (Minister of Finance 2009). The newly appointed Central Bank Governor mirrored the Minister’s sentiments stating that “investigations into possible wrongdoing are being vigorously pursued by the relevant authorities” (Honohan 2009).

In summary, Anglo’s failure was so severe that the Minister of Finance shut the bank down in 2012. On going enforcement investigations are important and are likely to shed further light on the various intricacies of these scandals. However, the government also needs to understand the failures of the prevailing corporate governance hegemony, given Anglo’s perceived compliance with the country’s corporate governance provisions. While the corporate governance system at Anglo might
have been correctly structured, the processes underlining these systems were not. In the wake of Anglo’s case study, authorities need to engage in a root and branch review of the governance regime, to provide real and lasting changes to corporate governance structures in the banking system. This is the challenge presented in this thesis and the basis for developing a new architecture for MRR in Ireland to prevent a similar scandal from reoccurring.

10. An institutional architecture for meta-risk regulation

The main reflections from the global crisis indicate a failure of board members to establish and measure firm-level risks, inappropriate compensation programmes, fragmented technology infrastructures and institutional arrangements which supported a culture of risk-taking (Senior Supervisors Group 2009). While many of these failures can be applied to the Irish context, the Anglo debacle represented a serious breakdown in governance procedures and has raised legitimate questions about whether nonexecutive directors where able to exercise independent and effective judgement, particularly in relation to risk management practices.

IFSRA has accepted that its overall strategic approach to regulation during the property bubble was inappropriate, suggesting that it was constructed in a “benign environment” where many of the current issues where not foreseen (IFSRA 2009). Particularly, IFSRA indicated that its “reliance” on management and boards at banks to effectively construct risk management systems and internal controls was “misplaced” (IFSRA 2009). Therefore, the regulator is likely to focus on the risk management capacity of its regulated entities in the future, working with industry to ensure that the correct internal control systems are in place.

However, as nonexecutive directors are seen as the main gatekeepers to any modern corporate governance system (Kraakman 1984; Kirkbride and Letza 2005), the success of a contemporary corporate governance framework still rests on their ability to understand risk (De Lacy 2005). Given the growing complexities (Prowse 1997; Ciancanelli and Reyes-Gonzalez 2001; Macey and O'Hara 2001),

---

22 The notion of using nonexecutive directors as ‘gatekeepers’ reflects a failure of internal controls provided through common law provisions. These outsiders, by having access to sensitive and confidential information about the company, are able to provide both internal and external control, simultaneously.
A meta-risk regulation approach to financial and corporate governance failure

2003; Levine 2004) and uniqueness (Andres and Vallezado 2008) associated with modern banking, it will be very difficult for part-time nonexecutive directors to provide meaningful judgement on corporate risk or business model development. Complexity and opacity can take many forms such as the difficulty in assessing a bank’s loan portfolio or ascertaining the importance of off-balance sheet operations but are usually driven from information asymmetries (Furfine 2001). This was particularly evident in the Anglo case study presented in this thesis, where the fragmented nature of risk management structures resulted in few people understanding the overall risk management position of the organisation. With this in mind, the objective of reforms in this thesis will be centred on strengthening the competence of the regulator and senior personnel at banks to detect and forestall occurrences of imprudent risk-taking, particularly during Minsky cycles. This type of regulatory arrangement is not new and has been captured in the literature in terms such as reflexivity, partnership, smart regulation and meta-regulation in the past (Dorf and Sabel 1998; Freeman 2000; Lipschutz 2005). While these terms broadly encompass the same ideals of a sophisticated and collaborative form of regulation, the unique properties of meta-regulation make it particularly suitable for the banking system.

According to Parker (2002), meta-regulation is defined as the “regulation of self-regulation”. Modifying this definition slightly to include risk, in meta-risk regulation (MRR) the regulator moves from monitoring individual risks at firm-level to evaluating the firm’s risk management system. The idea of regulation as a proxy for risk management is well established in the literature, particularly with the growth of the Risk Society (Beck 1992; Fisher 2007). Governments are being increasingly assessed in terms of their ability to identify, assess and manage risks (Rose 1999).

In a MRR regime the objective is to improve the self-monitoring capacity of entities (Morgan and Yeung 2007) by monitoring and evaluating their self-regulatory techniques (Gunningham and Grabosky 1998). The regulator ceases to be concerned about direct controls and proscribing the behaviour of firms (Humphrey 2002), and rather shifts to a proceduralisation strategy (Morgan and Yeung 2007), encouraging firms to put in place “processes and management systems which are then scrutinised by regulators or corporate auditors” (Gunningham and Grabosky 1998). Under this approach the monitoring of compliance at the organisation is undertaken in three layers: firstly, at an
operational level in the workplace, next, by the directors of the company, and, finally, by the regulator itself (Parker 2002).

This approach recognises the limitations of state actors (and nonexecutive directors) to acquire sufficient knowledge to regulate an industry independently in a centralistic fashion (Black 2002). Furthermore, a move to MRR is particularly suitable in volatile and complex environments (Braithwaite 2003), enabling regulators to respond to changing market conditions and address shifting priorities in their regulatory agenda (Levi-Faur 2005). The lack of information when designing regulation has in the past posed problems in formulating appropriate rules or standards (Hayek 1949; Ogus 1995; Moran 2003) with some suggesting that a centralistic approach to regulation (Black 2002), can result in unintended and negative consequences (Centre on Regulation and Competition 2005).

In the recent past, regulators have come to recognise the potential of steering the internal controls of an organisation “as a means of securing control indirectly” (Scott 2003) to achieve regulatory objectives. The classic example being in the nuclear power industry following the Three Mile Island accident in 1979 in the US, where, following the incident, state investigators concluded that plant controllers’ over-reliance on basic compliance was a contributing factor to the event (Rees, 1994). When something occurred that was not covered in their rulebook, they lacked the ability to strategically react and manage the event. Following this observation, government inspectors moved from intensively inspecting compliance with rules to evaluating risk management systems at these plants, seeking to establish if controllers had the “risk analysis intelligence” to understand the safety systems of their nuclear facilities (Braithwaite 2003). Under the new regime, each nuclear plant saw itself as a “unique distinctive system” with its own clear rules, principles and peer review support (Braithwaite 2003). The idea of reducing systematic risk in an industry by improving and monitoring the risk management capabilities of individual firms, and not just assessing whether specific rules were adhered to or not, represented a significant change in ideology and was ultimately successful.

The benefits of meta-regulation have not just been observed in the nuclear power industry; they have been adopted across the spectrum of societal arrangements, from the taxation and health sectors to the financial services sector. In financial services, regulators have had a quasi meta-risk
regulatory responsibility since the introduction of the Basel II accord in 2004. Under this framework, banks were free to impose their own minimum capital requirements based on their internal risk based models, but only subject to prior, and continual, monitoring of these models by the regulator (Gray and Hamilton 2006). However, the Irish (and global) banking crisis is clear evidence that financial regulators failed in this regard. This is not surprising as IFSRA never saw itself as a meta-risk regulator and lacked the institutional arrangements to effectively act as one. But in the future managing and controlling risks is likely to play a central role in the financial regulator’s (i.e. the Central Bank’s) future mandate, the authority needs to modify the way in which it interacts with banks by embracing MRR. To support this transition, a novel institutional architecture for MRR in Irish banking (see Figure 11) has been developed, which hinges around the relationship between two proposed units, the Corporate Risk Department (CRD) at banks and the Risk and Compliance Unit (RCU) at the financial regulator.

**Figure 11:** Old and New architecture for MRR in Irish Banking

Firstly, in relation to a bank’s internal structures and in line with recent recommendations from the OECD (OECD 2009), a Corporate Risk Department (CRD) should be established, responsible for formulating firm-wide internal controls and risk management procedures. Specifically, the CRD
A meta-risk regulation approach to financial and corporate governance failure

should seek to control and monitor risks in banks by, for example, introducing mechanisms to limit excessive balance sheet growth. The CRD would represent a nexus merging the operations of the risk management, credit and internal audit departments into a horizontally integrated department. This should help the department make more informed decisions, with greater access to information. The CRD should reduce the problem of organisational silos, which was apparent in the director’s loan controversy at Anglo (see Section 9). The adoption of this approach will also improve accountability in the organisation, as only one department would be responsible for monitoring group-wide risks.

Establishing these institutional arrangements will not work unless “the transmission of information is through effective channels” (OECD 2009). Therefore, the head of the CRD, the Chief Risk Officer (CRO), should have a seat on the board of directors. This should facilitate the proper dissemination of information in the boardroom of Irish banks. However, a conflict may arise between the CRD’s goal of prudent risk management and the executive management team’s objective of increasing short-term profit. Therefore, some safeguards must be built into this position, such as its resources being approved by a group of nonexecutive directors to ensure a level of independence and separation from the executive board at the bank. The regulator should work closely with this department to make sure firm-level internal controls are operating effectively. Also, it should have the power to veto any inappropriate appointment to the CRO position.

With regard to the regulatory authority, the Irish government has established a Banking Commission which incorporates both the monetary responsibilities of the Central Bank and the supervisory functions of IFSRA (Minister of Finance 2010). However, in order to institutionalise a move towards MRR, it is necessary to superimpose a new Risk and Compliance Unit (RCU) above the Market and Banking Supervision Departments. Institutional restructuring is in vogue of late, as administrations across the world are overhauling their financial regulatory architecture. The Federal Reserve former chairman, Ben Bernanke (2009), has indicated the need for institutional reform to improve internal communication amongst US agencies responsible for overseeing financial institutions and markets.

Under the new regulatory regime, it is envisaged that the RCU would be responsible for monitoring and evaluating the risk management systems promulgated by each CRD, given the bank’s
A meta-risk regulation approach to financial and corporate governance failure

compliance requirements. These requirements could be defined through principles, rules or any other instrument the regulator deemed appropriate. The RCU would take a macro-perspective to the regulation of a bank’s risk management practices, given the interconnected nature of the banking system. Information from both the Market and Bank Supervision departments would feed directly into the RCU on a daily basis, to ensure that it had adequate knowledge to evaluate risks. If a particular CRD was not performing its risk management functions effectively, the RCU at the regulator should have the power to step-in and introduce temporary command and control measures, until the system is corrected. The same allocative principles should apply in the new regime as with the current risk rating system, but the ability to manage risk would be heavily weighted. The core current prudential requirements applicable to banks, such as risk-based internal capital models, should be integrated into the new meta-risk regulatory framework, along with business model supervision to ensure that consumers are protected.

To support the RCU’s bourgeoning informational requirements, banks should be subjected to yearly risk management audits. The audit should be required as an enforceable undertaking, funded by the banks themselves. It would be similar to compliance audits in the environmental sector and conducted by an independent professional service firm (but not the bank’s current auditors). Its objective would be to determine whether the risk management systems and internal controls at banks are consistent with the prudential principles and rules imposed by the regulator. The compliance report would be sent directly to the regulator and the board of directors at the bank. Its purpose would not be to punish inappropriate compliance procedures but rather to identify problems early-on, to create greater awareness about the importance of internal controls and to help foster better risk management systems. While the compliance auditor should examine the work of the CRD, it should separately review the risk management practices in the bank. While the correct policies and systems might be propagated by the CRD, creative compliance in the operational departments is always a danger. In essence, this “belts and braces” (Scott 2000) approach would represent an additional layer in Parker’s (2002) meta-regulatory framework, creating extra redundancy. Thus, if one element of the MRR system fails, the other will step-in and prevent a systemic failure. While, it is important to note the cost associated with this new and expensive additional check, in a market dominated by only a
few accountancy firms, the benefits of preventing a similar crisis which has crippled the Irish economy for the foreseeable future (Honohan 2009; O'Sullivan and Kennedy 2010) should outweigh the initial costs. Additionally, despite the literature lampooning the effectiveness of the audit society (see Power 1997 for a detailed discussion on this issue), several authors (Titman and Trueman 1986; Datar, Feltham et al. 1991) have highlighted the long-term financial benefits of high quality auditing.

Interestingly, the Central Bank has already taken some action in this regard and its supervisory teams will be supported by a panel of external risk advisors in the future (Elderfield 2009). This panel will assist the Central Bank in assessing governance, risk management and internal controls at regulated firms. It will also provide a resource for evaluating business and commercial risks faced by banks. However, this section suggests that a bottom-up approach, through the compliance audit, is much more appropriate given the inherent complexities associated with banking.

Finally, institutional arrangements should be established where the various stakeholders associated with risk management can interact with each other. Irish banks depend on each other: a failure of one institution could have serious repercussions on the stability of the entire banking system (O'Sullivan and Kennedy 2010). Internationally, this type of symbiotic relationship was also evident following the collapse of Barings Bank in 1995 and the crisis in confidence in derivative trading that ensued. In response to this, J.P. Morgan, the largest derivative trading house at the time, decided to publish its own proprietary risk management model to help smaller companies with less sophisticated systems to manage their risk (Dale 1996). Braithwaite (2003) argues that J.P. Morgan understood it was in “a community of shared fate”.

To formalise a similar community in risk management, a Financial Sector Risk Forum (FSRF) should be established, chaired by the regulator. While banks’ risk management systems can be a source of competitive advantage for firms, mitigating against systematic vulnerabilities in the financial system should override competitiveness concerns. As with Internet browser platforms (such as Mozilla Firefox), the movement towards sharing underlying codes usually results in better functioning systems. In fact, in December 2009, electronic voting machine manufacturer Sequoia published its own source code in an attempt to, firstly, promote public confidence in the robustness of their systems; secondly, facilitate a shift towards a common methodological format in the e-voting process.
industry; and finally, to help improve their underlying code. This could also be applicable to the banking sector, as the sharing of risk management systems would create greater scrutiny and, through feedback and consultation, help identify and fix any problems associated with particular risk management practices. It should also foster greater international confidence in the Irish banking system, if the risk management procedures promulgated by banks are in line with best practice.

Members of the FSRC would include the CROs from each bank, officials of the Department of Finance and the Central Bank, and the compliance auditors. It should meet on a quarterly basis, providing stakeholders the opportunity to disseminate risk management policies and engage with supervisory authorities, as well as set out best practice codes and rules. Additionally, this forum would give banks the opportunity to learn from each other’s mistakes, which is essential for any smart regulatory regime (Gunningham and Grabosky 1998).

11. External audit, meta-risk and investability

Not all financial regulators are going to adopt MRR but that should not prevent firms from applying many of its principles. MRR should not just be viewed as an approach limited to regulators. Firms can use external audits to adopt a MRR-light framework (see section 10). The model above proposed that banks should create a CRD to formulate firm-wide internal controls and risk management procedures. Specifically, the CRD should seek to control and monitor risks in banks by, for example, introducing mechanisms to limit excessive balance sheet growth. An external audit of banks’ risk management systems should focus much of its attention on monitoring and evaluating the work of the CRD in assessing risk management procedures throughout the firm. This, in combination, with regulatory scrutiny will provide an extra layer of protection at banks. In countries with lax regulatory structures it may provide the only level of protection. But is there any pay-off for firms in adopting good governance practices?

Knowing whether markets reward well-governed firms will help answer this question? The answer appears to be yes, markets do value well-governed firms. Using a carefully constructed and novel dataset which extends the approach of Bae and Goyal (2010) to a multi-country setting, the
thesis examines the effect of differences in corporate governance within firms on their valuation in emerging markets. The research goes one step further and applies the methodology of Mitton and O’Connor (2011) to see whether investors care more about the firm’s corporate governance, or the country’s level of institutional development. Using a series of firm fixed-effects regressions, the research shows that a firm’s corporate governance matters more—there is a premium to investing in firms with good governance structures in countries with weak institutions. The findings are robust to alternative measures of corporate governance and institutional development.

12. Conclusion

In 2003 IFSRA was established to build a robust and solvent banking system and protect the interests of customers. However, following the credit crunch and the contraction in the domestic economy in 2008, the Irish banking system is still recovering—six years on. The Irish banking systems’ capital base has been destroyed and years of steady progress and integrity have been eroded in a few years. So far, the government has been forced to issue a guarantee scheme, recapitalise Bank of Ireland and Allied Irish Bank, nationalise and close Anglo and established a National Management Asset Agency, to cleanse the banks of its non-performing assets. The cost of Anglo alone is likely to exceed €30 billion, according to the government estimates. Moreover, the recent “Anglo tapes” controversy only further demonstrates the toxic culture that prevailed at Irish banks during this hedonistic period.

Given the scale of the Irish banking crisis and its impact on the stability of the economy, serious questions have been raised about the failure of its supervisory agencies to recognise the dangers of the Irish banking systems’ over-reliance on domestic property in the face of continued warnings from international agencies (i.e. the IMF and European Commission) in the mid-2000s. Subsequently, the Central Bank has admitted they did not realise how vulnerable Irish banks were to property price depreciations, blaming an over-reliance on the risk management systems used by banks.

Evidence presented in the Anglo case study demonstrates a failure of both Anglo, IFSRA and the Central Bank to manage and understand risks. However, the growing regulatory consensus
A meta-risk regulation approach to financial and corporate governance failure

towards centrality and the jettison of management-based regulation needs to be challenged, in the interest of competition, innovation and in the future interests of society and the banking system as a whole. As with most smart regulatory regimes, its success rests on the quality of the banks’ risk management systems and internal controls together with the regulator’s ability to evaluate these systems effectively. This thesis argues that the most effective way the regulator can reduce risks in its industry and buffer banks’ risk management practices is by shifting toward MRR. This novel theoretical approach envisages the regulator working closely with banks to help them identify and understand the risks present in their balance sheets. This is not an easy task and the thesis presented a number of institutional arrangements which would support such a change in philosophy. These arrangements include the creation of a Risk and Compliance Unit at the financial regulator and a Corporate Risk Department at individual banks to buffer against the negative effects of Minsky credit cycles.

However, firms should not wait for regulators to adopt a meta-risk regulatory philosophy. Research in this thesis demonstrated that well governed firms in emerging markets enjoy an investability premium. If the Irish financial regulator, or other international regulators, does not have the stomach to implement MRR, it is still in the interest of individual firms to implement this philosophy through conducting external audits of their risk management systems. Investors will reward firms that do so.

While adopting MRR is far-reaching for firms and regulators, the Anglo case study should represent a new epoch in corporate governance and financial regulation. Through the guarantee and nationalisation and recapitalisation programme, the Irish government has acquired a significant stake in surviving Irish banks. It now has an obligation to systematically reform governance arrangements and help rebuild the shattered confidence of its banking system. In 2008, as a first step, the Minister of Finance announced the establishment of a Banking Commission. The new authority fuses together both the monetary responsibilities of the Central Bank and the supervisory functions of IFSRA into a single, standalone agency. The reorganisation of institutional arrangements in financial regulation was initiated to address perceived failings in the regulatory regime, particularly related to the loss of public confidence IFSRA experienced following the crisis. However, the International Centre for
Monetary and Banking Studies (2009) warn against such measures indicating that “when a regulatory mechanism has failed to mitigate boom or bust cycles, simply reinforcing its basic structure is not likely to be a successful strategy”.

This thesis has presented evidence that the regulatory regime needs to be fully overhauled. As such, IFSRA and the Central Bank were always closely associated, the government’s new arrangements will simply formalise this relationship. While combining monetary and supervisory functions tends to result in lower instances of systemic banking crisis, the severity of crises tends to be more pronounced compared to a separated regime (O’Sullivan 2010). Nevertheless, the Banking Commission in Ireland is now fully operational with the purpose of restoring public confidence in financial regulation. Financial markets will be watching these developments closely to ensure that the implementation process matches the desired objectives. This is the ultimate test in rebuilding the reputation of the Irish financial regulatory regime and the banking system.
References


A meta-risk regulation approach to financial and corporate governance failure


A meta-risk regulation approach to financial and corporate governance failure


A meta-risk regulation approach to financial and corporate governance failure


77. CARSWELL, S. 2009. FitzPatrick Anglo loans were more than €87m. *Irish Times*, 14th of January.


A meta-risk regulation approach to financial and corporate governance failure


A meta-risk regulation approach to financial and corporate governance failure


156. GRIMES, S. 2006. Ireland’s emergence as a centre for internationally traded services. Regional Studies, 40, 1041-1054.


A meta-risk regulation approach to financial and corporate governance failure


A meta-risk regulation approach to financial and corporate governance failure


A meta-risk regulation approach to financial and corporate governance failure


212. LENIHAN, B. 2009. Interview with the Minister of Finance *Six-one News*. Dublin: RTE.


A meta-risk regulation approach to financial and corporate governance failure


A meta-risk regulation approach to financial and corporate governance failure


A meta-risk regulation approach to financial and corporate governance failure

249. NATIONAL COMPETITIVE COUNCIL [AUSTRALIA] 2005. Submission to the taskforce on reducing the regulatory burden on business. Sidney: NCC.


A meta-risk regulation approach to financial and corporate governance failure


A meta-risk regulation approach to financial and corporate governance failure


A meta-risk regulation approach to financial and corporate governance failure


A meta-risk regulation approach to financial and corporate governance failure


A meta-risk regulation approach to financial and corporate governance failure


A meta-risk regulation approach to financial and corporate governance failure


A meta-risk regulation approach to financial and corporate governance failure


Annex I: Published research

Four peer-reviewed articles were published as part of this research project. The first article (December 2011) includes a literature review of regulation. This analysis provides the theoretical underpinnings to the entire research project. As part of our research, we found that the traditional form of regulation, command and control (CAC), was dominant in modern policy making despite advances in alternative methods of regulation, such as market-based regulations. We provide the first insights into explaining this phenomenon showing how the forces of uncertainty and internal dynamics among stakeholders are the most dominant factors preventing the adoption of non-CAC regulations. Using case study evidence of internet regulation, we then integrate our analysis into the most prominent regulatory choice behaviour theories and illustrate that regardless of the theory, these factors can help explain the dominance of command and control as a choice of regulation.

In the second article (January 2012) focused on regulation and corporate governance in the banking system. The article presents the theory and function of financial regulation and corporate governance. Using case study evidence, it sets out the evolution of financial regulation in Ireland, with particular attention given to the roles, responsibilities and actions of those authorities responsible for maintaining financial stability. It examines the role of financial regulation during the property bubble and subsequent bust, in particular, the huge increase in property-backed lending, which fuelled its growth during the mid-2000s and contributed to one of the largest banking failures experienced by a developed country since the Great Depression.

The third article (June 2012) applied the insights gained from the CAC and Irish banking crisis papers to build a meta-risk based approach to financial regulation based on Anglo Irish Bank’s failure in 2008. The model is built to amorality the effects of a Minsky credit cycle on banks. It envisages the regulator working closely with banks to help them identify and understand the risks present in their balance sheets as opposed to just testing compliance with individual rules. Since the
paper was written many regulators have adopted a meta-risk based approach to financial regulation. For example, the creation of the Eurozone macroprudential regulator, the European Systemic Risk Board, is designed to help authorities and banks anticipate future risks to their businesses, such as foreign currency lending.

The final paper (July 2012) examined the interaction between the legal protection of investors, corporate governance and investable premia in emerging markets. The research question was to understand if well governed firms (including banks) operating in countries with lax regulatory and corporate frameworks receive an investability premium. In a multi-country setting and using a novel dataset we find that better-governed firms experience significantly greater stock price increases upon equity market liberalization. The paper examined whether well-governed firms in poorly governed countries enjoy an investability premium as measured by Tobin's q. The research indicates that they do. Investors look beyond the seemingly weak country-level governance structures, and focus on corporate governance, including effective risk management structures in line with our meta-risk based approach.

Multi-author research is an important component to high quality academic research. All articles have been written in collaboration with colleagues at the University of Limerick, National University of Ireland, Maynooth as well as my supervisor. I am in the lead author in the first three papers and co-authored the final piece. All papers have been published in peer-reviewed journal.


Annex I: Paper 1

Author: K.P.V. O’Sullivan (UL) and Darragh Flannery (UL)

Title: A discussion on the resilience of command and control regulation within regulatory behaviour theories

Publication: Journal of Governance and Regulation

Date of publication: December 2011

Volume: 1

Issue: 1

Pg: 15-25
Abstract

This paper provides the first insights into the factors that may drive the resilience of command and control regulation in modern policy making. We show how the forces of uncertainty and internal dynamics among customers, producers and regulators are the most dominate factors preventing the adoption of non-CAC regulations. Using case study evidence of internet regulation, we then integrate our analysis into the most prominent regulatory choice behaviour theories and illustrate that regardless of the theory, these factors can help explain the dominance of command and control as a choice of regulation.
1. Introduction

As the state began to divest itself from industries long held in public ownership, governments have sought new ways to manage public control. Regulation had long been a favourite interventionist tool used by policy makers, particularly in cases where private law instruments were deemed insufficient to address market failures. With the proliferation of new regulatory agencies designed to supervise these privatised firms, a complex, multifaceted and multilayered matrix of regulations started to emerge. As their influence increased, greater scrutiny has been placed on the methods they use to control behaviour. In the last few decades, governments have started developing, testing and costing new types of regulations, in response to the problems associated with the traditional method— which is commonly referred to as command and control (CAC). In tandem with these developments, a burgeoning literature has developed highlighting an array of arguments in favour of non-CAC regulations from market-based to self-regulation.

However, thirty years on, there is only anecdotal evidence to suggest that a shift towards alternate modes of regulation is actually occurring. Despite arguments that we are in transition towards a more pluralist conception of regulatory design, the OECD (2009) maintain that governments still remain reluctant to seriously consider instruments other than command and control (CAC). Even in cases where regulators are controlling new areas (such as the internet) and where different market failures may exist, command and control is still omnipresent (OECD 2009). While the OECD has documented this phenomenon, as far as we are aware, nobody has tried to explain it either through theoretical or empirical research. To address this gap, this paper investigates the key factors which explain the stickiness of command and control and applies them to the three main competing theories of regulatory choice: public interest, regulatory capture and institutional. The paper maps the evolution of internet regulation as a means to illustrate how the forces of uncertainty and internal dynamics of producers, consumers and regulators within these three competing theories of regulatory choice can help explain the continuing dominance of command and control regulation in modern policy making.
The paper is structured as follows. In section 2 and 3, we review the literature associated with command and control regulation and alternate regulatory instruments, outlining their positive and negative attributes. In section 4, we discuss the resilience of command and control regulation within the three competing theories of regulatory behaviour integrating our theoretical reasoning with the evolution of internet regulation in the United States (US). Finally, we finish by summarizing the main findings arising from earlier sections and the key conclusions arising from these findings.

2. Command and control regulation

Under command and control (CAC), the regulators fixes standards on certain activities (the command) and uses legalisation to prohibit the behaviour of the regulated entities which do not conform to these standards (the control) (Moran 2003; Baldwin 1997; Black 2002). CAC is based on simple cause-effect relations — represented by a linear progression from policy formation to implementation. It creates a stable platform for regulatory participants due to dependability it creates for the regulator, in terms of operational parameters, and for the regulated entity, in terms of compliance obligations (Gunningham and Grabosky 1998). Its legitimacy is particularly strong in times of crisis where sentiment demands more perspective, intensive and legalistic rules (Scott 2004). Latin (1985) describes a number of other strengths to CAC, such as: reduced information and collection costs, greater accountability and legitimacy, enhanced accessibility of decisions to public scrutiny, reduced opportunities for regulatory capture in response to political behaviour, and the increased likelihood that regulations will withstand judicial review. In the German environment sector, the development and enforcement of detailed rules and standards — back by legal sanctions — has been credited with not only increasing the productivity of firms through technology and managerial improvements (Gunningham and Grabosky 1998) but with also establishing new markets for firms to exploit (Fisse and Braithwaite 1993). This is consistent with Porter’s theory of competitive advantage; where he argues that stringent regulation can facilitate technology innovation in economies, as firms innovate to comply with regulations (Porter 1990).
Many of these arguments have been hotly disputed and by the end of the 1960s governments started to question the suitability of the incumbent regime which was said to be collapsing under its own weight (Krier 1992). An array of cost-based arguments have been given against command and control, from it effect of increasing relative prices (Buchanan and Tullock 1975), creating market inefficiencies (Dales 1968), and depressing economic growth (Kneese and Bowers 1968). Specifically, many socio-legal scholars have shown that CAC leads to a proliferation of costly rules and over-regulation (Stewart 1988; Cox 2003) which damages innovation and growth in the economy (Bardach and Kagan 1982). This can be explained, in some part, by the high costs of gaining perfect information required to target rules and standards efficiently (Teubner 1987). CAC is also more resource intensive, as centralising the design, monitoring and enforcement of rules requires significant operational and administrative budgets.

Notwithstanding, cost-based research, the literature associated with command and control will harbour up phrases such as old (Levi-Faur 2005), anachronistic (Stewart 1981; Sunstein 2000), costly (Morgan and Yeung 2007), inefficient (Sinclair 1997; Gunningham and Grabosky 1998), restrictive (Breyer 1979), coercive (Latin 1985), bureaucratic (Stewart 1981) and results in ossification due to its legalistic underpinnings (Cox 2003; Moran 2003). It is also been shown to be conducive to capture (Mitnick 1980; Stigler 1971; Hood 1994; Quirk 1983; Wilson 1984), particularly in the latter stages of Bernstein’s regulatory life cycle (Baldwin and Cave 1999). Essentially it seems that CAC has come to represent all that can be wrong about regulation.

However, Baldwin, Scott and Hood (1998) note that many of the faults presented above are US centric and are reduced when command and control regulation operates in a enforcement regime which is more flexible, administrative based and less prosecutorial in nature (such as in the UK). Additionally, many of the problems associated with command and control, such as enforcement, are faced by all types of regulatory instruments (Ogus 1994), an issue we will investigate further in the next section.
3. Alternate regulatory instruments

Policy makers have sought new ways of reforming their regulatory frameworks. A seminal moment in this change in emphasis was in 1972, following the publication of a health and safety report by the British Committee on Safety and Heath at Work. The report suggested that there were severe practical limits on the extent to which better standards of safety and health at work can be achieved through a “negative” command and control regime (Robens 1972, 12). The report stimulated the 1974 Health and Safety Act which shifted the emphasis away from using rules or inspections to achieve regulatory objectives towards adopting a collaborative approach to compliance in which employers, employees and trade unions where jointly responsible for ensuring a safe working environment (Aalders and Wilthagen 1997). The new partnership arrangement proved successful, in terms of reducing costs and regulatory burden and, most importantly, reducing accidents and injuries in the workplace.

Following, this and other reports, we have seen the development of a plethora of regulatory techniques designed to steer desired behaviour in means other than legal compulsion. The neo-liberal hegemony which took root following the stagflation of the 1970s support this change and resulted in pressure, not only to deregulate, but to experiment with other types of regulation. The main alternate regulatory instruments which have been developed can be categorised loosely under four headings: market-based regulation, self-regulation, educational schemes, and laissez faire (OECD 2009).

Market-based instruments use economic or financial incentives to change the behaviour of regulated entities (Baldwin and Cave 1999). They are essentially a market-based derivative of CAC, as the supervisor controls regulatory outcomes through the manipulation of economic or financial, as opposed to legal means. Panayotou (1995) categories economic instruments into seven broad categories: property rights, market creation, fiscal instruments, charge systems, financial instruments, liability instruments and performance bonds. They are seen as cost effective as they allow firms to find the most beneficial regulatory solution to their individual operations. They also reduce enforcement costs to the regulator as well as compliance costs to industry (Panayotou 1995). Economic instruments are particularly popular in the environment sector (Atkinson and Tietenberg...
1991; OECD 2003) where they operate through changing relative prices or creating new trading opportunities (OECD 2009). While the enforcement of CAC is subject to legal uncertainties, breaching market-based rules in more obvious and generally results in the payment of specific sums, which should normatively reflect the marginal costs of the breaching the rules to firms within the industry and society in general (Ogus 1994).

Secondly, self-regulation involves a group of entities coming together to develop rules or codes to regulate their individual and collective behaviour (Baldwin, Scott, and Hood 1998; Page 1986). It generally takes the form of accreditation and industrial codes and can be voluntary or non-voluntary in nature (Baggott and Harrison 1995). It has been used as the primary controlling device in industries, such as financial services, the press, advertising and a host of professional occupations to varying degrees of success. As it is operated by the industry itself, it normally acquires a greater level of technical knowledge and expertise than other approaches, resulting in more fluid and responsive rules with less monitoring, enforcement and compliance costs (Ogus 1995). Regulated firms have also been observed to be more committed to comply with rules which they have helped to create in the first place (Ayres and Braithwaite 1992).

Thirdly, educational measures are considered the lightest form of regulation and the most widely used alternative to command and control in OECD countries (OECD 2002). They seek to change the behaviour of individual agents or organisations through disseminating information. They address information asymmetries, allowing agents to make informed choices based on their risk profile and individual preferences (OECD 2002). A key function of educational instruments directed at firms can be to internalise awareness and responsibility into corporate decision making (Gunningham and Grabosky 1998). Public information campaigns are also popular — such as with anti drink driving and anti-smoking campaigns —which attempt to educate the public on the effects of non-compliance. Also, the government through *exclamation and excoriation* (Morgan and Yeung 2007) may publish league tables showing performance of regulated entities in their compliance duties against their peers to shame them to improve their compliance record.
The final popular alternative to command and control is to not regulate at all (OECD 2002). For example, instead of regulating the prices charged by firms, the regulator can use other measures such as competitive bidding or franchise arrangements to achieve the same result (Noll 1989). It is worth noting that in proposing a regulatory regime for the British telecommunications industry following its privatisation in the early 1980s, Littlechild (1983, 9) characterised regulation as only “holding the fort” until the “cavalry of competition” arrived. A laissez approach recognises that regulation is not a panacea, nor a zero-sum game, and all types of regulation result in some form of costs to society.

On this basis, Gunningham and Grabosky (1998) argue that while non-CAC instruments have something to offer, they have substantial limitations and problems. In critically appraising market-based regulation, it can be difficult to harmonise across jurisdictions and is cumbersome to change once up and running. Self-regulation can be costly to governments, due to expense in approving self-regulatory codes and rules (Ogus 1995). It can also be socially undesirable because it may result in the acquisition of power by rent-seeking firms (Stigler 1971; Peltzman 1976), not accountable to the conventional constitutional channels (Shaked and Sutton 1981; Page 1986; Kay 1988; Ogus 1995). Information and educational measures may lack flexibility and proper monitoring provisions (OECD 2009). They may also fail to address information asymmetries, as research has shown that disclosing information contained in financial products does little to change customer’s behaviour as they are either unaware of it, do not understand it, or choose to disregard it (Morgan and Yeung 2007). Finally, numerous studies have demonstrated the problems which arise when the state abstains from interference with, or participation in, private industries. Wilson (1980); Feintuck (2004) Baldwin and Cave (1999) all suggest that adopting a laissez faire approach to regulation may result in market abuse by monopoly power, information asymmetries and negative externalities. Without government intervention, powerful firms can earn supra-competitive profits to the detriment of the public interest (Friedman and Kurnets 1945; Ogus 1995; Shilling and Sirmam 1988) by erecting barriers to restrict entry and support anti-competitive practices.
4. Uncertainty within Models of Regulatory Behaviour Theory: Case Study Internet Regulation

The flaws identified above cannot be the only reason explaining the proliferation of command and control, given CAC’s own faults (see Section 2). As such, in a formal theoretical manner, the behaviour of regulators in adopting and/or modifying regulation is mainly seen to conform to three different strands of thought; the public interest hypothesis, regulatory capture and the institutional theories. The former suggests that regulators behaviour is shaped by a motivation to protect consumers from abuse of market power; regulatory capture theory postulates that the regulator will be more subservient to the needs and desires of firms within the regulated market; while institutional theories centre on the belief that organisational structure and arrangements, as well as social processes within firms, drive the regulatory agenda.

To fully understand the mechanics involved in the regulatory choice decision process, it is useful to examine the three competing theories in real life policy situations. In this paper, we have chosen the case study of internet regulation. We decided to examine the evolution of regulation in cyberspace as many forces of uncertainty and internal dynamics presented in the paper (i.e. type II errors, autopoiesis) rests, partially, on the assumption that CAC is the incumbent or at least historical regime. Therefore, as internet regulation is a relatively nascent area of regulatory focus — having developed outside the traditional regulatory structure — we should be able to control (to some degree) the forces of incumbency and get a better understanding of all the factors influencing regulatory choice. However, before we start looking at this in more detail, it is necessary to give a brief overview of the evolution of internet regulation.

4.1 Internet Regulation, from laissez faire to command and control

For the first few decades following its establishment, the internet was limited to the United States military establishment and while there were probably some rules attached to its operation, there was certainty no formalised regulations and neither was any needed. Following its commercialisation, and the development of private networks in the late 1970s and 1980s (Barry et al. 2009), the internet was
fully privatized in 1990 (Weiser 2003). Since then it has developed in an environment largely free of regulation (Weiser 2009), with the regulator in the United States, the Federal Communications Commission (FCC), taking a benign approach to oversight. Contrary with its implicit responsibilities in the Communications Act of 1934, the FCC argued that data processes should not be subject to regulation (Oxman 1999). It believes that the interests of the public where best served permitting computer services to develop in a free and competitive marketplace (Oxman 1999). In this environment, consumers and innovators do not need permission before they use the internet to create new technologies, establish businesses, connect with friends, or share their views. The FCC instigated a process of *unregulating* the industry (particularly in to network management) during the 1990s (Oxman 1999), buttressed by simple policy statements, such as in network management, where it outlined that practices must be “reasonable” (FCC 2009, 1).

While there is no explicit CAC or self-regulating regulatory code encompassing cyberspace, it is worth noting that the internet is subject to a particular type of regulation. According to Lessig’s *locus classicus* book on internet regulation, the centrality of computer code in cyberspace produces a kind of architecture (Lassig 2000). Lessig suggests that this architecture represents a kind of law determining what people can and cannot do. Thus, large firms and government institutions are able to shape and control networks so that they can become as closed, secure and robust as required. Lessig (2000) believes that shaping the core functionality of the internet is a powerful tool in standard setting, information gathering and behaviour modification, and therefore can be described as a cybernetic approach to regulation (Morgan and Yeung 2007; Moran 2003). However, he is less clear how these processes occurs and what leads to the diffusion of one type of regulatory architecture over another (e.g. assembly based versus interpretative programming language).

This quasi-biological or evolutionary form of regulation was replaced in the late 2000s following a number of serious network management incidents which saw millions of customers blocked from accessing hundreds of sites across Canada and the US. As private networks replaced traditional ones, internet service providers had the power to restrict content that competed with their
own online content and services. When they started to use this power and block or degrade disfavoured content and applications without disclosing their practices to consumers, various stakeholders called for regulation to ensure that the principle of net neutrality —where all information packets are treated equally by suppliers and there is no gatekeeper blocking lawful uses of the network — remained intact.

In October 2009, the FCC announced that in order to perverse a free internet in the future, it was beginning the process of drafting rules backed by legalisation which would codify and supplement existing internet openness principles (FCC 2009). This reflected the fact that private communication networks are now a critical part of the any country’s economic and cultural infrastructure (Lemley and McGowan 1998). In December 2010, the FCC agreed to adopt enforceable CAC rules that require all fixed line broadband suppliers, excluding mobile operators, to disclose network management practices, restrict broadband suppliers from blocking Internet content and applications, and bar fixed broadband providers from engaging in unreasonable discrimination in transmitting lawful network traffic.

The FCC’s decision to regulate using this approach has sparked wide-spread criticism, with many suggesting that a command and control regime is not applicable to an industry such as cyberspace, which was built on a culture of cooperation and collaboration (Weiser 2009). However, it should not be surprising and can be explained separately by the three most prominent theories of regulatory behaviour choice: public interest, capture and institutional.

### 4.2 CAC resilience within a public interest behaviour model

Within public interest theory, the regulatory process begins with a necessity to address market failure (Posner 1974), with a normative goal of creating a *Pareto efficient* allocation of resources (Arrow 1970; Shubik 1970). Instances of market failure can include anti-competitive behaviour, windfall profits, externalities, information asymmetries and moral hazard. Where market failure is accompanied by private law failure, there is a prima facie case for regulatory intervention to protect
the public from undesirable market activity (Baldwin and Cave 1999). In our case study, the outcry from industry and the public for more robust regulation to prevent a reoccurrence of the 2007 network outage incident represents the rationale for the public interest regulator’s intervention.

Once the market failure has been identified and with the assumed public interest at stake, a number of steps are generally seen to occur (O’Sullivan and Kennedy 2007). Firstly, the regulator needs to determine the root cause of the failure, to ensure a lasting solution is brought forward (OECD 1992). This should involve analysing whether existing regulations contributed to the market failure and testing whether modifying these regulations—rather than introducing new ones—would be a most effective solution (OECD 2002). Next, the regulator needs to identify the range of alternative instruments that would be most effective in correcting the market failure (Gunningham and Grabosky 1998). In most cases, this involves CAC together with a number of other types of regulations, usually limited to variations of market-based, self-regulation and educational instruments (OECD 2009).

Following Presidential Executive Order 12291 in the United States (US) and all major regulations must be accessed using cost benefit analysis (CBA) as a means to ensure monetized benefits outweigh the costs of regulation. During the CBA the regulator quantitatively assesses each policy choice identified in the previous process based on a number of pre-defined metrics such as efficiency, effectiveness, impact on industry and the wider economy and accountability. While CBA has many benefits, such as improving the rule-making process and encouraging experts to clarify their justifications for regulations, the mechanics involved are said to be biased towards CAC (Baldwin and Cave 1999). This stems from the uncertainty involved in anticipating the effects of alternate regulations. CBA requires alternate regulations to display tangible benefits against command and control—in terms of efficiency and effectiveness— which in certain circumstances this is very difficult to calculate and hard to prove (OECD 2009). Principally, regulators may lack sufficient knowledge of how alternate regulations interact with other elements in the regulatory system (OECD 2009). This bounded rationality perspective (March and Simon 1958; Simon 1957) is due to a shortage of empirical analysis and case study evidence on non-CAC instruments (OECD 2009, 2002),
and insufficient time to design effective models to test their robustness (OECD 2009). In terms of our internet regulation case study, Weiser (2009) has highlighted that neither the FCC nor academia have developed non-traditional regulatory approaches applicable to network regulation, implying that it was more risky for regulators to adopt a non-CAC approach in light of this uncertainty.

Notwithstanding the CBA process, migrating to alternative forms of regulation poses significant risks compared with other regulatory methods, which will make policy makers think twice before adopting non-CAC regulations. A pluralist account of rise of risk in politics is influenced by the cultural theories, whereby policy making is highly charged with risk issues. As the regulator may lack significant knowledge of the alternative approaches there may be the interpretation that non-traditional forms of regulation — principally in relation to self-regulatory regimes — are more conducive to type II errors. Type II errors, also known as false negatives; occur when the regulator fails to regulate behaviour that turns out to be harmful. Conversely, type I errors, occur where the authority regulates behaviour which turns about to be harmless. For the regulator, type II errors are considered more damaging than errors of first kind (OECD 2002). Type II errors have negative effects on the nature and availability of products and services provided in the market, driving up costs for customers and even discouraging some firms from entering markets. For example, various opaque parts of the financial system (i.e. dark pools, certain commodity trading platforms) which were previously free from government oversight, are now currently the focus of intense regulatory scrutiny, as they have been partially blamed for the development of the recent international financial crisis (Pozsar et al. 2010; Financial Stability Board 2011; EC 2010). Additionally, many government’s (e.g. UK, Ireland, and Germany) have reorganised their entire regulatory structures and have jettisoned failed alternative regulatory modes, such as principles-based regulation (a form of management-based regulation), in the face of intensive criticism from the public.

Essentially, CAC reduces type II errors because it is precautionary in nature and tends to result in over-regulation, as the inflexibility of legally backed rules and the difficulties of gathering perfect information mean that regulators tend to adopt more broad-brush solutions to problems when
designing rules (Bardach and Kagan 1982). While this can damage efficiency and increase the probability of type I errors it does reduce type II errors (Baldwin and Cave 1999). In our internet case study, the FCC would have to weigh the benefits of adopting rigid legalistic and enforceable rules to limit the probability of network management incidents in the US against the option of adopting more responsive and collaborative rules, which while reducing costs to producers and consumers, would raise the probability of network management failure in comparison to the first option.

4.3 CAC resilience within a regulator capture behaviour model

The adoption of CAC by the FCC can also be explained using the capture theory, which was first articulated by Stigler (1971). The most basic assumptions surrounding this model are firstly, regulation is subject to strong political control and secondly regulatory decisions are then made to maximise the expected voting majority of politicians. Peltzman (1976) formulises this basic notion within a price entry framework by positing a majority generating objective function for legislators that is dependent on the utility of two economic groups within society, namely producers and consumers. This objective is presented as $M = (M[p, \pi])$ where $p$ is the price consumers face and $\pi$ is firm profits. It is assumed that the politician’s majority is negatively related to higher prices as this entails lower consumer surplus and fewer votes from this group, but higher profits are positively related to this majority as producers can vote, but also they can gather together groups of voters and/or contribute funds to help political campaigns. The model predicts that unlike public interest theory above, regulation will entail less than full consumer protection within the market. It also entails less than 100 per cent producer protection as the majority objective equilibrium will be reached somewhere in between the two. If we assume that this equilibrium is reached by a regulator within a CAC type regulation model the uncertainty involved for both consumers and firms in moving to an alternate regulatory model may deter legislators from making this change. As there is uncertainty with regard to consumers, politicians may be fearful, as in the public interest theory, that in alternating regulation from CAC they adversely affect consumers in such a way that they move away from their majority equilibrium. However, as a result of possible regulatory capture, there may also uncertainty for firms
in varying regulation type as moving from the incumbent regime may create ambiguity for firms who worry about the extra transactions costs and compliance requirements associated with a movement away from CAC (OECD 2002). This may drive the firms to put pressure upon the legislators to avoid modifying regulation and as the specific outcome of varying regulatory type is largely unknown to the politician, they may stick with the incumbent format to avoid the risk of disturbing their majority objective. Regulatory changes are felt most acutely in business which are characterised by high levels of investment and suck costs, like the energy sector, which is now seeing the construction of financial instruments that hedge against regulatory change (Irvine 2009).

In terms of our internet regulation case study, the movement toward command and control helped preserve the steady state, shielding the incumbent regime. Content providers lobbied hard in the US to main the existing principles of Internet openness and laissez faire regulations. Moreover, the new command and control rules will act a barrier to entry for competitors and help formalise the previously quasi-biological regulatory code that was already operating implicitly.

4.4 CAC resilience within institutional theory

In terms of the internet case study, the FCC uses a CAC regime when regulating other communication industries, like the cable companies (Hazlett 2001), and given the dominance of routines in regulatory choices according to the institutional theories, using command and control rules for regulating the internet seemed a logical decision.

Institutional theory is built on the premise that the internal dynamics within regulating authorities shape regulation. According to this theory, regulation is guided by organisational routine and procedures punctuated by occasional crises (Hancher and Moran 1989). Therefore, the choice of policy instruments is influenced more by habit, history and institutional culture rather than pure rational choice maximisation, notions of public interest or competitive bargaining between different competing interests (OECD 2009; Baldwin and Cave 1999). Institutional theory is heavily influenced by the naturalist perspective, which suggests that there is a dominance of routines in policy decision
making (Black 1997). Also, the idea that institutions have discretion to influence the regulatory agenda has been demonstrated empirically since the 1970s (Mitnick 1980; Hood 1994; Stigler 1971). As such, regulatory institutions are seen as bounded systems that display tendencies towards self-closure that are so persuasive that it is impossible to exogenously direct control over these institutions. Therefore, as command and control is the prevailing hegemony in policy making, and systems and standards have been built over time, it is natural that regulators will tend to favour it above other types of regulation (OECD 2009). Even if the regulator decides to pursue alternatives to CAC, the regulator (is our case the FCC) would require the acquisition of new skills and expertise, and in some cases, institutional strengthening. For example, when the UK Financial Services Authority’s shifted to management-based regulation in the early 2000s, the regulator indicated that the whole process was complex, highly demanding and costly (FSA 2007).

Also, those who stress autopoiesis as a dominant force in regulation maintain that the internal discourse within professionals (Hood, Rothstein, and Baldwin 2001) will tend to reproduce itself according to its own norms when faced with policy decisions (Brans and Rossbach 1997). As such, regulatory institutions are seen as bounded systems that display tendencies towards self-closure that are so persuasive that it is impossible to exogenously direct control over these institutions (Teubner and Febbrajo 1992). Autopoiesis tends to be most acute in recondite or inward-looking professions which have their own type of language and self-referential spaces (Teubner 1984), such as in law or medicine. (Hood, Rothstein, and Baldwin 2001). Given the concentration of lawyers in the offices of regulators, like the FCC, the conventional regulatory decision process is effectively conditioned to interact with legally-backed regulations, aka command and control. Unsurprising, the legal system, favours the use of binding commands rather than economic incentives through autopoiesis conditioning (Baldwin and Cave 1999). Moreover, pan-international organisations (such as the EU) also place considerable emphasis on law and hierarchical control in its policy making process (Wilks 1996). Baldwin and Cave (1999) suggest that Federal regulations are properly implemented, States must produce laws which have legally binding effect” resulting in a natural bias towards CAC. This can also be explained, in part, through the related theories of cybernetics (Teubner 1984) which
characterise closed social systems, such as law, as black boxes. These black boxes are said to be mutually inaccessible to each other and can explain why policy makers tend to favour legally backed rules, such as CAC, against economic instruments, when designing regulatory.

A further strand of the literature on institutional theories suggests that the internal dynamics within firms can result in power struggle and the desire to expand their range of influence; as such the regulating entity gets captured by its employees. Under such conditions, employees are seen as self-interested agents and their interactions in the regulatory system are designed to maximise their own budgets as a means to increase their own personal utility (Niskanen 1971; Baldwin and Cave 1999). As such employees will try and, in terms of wages and prestige, and therefore will favour a centralistic regime, such as CAC, according to Niskanen’s theory of bureaucracy (Niskanen 1971). CAC is also favourable for those who argue that rational civil servants will not seek to maximise their departmental budget per se but rather seek to shape public policy to maximise their own personal utility (March, Smith, and Richards 2000), given the discretionary power that CAC affords to employees at regulators to act in ways which are not consistent with their legislative mandate (McCubbins, Noll, and Weingast 1989). Shleifer and Vishny (1998) refer to this as the grabbing hand of the regulator to enhance individual interests, rather than using its helping hand to address issues of market failure vis-á-vis the public interest. Command and control is conducive to a grabbing hand philosophy as power is concentrated in the hand of a few actors in the policy making process. Under alternate regulatory techniques, knowledge is often split amongst multiple actors and consistent with Foucauldian notions of power, the fragmentation of knowledge dilutes the power of any one individual to shape regulatory outcomes (Black 2001).

In the internet case study, CAC expanded the FCC’s own realm of influence and give managers leeway to seek budgetary and resource increases for their departments. For fiscal year 2012, despite widespread budgetary cuts elsewhere, the FCC is seeking a 5.47 per cent increase in its budget from last year, citing important work on internet regulation and the implementation of the national broadband to enhance US competitiveness.
5. Conclusion

Against the backdrop of the internet regulation, the paper has demonstrated how the forces of uncertainty and internal dynamic among producers, consumers and regulators can help explain the resilience of command and control regulation in modern policy making. Firstly, a public choice regulator will tend to favour CAC due to the lack of significant knowledge of the alternative instruments and their interactions with the various elements in the regulatory system. Secondly, regulators who have been captured by firms will tend to favour the incumbent or a centralistic regime (i.e. CAC), given concerns about extra costs associated with alternate regulations. Finally, our analysis within the institutional theories highlights a natural predisposition towards the incumbent or the centralistic regime, as the choice of regulation is typically influenced more by habit or personal utility rather than pure rational choice maximisation. In situations where no regulation exists, autopioesis theory seems to support the propagation of legalistic rules, such as CAC, given the prevalence of legal professionals at the offices of regulators.

Given the costs associated with regulation, the factors we have presented above require further empirical and theoretical research in the future to test their robustness. We believe practitioners should start moving towards a more pluralistic conception of regulatory design. Decisions about regulations should not be binary, i.e. a discrete policy decision between strict command and control regulation versus pure self-regulation. Regulators should exploit the strengths of individual regulations while compensating for their weaknesses by the use of additional and complementary instruments tailored to address specific policy goals. Moreover, for regulation to be effective, whatever its kind, it needs to be born from a range of institutional actors, who can effectively shape behaviour in society. The notion that regulation is artificially restricted to governments and industry only reinforces an out-dated and simplistic analysis of modern policy making.

Command and control regulation has a role to play in the optimal regulatory mix, regardless of what the literature postulates, its resilience is testament to this. The practice of annexing regulation
to law has many benefits, especially in environments where there is an independent judiciary, strong enforcement practices and a reputation for impartiality. So long as people trust and respect the rule of law, command and control regulation will remain important, in some shape or form.
References


Author: K.P.V. O'Sullivan (UL) and Stephen Kinsella (UL)

Title: Financial and Regulatory Failure: The Case of Ireland

Publication: Journal of Banking Regulation

Available online: 18 January 2012

Date of publication: January 2013

Volume: 14

Pg: 1-15
Abstract

The paper chronicles the evolution of financial regulation in Ireland, with particular attention given to the roles, responsibilities and actions of those authorities responsible for maintaining financial stability. It examines the role of financial regulation during the property bubble, in particular, the huge increase in property-backed lending which fuelled its growth during the mid-2000s. We examine the impact of ongoing government support to the banking system and the damage which has been done to public finances since the banking crisis.
1. Introduction

Ireland is experiencing a deep financial and economic crisis, rooted in a contraction in residential and commercial property markets combined with a sharp decline in economic activity. The crisis is mainly domestic in nature and can be traced to the liberalisation of financial regulation during the 1990s, the adoption of principles-based regulation during the start of the property boom and expansionary fiscal policy propagated by a series of governments which stoked the property bubble.

Following the crash in property prices, which have fallen by over 50 per cent since its peak, the balance sheets of Irish banks have been severely damaged. Its binge on property related lending has resulted in its capital base being destroyed, and decades of steady progress and integrity eroded in just a few years. Market sentiment, nationally and internationally, is at historic lows, and the share prices of Irish banks have fallen by over 90 per cent since its height in mid-2007. Several banks have been nationalised, merged, and even closed down.

While several articles have dealt broadly with Irish banking crisis and its impact on public finances,(Honohan 2009; Bergin, Conefrey et al. 2010; Conefrey and Fitzgerald 2010; O'Sullivan and Kennedy 2010; Regling and Watson 2010; Stewart 2010) only a few(Central Bank 2010) have examined the role of financial regulation and supervisory authorities comprehensively. Therefore, the goal of this paper is to examine the regulatory failure associated with the Irish banking crisis. Particularly, the role and response of the Irish Central Bank, Irish Financial Services Regulatory Authority (IFSRA) (financial regulator) and Department of Finance to the property bubble and subsequent crash will be presented. The Irish government’s decision to guarantee the private debts of Irish banks in 2008 will also be analysed, in terms of its impact on public finances.

The paper is structured as follows. The next section, we present a brief rationale for financial regulation. It also describes how the theory of institutional design has built-up over time, particularly in relation to the separation of monetary and regulatory functions. In section 3 and 4, we map out the evolution of financial regulation in Ireland. Next, the contribution of failed regulation and otiose
in institutional structures will be assessed in the context of the Irish banking crisis. We examine the measures which successive governments have taken to support the banking system and their impacts on public finances. Finally we highlight the government’s response to its failed regulatory regime and discuss whether this is necessary, or indeed, sufficient.

2. Literature review: financial regulation

A well-functioning banking system acts as a fulcrum around which the real economy turns by allocating resources, increasing capital formation, stimulating productivity growth and acting as a repository of national savings. (Levine 2004) However, banking systems are prone to periods of instability (Llewellyn 1999) resulting in large and expensive consequences to the wider-economy. (Rogoff and Reinhart 2009) One of the main contributing factors to these crises, demonstrated in Asia (Drage, Mann et al. 1998) and Sweden (Benink and Llewellyn 1995) in the 1990s, has been a lack of effective government oversight. (Llewellyn 1998) Therefore, countries have sought to carefully supervise banking institutions in order to limit the probability of systemic crisis and their impacts on the real economy. Regulation has become the favourite interventionist policy tool in this regard. Its economic rationality has been extended in the 1980s beyond financial stability and is now used to address market failures such as customer protection, competition, information asymmetries and moral hazard.

Two main types of regulation have promulgated: conduct of business (CoB) and prudential regulation. Conduct of business regulation focuses on how financial institutions conduct business with their customers. It is necessary due to asymmetries of information between consumers and banks, which is further exacerbated due to the inherent complexity of financial products. In a benign environment, CoB regulation relates to the establishment of guidelines and rules of acceptable behaviour between banking institutions and their customers. It also deals with unsolicited contact, advertising, complaints and, in some jurisdictions, levels of service provision and profitability.
Prudential regulation focuses on the factors that are essential to maintain the stability and well-being of the financial system. Its aim is to minimise the probability of a breakdown in the financial sector and prevent any adverse effects on consumers and the wider-economy. Similar to conduct of business regulation, prudential regulation is driven by imperfect information. However, this time it relates to lack of information about the stability of financial institutions (or the entire financial system vis-à-vis macroprudential supervision). Stability can be achieved by preserving solvency, limiting risk and protecting customer deposits. Regulations such as capital and liquidity adequacy ratios and entry restrictions requirements can support this goal, limiting the severity of costly banking failure or at least reducing the social costs of resolution.

However, not everyone shares this normative view of regulation and a burgeoning literature has developed in response to its perceived weaknesses. There are many strands to this literature, with arguments ranging from the Chicago School liberals—who suggest there are no failures in financial markets—to others who believe that even if market failures exist, the cost of regulatory intervention is usually greater than its benefits. Even if government intervention is required, the notion that authorities have sufficient knowledge to design appropriate rules and standards has been long challenged, with some suggesting that this ‘centralistic’ regulatory approach can result in unintended and negative consequences. Moreover, Shleifer and Vishny have suggested that regulators do not always regulate according to their statutory objectives (i.e. helping hand). Instead, in a grabbing-hand fashion, regulation is sometime introduced to protect institutional or political factions. This alternative perspective is based on the assumption that government failure is at least as important and frequent as market failure and countries with strong financial regulatory frameworks will tend to be less efficient.

---

1 In its strictness sense, prudential regulation is concerned about the soundness of financial institutions vis-à-vis consumer protection while systemic regulation is concerned about the safety of financial institutions for purely systemic reasons. However, for simplicity purposes, this paper expands the strict definition of prudential regulation to include systemic regulatory considerations.
Focusing on this helping-hand/ grabbing-hand taxonomy in the sphere of financial regulation, empirical research provides mixed results. (Barth, Caprio et al. 2009) Highly restricted banking systems are associated with lower capital costs, resulting in improved lending and economic growth prospects. (DeLong 1991; Ramirez 1995; Berger and Udell 2006) In contrast, lightly regulated banks have higher levels of operational efficiency, resulting in lower banking charges for customers. (Vennet 1999) Moreover, Barth et al. (2004) have demonstrated that the probability of banking crises increase with levels of regulatory restrictions. While this might not be consistent with conventional wisdom, less regulatory restrictions gives banks the ability to diversify their income sources by engaging in different activities which, in turn, improves their underlying stability.

In terms of the financial institutional structure, historically, prudential and conduct of business regulation have been the responsibility of at least two separate institutions. Prudential regulators have generally significant powers, such as the ability to revoke banking licences from incumbent financial service providers or refuse an application for authorisation for new entrants. They are traditionally located within the supervisory department of a central bank, which in the last number of decades has been given independent powers to buffer against political threats. Moreover, prudential regulators generally have significant influence in monetary policy decision-making given their financial stability responsibilities.

Conducts of business (CoB) regulators tend to have less influence in financial economic policy making. Their enforcement powers are typically limited to the imposition of monetary fines and penalties. The fragmented nature of their institutional make-up further compounds their lack of influence. CoB regulators are generally either part of a wider customer protection agency, annexed to a larger prudential regulator or split between different agencies with specific responsibilities. Moreover, many of their goals, such as greater competition, are not necessarily consistent with the holy grail of financial stability. (Carletti and Hartmann 2003) As a result, CoB regulation is generally characterised as being piecemeal and insufficient, leading to ineffective supervisory oversight. (Goodhart, Hartmann et al. 1998)
It was not until the mid-1990s, that institutional structure became a major issue in policy debates, as governments began to question whether the efficiency of their regulatory regime could be influenced by the institutional arrangements encompassing it. There are a number of reasons behind greater awareness of the importance of institutional structure. Firstly, the emergence of universal banking in the early 1990s, posed significant problems for the traditional regulatory architecture. (Goodhart, Hartmann et al. 1998) There were concerns that the fragmented nature of financial markets may not only generate inconsistencies but also result in insufficient oversight of newly emerging financial conglomerates. (Norgren 1998) Secondly, there was increasing recognition of the growing complexity of financial operations and the need for economies of scale in terms of specialist expertise in regulators. Finally, instances of regulatory failure, such as the collapse of Baring Banks in the UK, resulted in considerable debate about the all aspects of financial regulation in the mid-1990s.²

Concomitantly, debates (Peek, Rosengren et al. 2001) have focused on whether financial regulation should be divorced from monetary policy. The main argument being that integrating monetary and regulatory policy in a single authority can result in a conflict of interest. (Goodhart and Schoenmaker 1995) For example, a reduction in interest rates would support economic stability in times of high inflation—consistent with monetary policy objectives. However, this policy would have adverse effects on financial stability in terms of the profitability and solvency of banks. (Vittas 1992) Additionally, during instances of banking failure, financial regulators may want to close a failed bank or affect an orderly wind-down of its operations due to moral hazard concerns. In contrast, fearful of systemic stability and the risk of contagion, officials in charge of monetary policy may want to rescue the institution, regardless of what moral hazard problems this creates.

However, there are many who are unconvinced with these arguments. As the lender of last resort, the central bank already plays an important role in managing systemic stability in the financial system. According to Peek, (Peek, Rosengren et al. 1999) housing regulatory functions within its remit is

² For example, the UK, Japan, South Korea, and Iceland all integrated their regulatory authorities into a unified structure during the 1990s, which were previously the responsibility of a number of specialist authorities and government departments.
beneficial, as joint responsibilities make for better supervisory and monetary policy than would result from a single regulator with no economic responsibilities or a monetary policy-maker with no involvement in the review of individual banks’ operations. This is because the evaluation of economic conditions is enhanced by having access to detailed supervisory information and vice versa. Empirically, Bernanke and Friedman and Kuttner (1992) have shown that problems in the banking system can be good indicators of emerging problems in the wider-economy. Additionally, numerous studies (Bernanke and Blinder 1988; Bernanke and Lown 1991; Kashyap, Stein et al. 1993) have demonstrated that the well-being of the financial system may effect an economy’s response to monetary policies.

Ireland has embraced many of these debates, resulting in far-reaching changes to financial regulation in the last number of decades. In the next two section, we describe these changes in more detail, before demonstrating its failure during the 2000s.

3. Evolution of financial regulation in Ireland

When the Irish Free State emerged in 1922, a sophisticated and well-integrated banking system already existed, providing credit and other banking services in the economy. (Pohl and Freitag 1994) While there was recognition for the need for a distinctive currency in the new state — and the establishment of an issuing authority a priori — the social and political unrest during the Irish civil war and the risk of undermining the country’s trade stability prevented an immediate break from British sterling. However, following the passing of the Coinage Act, 1926 when the Minister of Finance was given the authorization to issue token coins of limited legal tender, the government established a Commission of Inquiry into Banking to re-examine this issue. The commission, in its final report in January 1927, recommended the adoption of fixed-parity with sterling for the new Irish currency and the creation of a Currency Commission to manage and control its operation. The government accepted these proposals and later that year the forerunner to a central bank — the Currency Commission — was established. The Commission was controlled by a board composing of
six commissioners, three elected by the Irish clearing banks and three appointed by the Minister of Finance.

While, the 1926 Commission of Inquiry into Banking considered creating a central bank type-structure to oversee the Irish financial system, it concluded that this course of action was ‘not to be recommended as an immediate expedient’ ((as cited in Pohl and Freitag 1994)) and, thus, banks were left largely to operate free from government oversight. Instead, the authority’s focus was on the economy, particularly the state of public finances and trade and balance of payments issues.(Westrup 2005) However, this was not atypical for the 1920s, as world governments generally adopted a laissez faire approach to banking,(Dowd 1996) due to systems low probability of failure(Benston and Kaufman 1988; Laeven and Valencia 2008; Rogoff and Reinhart 2009) and the prudent risk management practices adopted by the sector.(Dowd 1992) For example, during the antebellum period in the United States, banks were subject ‘to virtually no federal regulations’(Dowd 1996) and yet had average capital ratios of 40 per cent.(Kaufman 1992; Benston and Kaufman 1995) This decreased to 20 per cent at the turn of the twentieth century, as banks were subjected to greater regulations. However, this is still much greater than current levels, notwithstanding the development of the regulatory state in the latter half of the 20th century(Majone 1994; Moran 2003) and a tendency towards verrechtlichung.(Teubner 1987; Sweet 2002)

Despite, the Wall Street Crash and the crisis of confidence in financial markets that ensued, Irish government policy (or lack of) remained the constant. However, in 1938, a new Commission on Banking, Currency and Credit recommended that a central bank should be established in light of the growing complexities in financial markets. Four years later, after much legislative preparation, the government took the commission’s advice and replaced the Currency Commission with the Central Bank of Ireland. The authority’s main role was to safeguard the integrity of the currency and consistent with Article 45 of the State’s Constitution, to control credit in the economy with the objective of ‘improving the welfare of individuals’. Initially, the authority was given very specific powers and duties despite the commission recommendations that it should have similar powers to its
international peers. For example, it was not the banker to the government,\(^3\) had no legislative powers to control credit in the economy and did not hold the cash reserves of the clearing banks in Ireland. However, this changed with the passing of the Central Bank Act 1973, as the Central Bank started to further engage in the regulatory process and took on the role of *custodian* to the banking system.

Following the passing of the 1973 Act, the Central Bank became a full-blown prudential regulator, responsible for direct licensing and supervision of most banks in Ireland.\(^4\) Throughout the 1970s, it introduced strict credit restrictions on bank lending, deposit requirements on net capital inflows and liquidity ratios for licensed banks. Also, after Ireland’s membership of the European Economic Community and the passing of various financial directives, the regulatory tools and techniques used by the authority were significantly improved. By the mid-1980s, the Central Bank had created a financial system which was characterised as being one of the most ‘intensely regulated’ in all developed countries.(DKM 1984) At that time, an interest rate cartel existed as a key factor inhibiting competition. Moreover, the Central Bank controlled new entrants in the banking sector and entry was practically unattainable except by way of takeover.(O’Sullivan and Kennedy 2007)

However, the banking system was totally not free from crisis during this period. In 1985, following the collapse of one of Allied Irish Bank’s insurance subsidiary, the Insurance Corporation (ICC) of Ireland, due to poor risk management practices, the government was forced to pump over €500 million into the banking systems to prevent a potential crash. This investment — latter written-off completely — was made despite the crippling level of public debt experienced by the economy during this time (a tale which was repeated 23 years later).

4. Single financial regulator

Subsequent to the ICC debacle, the pace of development of the Irish banking system ‘increased sharply’(Cullen 1998) as the economy spluttered out of its deep recession during the 1980s. Ironically, many of the regulatory provisions which were designed to protect the stability of the Irish

---

\(^3\) Bank of Ireland was the banker to the government until 31 December 1971.

\(^4\) The Department of Finance remained responsible for the bank’s legal framework.
banking system were either removed or relaxed, such as a reduction in liquidity requirements and the removal of explicit sectoral guidelines on credit. (O'Sullivan and Kennedy 2008) Of particular note, the creation of the International Financial Service Centre in 1987—a purpose built tax and regulatory environment for financial institutions—encouraged international investment from foreign banks and changed the profile of the then insular financial sector in Ireland. The government reacted to this change with the enactment of the Central Bank Act, 1989, which extended the Central Bank’s licensing and supervisory powers with respect to business banking and specialist financial institutions.

However, weaknesses in the regime where beginning to surface during the 1990s, specifically related to the relationship between the Central Bank and its regulated entities. Of note, concerns emerged following a government inquiry into widespread use of off-shore bank accounts in the mid-1990s. The report found that the Central Bank failed to effectively monitor and supervise these accounts and allowed the practice to become endemic in Irish banking. Moreover in 1999, a government committee highlighted that the Central Bank did little to prevent the widespread evasion of deposit interest retention tax (DIRT) over a 12 year period. The committee concluded that the relationship between the Central Bank and banks was ‘particularly close and inappropriate’, suggesting that the Central Bank was perhaps ‘too mindful of the concerns of the banks, and too attentive to their pleas and lobbying’. (Committee of Public Accounts 1999) The Competition Authority of Ireland noted that a new regulatory structure was now required to restore what it suggested was the ‘shattered’ public confidence in banking oversight (as cited in Westrup 2005).

In response to these problems and in accordance with a wider better regulatory agenda, (OECD 2001; High Level Group on Regulation 2002) the Irish government reformed institutional arrangements in financial regulation through the enactment of the Central Bank and Financial Services Authority of Ireland Act in 2003. The Act created a single financial regulator: the Irish Financial Services Regulatory Authority (IFSRA). IFSRA was given prudential and conduct of business responsibility for all financial institutions previously regulated by the Central Bank, the Department of Enterprise, the Office of the Director of Consumer Affairs or the Office of the Registrar of Friendly Societies.
The new regulator was kept as a constituent part of the Central Bank’s organisational superstructure, but given the ‘independence necessary for the successful regulation of the Irish financial sector’. (McCreevy 2003) At the launch of IFSRA, the then Minister of Finance, Charlie McCreevy, highlighted the importance of ‘sufficient integration’ of the new regulator within the Central Bank to allow for ‘a continuous exchange of information and expertise’ between both authorities. Westrup (2005) argues that this ‘curious hybrid’ structure was effectively a compromise attempt at implementing the main recommendation of the McDowell Report, which suggested the regulator should be a ‘completely new organisation outside, and independent of, the Central Bank’. (McDowell Report 1999) The report outlined that there was no significant international precedent for creating a regulator with such a large range of responsibilities within a conventional Central Bank, suggesting that ‘no EU member state has done so or proposes to do so’. Many suggest that the reason that the government decided to keep regulatory functions within the Central Bank’s legal superstructure was due to intense lobbying from the Central Bank and the Department of Finance, following the publication of the McDowell Report. (Westrup 2005) The Central Bank’s desire to keep prudential regulation as a core part of its mandate was also related to developments in 1999, when the European Central Bank assumed responsibility for the administration of monetary policy in Ireland and the rest of the eurozone. As such, the possibility of the authority losing a large chunk of both monetary and prudential functions would have severely diminished its power, making it a bit-player in financial economic policymaking.

In relation to regulatory philosophy, the adoption of principles-based regulation (PBR) by IFSRA was broadly welcomed by both banks and industrial bodies. (O’Sullivan and Kennedy 2010) Under PBR, the regulator set out basic principles or desirable outcomes in a number of different areas such as solvency, governance and consumer protection. It then allowed banks to decide how best to align their corporate objectives with pre-defined regulatory outcomes. The rationale being, in part, that it’s better for consumers to have a relatively small amount of rules followed in spirit rather than a large number of legislative provisions which are followed to the letter but not the spirit. However, the effective application of principles-based regulation (PBR) requires a high degree of mutual trust
between participants in the supervisory framework. (Black 2008) It does not work with individuals ‘who have no principles’, according to the chief executive officer of the British financial regulator. (Sants 2009) Its system of governance relies on self-observing and responsible organisations within its framework. (Parker 2002) The Irish banking crisis of 2008 and its spill-over effects have raised serious question over principle-based regulation, particularly given prevailing business and cultural environment.

With regard to responsibilities, the government mandated IFSRA to achieve three main goals, firstly, to protect consumer interests, secondly, to build up a regulatory framework that supports the stability of the banking system, and finally, to foster the development of a competitive banking industry in Ireland. Despite concerns that the interests of banks would always trump that of consumers, government policy dictated that ‘the public and consumer interest are at one’, and that ‘prudential supervision and consumer protection are complementary, not conflicting’ and the new unified consumer protection structure would be effective in address the principle-agency concerns in banking. (Harney 2003)

Regarding stability and macroprudential supervision, both the Central Bank and the financial regulator had ‘shared’ yet undefined responsibilities to maintain financial stability and develop measures to deal with the negative events of banking crises. (Central Bank 2007) Possibly this novel ‘belts and braces’ approach to financial stability was designed to create extra redundancy in the regulatory system. However, this was contrary to the principles of effective bank supervision by the Bank for International Settlements (Settlements 1997) which state that ‘an effective system of banking supervision will have clear responsibilities and objectives for each agency involved in the supervision of banks’. In reviewing the Northern Bank crisis in the UK, Keasey and Veronesi (2008) suggested that confusion existed between the three parties responsible for financial stability —HM Treasury, Bank of England and Financial Services Authority—and there was a need for better definition of roles and overall clarity in the future.
Further related to the issue of stability was the regulator’s final goal: fostering a competitive banking environment. IFSRA suggested that its PBR regime would encourage new entrants into the marketplace and increase competition, which would in turn improve levels of service provision in the banking system. (IFSRA 2008) The regulator’s reform agenda together with a relaxing of entry requirements to the Irish Payment Clearing System did facilitate the entry of a number of international banks, including: Halifax Bank of Scotland, Rabobank and Danske bank. However, advancing competition, if preformed incorrectly, can damage the stability of the financial sector by forcing domestic banks to engage in riskier operations to compensate for an erosion in profit margins. For instance, while reviewing the Nordic banking crisis in the early 1990s, many commentators (Englund 1999; Jonung 2008) suggested that the process of liberalisation in financial markets during the 1980s, was one of the main causal elements of the subsequent banking crisis. Recently, a report commissioned by the Irish government outlined that the ‘entry of foreign banks intensified competition in lending’ which in turn lowered credit standards. (Regling and Watson 2010) Moreover, in August 2010, following the withdrawal of Halifax Bank of Scotland from the Irish business and retail market, the Irish Minister of Finance suggested that foreign banks contributed to the ‘frenzy’ in lending during the later stages of the property bubble. (McGee 2010)

5. Credit bubble

As noted in the previous section, principles-based regulation gives credit institutions discretion to expand their operations and exercise judgement with little regulatory oversight. Irish banks applied this discretion during the 2000s to exercise a profit maximisation approach by ramping up their credit outflows. This is evident from the excessive appreciation in the aggregate loan book and asset base of Irish banks from 2004 to 2007, compared to the previous 54 years (Figure 1). The majority of this expansion was property related, either through the financing of commercial developments or by the provision of mortgage credit to the personal sector. Increases in these sectors were atypical and vastly outstripped others areas of lending, such as in the agricultural or manufacturing sectors, where growth in credit remained relatively incremental during this period.
The euphoria surrounding property lending was supported by a number of factors, such as full employment, favourable planning laws, a tax system which was biased towards home ownership and property development, and historically low and even negative real interest rates. (O'Sullivan and Kennedy 2010) Banks funded lending through disproportionately high borrowing from the interbank lending markets, as their deposit accounts could not keep pace with the huge growth in lending they experienced. More worryingly, amid aggressive competition, and pressures to maintain growth levels, the terms associated with lending were loosened to widen the pool of potential customers. For example, with regard to mortgage finance, 5 per cent of the total stock of mortgage lending in 2004 related to 100 per cent, by 2007 this increased to 15 per cent. Similarly, the amount of loans greater than 31 years increased in this time period from 10 to 33 per cent, with the size of mortgages greater than €300,000 growing from 7 to 23 per cent of the total stock of mortgage lending. (O'Sullivan and Kennedy 2010)

**Figure 1**: Total assets and resident private credit for retail Irish clearing banks (resident), 1948-2007.
While these practices increased the Irish banks’ profitability, their fortunes became inextricably intertwined with the property sector, resulting in greater vulnerability to market cycles, both nationally and internationally. In retrospect, Ireland was experiencing an old-fashioned asset bubble during this period. The link between asset prices and its fundamental value became detached, resulting in considerable yield compression. For example, in 2006, commercial rents had risen by 5.7 per cent, compared with a rate of capital appreciation of 23.1 per cent. Moreover, the structure of the Irish economy had become increasingly dependent on the construction sector during the 2000s, and by 2006 construction output represented 24 per cent of gross national income,\(^5\) as compared with an average ratio of 12 per cent in Western Europe. By the second quarter of 2007, construction accounted for over 13 per cent of all employment (almost 19 per cent when those indirectly employed are included), and generated 18 per cent of tax revenues. (Gurdgiev 2011)

Unperturbed, Irish banks maintained that the concentration of credit risk in Irish commercial and domestic property was justified, given the prevailing economic conditions in the mid-2000s. They continued to finance property developments, with some banks almost doubling their loan book between 2005 and 2007, believing that ‘the fundamentals in the Irish and UK economies were strong’ and its borrowers where ‘well capitalised’ and had ‘robust cash flows’. (Anglo Irish Bank 2008) The Irish government, for its part, continually defended the practices of banks, the state of the property market and the banking system and failed to take any corrective action during the bubble, believing that ‘the Irish banking system is well capitalised and it is in a healthy state’. (Cowen 2008) The Central Bank’s appraisal of the state of the Irish banking system was presented in its 2007 financial stability report (FSR), where it concluded that Irish banks were ‘appropriately capitalised’ and ‘solvent’ and the system was well placed ‘to cope with emerging issues’. (Central Bank 2007) Despite financial turbulence the US subprime mortgage market during mid-2007, it indicated that banks’ ‘shock-absorption capacity’ were ‘sufficient’ to deal with heightened problems in financial

---

\(^5\) Gross national product is a better indicator of Ireland’s real economic activity given the large prevalence of foreign companies (relative to Irish firms with foreign subsidiaries) who export high valued added goods and services from the economy.
markets. (Central Bank 2007) Additionally, through in-house stress testing the Central Bank determined that the Irish banking system remained ‘well placed’ to ‘withstand adverse economic developments’ in the short-to-medium term, notwithstanding international financial market fragility. Its sister agency, the financial regulator, formed a similar prognosis. In September 2008, following the state guarantee, its chief executive officer Patrick Neary suggested ‘by any estimate’ the Irish banking system is ‘so well capitalised compared to any banks anywhere across Europe’ that it could ‘absorb any loans or any impairments’. (Neary 2008)

6. Regulatory failure and government intervention

However, in early 2007, residential property prices started falling for the first time in over 15 years amid growing signs that the Irish property market, which was of such importance to the Irish banking system, was overvalued. The correction in the domestic property market has been severe, with two-year (2007-2009) peak-to-trough capital depreciation of 24 per cent and 49 per cent in private and commercial property sectors, respectively. (Permanent TSB and ESRI 2009) This contributed to a 7.25 per cent contraction in the gross domestic product in 2009, one of largest experienced by a developed country since the great depression, following a fall of 3 per cent in 2008. (Central Bank 2009)

Initially, in the new climate, developers were finding it difficult to sell property and meet their debt obligations, as their highly leveraged property loans were built around fast-exit strategies. Consequently, banks saw a significant increase in credit defaults and the prospect of billions of euros of impairments and bad debt charges was anticipated (Credit Suisse 2008). The balance sheets of Ireland’s banks were damaged by their exposure to property-related lending. When the property bubble fully burst in 2008, Irish banks were highly exposed. Events were further exacerbated, following the collapse of Lehman Brothers in the United States in mid-September 2008, and the freezing of money markets — a critical element of short-term finance for Irish banks. Interbank rates were set soaring and banking system was seeing substantial outflows of deposits with heightened volatility in funding.
In light of growing concerns about access to credit, the health of its loan book and a potential run on Irish banks, the Irish government decided to issue a guarantee scheme in September of 2008 equivalent to four-times its annual gross domestic product. A series of subsequent policies have been implemented to nationalize, recapitalize, and reformat the banks since 2008, including the establishment of a national asset management agency to oversee the management of good and bad loans taken on by Ireland’s wayward banks on behalf of the taxpayer, while issuing government-backed bonds to help shore up banks’ balance sheets.

As a result of successive government support — allied to the budget deficits associated with running a pro-cyclical taxation and expenditure mix — public debt has increased threefold from 2007-2010, placing considerable pressure on the country’s balance sheet (Table 1). In fact, Ireland’s debt levels, which were only 28 per cent of gross national income in 2007, grew in three years to over 114 per cent of gross national income by the end of 2011. In the most optimistic scenario, Ireland’s general government debt is projected to stabilize at 108% of GDP by 2014.

Much of this increase in public debt is due to government support of the banking system; bank bailouts alone accounted for 14.5 per cent of nominal GDP in 2009 and 32 per cent of nominal GDP in 2010. In particular, Anglo Irish Bank, Irish Nationwide Building Society (INBS), and the Educational Building Society have required €30.9 billion in ‘promissory notes’. These interest rates are pegged to the interest rates on an Irish 10-year bond at the moment. The promissory notes currently represent the only debt the Irish government can possibly negotiate down in conjunction with the European authorities in order to lessen the debt burden.

Table 1: Ireland's Assets and Liabilities at the end of 2010

<table>
<thead>
<tr>
<th>Assets</th>
<th>€bn</th>
<th>Liabilities</th>
<th>€bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Cash</td>
<td>16.2</td>
<td>E. Government securities/borrowings</td>
<td>116.5</td>
</tr>
</tbody>
</table>

While, promissory notes are not, strictly speaking, government debt, they are treated as such by the European Statistical Agency (Eurostat). They are debt vehicles issued by the Central Bank of Ireland, and the liability for these notes falls on the individual issuing State. The promissory note repayment structure calls for government borrowing of €3.1 billion plus interest and other capital payments each year to repay these notes over a 10-15 year period at varying interest rates.
The real economy has been hit-hard by the banking crisis. There has been a collapse of private credit into the economy, as banks, suddenly unable to access interbank funding, and dependent on liquidity from the ECB to remain nominally solvent, deleverage. Lack of access to credit has forced small and medium-sized firms to downsize their operations. Unemployment has grown from 4.6% in 2007 to 14.4% in November 2011. Over 55% of those unemployed are long term unemployed (greater than 12 months). Domestic price levels have fallen for 9 successive quarters, especially in the private sector.

As a result of the precarious position of its balance sheet, continuing concerns about the true health of its banking system (in particular the residential mortgage books of the two ‘pillar’ banks — Allied Irish Banks and Bank of Ireland), and wider-concerns about the eurozone, markets have become closed to Ireland. The government was left with two options: balance government expenditure and revenues in a single year by decreasing expenditure by more than €19 billion, or seek a loan facility from the European Union (EU) and International Monetary Fund (IMF).

The government choose the latter option and in November 2011 accepted an international loan facility which will add to the country’s national debt in the future. The loan facility is worth €85 billion over a
three- to four-year period. The facility takes €22.5 billion from the International Monetary Fund, €17.7 billion from the European Financial Stability Fund, controlled by the European Central Bank, €22.5 billion from the European Financial Stability Mechanism, controlled by the European Commission, with €17.5 billion euros from Ireland’s cash reserves (€5 billion) and national pension reserve fund (€12.5 billion). In addition, the UK have pledged €3.8 billion, Denmark and Sweden have pledged €400 million and €600 million respectively. Each of these different ‘pots’ of loanable funds comes through the IMF’s with an interest rate. The EU/IMF loan facility attaches stringent ‘conditionality’ measures to be implemented to receive further tranches of capital. The current set of measures include bringing the budget deficit to within 3 per cent of a primary balance by 2015, various supply side measures, and a privatization programme of State assets.

In summary, a failure of regulation in the Irish case is self-evident. These consequences have been far-reaching and the regulator’s three main goals – to establish a robust and solvent banking system, to protect the interests of customers and to create a competitive banking environment – have not been reached. Particularly, IFSRA failed to curtail the lending boom, which saw the loan book of Irish banks double in only five years (2000–2005). This despite the established evidence between lending booms and banking crises.(Caprio and Klingebiel 1996) Consequently, the banking system is currently on ‘life support’(Honohan 2009) and has required the injection of billions of euros of government funds to keep it solvent.

In relation to IFSRA’s second goal, safeguarding the interests of bank customers, many individuals have been left vulnerable due to a failure in financial regulation. Nearly one in three households are facing negative equity in 2011.(ESRI 2009) Heightened bank lending has also driven private sector credit to 215 per cent of Gross Domestic Product, one of the highest in the Organisation for Economic Cooperation and Development (OECD) area, which is likely to stunt any future recovery in the economy. The Financial Regulator’s own consumer watchdog, the Consultative Consumer Panel, recently announced that most financial consumers had ‘lost substantial sums of money’ due to the ‘inadequate’ performance of the regulatory regime.(Consumer Panel of IFSRA
2009) It pointed to the failure of IFSRA ‘to dampen the bubble’ by introducing measures such as
greater capital provision for riskier lending. Governance was viewed as existing ‘entirely within
regulated institutions’ and not the shared responsibility of the Financial Regulator, Central Bank,
Department of Finance and the banks themselves.(Consumer Panel of IFSRA 2009)

Finally, in terms of ‘fostering a competitive’ banking system, the exit of important foreign players in
light of limited opportunities for growth in Ireland (i.e. Halifax Bank of Scotland), together with the
government’s decision to close-down several domestic players, has severely damaged competition.
Preferential treatment of the two pillar banks (in terms of economic policy and government support)
makes it difficult to envisage new foreign entrants in the short to medium term. In fact, the foreign
banks which are remaining are generally scaling back their activities and deleveraging their loan
books in Ireland.

7. Conclusion

Rogoff and Reinhart (2010) suggest that following a severe financial crisis, gross domestic product
(GDP) per person falls by an average of 9 per cent in two years, the unemployment rate increases by 7
per cent and house prices fall by approximately one third in real terms and take about five years reach
its nadir. Concomitantly, real government debt grows by an average of 86% in countries afflicted by
financial crises, reflecting a collapse in tax receipts due to a reduction in economic activity. Therefore,
downturns following a banking crisis are typically long and deep.

Ireland’s experiences in 2008 have been much more pronounced. In terms of the economy,
Ireland experienced a cumulative nominal GDP decline of 21 per cent from Q4 2007 to Q3 2010,
while its primary fiscal balance shifted to baseline deficits of 11-12 per cent of GDP in 2009 and
2010. The Irish economy experienced the largest compound decline in GNP of any industrialised
economy over the 2007-2010 period. Moreover, Ireland’s general government debt has increased by
320 per cent over the same period. Until at least 2014, Ireland is reliant on liquidity transfers from the
European Central Bank to fund its banking system, totalling €157 billion at the end of 2010, and loans
from the international community to fund a rescue package of €67.5 billion, to keep its economy ticking over. The Irish state will use €17.5 billion of its own reserves in the rescue. €35 billion been apportioned to recapitalising Ireland’s banks in the coming years, with the remainder plugging the gap between government revenues and expenditures.

Given the scale of the Irish banking crisis and its impact on the stability of the economy, questions have been raised about the failure of its supervisory agencies to recognise the dangers of the Irish banking systems’ over-reliance on the domestic property in the face of continued warnings from the International Monetary Fund (2006) and The Economist (2004) in the mid-2000s. Subsequently, the Central Bank has admitted they did not realise how vulnerable Irish banks were to property price depreciations, blaming an over reliance on the risk management systems used by banks.(Central Bank 2010) A report commissioned by the Minister of Finance indicated that throughout the property bubble, staff at the Central Bank, were not aware of any serious difficulties— let alone insolvency problems— at Irish banks. The newly appointed Governor at the Central Bank, Patrick Honohan, believes that ‘failure was clearly of a systemic nature’ rather than related to any one individual or department. In relation to previous financial stability reports (FSRs), Honohan,(Central Bank 2010) believes that the ‘language of successive FSRs were too reassuring’ and did ‘little to induce the banks…to adjust their behaviour to avoid the threats that lay ahead. With regard to IFSRA, the authority, itself, has accepted its strategic approach to regulation was inappropriate, suggesting that it was constructed in a ‘benign environment’ where many of the current issues where not foreseen (IFSRA 2009). Particularly, its reliance on senior managers and directors to construct appropriate risk management systems and internal controls was ‘misplaced’. (IFSRA 2009) As such, supervisory practice focussed on ‘verifying governance and risk management models rather than attempting an independent assessment or risk’. (Central Bank 2010) In light of these and other failures, the Minister of Finance at the time suggested that the ‘Irish regulatory system badly needs reform’ and that ‘a root and branch review is required’(Lenihan 2009).
As a result of its review, the Minister announced the establishment of a banking commission. The new authority would fuse together both the monetary responsibilities of the Central Bank and the supervisory functions of the financial regulator into a single, standalone agency. The reorganisation of institutional arrangements in financial regulation was initiated to address perceived failings in the regulatory regime, particularly related to the loss of public confidence IFSRA experienced following the crisis, akin (albeit less pronounced) to the loss of confidence the Central Bank experienced following the DIRT enquiry in the 1990s. However, the International Centre for Monetary and Banking Studies (2009) warn against such measures indicating that ‘when a regulatory mechanism has failed to mitigate boom or bust cycles, simply reinforcing its basic structure is not likely to be a successful strategy’. As such, the financial regulator and Central Bank were always closely associated, the government’s new arrangements will simply formalise this relationship. While combining monetary and supervisory functions tends to result in lower instances of systemic banking crisis, the severity of crises tend to be more pronounced compared to a separated regime. (Barth, Caprio et al. 2009) Nevertheless, the banking commission in Ireland is now fully operational with the purpose of restoring public confidence in financial regulation. Financial markets will be watching these developments closely to ensure that the implementation process matches the desired objectives. This is the ultimate test in rebuilding the reputation of the Irish financial supervisory regime and the banking system.
References


Author: K.P.V. O’Sullivan (UL) and Stephen Kinsella (UL)

Title: An institutional architecture for meta-risk regulation in Irish banking. Lessons from Anglo Irish Bank’s Minsky moment

Publication: Journal of Banking Regulation

Available online: 22 June 2011

Date of publication: June 2011

Volume: 12

Pg: 342-355
Abstract

The paper maps the risk management failures within Anglo Irish Bank, showing that, when banks are systemic in nature, poor internal corporate governance within a Minsky credit cycle can lead to destabilising macroeconomic conditions, which may prolong the effects of a credit-induced downturn.

The paper highlights a failure of management at Anglo Irish Bank to establish and measure firm-level risks and develop appropriate internal controls to support a culture of prudent credit management. We propose the adoption of a novel supervisory architecture based on the meta-risk regulatory philosophy, which is designed to strengthen risk management practices at banks.

Keywords: Corporate Governance; Regulation; Banking Crises; Meta-risk regulation; Ireland
1. Introduction

Banking systems are inherently fragile and have been prone to failure since the 16th century. However, since the 1980s, the scale and frequency of these failures has increased, taking its toll on economic growth and public finances. The majority of these boom and bust cycles have been associated with similar characteristics, such as cyclical downturns in output, fluctuations in property prices or the indirectly malign effects of regulatory frameworks. However, the reason why some banks fail and others survive in distressed economic conditions is primarily the product of individual corporate governance practices within financial institutions, particularly in relation to risk management and internal controls.

In 2008, Ireland experienced its own instance of bank failure, culminating in the recapitalisation, and subsequent nationalisation, of Anglo Irish Bank (Anglo). Previously, Anglo’s experiences have been examined in the context of a property crash, international financial crisis or regulatory failure. However, there is a lack of research examining the risk management practices at banks to the failure of the bank in 2008. This paper attempts to address this lacuna by mapping out the supervisory framework in Ireland, and applying this framework to the case study of Anglo Irish Bank during the property boom and bubble. It places Anglo Irish Bank’s behaviour within a Minsky cycle, where the bank moved from a hedged to a speculative to a Ponzi-financed position as a result of its poor corporate governance. To ameliorate against future Minsky cycles, we have proposed an architecture for meta-risk regulation in Irish banking which could result in profound changes in the relationship between regulators and their regulated entities. It includes the creation of risk departments at the financial regulator (Irish Financial Services Regulatory Authority (IFSRA)) and banks as well as the establishment of a financial services risk committee.

The paper is structured as follows. In section 2, we present the theoretical arguments underpinning managerial oversight and present its current framework in Ireland. Section 3 describes and develops the Minskyan framework though case study evidence of Anglo Irish Bank’s practices during the credit bubble in Ireland. Next, in section 4, we introduce an institutional architecture for
meta-risk regulation in the Irish banking system, based on shortcomings exposed in our case study. Finally, section 5 concludes the piece.

2. Managerial oversight theory & practice in an Irish context

The separation between ownership and control in firms may result in agency problems (Berle and Means 1932) and could result in managers exploiting corporate assets for their own individual interests. Although this not a new phenomenon, its theoretical development is relatively nascent. It took the establishment of stock exchanges and the subsequent fragmentation of ownership in the early twentieth century, for agency problems to become more pertinent and, thus, the practice of managerial oversight more relevant. (Monks and Minow 2004) In this new environment, small stakeholders frequently lacked the proficiency to monitor managers. (Levine 2004) Additionally, the large costs associated with the task induced free-rider concerns. (Levine 2004) Despite these concerns and others highlighted by Berle and Mean (Berle and Means 1932) in the 1930s, it was not until the 1970s that corporate governance emerged from its limited existence as just a “province of jurisprudence” to become more mainstream. (Tricker 2000) Some commentators have suggested that the increasingly litigious climate in the U.S.A. during the 1970s, which placed greater responsibility on the part of directors to supervise financial accounts, resulted in an heightened appreciation for corporate governance at boardroom level. (Auerbach 1973)

In the last few decades, Internal mechanisms or corporate governance provisions have been propagated by most firms to protect the interests of their owners. These mechanisms attempt to monitor and evaluate the performance of managers (Grossman and Hart 1980; Shleifer and Vishny 1986; Becht, Jenkinson et al. 2005) and represent a system through which the objectives of a company are outlined and the methods of achieving and monitoring performances are formulated. (OECD 2004) They also include the arrangements in which companies are held to account for a lack of proper corporate oversight. (ASX 2007) The process of realigning the interests of managers with other stakeholders can take many forms, including managerial remuneration packages, internal controls, concentrated ownership structures and the creation of a board of directors. Boards are a critical
element to any corporate governance system, and are required to review and analyse risk management procedures (Ladipo, Nestor et al. 2008) and ensure that these practices are consistent with previously fixed policies and agreements. Benefits accruing from effective internal controls are not just concentrated on the part of small stakeholders and may result in lower equity and debt capital cost for banks, a reduction of labour costs and higher value in products and services from clients. (OECD 2009) However, there are a number of problems in providing effective oversight of managerial actions in the financial system. These problems are mainly due to the “uniqueness” of banks (Andres and Valletlado 2008) and mainly hinge around issues such as complexity and opacity of operations (Prowse 1997; Ciancanelli and Reyes-Gonzalez 2001; Macey and O’Hara 2003; Levine 2004) together with information asymmetries. (Furfine 2001) Moreover, even if a company has designed appropriate internal controls, the board of directors may not always represent the interest of shareholders and be may implicitly “captured” by management.

In light of these concerns, governments have introduced a series of regulations to safeguard the interests of stakeholders by ameliorating the negative effects of information and transaction costs associated with managerial oversight. (Levine 2004) Specifically with regard to financial institutions, they are concerned about the interests of the wider economy, given banks central role in allocating resources, increasing capital formation, stimulating productivity growth and acting as a repository of national savings. (Levine 2004) There are many theoretical arguments expounding the virtues of regulation of senior managers. (Martynova and Renneboog 2009) Greater disclosure in financial statements allocates capital to the best operating corporations where investors can get the highest return on their assets invested. Therefore, if the company conceals information about its performance, a more inefficient allocation of capital is the result, which in turn leads to lower growth in an economy. (Martynova and Renneboog 2009) Secondly, corporate governance regulation forces organisations to adopted better standards of internal governance which results in better risk management strategies for firms. (Becht, Jenkinson et al. 2005) However, the regulator may clash with the interest of stakeholders. For example, the goal of systematic risk on the part of the government may not be consistent with the main goal of shareholders, that of to increase their wealth. Therefore,
the effectiveness of managerial oversight mechanisms may be negated through government interventions, like in the case of deposit insurance schemes which restricts the supervision of depositors. Next, there is well established evidence to suggest that government’s can intervene to maximise their own political motives and not necessarily the interests of society.(Hamilton, Lay et al. 1788; Buchanan and Tullock 1962) Shleifer and Vishny(1998) refer to this as the “grabbing hand” of the government used to promote its own interests, such as diverting credit to politically connected firms,(Levine 2004) rather than using its “helping hand” to reduce the probability of bank failure. This is supported by McCubbins, Noll, and Weingast(1989) who outline that central authorities can act in ways contrary to their statutory objectives due to bureaucratic drift. Finally, some socio-legal scholars,(Breyer 1982) believe that government-backed regulation can lead to a proliferation of unnecessary and complex rules, resulting in over-regulation or verrechtlichung, which can stunt levels of innovation and growth by managers at financial institutions.

In Ireland, managerial oversight in financial institutions is mainly the responsibility of the Irish Financial Services Regulatory Authority (“IFSRA”, “financial regulator”) although, the Office of the Director of Corporate Enforcement (ODCE) and the Irish Stock Exchange have also enforcement and rule-making responsibilities. Since 2000, companies on the Irish Stock Exchange have been required to report on how they applied the British Combined Code of Corporate Governance in their annual report, justifying any instance of non-compliance to their shareholders. The Irish supervisory regime in this area was further supplanted by the British system following the financial regulator’s decision to adopt a principles-based approach to financial regulation in 2003. In principle-based regulation (PBR), an authority sets out basic principles or desirable outcomes in a number of different areas such as solvency, governance and consumer protection and then allows banks to determine the compliance provisions on each of these principles. The objective being, in part, to create a regulatory structure that is not overly bureaucratic and where its regulations are followed in “spirit” and not just the “letter” of a rule.(Black, Hooper et al. 2007) PRB creates a certain degree of flexibility and innovation by allowing managers the responsibility to develop their own compliance ethos within the context of their own market, legislative backgrounds and cultures.(IFSRA 2004) PBR is a type of
decentred regulation (Black 2002), where the state cedes many of its regulatory functions to multiple actors within the system. (Black 2001) Much of the responsibility is transferred to senior managers within the boardroom and the integrity of the regime rests on their behaviour. (Coglianese and Lazer 2003) Moreover, the effective application of principles-based regulation (PBR) requires a high degree of mutual trust between participants in the supervisory framework. (Black 2008) It does not work with individuals “who have no principles”. (Sants 2009) Its system of governance relies on self-observing and responsible organizations within its framework who follow robust risk management practices. (Parker 2002; Power 2007) IFSRA outlined that “ethical behaviour” and “transparency in business dealings” are key attributes expected senior officials in banks in a PBR regime. (IFSRA 2006) However, the Anglo Irish Bank crisis of 2008 and its spill over effects have placed a question over the effectiveness of this type of regulatory philosophy.

3. Anglo Irish Bank’s Minsky moment

Hyman P. Minsky (Minsky 1986) is credited with systemising the somewhat trite observation that creditors become more lax about lending standards during times of stability. The central innovation of his, and other financial fragility models, (Nell 1996; Kindleberger 2005) is that the economic fact, or variable, which explains the collapse of the system after some time is built into the system. Other models of financial fragility typically assume an agency problem, where a market in equilibrium is shocked from its balanced growth path by an adverse run of poor luck on the markets. (Bernanke and Gertler 1990) Instead, Minsky (1986) divided economic units like firms, households, and private banks, into three types: hedge units that can pay principal and interest on any borrowings; speculative units who can pay interest, but have to keep rolling the principal into new loans; and Ponzi units, which cannot even cover the interest, but keep things going by selling assets and/or borrowing more and using the proceeds to pay the initial lender. The key Minskyan (Minsky 1986) insight is that:

“[o]ver a protracted period of good times, capitalist economies tend to move to a financial structure in which there is a large weight of units engaged in speculative and Ponzi finance.”
Modelling an economy in historical time, Minsky showed that profit-seeking firms cycled through hedge, speculative, and Ponzi positions with regard to their assets and liabilities, driven endogenously by the profit motive, which naturally undermines good corporate governance practices in the pursuit of financial innovation. (Minsky 1992) As the economy moves through Mitchell’s phases of the business cycle—the quest for profits, revival, peak, and recession/depression, speculative units will become Ponzi units, and the net worth of previously Ponzi units will quickly evaporate. Consequently units with cash flow shortfalls will be forced to try to make positions by fire-sales. That is likely to lead to a collapse of asset values.

There are five stages in Minsky’s model of the credit cycle: displacement, boom, euphoria, profit taking, and panic. Ireland is currently at the final stage in Minsky’s model at the time of writing. Firstly, a displacement occurs when investors get excited about an event—an invention, such as the Internet, or a war, or an abrupt change of economic policy—something which favours an upswing in investment. Displacement, in the Irish context, can be dated from 1997, during the *Celtic tiger* phase of the economy, which saw unprecedented economic growth, a large inflow of foreign credit, huge increase in domestic demand and high levels of service exports. (O'Sullivan and Kennedy 2010) The Irish government pursued a neo-liberal and market orientated agenda, promoting deregulation, privatisation and the propagation of “pro-business” policies, particularly in the financial sector. It also reduced taxes rates considerably and introduced tax incentives to stimulate home ownership, resulting in a significantly reduced tax intake relative to other European economies. (O'Sullivan and Kennedy 2010) Anglo Irish Bank (Anglo), for its part, pursued a strategy of modest and sustainable growth during this time period, increasing its asset and lending base steadily through organic expansion by funding prudent and commercially sustainable projects.

During the boom phase (1999-2002), there was a sharp increase in investment in the domestic property sector. This investment was based on solid demand and supply fundamentals — increasing population, rising real wages and property price appreciation. Anglo started developing and embedding relationships with key property developers in Ireland by loosening the terms associated
with its credit application process. It changed the nature of commercial banking through its relaxed approach to lending, short decision times on credit application and by delivering exceptional growth to its shareholders. Apart from the deposit market, the bank largely avoided costly retail banking. Although it had a small branch network and employee base, its lending was proportionally much greater than its leading competitors. In 2007, it lent over €67,000 million to the non-financial sector (NFS) or circa €35 million per employee. This compares to €4.4 million per employee lent at Bank of Ireland and €4.9 million per employee at AIB (Table 1).

Table 1: 2007 Selected group statistics on Anglo Irish Bank, Bank of Ireland and Allied Irish Bank (AIB).

<table>
<thead>
<tr>
<th></th>
<th>Anglo Irish Bank</th>
<th>Bank of Ireland</th>
<th>AIB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Branches in 2009 (N)</td>
<td>6</td>
<td>275</td>
<td>268</td>
</tr>
<tr>
<td>Number of employees (N)</td>
<td>1,900</td>
<td>15,952</td>
<td>25,898</td>
</tr>
<tr>
<td>Deposits NFS (€ million)</td>
<td>52,686</td>
<td>66,367</td>
<td>81,308</td>
</tr>
<tr>
<td>Assets (€ million)</td>
<td>96,652</td>
<td>170,406</td>
<td>177,862</td>
</tr>
<tr>
<td>Profits (pre-tax) (€ million)</td>
<td>1,243</td>
<td>1,958</td>
<td>2,508</td>
</tr>
<tr>
<td>Loans and advances NFS</td>
<td>67,076</td>
<td>71,434</td>
<td>127,603</td>
</tr>
<tr>
<td>Cost to income ratio (%)</td>
<td>22</td>
<td>54</td>
<td>51</td>
</tr>
<tr>
<td>Return on Equity (%)</td>
<td>30</td>
<td>23</td>
<td>21.8</td>
</tr>
<tr>
<td>Share price increase (%)</td>
<td>69</td>
<td>24</td>
<td>30</td>
</tr>
</tbody>
</table>

(July 2005-July 2007)
Next, the euphoria stage (2002-2006) can be traced to the recovery of the Irish economy in 2002, following the dotcom bubble crash, when a degree of speculation crept in to the property market. During this period, the European Central Bank pursued a strategy of low interest rates designed to stimulate activity in the German and French economies. (O'Sullivan and Kennedy 2010) However, this resulted in some peripheral economies, like Spain and Ireland, being subjected to historically low or even negative real interest rates from 2000-2007. This had a “dramatic” effect on inflating property prices, as interest rates were “much too low” by the Taylor criterion. (Honohan and Leddin 2006) Notwithstanding, pro-cyclical monetary policy, perceptions of stability conferred by euro membership allowed Irish banks borrow at more favourable interest rates in the wholesale inter-bank markets than otherwise have been the case. (Nelson, Belkin et al. 2010) Additionally, with loss of exchange rate risk, German and French banks with surplus funds, where more willing to provide credit to their Irish counterparts, where they had a better prospect of higher returns than investing in their own domestic economies.

As a result, Irish banks were caught in a perfect storm of cheap credit and in an environment of pent-up demand for property. (O'Sullivan and Kennedy 2010) there was huge expansion in lending (Figure 1). The majority of the expansion was property related, particularly through the provision of mortgage credit to the personal sector (Figure 1). Banks supported the boom aggressively by targeting credit to construction and building firms, relative to other sectors of the economy. As a result, property prices soared, increasing by over 64% from 2002-2006. Supply rushed in to meet this demand with the total stock of house units increasing by over 455,000 during this time period (Figure 2). However, bank’s deposit base could not keep pace with this growth in lending and the bank’s increasingly relied on external funds from the interbank market to finance this expansion. The loan-to-deposit ratio in the Irish banking system grew from 1.19 in 2003 to 1.77 in 2007, one of the highest in
the eurozone. (O'Sullivan 2010) Furthermore, the quality of the loans deteriorated during this time period, in terms of security, type of loans (i.e. great proportion of interest-only loans) and duration. (O'Sullivan and Kennedy 2010)

Figure 1: Non-financial sector lending 1955-2008

![Non-financial sector lending 1955-2008](Image)

*Sources: Central Bank of Ireland Annual Reports/ Monthly Bulletins (1955-2008).*

Figure 2: House Units built in Ireland, 1955-2010.

![House Units built in Ireland, 1955-2010](Image)


Anglo was at the forefront of this surge in lending, its loan book to the non-financial sector increased at an average annual rate of over 31% from 2002-2007 (Figure 3). Approximately two thirds its
lending was in property developments, a tenth in private and business lending with the remaining associated with land developments. (PricewaterhouseCoopers 2009) Its loans were mainly funded, and secured by, assets in markets associated with property booms, particularly in Ireland, Britain and the US. In addition to the bank’s sectoral and geographical concentration, Anglo had 15 customers with loans of in excess of €500 million and close to one third of the bank’s loan book was lent to just 20 customers. (PricewaterhouseCoopers 2009)

Figure 3: Percentage increase in lending in Irish banks, 2001-2008.

Source: Annual Reports from Anglo Irish Bank, Bank of Ireland and AIB (2001-2008).

Next, the profit-taking stage of Ireland’s Minsky cycle (2007) is reflected by Anglo’s exceptional results during the 2000s, peaking in 2007 with a profit of over €1.2 billion, 2064% its profit levels at the start of the boom phase in 1999 (Figure 4). The bank also experienced a huge growth in its asset base, which grew from €25.53 billion in 2003 to €88.67 billion in 2007, or 36% at an annualized growth rate (Figure 4). Honohan (2009) suggests that an annual growth of greater than 20% is unsustainable and a warning sign of unacceptable risk exposure, enhancing the probability of credit quality deterioration. While, Anglo Irish Bank crossed this threshold on several occasions, market sentiment was still strong and in July 2007, its share price peaked at €17.53, giving the bank a market capitalization of over €13.3 billion. This represented an 80% increase in share value and 103% increase in market capitalisation in just two years, much stronger than any other Irish bank.
From 2003, the Irish property market, which was of such importance to Anglo, was overvalued and was showing signs of an asset price bubble, according to the IMF. (2006) The link between asset prices and its fundamental value became detached, resulting in considerable yield compression. The Economist (2004), warned that a crash in the property market would “badly hit the balance sheets” of the main banks in Ireland. Anglo refuted their assessment by continuing to finance property developments, almost doubling its loan book between 2005 and 2007. The bank believed that “the fundamentals” in the Irish and UK economies were “sound” and its borrowers where “well capitalised” with “robust cash flows”. (Anglo Irish Bank 2008)

However, the panic phase commenced in early 2008, following a decline in property prices. (Honohan 2009) The correction in the domestic property market was severe, with two-year peak-to-trough capital depreciation of 24% and 49% in private and commercial property sectors, respectively. This contributed to a 7.25% contraction in the GDP in 2009, the largest experienced by a developed country since the great depression, following a fall of 3% in 2008. (O’Sullivan and Kennedy 2010) The state of the Irish economy has placed a significant strain on Irish banks, particularly hitting Anglo’s property exposed loan book. Since 2008, prospective buyers have been holding off their purchases, instead waiting for prices to reach its nadir and the Irish economy to return to growth. Highly leveraged property loans where built around fast exit strategies and in the new environment of
low sales, property developers where finding it difficult to meet their debt obligations. Anglo Irish Bank saw a significant increase in credit defaults, impairments and bad-charges and confidence in the banking system was under threat.

Following the collapse of Lehman Brothers in mid-September 2008, money markets, a critical element of short term finance, stopped rolling over and interbank interest rates soared. Anglo was particularly susceptible to the liquidity crisis that ensued. Its operations centred on financing long-term illiquid assets through short-term secured funding markets. Given this mismatch and the fact that Anglo had a relatively small deposit base, it was seen by investors and analysts as being particularly reliant on private credit markets. Therefore, when liquidity started to dry up in the summer of 2008, investor confidence diminished which led to significant outflows of free credit balances over a short period. The bank had lost over €5.4bn in deposits in one week alone during September according to a report commissioned by the government in 2008. (PricewaterhouseCoopers 2009) Of particular concern, Anglo saw a sudden and dramatic loss of repo-counterparty confidence, resulting in a considerable hole in its secured funding base. While this source of financing was always susceptible to rollover risks, Anglo’s over-reliance on overnight repos to fund less liquid assets proved to be particularly problematic. Looking back over this period, Anglo’s former chairman stated that there was “no money available on global markets”, (Fitzpatrick 2008) the bank was experiencing “substantial outflows and volatility in funding” (Anglo Irish Bank 2008) and on the “brink of collapsing in a matter of days”. (Fitzpatrick 2008) Ultimately, fuelled by the firm’s declining stock price and widening credit spreads, and lenders’ unwillingness to provide funding to the bank, the Irish government was forced to issue a blanket guarantee of all debt obligations of the six Irish owned financial institutions. The decision was taken to remove any uncertainty on the part of creditors, depositors and investors. Furthermore, the Minister of Finance suggested that it would make further capital available at a future date to ensure that Anglo Irish Bank remained “a sound and viable institution”. (Lenihan 2008)
To sum up, Minsky (Minsky 1986; Minsky 1992) and, later, Nell (Nell 1996) write of the instability of the economy as a reflection of the instability of the financial institutions which are embedded within the economy. Financial intermediaries such as Anglo Irish Bank in Ireland and abroad had taken on large liabilities with respect to residential and commercial developments, which, it turns out after the boom has passed its peak, turn out to be excessively risky. Because the market for the previously appreciating security on the loan–the property–has disappeared, the banks are faced with assets that are significantly lower in value than their initial valuations. There are different solutions to this problem. The large debts held by the banks are either converted into bad debts, or sold off, or the bank is allowed to fail as a going concern, or the bank and its debts are nationalised or partly nationalised. The reaction of the government at each stage has been entirely rational, from the point of view of self interested political elite. From a public policy and governance perspective, there are several turns of the wheel yet to run in this crisis.

Anglo’s funding position over the decade from 2000 to 2009 emphasises its dependence on international money markets. Like all operating firms, or at least a significant fraction of such firms, modern banks are highly interdependent – that is, that the returns they will make on capital they borrow depend on whether other operating firms are able to obtain financing. The success of a given operating firm in turn depends crucially on other firms’ operations to the extent that the other firms provide necessary inputs of cheap capital in the case of Anglo, or that the other firms, or those generating income from them, provide demand for the firm’s outputs--loans to the Irish construction sector. This interdependence makes the decision of any given financial institution whether to lend to a given operating firm depend not only on the financial institution’s assessment of the firm’s project but also on its expectations as to whether other financial institutions will lend money to other operating firms. Thus within a Minsky cycle, a highly interwoven Ponzi-financed unit (or set of units) can cause a system-wide contagion.
4. An institutional architecture for meta-risk regulation in Irish banking

In models of bureaucracy or politics, risky behaviour for the conglomerate entity can emerge from stable environments in consequence of the actions of individual players, who become emboldened to test the limits traditionally placed on their behaviour by convention, ethics, regulation or law. This is similar to the way in which firms can be endangered by risky behaviour emanating from the CEO, from the ranks of management, or through a failure of labour-management relations. Such a pattern was evident following the recent global crisis, where a failure of board members in some banks to establish and measure firm-level risks and design inappropriate internal controls, resulted in the requirement for government intervention. (Senior Supervisors Group 2009) While many of these failings can be applied to the Irish context, the Anglo Irish debacle represented a serious failure in governance procedures and has raised legitimate questions on whether nonexecutive directors were able to exercise independent and effective judgement, particularly in relation to risk management procedures.

The Irish regulator (IFSRA) itself has accepted that its overall strategic approach to regulation during the property bubble was inappropriate, suggesting that it was constructed in a “benign environment” where many of the current issues where not foreseen. (IFSRA 2009) Particularly, it indicated that its “reliance” on management and boards at banks to effectively construct risk management systems and internal controls was “misplaced”. (IFSRA 2009) A failure in this regard was particularly evident in the Anglo Irish Bank case study presented in this paper, where the fragmented nature of risk management structures resulted in few directors understanding the overall risk management position of the organisation. Therefore, IFSRA is likely to take greater control of the risk management practices at banks in the future, supporting non-executive directors to manage corporate risk and business model development. With this in mind, the objective of reforms in this paper will be centred on strengthening the competence of the regulator and senior personnel at banks to detect and forestall occurrences of imprudent risk-taking, particularly during Minsky cycles. This type of regulatory function is not new and has been captured in the literature in terms such as
reflexivity, partnership, smart regulation and meta-regulation (Lipschutz 2005). While these terms broadly encompass the same ideals of a sophisticated and collaborative form of regulation, the unique properties of meta-regulation make it particularly interesting for the banking system.

According to Parker, (2002) meta-regulation is defined as the “regulation of self-regulation”. Modifying this definition slightly to include risk, with meta-risk regulation the regulating authority moves from monitoring individual risks at firm-level to evaluating the firm’s risk management system. The idea of regulation as a proxy for risk management is well established in the literature, particularly with the growth of the risk society (Beck 1992). In a MRR regime the objective is to improve the self-monitoring capacity of entities by monitoring and evaluating their self-regulatory techniques. The regulator ceases to be concerned about direct controls and proscribing the behaviour of firms, and rather shifts to a proceduralization strategy, encouraging firms to put in place “processes and management systems which are then scrutinised by regulators or corporate auditors” (Gunningham and Grabosky 1998). Therefore, in this approach the monitoring of compliance at the organisation is undertaken in three layers: firstly, at an operational level in the workplace, next, by the directors of the company, and, finally, by the regulator itself (Parker 2002).

In the recent past, regulators have come to recognise the potential of steering the internal controls of an organisation “as a means of securing control indirectly” (Scott 2003) to achieve regulatory objectives. Thus, meta-risk regulation has been adopted across in many areas such as in the taxation, energy and health sectors. Additionally, in financial services, regulators have had a quasi meta-risk regulatory responsibility since the introduction of the Basel II accord in 2004. Under this framework, banks were free to impose their own minimum capital requirements based on their risk management systems, but only subject to prior, and continual, monitoring by the regulator of these risk management systems. However, the Irish banking crisis and the subsequent liquidity problems is clear evidence that IFSRA failed in this regard. This is not surprising as IFSRA never saw itself as a meta-risk regulator and lacked the institutional arrangements to effectively act as one. To support this transition, we propose a new institutional architecture for meta-risk regulation in Irish banking (see
Figure 5), which hinges around the relationship between two newly established institutions, the Corporate Risk Department (CRD) at banks and the Risk and Compliance Unit (RCU) at the Financial Regulator.

Figure 5: A new architecture for meta-risk regulation in Irish banking.

Firstly, in relation to a bank’s internal structures and in line with OECD recommendations (OECD 2009) and a recent policy paper on significant influence functions from the British Financial Services Authority, (Financial Services Authority 2010) we propose the establishment of a Corporate Risk Department (CRD) in banks, responsible for formulating firm-wide internal controls and risk management procedures. The CRO should report to the firm’s governing body on its risk exposures, highlighting the extent to which the risks identified match the firm’s overall risk appetite and tolerance. Risk Committees should provide advice directly to the firm’s governing body on risk strategy. It should also be responsible for the oversight of stress and scenario testing and the supervision of the day-to-day risk management and oversight arrangements of the executive. Specifically, the CRD should seek to control and monitor risks in banks by, for example, introducing mechanisms to limit excessive balance sheet growth. The CRD would represent a nexus merging the operations of the risk management, credit and internal audit departments into a horizontally integrated department. This should help the department make more informed decisions, with greater access to

---

**Key**

Information Flows —— ——
New Institutional Structures

---

Financial Regulator

- Consumer Dept.
- Prudential Dept.
- Risk & Compliance Unit
- Supervisory Depts.

Banking Institution

- Board of Directors
- Corporate Risk Dept.
- Executive Committee
- Operational Depts.

Financial Sector Risk Committee

---

Board of Directors
information. The adoption of this approach will also improve accountability in the organisation, as only one department would be responsible for monitoring risks.

However, establishing these institutional arrangements will not work unless the transmission of information was through effective channels. Therefore, we believe that the head of the CRD, the Chief Risk Officer (CRO), should have a seat on the board of directors. This should facilitate the proper dissemination of information in the boardroom of Irish banks. The role should be fully independent from the operational units with sufficient authority to access all relevant data (see Figure 5). The Regulator should work closely with this department to make sure firm-level internal controls are operating effectively. Also, it should have to approve any appointment to the CRO position, ensuring that she has the appropriate level of skills and experience to conduct their function affectively. While the close relationship between the CRD and the financial regulator could result in the regulator being “captured” by its regulated entity, this phenomenon is not unique to MRR and has been show to exist across the strata of regulatory regimes, from command and control (C&C) to self regulation. (Baldwin and Cave 1999) In fact, a government report in 1999 (Committee of Public Accounts 1999) showed that the previous C&C regime propagated in Irish banking system resulted in a relationship between the regulator and banks being “particularly close and inappropriate” and suggested that the regulator was perhaps “too mindful of the concerns of the banks, and too attentive to their pleas and lobbying”.

With regard to the regulatory authority, the government is planning to establish a Banking Commission which incorporates both the monetary responsibilities of the Central Bank and the supervisory functions of IFSRA. However, in order to institutionalise a move towards meta-risk regulation, it is necessary to superimpose a new Risk and Compliance Unit (RCU) above the market and banking supervision departments. This should be effective, as administrations in the United States, UK and Germany are using institutional reforms as the favoured method to change the incumbent regulatory philosophy, particular in relation to consumer protection. Additionally, the Federal Reserve chairman, Ben Bernanke, (2009) has indicated the need for institutional reform in this
area, particularly in relation to internal communication in the regulating authority together with strong risk-management practices propagated in good times as well as bad.

Under the new regulatory regime, it is envisaged that the RCU would be responsible for monitoring and evaluating the risk management systems promulgated by each CRD, given the bank’s compliance requirements. The regulator would use its core current prudential indicators, such as capital and liquidity ratios, as a basis for its analysis. Information from both the market and bank supervision departments would feed directly into the RCU on a daily basis, to ensure that it had adequate knowledge to evaluate risks. If a particular CRD was not performing its risk management functions effectively, the RCU at the Financial Regulator should have the power to step in and introduce temporary command and control measures, until the system is corrected.

Finally, institutional arrangements should be established where the various stakeholders associated with risk management can interact with each other. The implications of the near failure of Anglo Irish Bank in 2008 indicate that Irish banks depend on each other and a failure of one institution could have serious repercussions on the stability of the entire banking system.(O'Sullivan and Kennedy 2010) Internationally, this type of symbiotic relationship was also evident following the collapse of Barings Bank in 1995 and the crisis in confidence in derivative trading that ensued. In response to this, J.P. Morgan, the largest derivative trading house at the time, decided to publish its own proprietary risk management model to help smaller companies with less sophisticated systems to manage their risk. Braithwaite(2003) argues that J.P. Morgan understood it was in “a community of shared fate”. To formalise a similar community in risk management, we propose that a Financial Sector Risk Committee (FSRC) should be established, chaired by the Financial Regulator (or the prudential department at the new Banking Commission). While banks’ risk management systems can be a source of competitive advantage for firms, mitigating against systematic vulnerabilities in the financial system should override competitiveness concerns. As with internet browser platforms (such as Mozilla Firefox), the movement towards sharing underlying codes usually results in better functioning systems. This could also be applicable to the banking sector, as the sharing of risk
management systems would create greater scrutiny and, through feedback and consultation, help identify and fix any problems associated with particularly risk management practices. It should also foster greater international confidence in the Irish banking system, if the risk management procedures promulgated by banks are in line with best practice. Members of the FSRC would include the CROs from each bank, officials of the Department of Finance and the Central Bank, and the compliance auditors. It should meet on a quarterly basis, providing stakeholders the opportunity to disseminate risk management policies and engage with supervisory authorities, as well as set down best practice codes and rules. Additionally, this forum would give banks the opportunity to learn from each others’ mistakes, which is essential for any smart regulatory regime. (Gunningham and Grabosky 1998)

However, the success of this type of arrangements rests with the senior officials at the banks themselves and whether they are willing to move from a more combative relationship with their competitors to one in which promotes mutual co-operation. The 2008 international financial crisis should have changed the dynamics in the banking system, particularly with the semi-nationalisation of most banks. It is important that the government uses its significant stake in most banking institutions in Ireland to promote such an arrangement to develop.

5. Conclusion

In 2003, the Irish financial regulator (IFSRA) was established to build a robust and solvent banking system and protect the interests of customers. (IFSRA 2006) However, following the credit crunch and the contraction in the domestic economy in 2008 (European Commission 2009), the Irish banking system is currently on “life support”. (Honohan 2009) The rising cost of supporting Anglo, in particular, poses a “very serious problem for the economy”, according to the Irish Minister of Finance, (Carswell 2010) at a time when the Irish economy has experienced its worst decline in economic growth since its independence in 1921 and has had to seek international assistance in the form of a €67.5 billion multi-lateral loan from the International Monetary Fund and the European Stability Fund. It must now deal with the consequences of the imprudent and high risk lending practices that fuelled the property bubble and resulted in super-normal profits. Its capital base has
been destroyed and years of steady progress and integrity have been eroded in a few years. So far, the government has been forced to issue a guarantee scheme, recapitalise Bank of Ireland and AIB, nationalise Anglo Irish Bank and establish National Management Asset Agency, to cleanse the banks of its non-performing assets. The cost of Anglo Irish Bank alone is likely to exceed €30 billion, according to the Government’s most recent estimates.

The evidence presented in this case study demonstrates a failure of the regulator and Anglo Irish Bank to manage their risk management responsibilities. However, the growing regulatory consensus towards centrality and the jettison of management-based regulation needs to be challenged, in the interest of competition, innovation and in the future interests of society and the banking system as a whole. As with most smart regulatory regimes, its success rests on the quality of the banks’ risk management systems and internal controls together with the regulator’s ability to evaluate these systems effectively. (IFSRA 2006) This paper argues that the most effective way the regulator can reduce risks in its industry and buffer bank’s risk management practices is by shifting its regulatory philosophy toward meta-risk regulation. This envisages the regulator working closely with banks to help them identify and understand the risks present in their balance sheets. This is not an easy task and we have presented a number of institutional arrangements which would support such a transition. These arrangements include the creation of a risk and compliance unit at the IFSRA (financial regulator) and a corporate risk department at individual banks to buffer the negative effects of Minskyan cycles. Concomitantly, the creation of financial services risk committee should foster greater risk management practices in the financial system. While these measures are far reaching, the Anglo case study should represent a new era in corporate governance procedures in the country. Through the guarantee, nationalisation and recapitalisation programme, the Irish government has acquired a significant stake in the majority of Irish banks. It has now an obligation to systematically reform governance arrangements and help rebuild the shattered confidence of its banking system.
References


79. Carswell, S. (2009). FitzPatrick Anglo loans were more than €87m. Irish Times. Dublin, Irish Times.


Author: Thomas O’Connor (NUIM), Stephen Kinsella (UL) and K.P.V. O’Sullivan (UL)

Title: Legal protection of investors, corporate governance, and investable premia in emerging markets

Publication: International Review of Economics & Finance

Available online: 25 July 2013

In Press
Abstract

We examine the interaction between the legal protection of investors, corporate governance within firms, institutional development between countries, and investable premia in emerging markets. In a multi country setting and using a novel dataset we find that better-governed firms experience significantly greater stock price increases upon equity market liberalization. We look to see whether well-governed firms in poorly governed countries enjoy an investability premium as measured by Tobin’s q. We find they do. Investors look beyond the seemingly weak country-level governance structures, and focus on corporate governance.
1. Introduction

Over the course of the last two decades, a large literature has examined how the advent of stock market liberalizations have, on the one hand, benefited individual firms, and on the other, the overall economy (see for example Mitton, 2006 for a firm-level analysis, and Bekeart et al., 2001, 2005 who examine the gains from stock market liberalizations at the macro level). In general, this literature suggests that stock market liberalizations confer positive benefits on both firms and the economy. For example, at the firm-level and consistent with international asset pricing models, stock market liberalizations tend to reduce the cost of equity capital as a result of greater risk sharing between domestic and foreign investors. In turn, this lower cost of equity capital manifests in reduced financing constraints (Kim and Signal, 2000), increased investment (Henry, 2000; Mitton, 2006 using firm-level data), and improved operating performance (Mitton, 2006). In turn, Mitton and O’Connor (2011) show that these realized gains impact positively on the value of these firms. Using Tobin’s q to proxy for firm value, they uncover an “investable premium” in the region of 9% for investable firms. At the country (aggregate) level, such reforms have resulted in greater investment and ultimately economic growth (Bekaert et al., 2001, 2005).

However, notwithstanding the positive gains documented in the literature to date, these gains are nonetheless, less than the gains theoretically predicted, since capital flows to these countries have been less than expected. One plausible explanation which attempts to explain the apparent reluctance of foreign investors to invest relates to the threat of expropriation given the nature of corporate governance in emerging markets. The intuition which underpins this argument is simple and is as follows; the greater the likelihood of expropriation, the smaller the flow of equity capital to these countries since foreign investors incur sizable monitoring costs should they invest in firms with poor corporate governance. This line of reasoning leads to a simple testable hypothesis; better-governed firms should reap the largest value gains from stock market liberalizations since foreign investors are

---

Footnotes:

7 Furthermore, the value gains from stock market liberalizations are also much less than the value gains that accrues to firms that cross-list on international exchanges. The “investable premia” documented by Mitton and O’Connor (2011) is smaller than the “cross-listing premia” documented by, amongst others, Doidge et al. (2004, 2009).

8 While corporate governance standards tend to be higher in developed countries, Klapper and Love (2004) and Durnev and Kim (2005, 2007) show that there exists sizable variation in governance standards within emerging market countries. In turn, they show that the extent of this variation is inversely related to the quality of country governance.
much more likely to invest in these firms. Bae and Goyal (2010) test this prediction using a sample of firms in the period immediately surrounding the liberalization of the Korean equity market in 1992. They hypothesize that if expropriation risk in part explains the smaller than expected gains from liberalizations, then holding country governance constant (as their analysis focuses on a single country), and accounting for cross-sectional differences in corporate governance practices across Korean firms, then the largest post-liberalization value gains should accrue to better-governed firms. Using a variety of measures to capture the governance practices of Korean firms, this is in fact what they find. In this paper, we account for cross-sectional differences in corporate and country governance, and examine how their interaction can explain the value gains from stock market liberalizations.

Specifically, in this paper we examine the interaction between the legal protection of investors, corporate governance within firms, institutional development between countries, and “investable premia” in emerging markets. The aim of the paper is to extend the approach of Bae and Goyal (2010) to examine the effect of differences in corporate governance within firms on their valuation in emerging markets. We generalise the findings of Bae and Goyal (2010), who looked only at South Korea, to a multi-country setting using a novel dataset, and largely confirm their insight that better-governed firms experience significantly greater stock price increases upon equity market liberalization.

We go a step further than Bae and Goyal (2010), and deepen that insight by looking to see whether well-governed firms in poorly governed countries enjoy an “investability premium” as measured by Tobin’s q, following Mitton and O’Connor (2011). The intuition behind our paper is simple: firms with good corporate governance structures, but in countries with lower levels of foreign investment or weak institutions should have premia attached to them, as they will flourish in their respective markets, especially with the help of outside capital injections and foreign expertise. In turn, this premium should be larger for these firms than for comparable firms from countries with high-quality institutions. Recent evidence suggests that this is in fact the case (Durnev and Kim, 2005; and
Thus, a priori, we would expect that if foreign investors place a large premium on good governance and place an even larger premium when country governance is weak, then better-governed firms from countries with poor governance should enjoy the largest “investable premia”. We find that they do. Our findings suggest that investors look beyond the seemingly weak country-level governance structures, and focus on firm-level corporate governance. As such, our findings are consistent with some recent empirical and survey evidence which suggests that firm-level and country-level governance can substitute for one another in emerging markets and that good corporate governance is more highly valued when country governance is poor (Durnev and Kim, 2005; Chen et al., 2009; and McCahery et al., 2010). Finally, our findings are robust to alternative measures of institutional development and corporate governance within countries and between investable firms, which lends some confidence to the analysis. Irrespective of the measure of corporate and country governance employed, we always find that “investable premia” are higher for better-governed firms from countries with poor governance.

The paper begins by carefully describing our data in section 2, moving on to a discussion of our regression models and results in section 3, and concludes with a discussion and suggestions for further work in section 4.

2. Data description

We begin by sourcing an initial sample of all 2,784 firms from the major markets of the IFC Emerging Market Database that were deemed investable at any time between 1980 and 2000. Like Mitton (2006) and Mitton and O’Connor (2011), we measure the openness of a firm’s stock to foreign investors using the “investable” measure provided by the EMDB. The IFC designates a firm as investable if its stock is free from both country-level and firm-level restrictions on foreign investment. It also requires that the stocks have sufficient size and liquidity to be realistically available to foreign investors. We define a firm as investable in a given year if the firm’s stock appears in the IFC investable index by December of that year. As a secondary measure of openness we use the “degree
“open” investable measure, a continuous variable ranging from zero (not open to foreign investors) to one (fully open to foreign investors).

To be included in the final sample, firms must have financial data available in the Worldscope database and satisfy a number of minimum-data requirements, consistent with Mitton (2006) and Mitton and O’Connor (2011). First, firms that become investable in the sample period are required to have financial data available at least one year before and one year after the year in which they are first deemed investable.\(^9\) Second, firms that never become investable are required to have financial data available one year either side of the median year in which firms are first investable in their respective countries. From our initial sample, we lose all firms from the Czech Republic, Egypt, Hungary, Jordan, Morocco, Poland, Russia, Sri Lanka, Slovakia, Venezuela and Zimbabwe due to insufficient financial data.

Our final sample, outlined in Table 1 consists of 251 investable firms from twenty countries.\(^10\) The total number of non-investable firms is 1,259, which coupled with the investable firms results in a final sample of 1,510 firms. In Table 1, we outline by country, the number of investable (# Inv) and non- investable (# NI) firms, the number of firm-year observations (# Obs), and the total number of firms (# Total). The number of sample firms per country varies significantly, ranging from a minimum of 8 in Colombia (Corresponding to 63 firm-year observations) to a high of 223 in Malaysia (Corresponding to 1,671 firm year observations). Korea provides the greatest number of investable firms (56), while Indonesia provides just one. The total number of firm-year observations is 9,992. The final sample covers the period from 1980 to 2000. Our original sample is reduced when we employ the closely-held shares (%) variable (from Worldscope) to account for differences in corporate governance across firms in our analysis. When we do so, our final sample is now comprised of 5,500 firm-year observations in total, and 201 investable firms. In this reduced sample, Colombia no longer contributes any investable firms.

---

\(^9\) There are firms in the final sample that become investable, subsequently become de-investable and investable once again. We require data to be available prior to their initial investable date.

\(^10\) They are Argentina, Brazil, Chile, China, Colombia, Greece, India, Indonesia, Israel, Korea (Republic), Malaysia, Mexico, Pakistan, Peru, Philippines, Portugal, South Africa, Taiwan, Thailand, and Turkey.
Table 1 also presents three key dates for each country: the first year in which sample firms in each country are designated investable (First Inv); the first year in which a closed-end country fund is available for the country (Country Fund); and the first year in which a sample firm in the country cross-lists in the United States as an American Depositary Receipt (First ADR). The latter two refer to our desire to control for the potential confounding effects of “indirect investability” as Mitton (2006) and Mitton and O’Connor (2011) do, by accounting for the possibility that investable firms become investable, not through stock market liberalizations, but through international cross-listings in the U.S., or through the availability of country-funds. Country fund data is sourced from Bekaert et al. (2005) and Patro (2005). All information on cross-listed firms is sourced from the Bank of New York, and cross-referenced with information from Deutsche Bank, JP Morgan, the New York Stock Exchange, and NASDAQ. We take great care in order to identify a firm’s initial listing. To do so, we consult the historical records from the Bank of New York (since the currently available on-line records refer to a firm’s current – not previous/initial - cross-listing). We cross-reference this data with the cross-listing database provided by Citibank. They flag firms that have changed their cross-listing status by including a “successor depositary receipt” data type for all firms. South Africa (18) and Mexico (14) provide the greatest number of cross-listing firms.

We employ Tobin’s q to measure firm value. Tobin’s q is defined here as the book value of debt plus market capitalization divided by the book value of assets. Market value of debt is proxied using its book value counterpart, and the replacement cost of assets as the book value of assets. Book value of debt is calculated as the book value of total assets less the book value of equity. Doidge et al., (2004, 2009), Gozzi et al. (2008), and Mitton and O’Connor (2011) also use Tobin’s q to proxy for firm value in their studies on the valuation effects of international cross-listings, internationalizations, and investability, respectively.

All firm-level financial information is sourced from Worldscope for each year from 1980 to 2000. We control for firm and industry related factors commonly employed in other studies using Tobin’s q. We use the average (geometric) sales growth (inflation-adjusted) over the last two years
and global industry q to account for firm and industry growth, respectively. Based upon the general industry classification codes provided by Worldscope, the (yearly) mean global industry q is calculated as the average q of all global firms within each classification. The general industry classification codes are: 1 (Industrial), 2 (Utility), 3 (Transportation), 4 (Bank/Savings & Loan), 5 (Insurance), 6 (Other Financial). We use the log of sales (inflation-adjusted and in $U.S.), rather than total assets (given the definition of Tobin’s q) to control for firm size. Tobin’s q, sales growth, and firm size are winsorized at the 1 and 99% tails of the distribution to remove the confounding effects of outliers. Finally, we exclude financial firms since these firms are more likely to be valued differently from non-financial firms.

To measure the strength of corporate governance, we use two measures. The first measure of corporate governance is an indicator variable that takes the value of one if the firm is a dual-class share firm (DC), and zero for a single-class share firm (SC).\textsuperscript{11} To classify firms as either SC or DC, we employ the ‘Currently a Multiple Share Company’ from Worldscope. It identifies multiple share companies as “…companies which currently have more than one type of common/ordinary share.”\textsuperscript{12} Our final sample is comprised of 196 single-class and 55 dual-class share investable firms.\textsuperscript{13} Korea (56) and Malaysia (45) provide the greatest number of single-class share investable firms. China, Indonesia, Peru and Thailand provide none. Both Greece and Mexico (11) contribute the greatest amount of dual-class share investable firms to our final sample.

Our second measure of corporate governance, also sourced from Worldscope, is the number of shares held by insiders as a percentage of the total number of shares outstanding. Firms with a larger percentage of closely held shares (as a percentage of total common shares outstanding) are

\textsuperscript{11} Durnev and Kim (2005, 2007) show using CLSA and S&P corporate governance data that in firms where control rights exceed cashflow rights (e.g. dual-class share firms), corporate governance standards tend to be lower in these firms, relative to firms where no such differences (or much smaller differences) exist between control and cashflow rights (e.g. single-class share firms). Consistent with the view, the consumption of private benefits tends to be greater in firms with dual-class shares compared to firms with single-class share structures (DeAngelo and DeAngelo, 1985; Grossman and Hart, 1988, and more recently, Masulis et al., 2009). As a result, dual-class share firms tend to trade at a discount relative to single-class share companies (Lins, 2003; Durnev and Kim, 2005).

\textsuperscript{12} Durnev and Kim (2005) classify DC firms as those whose control/voting rights exceed cash flow rights by at least 10%. Since we do not have access to ownership data, we rely on the Worldscope classification.

\textsuperscript{13} Claessens et al. (2002) and Lins (2003) show that governance problems, arising from dual-class share structures are common in emerging markets.
likely to suffer less from agency conflicts since the incentives of the controlling insiders are likely to better aligned with those of non-controlling minority outsiders. Consistent with this view, Mitton (2002) and Claessens et al. (2002) show how firm profitability and value is greater the larger the ownership (cash-flow) stake held by controlling insiders. In Table 1, we outline the pre-investable level of closely held shares held by the median investable firm. Inside ownership tends to be highest in Pakistan (70.43%) and Turkey (75.72%) and much lower in Mexico (27.36%) and Korea (27.13%).

Finally, we employ a number of different measures to try and capture the level of institutional development in each of our sample of twenty countries. First, we use Kaufmann et al. (2007) institutional development measure. This measure, available on a semi-annual basis from 1996 to 2000, and an annual basis from 2000, is comprised of six components, namely, voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption. We calculate institutional development as the sum of each of these six variables in each year, averaged over the years 1996, 1998, and 2000, in order to coincide with our sample period. We also use Spamann’s (2010) “corrected” anti-director rights index (using 1997 values), the judicial efficiency measure from La Porta et al. (1998), investor protection from La Porta et al. (2006), and a measure of accounting standards from CIFAR (Center for International Financial Analysis & Research). Anti-director rights is an index that aggregates six different shareholder rights and ranges in value from 0 to 6 with 6 as the highest level of protection for minority shareholders. Efficiency of the judicial system is an assessment of the efficiency and integrity of the legal environment as it affects business and ranges in value from 1 to 10, with 10 as the highest level of efficiency. Investor Protection is calculated as the weighted average of disclosure, liability standards, and (original) anti-director rights using principal component analysis. Investor Protection ranges from a low of zero to a high of ten, where higher values correspond to better levels of investor protection. The index of accounting disclosure level is measured in 1995 and is created by examining and rating companies’ annual reports for their inclusion and exclusion of 85 items and ranges from 0 to 100 with 100 as the highest accounting standard. The value of each of these institutional development measures are outlined for each country in Table 2. The bottom row presents the country sample median for each
variable. All figures in bold refer to values of each measure above the sample median. Institutions
tend to be of high-quality in Chile, Portugal, and Taiwan, and much less so in Pakistan and Indonesia.
Based on Spamann’s (2010) anti-director rights index, shareholders enjoy considerable legal
protection in Brazil, Chile, Pakistan, South Africa, and Taiwan (All 5), and much less so in Mexico
(2). The judiciary tends to be most efficient in Israel and Taiwan (Both 10), and least efficient in
Indonesia (2.50). Investor protection is greatest in the Philippines and India. Finally, accounting
standards tend to be greatest in Malaysia and South Africa (Both 79).

3. Regression analysis

This section econometrically explores the relationship between investability, corporate governance,
institutional development (country governance), and firm value. We begin by replicating Mitton and
O’Connor (2011), by first establishing the existence of “investable premia”. Then, we examine how
these “investable premia” vary by level of institutional development, and corporate governance.
Finally, we examine how the interaction of country and corporate governance explain the “investable
premia”. First, and in line with Mitton and O’Connor (2011), we first try to establish a causal link
between investability and firm value. The results are outlined in Table 3. To do so, we estimate a
series of firm- fixed effects regressions of the following form:

\[ \text{Tobin’s } q_{it} = \alpha + \beta X_{it} + \text{Investable}_{it} + \text{Year}_{t} + \text{Firm}_{i} + \epsilon_{it} \]  

Where Tobin’s qit is Tobin’s q for firm i in year t, Xit is a set of firm and industry controls (sales
growth, size, global industry q), and Investable are 0/1 dummies. Yeart and Firmi represent a full set
of year and firm fixed-effects. The coefficient estimates are outlined in Table 3, with t-statistics
calculated using standard errors adjusted for firm-level clustering reported in parentheses underneath
(Petersen, 2009).14

14 We don’t cluster by firm and years (time) since we find no evidence to suggest otherwise i.e. that our residuals are
correlated across firms and time. Thompson (2011) demonstrates how to compute standard errors if clustering on both
dimensions is required.
In column 1 of Table 3, we regress Tobin’s q on the investable dummies alone (time and fixed effects are included). In subsequent columns, we sequentially add firm and industry level control variables. Column 4 presents the coefficient estimates with all firm and industry-level control variables included (and time and firm fixed-effects). In the remaining columns of Table 3, we control for the potentially confounding effects of indirect investability. Since some of our firms are indirectly investable through ADR issuance or through inclusion in a country-fund, we need to separate the value gains from direct investability (equity market liberalizations) from indirect investability (ADR issuance/Country fund inclusion). To do so, we include the investable dummies with either ADR dummies or country fund dummies in the remaining columns of Table 3. In column 5, we add cross-listing dummy variables to column 4. In column 6, country fund data is added to the specification in column 4.

The coefficient estimates on the investable dummies are positive and statistically significant in all regressions, ranging from 0.111 to 0.150, with an average coefficient estimate of 0.128. These findings suggest that in as much as we can control for observable and unobservable differences between investable and non-investable firms, investable firms are worth more than non-investable firms. These findings are in line with Mitton and O’Connor (2011). Furthermore, since the median investable firm has a Tobin’s q of 1.20, this suggests that the act of becoming fully investable causes an average change in value of 10.67% (i.e., (0.128/1.20)*100) for these firms.

When we control for ‘indirect investability’, we find that the coefficient estimates on the investable remain high, and retain their statistical significance. The value gains from becoming investable via equity market liberalizations are distinct from the gains from ADR or country fund issuance.

We document a “cross-listing premium” for Level 2 firm only. For our sample of Rule 144a/Reg S firms, cross-listing only serves to destroy value. Country fund availability enhances firm value. Finally, the control variables tend to be of the correct sign, and statistically significant. Firm value increases with firm and industry growth, while smaller firms tend to be worth more. In the
bottom rows of Table 3, we estimate Eq. (1), but now, we measure openness to foreign investment using degree-open factors, a continuous variable ranging from zero (not open to foreign investors) to one (fully open to foreign investors). The coefficient estimates using the degree-open factors only serve to reinforce the findings just presented. Again, in all specifications, the coefficient estimates on the degree-open factors are positive and always statistically significant. These findings confirm the findings of Mitton and O’Connor (2011).15

4. Investability and Institutional Development

To expand on Mitton and O’Connor (2011), in Table 4 we estimate the impact of investability on firm value by level of institutional development.

Separate regressions are estimated for firms domiciled in countries with high (above-median) and low (below-median) institutional development, based on median figures outlined in Table 2. Mitton and O’Connor (2011) perform a similar analysis in a working paper version of their paper. In their paper, they estimate separate regressions for investable firms by level of financial development. Here, in this paper, we employ a set of variables designed to capture other, and much broader aspects of institutional development. Panel A includes all non-investable firms and investable firms domiciled in countries with either high or low levels of institutional development, as indicated. In Panel B, we only include investable and noninvestable firms of the specified type (e.g. investable and noninvestable firms from high institutional development countries). As a result, the number of firm-year observations is much larger in Panel A.

In columns 1 through 4 of Panel A, we estimate Equation (1) separately for firms in countries with high- and low-quality institutions. The coefficient estimates suggest that investable firms enjoy much larger value gains in countries with low-quality institutions. On average, firm value is much more sensitive to investability (i.e. coefficient estimates of 0.4 versus 0.077, 0.434 versus 0.100, and 0.485 versus 0.027) for these firms relative to their counterparts in countries with high-

15 In the remainder of the paper, we only present coefficient estimates using the investable dummies. Our findings remain unchanged when we also use degree-open factors.
quality institutions. Since the median investable firm has a Tobin’s q of 1.22 in low institutional quality regimes, then investability causes an average increase in value of 36.07% (i.e. (0.44/1.22)*100), or over three and a half times larger for these firms than that for the average firm (i.e. 10.67% (From Table 3) versus 36.07%). For investable firms from high-quality regimes, “investable premia” are much lower. For the median firm, the average “investable premium” is just 5.71% (0.068/1.19)*100), or just over half of the premium experienced by the average investable firm. The results are again robust to the inclusion of measures of indirect investability. Here again, we create separate dummy variables for each different ADR level (Level 1, Level 2, Level 3, and Rule 144a/RegS) and a dummy variable called “Country Fund” to control for indirect investable effects. Consistent with the findings presented in Table 3, the inclusion of ADR and country fund dummies does not significantly change the magnitude, or the significance on the investable dummies. Again, we document a “cross-listing premium” for Level 2 ADRs only, while for Rule 144a/Reg S firms, cross-listing reduces value for firms in both high and low institutional quality regimes. Here also, we find that country-fund availability enhances firm value, echoing and in some sense confirming the insights of Stulz (2007).  

Panel B of Table 4 includes only investable and noninvestable firms both from countries with either high- or low-quality institutions. For brevity sake, we only report the coefficient estimates on the investable dummies (but all firm and industry controls are included). Consistent with the findings presented in Panel A, the coefficient estimates from Panel B suggests that investable firms from countries with low-quality institutions experience much larger increases in value (the coefficient estimates range from 0.731 to 0.759). In fact, when we use degree-open factors to measure openness to foreign investment, we now find that investability has no effect on firm value for investable firms from countries with high-quality institutions; the coefficient estimates are positive, but statistically indifferent to zero. What Panel B does show is that investability greatly enhances the value of firms domiciled in countries with low-quality institutions, and relative to their peers, these firms experience

---

16 Stulz felt that country attributes were still critical to financial decision-making amongst investors in the presence of agency problems. Our work shows this is the case, but finds a more pronounced firm-level effect than Stulz would suggest.

17 The coefficient estimates are also robust to ADR and country-fund inclusion.
even large “investable premia”, than when compared to noninvestable firms in countries with high and low levels of institutional development (Panel A). These findings contrast notably with Bekaert et al. (2005). They show that the largest (economic) growth effects from stock market liberalizations dated using county-specific measures occur in countries with high-quality institutions.\textsuperscript{18} In the next section, we examine whether these “investable premia” accrue to all investable firms from countries with low-quality institution, or whether better-governed firms enjoy the majority of these value gains.\textsuperscript{19} To do so, we must first examine how the “investable premia” vary by the strength of corporate governance.

\textbf{4.1 Investability and corporate governance}

Next we examine how the “investable premia” documented earlier differ by the strength of corporate governance. The intuition is that if better-governed firms reap the largest value gains from becoming investable, then, a priori, we would expect that single-class share firms, and firms with concentrated inside ownership (as measured using closely-held shares as a % of common shares outstanding) would enjoy the largest “investable premia”.

Recent work by Bae and Goyal (2010) and O’Connor (2011) suggest that this is the case. Using the liberalization of the Korean equity market in 1992, the former show that better-governed Korean firms enjoy the largest value gains.\textsuperscript{20} O’Connor (2011) finds likewise using firm-specific

\textsuperscript{18} Our results may not be inconsistent with Bekaert et al. (2005) if the greater investment expected for investable firms from countries with low-quality institutions (caused by stock liberalizations increasing Tobin’s q) does not translate into higher growth rates for these firms. Mitton (2006) does show that investability is associated with higher growth rates, but does not distinguish between firms from different countries.

\textsuperscript{19} In Appendix 1, we estimates of the effect of investability on firm value using the different components of institutional development, namely, the level of voice and accountability, political stability, government effectiveness, regulatory quality, rule of law and control of corruption. In Panel A, we include investable firms of the specified type (e.g. all investable firms in high voice and accountability regimes) and all noninvestable firms. In Panel B, again we include investable firms of the specified type but now only include noninvestable firms from either high or low institutional regimes. Invariably we reach the same conclusions using the components of institutional development.

\textsuperscript{20} They use three measures to capture the different corporate governance practices of Korean firms. They use Chaebol affiliation, the ownership stake of the largest shareholder, and a dividend paying dummy.
measures of equity market liberalizations (i.e. investable dummies), and using firms from 20 emerging market countries. Thus, a priori, we would expect to find the same.

In Tables 5 and 6, we explore the relationship between “investable premia” and corporate governance. In Table 5, we estimate Equation (1), but now separately for single- and dual-class investable firms. Panel A only includes investable firms of the specified type (Single- or dual-class) and all noninvestable firms. Panel B only includes investable and noninvestable firms of the specified type. Hence in Panel B, single-class share investable firms are compared to single-class share noninvestable firms, and dual-class investable to dual-class noninvestable firms. As a result, the number of firm-year observations is greatest in Panel A. The coefficient estimates for single-class investable firms are presented in columns 1 through 4. The corresponding estimates for dual-class firms are presented in the remaining columns of Table 4 (5 through 8). The coefficient estimates from Panel A suggest that only single-class share firms enjoy an “investable premium”. For these firms, the coefficient estimates on the investable dummies are positive and statistically significant, ranging from 0.111 to 0.169 with an average coefficient estimate of 0.144. In turn, the coefficient estimates are robust to the inclusion of firm and industry-wide control variables, cross-listing, and country-fund inclusion. For single-class share firms, the coefficient estimates imply an average change in value from investability of 12.31% (i.e., ((0.152+ 0.169+ 0.111)/3/1.17)*100). In contrast, there are no significant value gains for dual-class share investable firms. While the coefficient estimates are large, and similar in magnitude to those for single-class share firms, they are, in all specifications, statistically indifferent to zero.

Panel B compares single-class (dual-class) share investable firms to single-class (dual-class) noninvestable firms. The notable difference between Panels A and B of Table 5 is that dual-class share firms do enjoy significant value gains from becoming investable, at least when compared to other dual-class noninvestable firms. In turn, when both single- and dual-class investable firms are compared to their peers, dual-class share investable firms do better than single-class share firms (for

---

21 O’Connor (2011) also uses three measures to measure differences in corporate governance practices in emerging market firms. They are a dual-class/single-class share indicator, and two agency costs measures, namely the ratio of sales-to-assets, and operating expenses-to-sales.
example compare 0.131 to 0.275). Together, the findings from Panels A and B suggest that dual-class investable firms do enjoy an “investable premium”, but in turn, it is less than that experienced by single-class share firms. These findings are consistent with Bae and Goyal (2010) and O’Connor (2011).

In Table 6, we further examine the relationship between investability, corporate governance, and firm value using our second measure of corporate governance, namely the percentage of common shares closely-held. Since the incentives of controlling insiders and minority outsiders are likely to be better-aligned (but not always) the greater the ownership (cashflow) stake of the controlling insider, then, all else being equal, foreign institutional investors are likely to invest disproportionately more in these firms once these firms become investable. As a result, we would expect that investable firms, with high pre-investable levels of closely-held shares (as a % of total common shares outstanding) reap the largest value gains from becoming investable. For firms with much lower levels of insider ownership, the level of foreign investment is likely to be much lower, since expropriation risk is much higher, hence resulting in much lower, if any, value gains. The coefficient estimates from estimating Equation (1) for investable firms with high and low pre-investable levels of closely-held shares (as a % of total shares outstanding) are presented in Table 6. Panel A compares high (low) closely-held share investable firms to all non-investable firms. Panel B compares high (low) closely held share investable firms only to other high (low) closely held share non-investable firms. The coefficient estimates are in line with our prior expectations, and with the findings from Table 5. Investable firms with high pre-investable levels of closely-held shares enjoy a large and statistically significant “investable premium”. The coefficient estimates range from 0.142 to 0.153, which suggest that the value gains from becoming investable for these firms range from 9.53% (i.e. (0.142/1.49)*100) to 10.27% (i.e. (0.153/1.49)*100) for the median firm.

In contrast, for investable firms with less concentrated inside ownership, there is no “investable premium”. For these firms, the coefficient estimates on the investable dummies are small, negative, and always statistically indifferent to zero. These findings are, in particular, consistent with
Bae and Goyal (2010). Using cross-sectional regressions of abnormal returns on governance-related variables calculated around the month of the liberalization of the Korean equity market, they show that the abnormal returns are positively related to the equity ownership of the largest shareholder. We show that “investable premia” increase in the level of pre-investable closely-held shares (as a % of total shares outstanding). Overall, our findings suggest that better-governed firms reap the largest value gains from becoming investable. Both single-class share firms (Table 6), and firms with concentrated inside ownership (Table 7) enjoy the largest “investable premia”. Dual-class share firms also gain, but their “investable premia” are much smaller.

4.2 Investability, Institutional Development and Corporate Governance

In addition to the tests undertaken in Bae and Goyal (2010) and O’Connor (2011), we are, given our inclusion of country-level variables able to perform a number of additional tests, not possible in the Bae and Goyal (2010) paper (because it is a single-country study), and not undertaken by O’Connor (2011). These tests centre around analysing whether corporate and country governance complement or substitute for each other. On one hand, if country and corporate governance complement each other, then the “investable premia” should be greatest for firms when both country and corporate governance is strong. If not, and they substitute for one another, better-governed firms in countries where country-governance is weak, should, all else equal, experience the largest value gains. If this is the case, it would suggest that foreign investors value good corporate governance more highly in countries where country governance is weak. In addition, this substitution effect would also imply that poorly-governed firms could substitute poor corporate governance for superior country governance. If this is the case, which would in turn suggest that foreign investors invest primarily based on country and not corporate governance attributes, then poorly-governed firms from countries with high-quality institutions would reap larger value gains that their counterpart from countries low-quality institutions. Hence, if country and corporate governance substitute for one another, this then suggests that both better-governed firms from countries with low-quality institutions, and poorly-governed firms from countries with high-quality institutions would reap large “investable premia”.

220
In Table 7, we take a first look at how corporate and country governance together can explain differences in the value gains from becoming investable. To do so, we undertake the same analysis as that performed in Tables 5 and 6, but now by level of institutional development (country governance). We follow the same convention as laid out earlier by presented two sets of estimates. Panel A includes investable firms of the specified type, and all noninvestable firms. Panel B only includes investable and noninvestable firms of the specified type (e.g. single-class investable and noninvestable firms in high institutional development countries).

The coefficient estimates are presented in Table 7 and suggest the following. First, in countries with high-quality institutions, better-governed firms either no longer enjoy (firms with high pre-investable closely-held shares (as a % of total shares outstanding)), or experience much lower “investable premia” (single-class share firms), relative to better-governed firms from countries with low-quality institutions. In these countries, single-class share firms, and firms with high pre-investable levels of inside ownership enjoy large “investable premia”. In the case of the former, investability is associated with a change in value in the region of 45.58% for the median firm ((0.588/1.29)*100=45.58%), and 82.89% ((1.177/1.42)*100=82.89%) in the case of the former. In contrast, there are smaller gains for single-class share firms (SCS High ((0.091/1.15)*100 = 7.91%), and no significant gains for firms with high pre-investable levels of inside ownership from countries, both from countries with high-quality institutions.

These findings suggest that corporate and country governance substitute for one another; single-class share firms substitute poor country governance for high-quality corporate governance. In turn, while we don’t directly observe the portfolio allocation decisions of foreign investors in each firm, these findings suggest that corporate and not country governance attributes matter more for foreign investors. These findings also confirm the substitute nature of the relationship that exists between corporate and country governance in emerging markets (Durnev and Kim, 2005; Klapper and Love, 2004; Chen et al. 2009). Durnev and Kim (2005) document a positive relationship between corporate governance and firm value in emerging markets, and in turn, show that this positive
relationship is more pronounced in countries with weak legal regimes. Klapper and Love (2004) show likewise, this time using measures of firm performance (Return on Assets). Finally, Chen et al. (2009) show that in emerging markets, firm-level governance and country governance substitute for one another in determining the cost of equity capital. Hence, foreign investors appear to value good (corporate) governance more highly, when it is most required i.e. when country governance is weak.  

Our findings also suggest that this is the case. Foreign investors value better-governed firms highly (see Table 5 and 6), but value better-governed firms from countries with low-quality institutions, the highest (see Table 7). Finally, our findings also contrast notably with the value gains from another aspect of (corporate internationalization), namely international cross-listings. Hope et al. (2007) and Fresard and Salva (2010) show that the value gains from international cross-listing in the U.S. are greater for exchange-traded firms (Level 2 and 3 ADRs) from countries with high-quality institutions. The former show that “cross-listing premia” increase in the quality of home-country (as opposed to host-country) institutions. The latter find that “foreign firm discounts” increase in the quality of home-country institutions. In contrast, we find that provided firms are well-governed, investability confers the largest “investable premia” on firms from low-quality regimes.

As a result, and thus non-surprisingly, we find no evidence to suggest that investable firms can substitute poor corporate governance for superior country governance. For example, using closely-held shares (as a % of total shares outstanding) to measure corporate governance, we find no evidence to suggest that firms with low pre-investable levels of inside ownership (presumably poor governance) from countries with high-quality institutions gain from becoming investable. Irrespective of the quality of home country institutions, there are no “investable premia” for these firms. These findings, and the findings presented for better-governed firms, suggest that corporate, and not country governance, matters most to foreign investors. If this was not the case, then poorly-governed firms from countries with high-quality institutions would reap large “investable premia”. They don’t, although with one exception, the case of dual-class share investable firms.

---

22 Using a sample of developed market firms, Andersen and Gupta (2009) show that corporate governance and country attributes (i.e. financial structure and legal system) complement one another. Better-governed firms are more high valued in market-based/common law country combinations (as opposed to bank-based and civil law countries).
For dual-class firms, the coefficient estimates run contrary to our prior expectations. Dual-class firms from countries with low-quality institutions, and not their counterparts from countries with high-quality regimes, enjoy large “investable premia”. When compared to their dual-class noninvestable counterparts, the former enjoy an “investable premium”. These findings extend our analysis from earlier (see Table 5). They suggest that the “investable premium” that we documented earlier for dual-class firms are the sole preserve of dual-class firms in countries with low-quality institutions. While we don’t try and uncover the sources of these value gains for dual-class firms in this paper, our findings are consistent with recent evidence presented by Flavin and O’Connor (2011). They show that investability is associated with a shift towards the greater use of long-term debt for these firms. Their results imply that the cost of (long-term) debt capital is lower for these firms, once they become investable. This effect, likely coupled with others, may well explain the “investable premia” that we observe for these firms. Along these same lines, Lin et al. (2011) show that borrowing costs are much higher for firms with excess control rights (dual-class share firms), and as a result, dual-class firms predominantly use more short-term debt financing (see Flavin and O’Connor, 2011). Consequently, Lin et al. (2010) find that firms with excess control rights are more financially constrained. In turn, financing constraints serve to partially explain the lower valuations of these firms. Our findings, together with those of Flavin and O’Connor (2011) suggest that investability relaxes the financing constraints of dual-class firms (in countries with low-quality institutions), which in turn, enhances their value. In contrast, dual-class share firms domiciled in countries with superior institutions do not enjoy any value gains. Finally, when both single- and dual-class firms enjoy “investable premia” (both in low institutional quality regimes), single-class share firms still enjoy the larger premia. Thus, when both gain from becoming investable, the hierarchy established in Table 5 remains.

23 In Appendix 2 we undertake the same analysis, but now using the components of the institutional development measure. Almost without exception, we reach the same conclusions.
4.3 Robustness

In Tables 8 and 9, we use alternative measures of institutional development to examine the relationship between investability, institutional development and firm value. In Table 8, we use measures of shareholder rights (using Spamann’s (2010) ‘corrected’ anti-director rights measure (using 1997 values)), judicial efficiency, investor protection, and accounting standards, and estimate Equation (1) for above- and below-median values of each. In Table 9, we undertake the same analysis as that employed in Table 7, but with these alternative measures of institutional development. Together the findings from Tables 8 and 9 are consistent with the findings from Tables 4 and 7.

“Investable premia” are greatest for investable firms from countries with high-quality institutions. On closer inspection, these “investable premia” are greatest for single-class share firms, and firms with high pre-investable inside ownership domiciled in countries with high-quality institutions. We again find that dual-class firms from countries with low-quality countries enjoy “investable premia”.

Finally, and with just one exception, when both single- and dual-class share firms experience positive gains from becoming investable, the gains are greatest for single-class share firms.

5 Conclusion and further work

This paper investigates the relationship between a firm’s corporate governance, the institutional developmental setting in which it finds itself, and the firms’ value. Using a carefully constructed and novel dataset, we extended the approach of Bae and Goyal (2010) to a multi-country setting, and find that their insights on the effect of differences in corporate governance within firms on their valuation in emerging markets do indeed carry over to other countries. We go a step further and apply the methodology of Mitton and O’Connor (2011) to see whether investors care more about the firm’s corporate governance, or the country’s level of institutional development. Using a series of firm fixed-effects regressions, we find a firm’s corporate governance matters more—there is a premium to investing in firms with good governance structures in countries with weak institutions. Our findings are robust to alternative measures of corporate governance and institutional development.
Further work will concentrate on extending the methodology of the paper towards developing nations, and regions within emerging nations.

References


The table reports summary statistics of the sample by country. Invertible dates are taken from the Emerging Markets Database (EMDB). # Obs is the number of firm-year observations, # Inv is the number of investable firms, # NI is the number of non-invertable firms, and # Total is the total number of firms. "Reduced Sample" refers to the number of investable (# Inv) and the number of firm-year observations (# Obs) when we use closely-held shares (%). "Invest & SC" and "Invest & DC" refer to the number of single- and dual-class investable firms. Closely Held Shares (%) is the median pre-invertible % of shares held by insiders in investable firms as a percentage of total common shares outstanding. All information on ADRs is sourced from the Bank of New York, CBOT, NYSE, and NASDAQ. Inv & SC and Inv & DC are the number of single and dual-class investible firms, respectively. The number of ADRs refers to the number of firms with ADRs that also have post-listing financial data. First country fund dates are taken from Raksas, Harvey, and Lundblad (2005) and Patero (2005).
Table 2

Institutional Development/Country Governance Measures

<table>
<thead>
<tr>
<th>Country</th>
<th>VA</th>
<th>PS</th>
<th>GE</th>
<th>RQ</th>
<th>RL</th>
<th>CC</th>
<th>ID</th>
<th>ADR</th>
<th>JE</th>
<th>IP</th>
<th>ADI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>0.273</td>
<td>0.097</td>
<td>0.197</td>
<td>0.582</td>
<td>0.063</td>
<td>(0.176)</td>
<td>1.036</td>
<td>3</td>
<td>6.00</td>
<td>0.479</td>
<td>68</td>
</tr>
<tr>
<td>Brazil</td>
<td>0.182</td>
<td>(0.267)</td>
<td>0.108</td>
<td>0.319</td>
<td>0.237</td>
<td>0.020</td>
<td>(0.091)</td>
<td>5</td>
<td>5.73</td>
<td>0.442</td>
<td>56</td>
</tr>
<tr>
<td>Chile</td>
<td>0.678</td>
<td>0.444</td>
<td>1.136</td>
<td>1.339</td>
<td>1.230</td>
<td>1.354</td>
<td>6.181</td>
<td>5</td>
<td>7.28</td>
<td>0.610</td>
<td>78</td>
</tr>
<tr>
<td>China</td>
<td>(1.440)</td>
<td>(0.151)</td>
<td>0.080</td>
<td>0.110</td>
<td>0.335</td>
<td>0.207</td>
<td>(2.345)</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Colombia</td>
<td>(0.524)</td>
<td>(1.587)</td>
<td>0.167</td>
<td>0.242</td>
<td>0.753</td>
<td>0.581</td>
<td>(3.402)</td>
<td>4</td>
<td>7.29</td>
<td>0.355</td>
<td>56</td>
</tr>
<tr>
<td>Greece</td>
<td>0.921</td>
<td>0.431</td>
<td>0.771</td>
<td>0.779</td>
<td>0.864</td>
<td>0.876</td>
<td>4.342</td>
<td>3</td>
<td>7.00</td>
<td>Low</td>
<td>61</td>
</tr>
<tr>
<td>India</td>
<td>0.236</td>
<td>(0.848)</td>
<td>0.162</td>
<td>0.171</td>
<td>0.266</td>
<td>0.364</td>
<td>(1.042)</td>
<td>4</td>
<td>6.00</td>
<td>0.769</td>
<td>61</td>
</tr>
<tr>
<td>Indonesia</td>
<td>(0.868)</td>
<td>(1.311)</td>
<td>0.431</td>
<td>(0.077)</td>
<td>0.615</td>
<td>(0.884)</td>
<td>(4.186)</td>
<td>4</td>
<td>2.50</td>
<td>0.307</td>
<td>Low</td>
</tr>
<tr>
<td>Israel</td>
<td>0.705</td>
<td>0.856</td>
<td>1.059</td>
<td>1.057</td>
<td>1.114</td>
<td>1.241</td>
<td>4.319</td>
<td>3</td>
<td>10.00</td>
<td>0.594</td>
<td>74</td>
</tr>
<tr>
<td>Korea</td>
<td>0.576</td>
<td>0.190</td>
<td>0.692</td>
<td>0.457</td>
<td>0.772</td>
<td>0.506</td>
<td>2.992</td>
<td>4</td>
<td>6.00</td>
<td>0.355</td>
<td>68</td>
</tr>
<tr>
<td>Malaysia</td>
<td>(0.271)</td>
<td>0.362</td>
<td>0.762</td>
<td>0.548</td>
<td>0.543</td>
<td>0.516</td>
<td>2.460</td>
<td>3</td>
<td>9.00</td>
<td>0.729</td>
<td>70</td>
</tr>
<tr>
<td>Mexico</td>
<td>(0.022)</td>
<td>0.460</td>
<td>0.201</td>
<td>0.458</td>
<td>0.445</td>
<td>0.390</td>
<td>(0.676)</td>
<td>2</td>
<td>6.00</td>
<td>Low</td>
<td>71</td>
</tr>
<tr>
<td>Pakistan</td>
<td>(0.935)</td>
<td>1.267</td>
<td>0.614</td>
<td>0.517</td>
<td>0.695</td>
<td>0.861</td>
<td>(4.889)</td>
<td>5</td>
<td>5.00</td>
<td>0.625</td>
<td>73</td>
</tr>
<tr>
<td>Peru</td>
<td>(0.332)</td>
<td>0.094</td>
<td>0.143</td>
<td>0.530</td>
<td>0.613</td>
<td>0.189</td>
<td>(1.740)</td>
<td>4</td>
<td>6.75</td>
<td>0.686</td>
<td>High</td>
</tr>
<tr>
<td>Philippines</td>
<td>0.247</td>
<td>(0.454)</td>
<td>0.197</td>
<td>0.228</td>
<td>0.177</td>
<td>0.409</td>
<td>(0.662)</td>
<td>4</td>
<td>4.75</td>
<td>0.812</td>
<td>64</td>
</tr>
<tr>
<td>Portugal</td>
<td>1.382</td>
<td>1.212</td>
<td>1.178</td>
<td>1.059</td>
<td>1.206</td>
<td>1.350</td>
<td>7.359</td>
<td>3</td>
<td>5.00</td>
<td>0.574</td>
<td>56</td>
</tr>
<tr>
<td>South Africa</td>
<td>0.830</td>
<td>(0.705)</td>
<td>0.783</td>
<td>0.256</td>
<td>0.127</td>
<td>0.569</td>
<td>1.721</td>
<td>3</td>
<td>6.00</td>
<td>0.599</td>
<td>70</td>
</tr>
<tr>
<td>Taiwan</td>
<td>0.729</td>
<td>0.789</td>
<td>1.055</td>
<td>1.007</td>
<td>0.588</td>
<td>0.824</td>
<td>5.291</td>
<td>5</td>
<td>10.00</td>
<td>0.547</td>
<td>58</td>
</tr>
<tr>
<td>Thailand</td>
<td>0.400</td>
<td>0.285</td>
<td>0.216</td>
<td>0.356</td>
<td>0.535</td>
<td>0.172</td>
<td>1.622</td>
<td>3</td>
<td>6.75</td>
<td>High</td>
<td>66</td>
</tr>
<tr>
<td>Turkey</td>
<td>(0.532)</td>
<td>(1.137)</td>
<td>0.064</td>
<td>0.417</td>
<td>0.049</td>
<td>(0.153)</td>
<td>(1.516)</td>
<td>4</td>
<td>4.02</td>
<td>0.328</td>
<td>58</td>
</tr>
</tbody>
</table>

Country Sample Medians

<table>
<thead>
<tr>
<th>Country</th>
<th>VA</th>
<th>PS</th>
<th>GE</th>
<th>RQ</th>
<th>RL</th>
<th>CC</th>
<th>ID</th>
<th>ADR</th>
<th>JE</th>
<th>IP</th>
<th>ADI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>0.241</td>
<td>(0.361)</td>
<td>0.199</td>
<td>0.437</td>
<td>0.095</td>
<td>(0.165)</td>
<td>0.473</td>
<td>4</td>
<td>6.00</td>
<td>0.384</td>
<td>66</td>
</tr>
</tbody>
</table>

The table reports institutional development measures by country. Figure in Bold refers to measures above the country sample median. Institutional development (ID) is averaged over 1996, 1998, and 2000, and is the sum of Voice & Accountability (VA), Political Stability (PS), Government Effectiveness (GE), Regulatory Quality (RQ), Rule of Law (RL), and Control of Corruption (CC). ADR is Spatafora’s (2010) “connected” anti-director rights index, ID is judicial efficiency, IP is investor protection, and ADI is accounting disclosure index. The Spatafora (2010) “connected” anti-director rights index is not available for China and Indonesia. We assume China is below the sample median, and use the revised anti-director rights index from Djankov et al. (2008) for Indonesia. We also assume that China has below-median values of Judicial Efficiency, Investor Protection, and Accounting Disclosure. We assume Greece and Mexico have below-median values (Low) of Investor Protection, and Thailand above-median (High). For the Accounting Disclosure Index, we assume below-median values for Indonesia and above-median for Peru.
Table 3
Regression estimates of the effect of investability on firm value

<table>
<thead>
<tr>
<th>Investable Dummies</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investable</td>
<td>0.117***</td>
<td>0.120***</td>
<td>0.132***</td>
<td>0.136***</td>
<td>0.150***</td>
<td>0.111***</td>
</tr>
<tr>
<td></td>
<td>(2.27)</td>
<td>(2.58)</td>
<td>(2.89)</td>
<td>(2.79)</td>
<td>(3.12)</td>
<td>(2.54)</td>
</tr>
<tr>
<td>Firm Size</td>
<td>0.011</td>
<td>0.073*</td>
<td>0.073*</td>
<td>0.073*</td>
<td>-0.072**</td>
<td>-0.091**</td>
</tr>
<tr>
<td></td>
<td>(0.33)</td>
<td>(1.84)</td>
<td>(1.86)</td>
<td>(1.86)</td>
<td>(1.83)</td>
<td>(2.45)</td>
</tr>
<tr>
<td>Firm Growth</td>
<td>0.825***</td>
<td>0.630***</td>
<td>0.821***</td>
<td>0.775***</td>
<td>1.016***</td>
<td>1.015***</td>
</tr>
<tr>
<td></td>
<td>(6.11)</td>
<td>(6.15)</td>
<td>(6.14)</td>
<td>(5.77)</td>
<td>(5.33)</td>
<td>(4.96)</td>
</tr>
<tr>
<td>Global Industry Q2</td>
<td>1.060***</td>
<td>1.016***</td>
<td>1.016***</td>
<td>1.015***</td>
<td>1.015***</td>
<td>1.015***</td>
</tr>
<tr>
<td></td>
<td>(5.55)</td>
<td>(5.55)</td>
<td>(5.55)</td>
<td>(5.55)</td>
<td>(5.55)</td>
<td>(5.55)</td>
</tr>
<tr>
<td>Level 1 ADR</td>
<td>0.045</td>
<td>0.045</td>
<td>0.045</td>
<td>0.045</td>
<td>0.045</td>
<td>0.045</td>
</tr>
<tr>
<td></td>
<td>(0.22)</td>
<td>(0.22)</td>
<td>(0.22)</td>
<td>(0.22)</td>
<td>(0.22)</td>
<td>(0.22)</td>
</tr>
<tr>
<td>Level 2 ADR</td>
<td>0.280***</td>
<td>0.280***</td>
<td>0.280***</td>
<td>0.280***</td>
<td>0.280***</td>
<td>0.280***</td>
</tr>
<tr>
<td></td>
<td>(2.89)</td>
<td>(2.89)</td>
<td>(2.89)</td>
<td>(2.89)</td>
<td>(2.89)</td>
<td>(2.89)</td>
</tr>
<tr>
<td>Level 3 ADR</td>
<td>0.062</td>
<td>0.062</td>
<td>0.062</td>
<td>0.062</td>
<td>0.062</td>
<td>0.062</td>
</tr>
<tr>
<td></td>
<td>(0.42)</td>
<td>(0.42)</td>
<td>(0.42)</td>
<td>(0.42)</td>
<td>(0.42)</td>
<td>(0.42)</td>
</tr>
<tr>
<td>Role 144a/Reg S ADR</td>
<td>-0.373***</td>
<td>-0.373***</td>
<td>-0.373***</td>
<td>-0.373***</td>
<td>-0.373***</td>
<td>-0.373***</td>
</tr>
<tr>
<td></td>
<td>(2.50)</td>
<td>(2.50)</td>
<td>(2.50)</td>
<td>(2.50)</td>
<td>(2.50)</td>
<td>(2.50)</td>
</tr>
<tr>
<td>Country Fixed</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>0.992</td>
<td>0.992</td>
<td>0.992</td>
<td>0.992</td>
<td>0.992</td>
<td>0.992</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.039</td>
<td>0.031</td>
<td>0.010</td>
<td>0.010</td>
<td>0.010</td>
<td>0.010</td>
</tr>
<tr>
<td></td>
<td>(0.55)</td>
<td>(0.55)</td>
<td>(0.55)</td>
<td>(0.55)</td>
<td>(0.55)</td>
<td>(0.55)</td>
</tr>
</tbody>
</table>

Degree Open Factors

<table>
<thead>
<tr>
<th>Degree Open</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree Open</td>
<td>0.163***</td>
<td>0.163***</td>
<td>0.175***</td>
<td>0.154***</td>
<td>0.190***</td>
<td>0.150***</td>
</tr>
<tr>
<td></td>
<td>(3.98)</td>
<td>(4.08)</td>
<td>(4.57)</td>
<td>(4.57)</td>
<td>(4.34)</td>
<td>(2.67)</td>
</tr>
<tr>
<td>Controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.041</td>
<td>0.033</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
</tbody>
</table>

The table reports coefficient estimates from firm-fixed effects regressions with t-statistics (absolute value) adjusted for firm-level clustering performed in parentheses underneath the coefficient estimates. The dependent variable is Tobin’s q. Openness to foreign investors is measured using either investable dummies or degree-open factors, respectively. Investable is a dummy variable that is set equal to one in years in which the firm is designated as investable. The degree-open factor ranges from zero (not open to foreign investors) to one (fully open to foreign investors). Firms are deemed investable if its stock is free from both country-level and firm-level restrictions on foreign investment. Firm size is measured as the log of annual sales in real S&P. Firm growth is measured as the difference in total assets over the prior two years. Global industry q is calculated as the average q of all global firms within each industry classification. ADR variables are dummy variables that are set equal to one in years in which the firm has an ADR. Country fixed is a dummy variable indicating the existence of a closed-end country fund in the firm’s country. Also estimated but not reported are a constant, and a full set of year dummies. Statistical significance is denoted by ***, **, * for the 1%, 5, and 10% levels, respectively.
Table 4
Regression estimates of the effect of investability on firm value by level of institutional development

<table>
<thead>
<tr>
<th></th>
<th>Panel A</th>
<th></th>
<th>Panel B</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High Institutional Development</td>
<td>Low Institutional Development</td>
<td>High Institutional Development</td>
<td>Low Institutional Development</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
</tr>
<tr>
<td>Investable</td>
<td>0.077</td>
<td>0.100*</td>
<td>0.027</td>
<td>0.400***</td>
</tr>
<tr>
<td></td>
<td>(1.61)</td>
<td>(1.94)</td>
<td>(0.59)</td>
<td>(2.78)</td>
</tr>
<tr>
<td>Firm Size</td>
<td>-0.082</td>
<td>-0.051</td>
<td>-0.084</td>
<td>-0.074*</td>
</tr>
<tr>
<td></td>
<td>(1.21)</td>
<td>(1.18)</td>
<td>(0.37)</td>
<td>(1.71)</td>
</tr>
<tr>
<td>Firm Growth</td>
<td>0.735***</td>
<td>0.726***</td>
<td>0.606***</td>
<td>0.702***</td>
</tr>
<tr>
<td>Global Industry, G2</td>
<td>1.003***</td>
<td>0.988***</td>
<td>0.986***</td>
<td>1.278***</td>
</tr>
<tr>
<td>Level 1 ADR</td>
<td>-0.129</td>
<td>0.012</td>
<td>0.012</td>
<td>-0.129</td>
</tr>
<tr>
<td></td>
<td>(0.72)</td>
<td>(0.36)</td>
<td>(0.36)</td>
<td>(0.72)</td>
</tr>
<tr>
<td>Level 2 ADR</td>
<td>0.205**</td>
<td>0.300*</td>
<td>0.300*</td>
<td>0.205**</td>
</tr>
<tr>
<td></td>
<td>(1.96)</td>
<td>(1.69)</td>
<td>(1.69)</td>
<td>(1.96)</td>
</tr>
<tr>
<td>Level 3 ADR</td>
<td>-0.025</td>
<td>-0.025</td>
<td>-0.025</td>
<td>-0.025</td>
</tr>
<tr>
<td></td>
<td>(0.19)</td>
<td>(0.19)</td>
<td>(0.19)</td>
<td>(0.19)</td>
</tr>
<tr>
<td>Role H4 vs. Reg S ADR</td>
<td>-0.337*</td>
<td>-0.337*</td>
<td>-0.337*</td>
<td>0.307**</td>
</tr>
<tr>
<td></td>
<td>(1.87)</td>
<td>(1.99)</td>
<td>(1.99)</td>
<td>(1.87)</td>
</tr>
<tr>
<td>Country Fund</td>
<td>0.985***</td>
<td>0.985***</td>
<td>0.985***</td>
<td>0.997***</td>
</tr>
<tr>
<td></td>
<td>(9.94)</td>
<td>(9.94)</td>
<td>(9.94)</td>
<td>(9.94)</td>
</tr>
<tr>
<td>Time Dummies</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td># Obs</td>
<td>9,553</td>
<td>9,553</td>
<td>9,553</td>
<td>9,553</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.015</td>
<td>0.015</td>
<td>0.015</td>
<td>0.010</td>
</tr>
</tbody>
</table>

The table reports coefficient estimates from firm-fixed effects regressions with t-statistics (absolute value) adjusted for firm-level clustering presented in parentheses underneath the coefficient estimates. Separate regressions are estimated for firms domiciled in countries with high (above-median) and low (below-median) institutional development. Panel A includes all non-investable firms and investable firms domiciled in countries with either high or low levels of institutional development, as indicated. Panel B includes only investable and non-investable firms domiciled in countries with either high or low levels of institutional development, as indicated. The dependent variable is Tobin’s q. Openness to foreign investors is measured using integer scale dummies. Investable is a dummy variable that is set equal to one in years in which the firm is designated as investable. Firms are deemed investable if its stock is listed on both country-level and firm-level exchanges on foreign investment. Firm size is measured as the log of assets in local currency. Firm growth is measured as the geometric average real growth in sales over the prior two years. Global industry, g, is calculated as the average g of all global firms within each industry classification. ADR variables are dummy variables that are set equal to one in years in which the firm has an ADR. Country fund is a dummy variable indicating the existence of a closed-end country fund in the firm's country. Also estimated but not reported are a constant, and a full set of year dummies. Statistical significance is denoted by ***, **, * for the 1%, 5%, and 10% levels, respectively.
Table 5
Regression estimates of the effect of inestability on firm value for single- and dual-class share firms

<table>
<thead>
<tr>
<th></th>
<th>Panel A</th>
<th></th>
<th></th>
<th>Panel B</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Single-Class Share Firms</td>
<td>Dual-Class Share Firms</td>
<td></td>
<td>Single-Class Share Firms</td>
<td>Dual-Class Share Firms</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
</tr>
<tr>
<td>Inestable</td>
<td>0.152**</td>
<td>0.169***</td>
<td>0.111**</td>
<td>0.151</td>
<td>0.141</td>
<td>0.155</td>
</tr>
<tr>
<td></td>
<td>(2.82)</td>
<td>(3.16)</td>
<td>(2.12)</td>
<td>(1.16)</td>
<td>(1.31)</td>
<td>(1.39)</td>
</tr>
<tr>
<td>Firm Size</td>
<td>-0.070</td>
<td>-0.069</td>
<td>-0.073*</td>
<td>-0.062</td>
<td>-0.061</td>
<td>-0.103***</td>
</tr>
<tr>
<td></td>
<td>(1.63)</td>
<td>(1.51)</td>
<td>(1.56)</td>
<td>(1.44)</td>
<td>(1.41)</td>
<td>(2.37)</td>
</tr>
<tr>
<td>Firm Growth</td>
<td>0.750***</td>
<td>0.771***</td>
<td>0.674***</td>
<td>0.682***</td>
<td>0.677***</td>
<td>0.681***</td>
</tr>
<tr>
<td></td>
<td>(5.50)</td>
<td>(5.49)</td>
<td>(4.95)</td>
<td>(4.55)</td>
<td>(4.56)</td>
<td>(4.53)</td>
</tr>
<tr>
<td>Global Industry</td>
<td>1.018***</td>
<td>1.010***</td>
<td>0.910***</td>
<td>1.276***</td>
<td>1.230***</td>
<td>1.167***</td>
</tr>
<tr>
<td></td>
<td>(4.65)</td>
<td>(4.60)</td>
<td>(4.34)</td>
<td>(5.66)</td>
<td>(5.31)</td>
<td>(4.96)</td>
</tr>
<tr>
<td>Level 1 ADR</td>
<td>-0.14*</td>
<td></td>
<td></td>
<td>0.296*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.68)</td>
<td></td>
<td></td>
<td>(0.37)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 2 ADR</td>
<td>0.321***</td>
<td></td>
<td></td>
<td>0.296*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2.59)</td>
<td></td>
<td></td>
<td>(1.68)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 3 ADR</td>
<td>-0.065</td>
<td></td>
<td></td>
<td>0.296*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.45)</td>
<td></td>
<td></td>
<td>(0.37)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rule 144a, Reg D ADR</td>
<td>-0.357**</td>
<td></td>
<td></td>
<td>0.405</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2.57)</td>
<td></td>
<td></td>
<td>(1.33)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country Fund</td>
<td>0.945***</td>
<td></td>
<td>1.065***</td>
<td>(5.87)</td>
<td></td>
<td>9.45</td>
</tr>
<tr>
<td></td>
<td>(0.94)</td>
<td></td>
<td></td>
<td>(9.45)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Dummies</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td># Obs</td>
<td>9,523</td>
<td>9,523</td>
<td>9,523</td>
<td>8,100</td>
<td>8,100</td>
<td>8,100</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.010</td>
<td>0.008</td>
<td>0.006</td>
<td>0.012</td>
<td>0.013</td>
<td>0.002</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
</tr>
<tr>
<td>Inestable</td>
<td>0.131***</td>
<td>0.148***</td>
<td>0.099**</td>
<td>0.275*</td>
<td>0.295**</td>
<td>0.250*</td>
</tr>
<tr>
<td></td>
<td>(2.61)</td>
<td>(2.96)</td>
<td>(1.98)</td>
<td>(1.95)</td>
<td>(2.09)</td>
<td>(1.34)</td>
</tr>
<tr>
<td>Time Dummies</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td># Obs</td>
<td>7,001</td>
<td>7,001</td>
<td>7,001</td>
<td>2,001</td>
<td>2,001</td>
<td>2,001</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.019</td>
<td>0.108</td>
<td>0.007</td>
</tr>
</tbody>
</table>

The table reports coefficient estimates from firm-fixed effect regressions with t-statistics (absolute value) adjusted for firm-level clustering presented in parentheses beneath the coefficient estimates. Separate regressions are performed for single- and dual-class investible firms. The dependent variable is Tobin’s q. Openness to foreign investors is measured using investible dummies. Inestable is a dummy variable that is set equal to one in years in which the firm is designated as investible., zero otherwise. Panel A includes all non-investible firms and either single- and dual-class investible firms, as indicated. Panel B includes only single- or dual-class investible and non-investible firms, as indicated. Firm size is measured as the log of annual sales in real U.S. Firm growth is measured as the (geometric) average real growth in sales over the prior two years. Global Industry 2 is calculated as the average 2 of all global firms within each industry classification. ADR variables are dummy variables that are set equal to one in years in which the firm has an ADR of the specified type. Country fund is a dummy variable indicating the existence of a closed-end country fund in the firm’s country. Also estimated but not reported is a constant and a full set of year dummies. Statistic significance is denoted by ***, **, * for the 1%, 5, and 10% levels, respectively.
Table 6

Regression estimates of the effect of investability on firm value by level of closely held shares

<table>
<thead>
<tr>
<th>Panel A</th>
<th>High Closely Held Shares (%)</th>
<th>Low Closely Held Shares (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Investable</td>
<td>0.153**</td>
<td>0.149**</td>
</tr>
<tr>
<td></td>
<td>(1.95)</td>
<td>(1.86)</td>
</tr>
<tr>
<td>Firm Size</td>
<td>-0.200***</td>
<td>-0.100**</td>
</tr>
<tr>
<td></td>
<td>(4.65)</td>
<td>(4.59)</td>
</tr>
<tr>
<td>Firm Growth</td>
<td>0.716***</td>
<td>0.700***</td>
</tr>
<tr>
<td></td>
<td>(4.19)</td>
<td>(4.14)</td>
</tr>
<tr>
<td>Global Industry Q</td>
<td>0.391**</td>
<td>0.404**</td>
</tr>
<tr>
<td></td>
<td>(2.59)</td>
<td>(2.64)</td>
</tr>
<tr>
<td>Level 1 ADR</td>
<td>0.107</td>
<td>-0.64**</td>
</tr>
<tr>
<td></td>
<td>(1.30)</td>
<td>(4.75)</td>
</tr>
<tr>
<td>Level 2 ADR</td>
<td>0.447</td>
<td>0.655***</td>
</tr>
<tr>
<td></td>
<td>(1.30)</td>
<td>(4.77)</td>
</tr>
<tr>
<td>Level 3 ADR</td>
<td>-0.082</td>
<td>0.757***</td>
</tr>
<tr>
<td></td>
<td>(0.85)</td>
<td>(6.50)</td>
</tr>
<tr>
<td>Role 144a/BK &amp; ADR</td>
<td>0.160</td>
<td>0.054</td>
</tr>
<tr>
<td></td>
<td>(0.72)</td>
<td>(0.45)</td>
</tr>
<tr>
<td>Country Fund</td>
<td>0.000***</td>
<td>0.025**</td>
</tr>
<tr>
<td></td>
<td>(4.67)</td>
<td>(2.51)</td>
</tr>
</tbody>
</table>

Time Dummies: Yes Yes Yes Yes Yes Yes

# Obs: 4,732 4,732 4,732 4,807 4,807 4,807

R-Squared: 0.001 0.001 0.001 0.001 0.001

Panel B

<table>
<thead>
<tr>
<th>High Closely Held Shares (%)</th>
<th>Low Closely Held Shares (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Investable</td>
<td>0.159**</td>
</tr>
<tr>
<td></td>
<td>(1.95)</td>
</tr>
</tbody>
</table>
| Time Dummies: Yes Yes Yes Yes Yes Yes
| R-Squared: 0.001 0.001 0.001 0.002 0.001 0.004

The table reports coefficient estimates from firm-fixed effects regressions with t-statistics (absolute value) adjusted for firm-level clustering presented in parentheses underneath the coefficient estimates. Separate regressions are performed by level of closely-held shares. The dependent variable is Tobin’s q. Openness to foreign investors is measured using investable dummies. Investable is a dummy variable that is set equal to one in years in which the firm is designated as investable, zero otherwise. Panel A includes all non-investable firms and investable firms with above- or below-median levels of closely held shares (%), as indicated. Panel B includes investable and non-investable firms with above- or below-median levels of closely held shares (%), as indicated. Firm size is measured as the log of annual sales in real U.S. dollars. Firm growth is measured as the (geometric) average real growth in sales over the prior two years. Global Industry Q is calculated as the average Q of all global firms within each industry classification. ADR variables are dummy variables that are set equal to one in years in which the firm has an ADR of the specified type. Country fund is a dummy variable indicating the existence of a closed-end country fund in the firm’s country. Also estimated but not reported is a constant and a full set of year dummies. Statistical significance is denoted by ***, **, *” for the 1%, 5, and 10% level, respectively.
### Table 7
Regression estimates of the effect of investability on firm value by level of corporate governance and institutional development

| Ownership Structure | Corporate Governance Measures | Closely Held Shares (%) | | | | | | |
|---------------------|-------------------------------|-------------------------|---|---|---|---|---|
|                     | High ID (1) | Low ID (2) | High ID (3) | Low ID (4) | High ID (5) | Low ID (6) | High ID (7) | Low ID (8) |
| Investable          | 0.001** 0.583*** | 0.042 0.244 | 0.051 1.177*** | 0.016 0.118 | 0.032 0.228 | 0.016 0.118 | 0.032 0.228 | 0.016 0.118 |
| Firm size           | -0.005 0.064 | -0.004 -0.062 | -0.014*** -0.105*** | -0.016*** -0.107*** | -0.015*** -0.106*** | -0.016*** -0.107*** | -0.015*** -0.106*** | -0.016*** -0.107*** |
| Firm Growth         | 0.689*** 0.699*** | 0.464*** 0.626*** | 0.515*** 0.559*** | 0.520*** 0.522*** | 0.515*** 0.559*** | 0.520*** 0.522*** | 0.515*** 0.559*** | 0.520*** 0.522*** |
| Global Industry Q   | 1.010*** 1.255*** | 1.251*** 1.253*** | 0.365*** 0.415** | 0.452*** 0.400*** | 0.365*** 0.415** | 0.452*** 0.400*** | 0.365*** 0.415** | 0.452*** 0.400*** |
| Time Dummies        | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| # Obs               | 637 | 7817 | 7847 | 7384 | 4685 | 4126 | 4745 | 4121 |
| R-Squared           | 0.014 | 0.013 | 0.017 | 0.012 | 0.010 | 0.018 | 0.002 | 0.001 |

Panel B

| Ownership Structure | Corporate Governance Measures | Closely Held Shares (%) | | | | | | |
|---------------------|-------------------------------|-------------------------|---|---|---|---|---|
|                     | High ID (1) | Low ID (2) | High ID (3) | Low ID (4) | High ID (5) | Low ID (6) | High ID (7) | Low ID (8) |
| Investable          | 0.050 0.937*** | 0.004 0.739*** | 0.034 1.233*** | -0.058 0.116 | 0.034 1.233*** | -0.058 0.116 | 0.034 1.233*** | -0.058 0.116 |
| Time Dummies        | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Controls            | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| # Obs               | 6,365 | 3,218 | 4,815 | 3,283 | 3,465 | 1,287 | 3,555 | 1,283 |
| R-Squared           | 0.010 | 0.012 | 0.015 | 0.008 | 0.005 | 0.005 | 0.002 | 0.001 |

The table reports coefficient estimates from firm-fixed effects regressions with t-statistics (absolute value) adjusted for firm-level clustering presented in parentheses underneath the coefficient estimates. Separate regressions are performed for single- and dual-class investable firms, and high and low closely held share (%) firms, by level of institutional development. Panel A includes all non-investable firms, and investable firms of the type indicated. In Panel B, only investable and non-investable firms of the indicated type are included. The dependent variable is Tobin’s q. Openness to foreign investors is measured using investable dummies. Investable is a dummy variable that is set equal to one in years in which the firm is designated as investable, zero otherwise. Firm size is measured as the log of annual sales in real U.S. Firm growth is measured as the (geometric) average real growth in sales over the prior two years. Global Industry Q is calculated as the average Q of all global firms within each industry classification. Also estimated but not reported is a constant and a full set of year dummies. Statistical significance is denoted by ***, **, *" for the 1%, 5, and 10% levels, respectively.
### Table 8
Regression estimates of the effect of investibility on firm value using alternative measures of institutional development

<table>
<thead>
<tr>
<th>Panel A</th>
<th>Spannann ADR Index (1997 Values)</th>
<th>Judicial Efficiency</th>
<th>Investor Protection</th>
<th>Accounting Disclosures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High ADR</td>
<td>Low ADR</td>
<td>High JE</td>
<td>Low JE</td>
</tr>
<tr>
<td>Invertible</td>
<td>0.132***</td>
<td>0.271***</td>
<td>0.099*</td>
<td>0.318***</td>
</tr>
<tr>
<td>(2.20)</td>
<td>(2.61)</td>
<td>(1.82)</td>
<td>(2.43)</td>
<td>(1.18)</td>
</tr>
<tr>
<td>Firm Size</td>
<td>-0.008**</td>
<td>-0.004</td>
<td>-0.660</td>
<td>-0.066</td>
</tr>
<tr>
<td>(2.00)</td>
<td>(1.60)</td>
<td>(1.50)</td>
<td>(1.42)</td>
<td>(1.22)</td>
</tr>
<tr>
<td>Firm Growth</td>
<td>0.004***</td>
<td>0.533***</td>
<td>0.769***</td>
<td>0.878***</td>
</tr>
<tr>
<td>(5.69)</td>
<td>(4.31)</td>
<td>(5.16)</td>
<td>(4.37)</td>
<td>(4.81)</td>
</tr>
<tr>
<td>Global Industry Q</td>
<td>0.001***</td>
<td>1.301***</td>
<td>1.041***</td>
<td>1.286***</td>
</tr>
<tr>
<td>(4.61)</td>
<td>(5.69)</td>
<td>(5.27)</td>
<td>(4.97)</td>
<td>(4.66)</td>
</tr>
<tr>
<td>Time Dummies:</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td># Obs</td>
<td>9,503</td>
<td>8,120</td>
<td>9,766</td>
<td>7,867</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.004</td>
<td>0.021</td>
<td>0.012</td>
<td>0.016</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B</th>
<th>Spannann ADR Index (1997 Values)</th>
<th>Judicial Efficiency</th>
<th>Investor Protection</th>
<th>Accounting Disclosures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High ADR</td>
<td>Low ADR</td>
<td>High JE</td>
<td>Low JE</td>
</tr>
<tr>
<td>Invertible</td>
<td>0.140***</td>
<td>0.358***</td>
<td>0.059*</td>
<td>0.280***</td>
</tr>
<tr>
<td>(2.71)</td>
<td>(2.76)</td>
<td>(1.71)</td>
<td>(2.93)</td>
<td>(0.82)</td>
</tr>
<tr>
<td>Time Dummies:</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td># Obs</td>
<td>8,244</td>
<td>1,748</td>
<td>7,817</td>
<td>2,715</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.001</td>
<td>0.146</td>
<td>0.046</td>
<td>0.010</td>
</tr>
</tbody>
</table>

The table reports coefficient estimates from firm-fixed effects regressions with t-statistics (absolute value) adjusted for firm-level clustering presented in parentheses; underestimates the coefficient estimates. Separate regressions are estimated for firms domiciled in countries with high (above-median) and low (below-median) institutional development. Institutional development is measured using either Spannann’s (2010) “corrected” vestigial rights index, judicial efficiency, investor protection, and accounting disclosures index. Panel A includes all non-invertible firms and invertible firms domiciled in countries with either high or low levels of institutional development, as indicated. Panel B includes only invertible and non-invertible firms domiciled in countries with either high or low levels of institutional development. The dependent variable is Tobin’s q. Openness to foreign investors is measured using investible dummy. Invertible is a dummy variable that is set equal to one in years in which the firm is designated as invertible. Firms are deemed invertible if it stock is free from both country-level and firm-level restrictions on foreign investment. Also estimated but not reported are a constant, firm-level controls, and a full set of year dummies. Statistical significance is denoted by ***, **, * for the 1%, 5%, and 10% levels, respectively.
Table 9
Regression estimates of the effect of investability on firm value by level of corporate governance and institutional development

<table>
<thead>
<tr>
<th>Ownership Structure</th>
<th>Corporate Governance Measures</th>
<th>Spannann ADR Index (1997 Values)</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>ADRI</td>
<td>ADRI</td>
<td>ADRI</td>
<td>ADRI</td>
<td>ADRI</td>
<td>ADRI</td>
<td>ADRI</td>
</tr>
<tr>
<td>Investable</td>
<td>0.117***</td>
<td>0.255***</td>
<td>0.017</td>
<td>0.226</td>
<td>0.115</td>
<td>0.329**</td>
</tr>
<tr>
<td>(2.27)</td>
<td>(2.09)</td>
<td>(0.15)</td>
<td>(1.39)</td>
<td>(1.53)</td>
<td>(1.03)</td>
<td>(0.66)</td>
</tr>
<tr>
<td>Time Dummies</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td># Obs</td>
<td>9,303</td>
<td>7,851</td>
<td>7,813</td>
<td>7,900</td>
<td>4,678</td>
<td>4,113</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.004</td>
<td>0.022</td>
<td>0.013</td>
<td>0.014</td>
<td>0.001</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Judicial Efficiency

<table>
<thead>
<tr>
<th></th>
<th>High JE</th>
<th>Low JE</th>
<th>High JE</th>
<th>Low JE</th>
<th>High JE</th>
<th>Low JE</th>
<th>High JE</th>
<th>Low JE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADRI</td>
<td>ADRI</td>
<td>ADRI</td>
<td>ADRI</td>
<td>ADRI</td>
<td>ADRI</td>
<td>ADRI</td>
<td>ADRI</td>
<td>ADRI</td>
</tr>
<tr>
<td>Investable</td>
<td>0.121***</td>
<td>0.360**</td>
<td>0.086</td>
<td>0.255***</td>
<td>0.051</td>
<td>0.926***</td>
<td>-0.008</td>
<td>0.013</td>
</tr>
<tr>
<td>(2.25)</td>
<td>(1.69)</td>
<td>(0.58)</td>
<td>(2.59)</td>
<td>(0.71)</td>
<td>(3.95)</td>
<td>(0.75)</td>
<td>(0.18)</td>
<td></td>
</tr>
<tr>
<td>Time Dummies</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td># Obs</td>
<td>9,306</td>
<td>7,644</td>
<td>7,007</td>
<td>7,704</td>
<td>4,682</td>
<td>4,120</td>
<td>4,739</td>
<td>4,127</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.012</td>
<td>0.010</td>
<td>0.011</td>
<td>0.015</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Investor Protection

<table>
<thead>
<tr>
<th></th>
<th>High IP</th>
<th>Low IP</th>
<th>High IP</th>
<th>Low IP</th>
<th>High IP</th>
<th>Low IP</th>
<th>High IP</th>
<th>Low IP</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC</td>
<td>ACC</td>
<td>ACC</td>
<td>ACC</td>
<td>ACC</td>
<td>ACC</td>
<td>ACC</td>
<td>ACC</td>
<td>ACC</td>
</tr>
<tr>
<td>Investable</td>
<td>0.134</td>
<td>0.152**</td>
<td>-0.107</td>
<td>0.250**</td>
<td>0.037</td>
<td>0.453***</td>
<td>-0.014</td>
<td>0.043</td>
</tr>
<tr>
<td>(1.56)</td>
<td>(2.35)</td>
<td>(0.66)</td>
<td>(1.72)</td>
<td>(0.47)</td>
<td>(2.81)</td>
<td>(1.16)</td>
<td>(0.04)</td>
<td></td>
</tr>
<tr>
<td>Time Dummies</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td># Obs</td>
<td>9,653</td>
<td>8,499</td>
<td>7,749</td>
<td>7,902</td>
<td>4,508</td>
<td>4,223</td>
<td>4,561</td>
<td>4,200</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.023</td>
<td>0.006</td>
<td>0.015</td>
<td>0.005</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Accounting Disclosures Index

<table>
<thead>
<tr>
<th></th>
<th>High ACC</th>
<th>Low ACC</th>
<th>High ACC</th>
<th>Low ACC</th>
<th>High ACC</th>
<th>Low ACC</th>
<th>High ACC</th>
<th>Low ACC</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC</td>
<td>ACC</td>
<td>ACC</td>
<td>ACC</td>
<td>ACC</td>
<td>ACC</td>
<td>ACC</td>
<td>ACC</td>
<td>ACC</td>
</tr>
<tr>
<td>Investable</td>
<td>0.065</td>
<td>0.419***</td>
<td>0.070</td>
<td>0.241**</td>
<td>0.046</td>
<td>0.656***</td>
<td>-0.001</td>
<td>-0.011</td>
</tr>
<tr>
<td>(1.14)</td>
<td>(3.19)</td>
<td>(0.30)</td>
<td>(2.18)</td>
<td>(0.65)</td>
<td>(2.73)</td>
<td>(0.70)</td>
<td>(0.12)</td>
<td></td>
</tr>
<tr>
<td>Time Dummies</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td># Obs</td>
<td>9,250</td>
<td>7,049</td>
<td>7,507</td>
<td>7,844</td>
<td>4,643</td>
<td>4,163</td>
<td>4,732</td>
<td>4,134</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.005</td>
<td>0.020</td>
<td>0.010</td>
<td>0.017</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
</tbody>
</table>

The table reports coefficient estimates from firm-fixed effects regressions with t-statistics (absolute value) adjusted for firm-level clustering presented in parentheses underneath the coefficient estimates. Separate regressions are performed for single- and dual-class investable firms, and high- and low-closely held share (%) firms, by level of institutional development. Institutional development is measured using either Spannann’s (2010) “corrupted” anti-director rights index, judicial efficiency, investor protection, and accounting disclosures index. Panel A includes all non-investable firms, and investable firms of the type indicated. In Panel B, only investable and non-investable firms of the indicated type are included. The dependent variable is Tobin’s q. Openness to foreign investors is measured using investable dummies. Investable is a dummy variable that is set equal to one in years in which the firm is designated as investable, zero otherwise. Also estimated but not reported is a constant, control variables and a full set of year dummies. Statistical significance is denoted by ***, **, * for the 1%, 5%, and 10% levels, respectively.
### Appendix 1

Regression estimates of the effect of investability on firm value by level of institutional development

<table>
<thead>
<tr>
<th>Panel A</th>
<th>Voice &amp; Accountability</th>
<th>Political Stability</th>
<th>Government Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High</strong></td>
<td><strong>Low</strong></td>
<td><strong>High</strong></td>
<td><strong>Low</strong></td>
</tr>
<tr>
<td>Investable</td>
<td>0.147**</td>
<td>0.160**</td>
<td>0.066</td>
</tr>
<tr>
<td>(2.16)</td>
<td>(2.30)</td>
<td>(1.39)</td>
<td>(2.89)</td>
</tr>
<tr>
<td>Time Dummies:</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Controls:</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td># Obs:</td>
<td>2,417</td>
<td>3,134</td>
<td>9,254</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.027</td>
<td>0.003</td>
<td>0.016</td>
</tr>
<tr>
<td><strong>Regulatory Quality</strong></td>
<td><strong>Rule of Law</strong></td>
<td><strong>Control of Corruption</strong></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Investable</td>
<td>0.110**</td>
<td>0.239***</td>
<td>0.100**</td>
</tr>
<tr>
<td>(2.24)</td>
<td>(2.31)</td>
<td>(1.95)</td>
<td>(2.22)</td>
</tr>
<tr>
<td>Time Dummies:</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Controls:</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td># Obs:</td>
<td>2,379</td>
<td>3,244</td>
<td>9,552</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.004</td>
<td>0.022</td>
<td>0.017</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B</th>
<th>Voice &amp; Accountability</th>
<th>Political Stability</th>
<th>Government Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High</strong></td>
<td><strong>Low</strong></td>
<td><strong>High</strong></td>
<td><strong>Low</strong></td>
</tr>
<tr>
<td>Degree Open</td>
<td>0.020</td>
<td>0.200***</td>
<td>0.047</td>
</tr>
<tr>
<td>(0.48)</td>
<td>(2.35)</td>
<td>(1.01)</td>
<td>(2.91)</td>
</tr>
<tr>
<td>Time Dummies:</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Controls:</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td># Obs:</td>
<td>3,470</td>
<td>6,243</td>
<td>6,356</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.091</td>
<td>0.001</td>
<td>0.012</td>
</tr>
<tr>
<td><strong>Regulatory Quality</strong></td>
<td><strong>Rule of Law</strong></td>
<td><strong>Control of Corruption</strong></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Degree Open</td>
<td>0.111*</td>
<td>0.179**</td>
<td>0.069</td>
</tr>
<tr>
<td>(1.31)</td>
<td>(2.41)</td>
<td>(1.59)</td>
<td>(3.26)</td>
</tr>
<tr>
<td>Time Dummies:</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Controls:</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td># Obs:</td>
<td>3,427</td>
<td>4,563</td>
<td>7,369</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.012</td>
<td>0.023</td>
<td>0.011</td>
</tr>
</tbody>
</table>

The table reports coefficient estimates from firm-fixed effects regressions with t-statistics (absolute value) adjusted for firm-level clustering presented in parentheses underneath the coefficient estimates. Separate regressions are estimated for firms domiciled in countries with high (above-medium) and low (below-medium) institutional development, using the components of institutional development. Panel A includes all non-investable firms and investable firms domiciled in countries with either high or low levels of institutional development, as indicated. Panel B includes only investable and non-investable firms domiciled in countries with either high or low levels of institutional development. The dependent variable is Tobin’s q. Openness to foreign investors is measured using investable dummies. Investable is a dummy variable that is set equal to one in years in which the firm is domiciled in investable firms. Firms are deemed investable if its stock is free from both country-level and firm-level restrictions on foreign investment. Also estimated but not reported are a constant, firm-level controls, and a full set of year dummies. Statistical significance is denoted by ***, **, * for the 1%, 5%, and 10% levels, respectively.
### Appendix 2

Regression estimates of the effect of investability on firm value by level of corporate governance and the components of institutional development

<table>
<thead>
<tr>
<th>Corporate Governance Measures</th>
<th>Ownership Structure</th>
<th>Closely Held Shares (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Single-Class Shares</td>
<td>Dual-Class Shares</td>
</tr>
<tr>
<td></td>
<td>High VA</td>
<td>Low VA</td>
</tr>
<tr>
<td></td>
<td>(1) (2)</td>
<td>(3) (4)</td>
</tr>
<tr>
<td><strong>Invertible</strong></td>
<td>0.208**</td>
<td>0.143**</td>
</tr>
<tr>
<td># Obs</td>
<td>4,255</td>
<td>3,899</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.025</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td>High PS</td>
<td>Low PS</td>
</tr>
<tr>
<td></td>
<td>(1) (2)</td>
<td>(3) (4)</td>
</tr>
<tr>
<td><strong>Invertible</strong></td>
<td>0.064</td>
<td>0.427***</td>
</tr>
<tr>
<td># Obs</td>
<td>9,569</td>
<td>7,783</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.013</td>
<td>0.014</td>
</tr>
<tr>
<td></td>
<td>High RQ</td>
<td>Low RQ</td>
</tr>
<tr>
<td></td>
<td>(1) (2)</td>
<td>(3) (4)</td>
</tr>
<tr>
<td><strong>Invertible</strong></td>
<td>0.120**</td>
<td>0.321***</td>
</tr>
<tr>
<td># Obs</td>
<td>9,084</td>
<td>9,070</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.005</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td>High RL</td>
<td>Low RL</td>
</tr>
<tr>
<td></td>
<td>(1) (2)</td>
<td>(3) (4)</td>
</tr>
<tr>
<td><strong>Invertible</strong></td>
<td>0.118**</td>
<td>0.550**</td>
</tr>
<tr>
<td># Obs</td>
<td>9,373</td>
<td>7,819</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.016</td>
<td>0.010</td>
</tr>
<tr>
<td></td>
<td>High CC</td>
<td>Low CC</td>
</tr>
<tr>
<td></td>
<td>(1) (2)</td>
<td>(3) (4)</td>
</tr>
<tr>
<td><strong>Invertible</strong></td>
<td>0.127**</td>
<td>0.393***</td>
</tr>
<tr>
<td># Obs</td>
<td>9,375</td>
<td>7,779</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.006</td>
<td>0.016</td>
</tr>
</tbody>
</table>

The table reports coefficient estimates from firm-fixed effect regressions with r-statistic (absolute value) adjusted for firm-level clustering presented in parentheses underneath the coefficient estimates. Separate regressions are performed for single- and dual-class investible firms, and high and low closely held share (%) firms, by level of institutional development using the components of institutional development. Panel A includes all non-invertible firms, and invertible firms of the type indicated. In Panel B, only invertible and non-invertible firms of the indicated type are included. The dependent variable is Tobin’s q. Openness to foreign investment is measured using invertible dummies. Invertible is a dummy variable that is set equal to one in years in which the firm is designated as invertible, zero otherwise. Also estimated but not reported is a constant, control variables and a full set of year dummies. Statistical significance is denoted by ***, **, * for the 1%, 5, and 10% levels, respectively.
Annex II: Other publications

Book chapters

  http://www.amazon.co.uk/Understanding-Irelands-Economic-Crisis-Prospects/dp/184218198X
- Corporate Governance convergence in Europe: Implications for emerging financial markets (with S. Kinsella), in S. Boubaker and D. Nguyen (Eds.), Corporate Governance in Emerging Markets: Theories, Practices and Cases, Springer Verlag, forthcoming 2013,

Conferences

- Counting the cost of EU bank recapitalisation, presented at Frontiers of Empirical Finance and Macroeconomics, University of Limerick, Ireland on 24 November 2011, Frontiers of Empirical Finance and Macroeconomics
- Regulation and Default: Prosaic Solutions for Ireland (with S. Kinsella), presented at Financial Crisis of Two Halves: Banking and Sovereign Debt, University of Warwick, Coventry, UK on July 2011, Financial Crisis of Two Halves: Banking and Sovereign Debt

Forums and blogs

- Deleveraging in the Eurozone (with S. Kinsella), VoxEU, 17 December 2011,
  http://www.voxeu.org/article/deleveraging-eurozone
- Financial Regulatory Reform, Jornal de Negócios, 22 December 2011,


Invited articles


Peer reviewed articles

  http://www.emeraldinsight.com/journals.htm?articleid=1876048&show=abstract

  http://www.ifo.de/portal/pls/portal/docs/1/1193076.PDF