OECD Corporate Governance Working Papers No. 8

Who Cares? Corporate Governance in Today's Equity Markets

Mats Isaksson,

Serdar Çelik

https://dx.doi.org/10.1787/5k47zw5kdnmp-en

OECD

OECD CORPORATE GOVERNANCE WORKING PAPERS

OECD Corporate Governance Working Papers provide timely analysis and information on national and international corporate governance issues and developments, including state ownership and privatisation policies. The working paper series is designed to make select studies by the OECD Corporate Governance Committee, OECD staff members and outside consultants available to a broad audience.

The papers are generally available only in their original language, English or French, with a summary in the other if available.

The opinions expressed in these papers are the sole responsibility of the author(s) and do not necessarily reflect those of the OECD or the governments of its member countries, unless otherwise noted.

Comment on the series is welcome, and should be sent to either corporate.affairs@oecd.org or the Corporate Affairs Division, OECD, 2, rue André Pascal, 75775 PARIS CEDEX 16, France.

OECD CORPORATE GOVERNANCE WORKING PAPERS
are published on www.oecd.org/daf/corporateaffairs/wp

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

© OECD 2013
Applications for permission to reproduce or translate all or part of this material should be made to: OECD Publishing, rights@oecd.org or by fax 33 1 45 24 99 30.

Abstract

Who Cares?
Corporate Governance in Today's Equity Markets

By Mats Isaksson and Serdar Çelik*

There are two main sources of confusion in the public corporate governance debate. One is the confusion about the role of public policy intervention. The other is a lack of empirical knowledge about the corporate landscape where rules are supposed to be implemented and the functioning of today's equity markets, where voting rights and cash flow rights are traded. To mitigate some of this confusion, this paper provides both an analytical framework for the role of public policy and a description of the empirical context that influences the conditions for that policy. It underlines the importance of focusing on the overall economic outcome and, in particular, how rules and regulations impact the conditions for companies to grow and create value by accessing public equity markets. In terms of the empirical context, we point to fundamental changes in the functioning of equity markets that may call for a fresh look at the economic effectiveness of corporate governance regulations. Among other things, we document a dramatic shift in listings from developed to emerging markets over the last decade, which means that concentrated ownership at company level has become the dominant form of ownership in listed companies worldwide. We also discuss whether the lack of new listings of smaller companies in developed markets is related to excessive regulatory burdens and unintended consequences of a decade of profound stock market deregulation. The discussion about listings illustrates that corporate governance rules and regulations do not only affect companies that are already listed. From a policy perspective, it is equally important to assess the implications for unlisted companies that may, in the future, require access to public equity markets for growth and job creation. We also document how the lengthened and ever more complex chain of intermediaries between savers and companies may influence the efficiency of capital allocation and the willingness of investors to take an active long-term interest in the companies that they own. It is shown that institutional investors are a highly heterogeneous group and that their willingness and ability to engage in corporate governance primarily depend on the economic incentives that follow from their different business models, investment strategies and trading practices. We provide examples of how regulatory initiatives to increase shareholder engagement may have unintended consequences, and note that the diversity and complexity of the investment chain can render general policies or regulation ineffective.

JEL Classification: G30, G32, G34, G38
Keywords: capital and ownership structure, corporate governance, initial public offerings, institutional investors, shareholders

* This paper was produced by Mats Isaksson and Serdar Çelik, Corporate Affairs Division, OECD Directorate for Financial and Enterprise Affairs. The authors would like to thank their colleagues in the OECD, delegates to the OECD Corporate Governance Committee and the participants in the project on Corporate Governance, Value Creation and Growth for their valuable comments. They would also like to thank the Capital Markets Board of Turkey, the Karl-Adam Bonnier Foundation and Stiftelsen Företagsjuridik whose financial support has contributed to making this work possible.

TABLE OF CONTENTS

INTRODUCTION 6

PART I CORPORATE GOVERNANCE AND PUBLIC POLICY 7

1.1. The rationale for public policy 7
1.2. Corporate governance, investment and economic growth 8
1.3. The unique role of equity 9

PART II ACCESS TO CAPITAL AND PRIMARY EQUITY MARKETS 10

2.1. Primary equity markets in OECD countries 10
2.2. Global primary equity markets 11
2.3. The primary equity market in the United States 13
2.4. The primary equity market in the United Kingdom 14
2.5. Primary equity markets in emerging markets 15
2.6. Secondary offerings 17
2.7. Delistings and share buybacks 18
2.8. Explanations for the recent trends in primary equity markets 20
2.8.1. The demand for equity 20
2.8.2. The supply of equity 23
2.8.3. Cyclical and structural factors 24
2.9. Policy responses to the initial public offerings crisis 25

PART III EFFICIENT ALLOCATION AND DEVELOPMENTS IN THE SECONDARY EQUITY MARKETS 27

3.1. Who are the owners? 28
3.2. Changes in market structure and trading practices 30
3.2.1. Fragmentation in equity markets 30
3.2.2. High frequency trading 31
3.2.3 Exchange-traded funds 32
3.3. Issues and policy reactions 33
3.3.1. Misalignment of incentives 33
3.3.2. Lack of confidence, crowding out and the use of primary markets 34

PART IV DEVELOPMENTS IN SHAREHOLDER MONITORING AND ENGAGEMENT 38

4.1. Different types of shareholder monitoring 38
4.2. Different ownership categories and monitoring 42
4.2.1. Pension funds, mutual funds and insurance companies 44
4.2.2. Alternative institutional investors 46
4.3. Obstacles to monitoring 48
4.4. Shareholder incentives for monitoring 49
4.4.1. The concept of fiduciary duty 50
4.4.2. The “market” for shareholder co-operation 51

REFERENCES 53

Tables

Table 3.1. Estimated share of trade volume 31

Figures

Figure 2.1. Primary equity market trends in OECD countries 11
Figure 2.2. Global trends in primary equity markets 12
Figure 2.3. Global shift in equity markets 13
Figure 2.4. Trends in primary equity markets in the United States 14
Figure 2.5. Trends in primary equity markets in the United Kingdom 14
Figure 2.6. Trends in primary equity markets in emerging markets 15
Figure 2.7. Contribution to global market capitalisation growth 16
Figure 2.8. Global secondary public offering trend 17
Figure 2.9. Number of delistings 18
Figure 2.10. Factors behind the recent trends in primary equity markets 20
Figure 2.11. Corporate saving and investment in OECD economies 21
Figure 3.1. Share of institutional investors in global equity markets 28
Figure 3.2. Evolution of trade and the supply of new equity 30
Figure 3.3. Global exchange-traded fund assets 33
Figure 4.1. Shareholder turnout and average dissent 40
Figure 4.2. Average dissent in Europe 40
Figure 4.3. Institutional investors' asset allocation to public equities 43

Boxes

Box 2.1. Methodology 11

INTRODUCTION

Corporate governance is not carried out in a vacuum. The incentives and abilities of owners, intermediaries, board members, managers and stakeholders depend on the environment in which they and corporations operate. Of particular importance is the functioning of the equity market, which is the place where cash flow rights and voting rights in the form of corporate shares are acquired. As equity markets change in terms of structure, participants, investment strategies and trading practices, so do the conditions for exercising corporate governance. To be effective, policy makers need to recognise these changes, consider their impact and understand their consequences for the design of rules and regulations.

To inform policy making, this report maps and describes the key changes in equity markets over the last decade or so which may affect the conditions for corporate governance. It also provides a brief overview of related policy discussions and select national initiatives that have been taken as a response to equity market developments.

The report starts with a description of the link between corporate governance, value creation and growth. It concludes that the quality of corporate governance plays a critical role at every stage of the investment process, including corporate access to equity, the allocation of equity among competing ends, and the continuous monitoring of corporate practices and performance. It also describes the unique characteristics of equity as risk capital and its role in financing genuine value creation in the form of innovation and long-term growth.

The remainder of the report is structured in accordance with the three main elements of the investment process: access to capital, allocation of capital and the monitoring of capital.

Part II provides an overview of developments in primary equity markets since the early 1990s. Sections 2.1-2.5 focus on initial public offerings in different markets and the share of global equity capital raised by companies from OECD and non-OECD countries. Section 2.6 provides data on secondary offerings and Section 2.7 deals with delistings and share buybacks. Section 2.8 explains recent trends in primary equity markets divided into factors that may influence the supply of equity, the demand for equity and any structural or cyclical variations in initial public offerings. Section 2.9 presents some examples of policy responses to the so-called “IPO crisis”.

Part III addresses the issue of efficient allocation. It begins with an overview of the relative size of different categories of owners and a discussion about how their different business models and investment practices may influence their incentives and ability to carry out long-term corporate governance functions. Section 3.2 provides an overview of the key changes in the functioning of equity markets, such as market fragmentation, high-frequency trading and exchange-traded funds. Section 3.3 offers an inventory of corporate governance-related issues of policy reactions with respect to developments in terms of equity market structures and trading practices.

Part IV describes developments with respect to various means of shareholder participation in the corporate decision-making process and gives some empirical evidence of how and to what extent shareholders participate in the decision-making process of the corporation. It discusses the emergence of new categories of investors: how they exercise their shareholder functions and how their actions relate to the objectives of the ultimate beneficiaries.

PART I

CORPORATE GOVERNANCE AND PUBLIC POLICY

While corporate governance is a hot policy topic, little attention has been given to formulating the appropriate role that public policy plays in it. Why does public policy matter and what is it expected to achieve? Without a coherent answer to these questions, any interventions made by policy makers risk being random and even contradictory. A second prerequisite for effective policy is a proper understanding of the reality in which rules and regulations are to be implemented. Who are the actors that will use the rules, what are their incentives and how do they interact? Both corporations and investors come in many different shapes and forms. Without knowledge about their relative significance and the nature of their businesses, regulation will be ineffective and most probably tainted by costly unintended consequences.

This report is an attempt to address both the question of why public policy matters and the nature of the economic context in which these policies are supposed to work today. The report is not a catalogue of reform proposals. In our view, proposals for reform can only come once we have answers to these fundamental questions and have understood their implications. This report will shed some light on that.

Among other things, we document a dramatic shift in listings from developed to emerging markets, which means that concentrated ownership at company level has become the dominant form of ownership in listed companies worldwide. We also discuss whether the lack of new listings in developed markets is related to excessive regulatory burdens or unintended consequences of a decade of profound stock market deregulation. Importantly, our discussion about listings also illustrates that corporate governance rules and regulations do not only concern companies that are already listed. From a dynamic perspective, it is equally important to assess the implications for today's unlisted growth companies – which seldom participate in the public debate – that may, in the future, require access to public equity markets for growth and job creation. We also document how the lengthened and ever more complex chain of intermediaries between savers and companies may influence the efficiency of capital allocation and the willingness of investors to take an active long-term interest in the companies that they own. We also examine how regulatory initiatives to increase shareholder engagement may have unintended consequences and note that the diversity and complexity of the investment chain can render general policies or regulation ineffective.

While this report covers a lot of ground, developments over the last decade have been so profound that for some issues we have only provided a snapshot of the emerging problems and challenges. As a consequence, the report calls for additional research and analysis of developments that may affect the conditions for access, allocation and monitoring of equity, which is so important for value creation and sustainable economic growth.

1.1. The rationale for public policy

The corporate governance discussion usually takes place on two different levels. One is concerned with the everyday workings of individual companies: how they organise their

internal proceedings and build their corporate culture. Much of this is unique to the company in question. The choices to be made are often a matter of business judgement and are seldom in a domain where policy makers and regulators have any specific expertise. The other level of corporate governance is concerned with the overall functioning of the business sector, particularly those corporations that have (or potentially will have) their shares listed on the stock market. At this level, the main concern is to provide corporations and investors with a legal and regulatory framework that maximises their contribution to overarching societal goals.

It is this second level of objectives that underpins the *OECD Principles of Corporate Governance*. The very first principle says that "*The corporate governance framework should be developed with a view to its impact on overall economic performance..."* and that *"…policy makers should remain focused on ultimate economic outcomes…*".

The rationale for this economic approach is that corporate governance policies, laws and regulations influence capital formation and capital allocation, which in turn determines economic growth. Corporate governance rules and regulations determine the conditions under which corporations are allowed to access public equity markets and the terms on which savers are able to invest and participate in the value-creating process of the corporation. So, getting the corporate governance rules right is of fundamental importance to the functioning of a dynamic private sector. As such, the quality of the corporate governance framework forms part of an economy's competitive edge. But, as illustrated below, the challenges in terms of efficient policy design manifest themselves at every stage of the investment process (Isaksson, 2004).

1.2. Corporate governance, investment and economic growth

The first stage of the investment process is the ability and willingness of savers to invest in equity: to provide entrepreneurs and growth companies with risk capital that they can use for innovation, job creation and growth. A number of provisions are required for savers to come forward, such as a secure means of registration, the transferability of shares, the right to receive corporate information and assurances that the contractual rights that come with the ownership of equity are well defined and enforceable. From the entrepreneur's perspective, this requires a regulatory environment that makes it attractive for the founder of the company to open up and share ownership with outsiders. Considering the great variety of savers and companies, successful matching between the two requires, almost by definition, a certain degree of enabling legislation and contractual freedom.

The second stage of the investment process is about effective allocation. It is not just the total amount of capital that is important to economic growth. It is equally important that the capital is allocated to its best possible use. Here, the efficiency of the equity market depends on the willingness and ability of shareholders to identify the full long-term economic potential of corporate activities. This requires that shareholders have access to all available information about the company. But it is not enough that all shareholders act on the same information. It is also essential that individual shareholders have incentives to independently gather and evaluate unique information about corporate prospects. To ensure this, the corporate governance framework contains a range of different provisions, including disclosure requirements and procedures related to changes in corporate control.

In the final stage of the investment process, corporate governance rules enable shareholders to monitor boards and managers that exercise the daily use of the money that the shareholders have invested. For this purpose, the corporate governance framework identifies a broad range of means for shareholder voice and a number of different issues on

which they can express their opinion, including board composition, remuneration practices and relations with stakeholders.

Considering the fundamental importance of investment for sustainable growth and the pivotal role of corporate governance in this process, the remainder of this report has been structured to explore the relevance of corporate governance at each of the three phases of the investment chain, namely *access* to capital, *allocation* of capital and the *monitoring* of capital employed in individual companies.

1.3. The unique role of equity

The economic importance of corporate governance rules and regulations is intimately (but not exclusively) linked to the unique role of equity financing in society. Since equity capital only has a residual claim on corporate earnings, it can be used to finance projects with uncertain and long-term returns, such as research, product development, innovation or the opening of new markets. These characteristics make equity unique and the only standardised financial instrument dedicated to finance genuine innovation and value creation, which is associated with (Knightian) uncertainty and the very basis for economic progress (Knight, 1921). Moreover, the transferability of shares in the public equity market allows for an important separation between the investment horizon of an individual saver and the investment horizon of the corporation. This means that a promising research project or product innovation does not have to be aborted because one of the shareholders is in immediate need of cash.

As in any other market, the market for equity is expected to function in a way that provides the most efficient means to match supply and demand. In this case, it is the supply of capital from savers and the demand for equity among founders, entrepreneurs and already established companies with growth opportunities. For savers, the market should provide a cost-effective way to identify and allocate funds to those companies they believe have the best business opportunities. When the company does well, the savers should do well. If the market provides this direct relationship between corporate performance and the saver's income, it also provides the critical incentive in society for savers to scrutinise corporate prospects and allocate capital efficiently among competing ends.

Partly to compensate for the lack of fixed claims on corporate earnings (which is awarded, for example, to creditors and suppliers), the equity holder is granted a set of rights. These rights not only serve as a safeguard against abuse, they also provide the opportunity to proactively influence the direction of corporate activities. As mentioned above, an active and informed use of these rights plays a pivotal role for generating the kind of new knowledge and innovation on which economics depends. When there is a direct relationship between the long-term performance of the company and the prosperity of the shareholder, the long-term interest of the company will also be the interest of the shareholder, particularly since secondary equity markets allow shareholders to sell their claims on all future residual company earnings to another investor. An important part of our inquiry is what happens when this link is broken, and we have to ask ourselves – who cares?

PART II

ACCESS TO CAPITAL AND PRIMARY EQUITY MARKETS

One of the best established economic relationships is between capital formation, productivity and economic growth.[1] An economy's capacity to continuously invest in new and better means of production is the basis for improving the lives of its citizens and making better use of scarce resources. There are many different sources for financing capital formation, but as described in Part I, the unique ability of equity capital to assume residual risk and handle uncertainty gives it a special role in funding those new and innovative business ventures that have an uncertain outcome and form the very basis for economic progress.

Ensuring that companies have access to equity capital is therefore a central policy priority and the rationale for many of the regulatory provisions that are recommended in the *OECD Principles of Corporate Governance*.

Against this background, this part provides an overview of developments in primary public equity markets since the early 1990s. It tracks the amount of equity capital provided in different markets and the share of capital raised by non-financial companies from OECD countries and non-OECD countries through initial as well as secondary offerings. It also contains an inventory of explanations for the decline in initial public offerings (IPOs), the shift in global equity markets and related policy issues.

2.1. Primary equity markets in OECD countries

Figure 2.1 shows the long-term development of IPOs across the OECD, tracking both the total *number* of offerings each year and the *amount* of equity that companies raised from them.

In terms of the number of IPOs, the data suggest a downward trend that began as early as 2000. A period of "recovery" can be noted in the years leading up to the 2008 financial crisis, followed by a sharp decrease in the number of new companies raising capital in the public equity market.

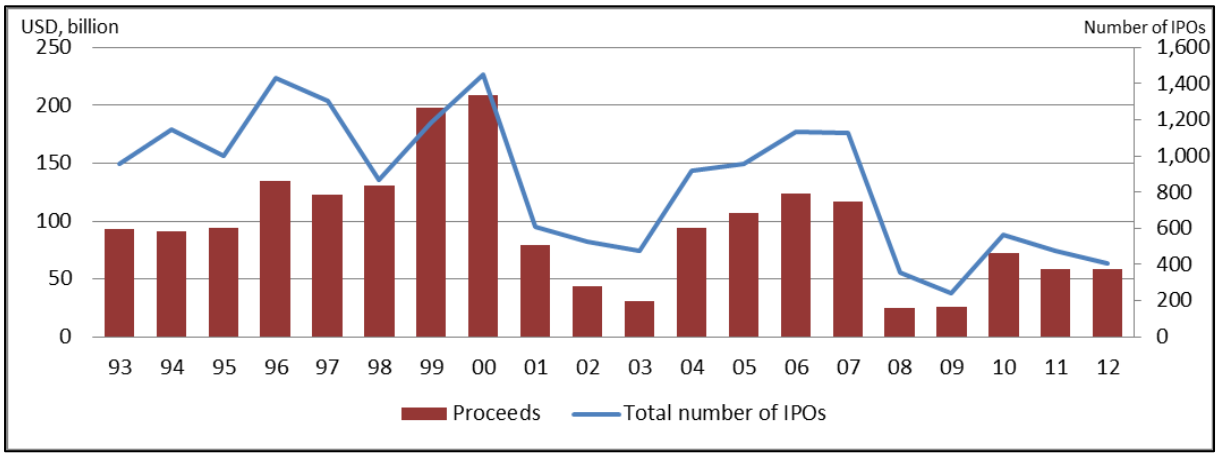
Comparing the two decades reveals that during the period 1993-2000, the OECD annual average was about 1 170 IPOs. During 2001-2012, this number fell to about 650. It is worth noting that even during the "recovery" period before the financial crisis, the annual number of IPOs never reached the average number of IPOs during the 1990s.

The decrease in the number of new firms listing in OECD markets has been accompanied by a decrease in the *amount* of equity that companies have raised in OECD markets. The total value of capital raised decreased from an annual average of USD 134.3 billion between 1993 and 2000 to an annual average of USD 69.8 billion during the period 2001-2012.

[1] While separating and accounting for the different factors behind economic growth is complex, Jorgenson *et al*. (1987) claim that between 1948 and 1979, capital formation accounted for 46% of the economic growth in the United States. Labour growth accounted for 31% and technical progress accounted for 24%.

Figure 2.1. Primary equity market trends in OECD countries

Number of initial public offerings in OECD markets and the total amount of equity raised (2012 USD, billions)



Source: based on data from Thomson Reuters *New Issues Database*, Datastream, stock exchanges' and companies' websites.

Box 2.1. Methodology

The analysis in Part II is based on original OECD calculations using data from the Thomson Reuters *New Issues Database*. Information from Datastream as well as individual stock exchanges' and companies' websites have been used for complimentary data and validation. The *New Issues Database* provides information on each initial public offering transaction, including proceeds, nationality and sector of the corporation. It also provides information about the market where the IPO takes place.

Between January 1990 and December 2012, excluding the investment funds, Real Estate Investment Trusts (REITs), banks, insurance companies and other financial sector corporations and OTC markets, a total of 36 238 IPOs were recorded. However, the Thomson Reuters database records some IPOs on multiple lines, especially those which have more than one tranche. After eliminating double counting and consolidating these transactions (5 976) and after removing IPOs for which there was insufficient information (41), a final database was established, which contains 30 221 IPOs by non-financial firms from 87 different countries.

In order to avoid a double counting problem, which is a commonly observed one in IPO research, the global IPO proceeds (IPOs in more than one market in a short period of time) have been allocated to the respective markets; REITs and investment funds and listings without additional capital raising have been excluded. The IPOs of companies that were listed in an organised market after the initial offering but currently traded in OTC markets are included.

Secondary public offerings (SPO) data is based on OECD original calculations of data from the Thomson Reuters *New Issues Database* and do not cover financial corporations and investment funds. The definition of SPO covers all share issues of listed companies after an initial offer. After eliminating duplications and removing SPOs without sufficient information, the final SPO database covers 74 015 secondary public offerings during the 1993-2011 period.

2.2. Global primary equity markets

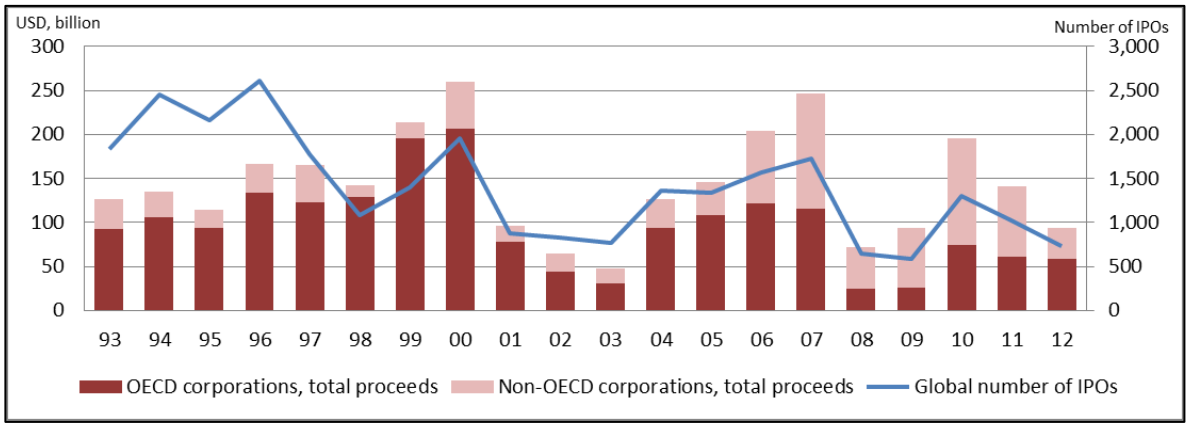
Figure 2.2 widens the perspective and looks at the total amount of equity raised globally. It also identifies the origin of the companies raising the equity. Figure 2.2 shows that throughout the 1990s, companies from OECD countries dominated the global IPO scene by receiving about 82% of all of the risk capital that was raised in public equity markets worldwide. This dominance ended quite dramatically by the turn of the century, when the absolute amount of capital raised by OECD companies was cut in half compared with the annual average of the previous decade. This resulted in an increased share of capital going

to companies in non-OECD countries, which in 2003 was about 35%, compared to 20% in 2000.

During the subsequent IPO "recovery" between 2004 and 2007, the relative amount of equity raised by companies from non-OECD countries continued to increase. During this phase, however, their increased share is not explained by a fall in equity raised by companies based in OECD countries. Rather, it is the result of a faster absolute increase in equity raised by companies from non-OECD countries. In 2003, non-OECD companies raised a total of USD 16 billion of equity worldwide, which in 2007 had risen to USD 130 billion. As a consequence, during the four "recovery" years before the 2008 financial crisis, non-OECD companies received almost 40% of all equity raised in the world. This share has increased even further in the period following the financial crisis. Between 2008 and 2012, almost 60% of all new risk capital raised worldwide went to companies from non-OECD countries.

Figure 2.2. Global trends in primary equity markets

Number of initial public offerings worldwide and the amount of equity raised by OECD and non-OECD corporations (2012 USD, billions)



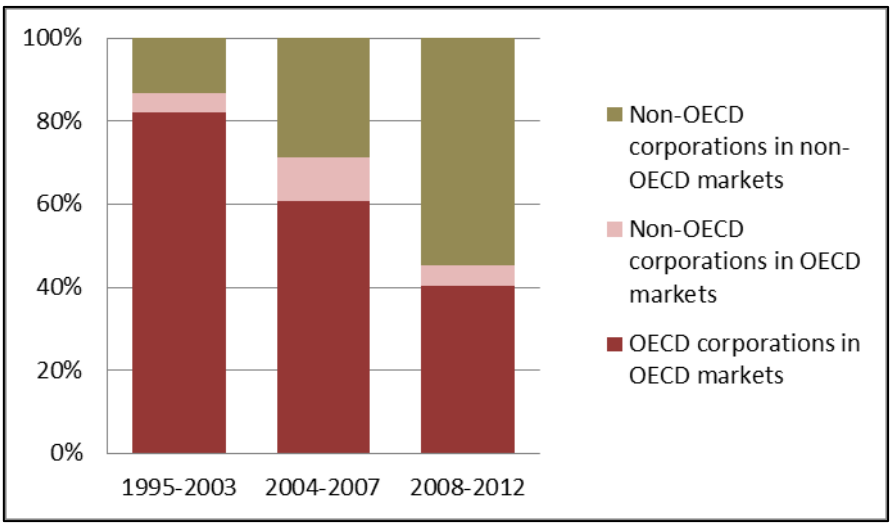
Source: based on data from Thomson Reuters *New Issues Database*, Datastream, stock exchanges' and companies' websites.

The developments illustrated in Figures 2.1 and 2.2 are summarised in Figure 2.3, which illuminates two important developments. The first is a significant and successive shift in the "IPO market share" from OECD to non-OECD economies. From initially providing less than 20% of all equity capital raised in the world, in the last five years (2008-2012) non-OECD markets have provided almost 55% of all equity raised through IPOs.

Second, Figure 2.3 shows that the dominant category of firms raising equity through IPOs are from non-OECD countries, accounting for 60% of all proceeds during the period 2008-2012. It also indicates that the increase in companies from non-OECD countries that raised equity in OECD markets during the "recovery" period (2004-2007) has come to a halt and been substituted for an increased reliance on non-OECD equity markets.

Figure 2.3. Global shift in equity markets

Relative share of equity raised through initial public offerings by OECD and non-OECD corporations and its distribution between OECD and non-OECD equity markets



Note: OECD corporations' fundraising in non-OECD markets throughout the period was insignificant and is not included in the figure.

Source: based on data from Thomson Reuters New Issues Database, Datastream, stock exchanges' and companies' websites.

2.3. The primary equity market in the United States

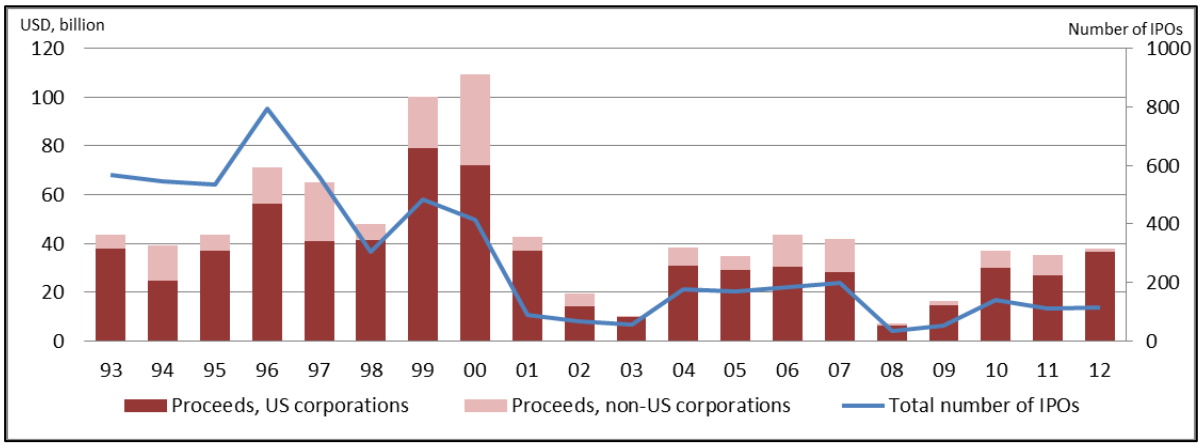
The developments described in Sections 2.1 and 2.2 are obviously influenced by the situation of the equity market in the United States, which has traditionally been the world's leading venue for IPOs. Figure 2.4 shows that in terms of the number of companies getting listed, a relatively clear downward trend began in the late 1990s. The annual average number of companies that made an initial public offering in the period 1993-2000 was 525. For the period 2001-2012, that number had fallen by about 80% to 116. The amount of capital raised also fell quite dramatically between the two periods, from an annual average of USD 65 billion to USD 30 billion.

Since the decrease in the total amount of equity raised was relatively smaller than the absolute number of IPOs, the average value of an IPO approximately doubled in real terms, from USD 123 million in the period 1993-2000 to USD 259 million in the period 2001-2012. Under the assumption that the average free float ratio for an initial offering was 25%, this means that the average market value of the companies that sought funding in public equity markets in the United States was about USD 1 billion.

One final observation from Figure 2.4 is that the absolute amount of equity raised by non-US firms through an IPO in US markets has also decreased quite considerably compared to the period from 1993 to 2000.

Figure 2.4. Trends in primary equity markets in the United States

Total number of initial public offerings, proceeds of US and non-US companies (2012 USD, billions)



Source: based on data from Thomson Reuters New Issues Database, Datastream, stock exchanges' and companies' websites.

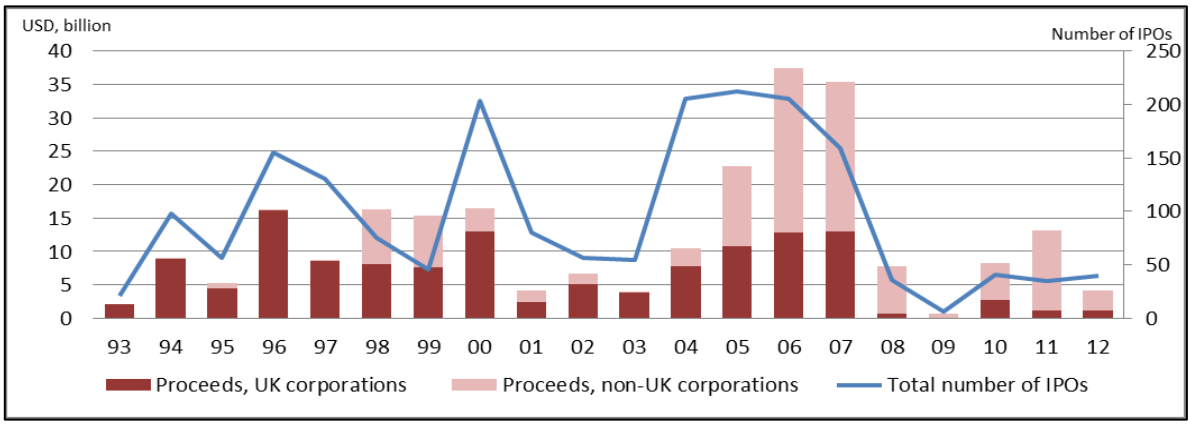
2.4. The primary equity market in the United Kingdom

While the picture in the United States is fairly clear, the United Kingdom, which has historically been the world's second largest IPO market, demonstrates a somewhat more complex picture. Figure 2.5 shows that, in particular, during the "recovery" period 2004-2007 the annual amount of equity raised through IPOs substantially exceeded the amounts raised during the 1990s. While the average annual amount raised in 1993-2000 was USD 11 billion, the average amount raised in the recovery period years before the financial crisis (2004-2007) was no less than USD 27 billion.

However, the figure also shows that the difference between the two periods can largely be explained by equity raised by non-UK companies. In contrast to the 1990s, more than 61% of the funds raised in 2005-2007 went to non-UK corporations. In the aftermath of the financial crisis, IPOs by UK companies has almost come to a halt. And while they still totally dominate the scene, public offerings by non-UK corporations have not been large enough to match the overall IPO activity of the 1990s.

Figure 2.5. Trends in primary equity markets in the United Kingdom

Total number of initial public offerings, proceeds of UK and non-UK companies (2012 USD, billions)



Source: based on data from Thomson Reuters New Issues Database, Datastream, stock exchanges' and companies' websites.

When analysing the United Kingdom's IPO market, it is also interesting to examine in some detail the character of the reported new listings. According to data provided by the London Stock Exchange, 3 449 non-financial corporations were listed on the exchange between 1995 and 2011. However, of these listings, only half (54%) were listed through an IPO. Instead, they were listed mainly through "introduction", which means that they joined one of the markets of the exchange without raising any new capital.

Of the remaining 1 859 reported listings (mainly in the alternative investment market, AIM) that actually were in the form of an IPO, 83% were conducted through a private placement where shares are only issued to a selected group of institutional investors without a public prospectus. This means that only about 300 of all of the companies that listed on the London Stock Exchange between 1995 and 2011 were seeking broad public funding issuing a prospectus.

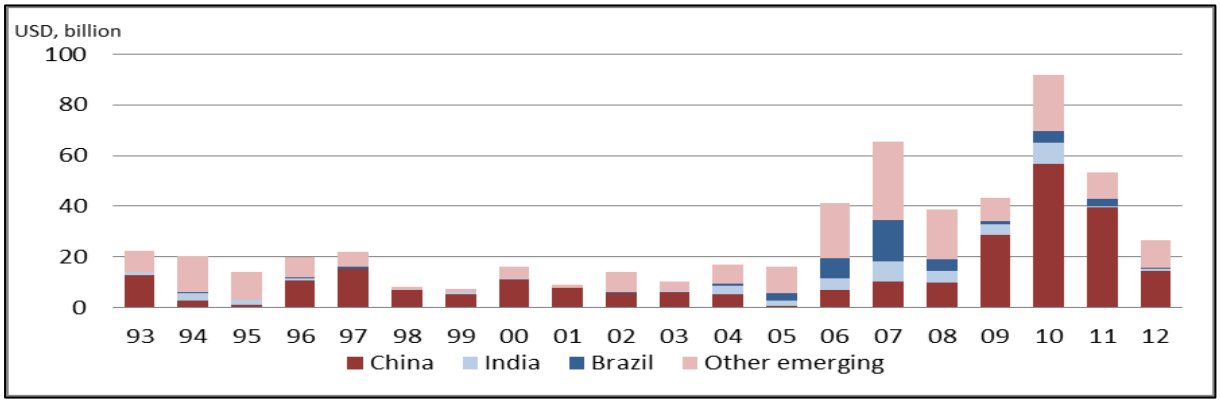
With respect to the private placements on the AIM market, a 2012 study by Vismara *et. al*. reports that private placements in London "never develop liquid trading, and the aftermarket performance has been poor, with an average three-year buy-and-hold abnormal return of -27.5%" (cited in Gao *et al*., 2012).

2.5. Primary equity markets in emerging markets

Already during the 1990s, public equity markets in emerging markets were at par with the London Stock Exchange in terms of equity raised. In fact, total proceeds from public offerings in emerging markets exceeded what was raised in London for every year between 1993 and 1997. But as shown in Figure 2.6, the real increase came in 2006 when the value of IPOs in emerging equity markets reached the same level as in the United States. This trend has continued and in 2010 the total value of IPOs in emerging markets was about USD 90 billion, which was almost twice the amount of equity raised through IPOs in the markets in the United Kingdom and United States combined. This growth in recent years is mainly attributable to an increased value of IPOs in China. As a matter of fact, in 2010, China overtook the United States as the largest primary equity market in the world.

Figure 2.6. Trends in primary equity markets in emerging markets

Amount of equity raised in non-OECD markets through initial public offerings (2012 USD, billions)



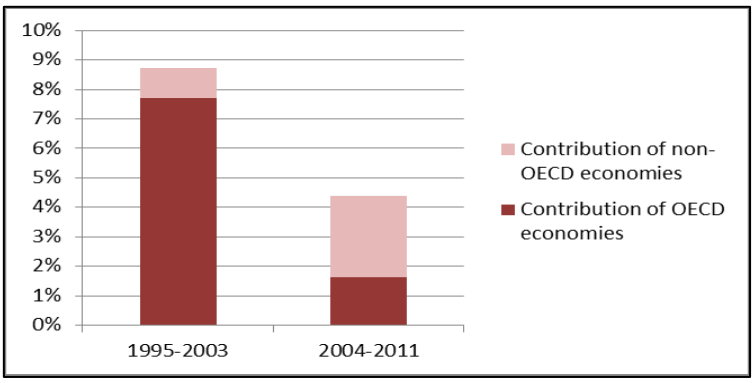
Source: based on data from Thomson Reuters New Issues Database, Datastream, stock exchanges' and companies' websites.

The increase in the number of listed companies in emerging markets has obviously had an impact on market capitalisation. Figure 2.7 shows that from having made only a marginal contribution to the growth in the overall stock market value during the period 1995-2003,

since 2004 non-OECD countries have contributed almost 65% of the growth in global equity market capitalisation.

Figure 2.7. Contribution to global market capitalisation growth

Annual average of market capitalisation growth



Source: based on data from World Bank *World Development Indicators*.

From a corporate governance perspective, one important consequence of the changing IPO and stock market landscape worldwide is the impact on ownership structure in individual companies. Most of the corporate governance debate is focused on situations with dispersed ownership, where the battle for wealth is a zero-sum game between dispersed owners on the one hand, and incumbent management on the other. This "agency" approach has its merits, but it also has important limitations, since a very large, if not dominant, part of listed companies around the world actually have a controlling (or dominant) owner. It is reasonable to assume that on a worldwide scale, developments in terms of new listings towards emerging markets have increased the dominance of controlled companies.

Broadly speaking, the decline in IPO activities, the increase in delistings and private equity activities, and the shift towards emerging markets have all been in favour of controlling ownership structures. These developments have resulted in a decrease in the number of locally listed companies in countries that are usually characterised as having a predominantly dispersed ownership pattern, namely Australia, the United Kingdom and the United States (IOSCO, 2007).[2] In 2000, locally listed companies in these three countries (excluding investment funds) represented 22.5% of the world's listed companies. In 2011, they only represented 16.3%. One could argue that the predominance of the dispersed ownership perspective in the public policy discussion is based on their high share in total market value rather than the number of corporations. However, the share of global market capitalisation of "dispersed" markets has decreased by some 30% – from 56% to 40% in the same period.

Another indication regarding the change in ownership concentration in listed corporations is the relatively low level of free float in emerging equity markets. For instance, while the average free float ratio for US and UK listed companies is about 90%, it is less than 35% in China, India and the Russian Federation (Goldman Sachs, 2010). In sum, the global change

[2] A recent study showed that among S&P 1500 companies in the United States, the number with a controlling owner has increased over the last decade, from 87 to 114. Moreover, the study notes that the issue of control receives a lot of attention since some large companies that recently went public have a controlling structure, such as Linkedin Corp, Zynga Inc., Groupon Inc. and Facebook Inc. (IRRC and ISS, 2012).

in IPO activities described above suggests a considerable reinforcement of concentrated ownership as the dominant "ownership structure" at company level in listed companies worldwide.

Despite the substantial growth of emerging equity markets, the McKinsey Global Institute still projects a future shortage of equity in emerging markets, particularly in China. The analysis, based on a "moderate" GDP growth scenario, projects that the accumulated need for equity over the next decade for new listings and secondary offers will be USD 18.4 trillion. The supply of equity, however, is only estimated at USD 8.2 trillion, resulting in what they call a USD 10.2 trillion "equity gap". While there is an ongoing shift of global financial assets towards emerging markets, the expected "gap" is largely explained by demographic changes, a traditionally low appetite to invest in listed companies and underdeveloped capital markets. One of the means the report suggests for attracting more capital to the equity market is improvements in corporate governance.

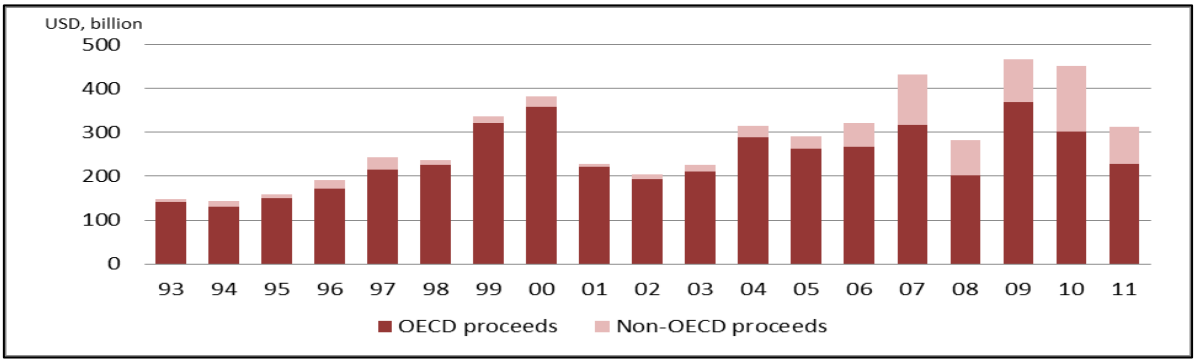
2.6. Secondary offerings

The role of public equity markets in providing new risk capital is not limited to IPOs. Equity markets should also serve already listed companies that can raise equity through a so-called secondary public offering (SPO). Figure 2.8 illustrates SPOs in OECD and non-OECD economies during the period 1993-2011. It demonstrates that in every year for the last decade, SPOs by non-financial companies based in OECD countries exceeded the proceeds from IPOs. In 2007, the amount of equity raised through SPOs was more than double that from IPOs. In 2009, the amount of equity that companies in OECD countries raised through SPOs was more than 14 times the amount that they rasied through IPOs.

It is worth noting that record levels were reached in the two years following the financial crisis. The tightening of corporate credits after the 2008 crisis seemed to result in an increase in secondary offers in equity markets. This may indicate that the aggregate amount of liquidity held by listed companies does not exclude a need for external equity finance for the corporate sector as a whole. As noted in Section 2.1, the figures do not include equity raised by financial corporations and investment funds. Further industry level and company size analysis would be useful to better understand any patterns in financing needs for different categories of non-financial businesses. Developments in aggregate corporate savings are discussed in Section 2.8.1.

Figure 2.8. Global secondary public offering trend

Total amount of equity raised through secondary public offers (2011 USD, billions)



Note: This figure does not cover financial corporations or investment funds. It covers all share issues of listed companies after the initial offer. After consolidating duplications into one single SPO and removing SPOs without sufficient information, the total number of unique SPOs covered is 74 015 for the period 1993-2011.

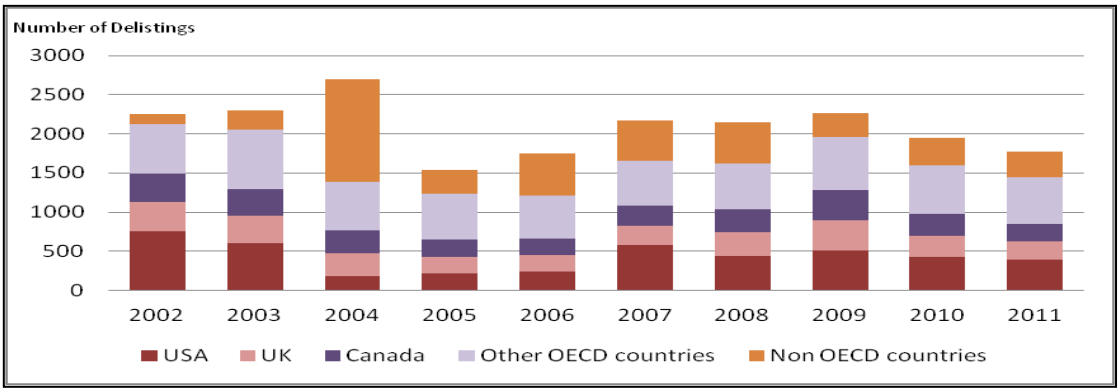
Source: based on data from Thomson Reuters *New Issues Database*.

2.7. Delistings and share buybacks

The total number of listed companies is not affected uniquely by the number of IPOs. It is also influenced by the number of corporations that, for different reasons, are leaving the public equity market. Since 2002, an annual average of 2 000 companies have delisted from stock exchanges worldwide. This means that almost 41% of the listed companies in 2002 have delisted over the last ten years.[3] Figure 2.9 shows that between 2002 and 2011, 78% of the delistings were from stock exchanges in OECD countries. Although some companies left the stock exchanges voluntarily through mergers, others delisted due to backruptcy or were forced to by the stock exchanges on which they are traded as they failed to meet continuining listing criteria (Macey *et al*., 2008). It is important to note that delisting from a stock exchange does not necessarily mean that the company becomes privately-held. In the case of dual listings, for example, a company may be delisted from one exchange but remain listed on the other exchange(s), or a company may just change its trading venue and move to a new exchange or the OTC market.

Macey *et al*. (2008) examined more than 9 000 delistings for the period 1999-2004 in the US market. They showed that more than half of the delistings were "involuntary". As expected, bankruptcy was one of the main causes; however, failure to maintain minumum asset or market capitalisation requirements and price drops under a minimum price requirement (USD 1) were also important factors.

Figure 2.9. Number of delistings



Note: Unlike IPO and SPO data, delistings also cover financial sector corporations.

Source: World Federation of Exchanges.

Just as listing may be a natural step in the lifecycle of a company, voluntary delisting may also be appropriate and economically efficient at a certain stage. Voluntary delistings can be classified into two broad categories: going private, including delistings due to merger and acquisitions (M&A), and "going dark". In going private, a listed companies' insiders or outsiders buy existing shares from the company's investors and make the company privately held. In a going dark transaction, however, there is no tender offer or share buybacks to make the company private; instead companies delist from a regulated market and move trading to an OTC market (Marosi and Massoud, 2007).

[3] In 2002, there were 50 086 listed companies worldwide. Between 2002 and 2011, 20 347 companies delisted from stock exchanges. Some of the delisted companies were companies that had also listed in that period (World Bank and WFE data).

Going private transactions in countries with dispersed ownership structures (such as the United Kingdom and the United States) are mainly in the form of leveraged buyouts (LBOs), where the listed company is acquired by a private equity investor through substantial borrowing and then delisted from the exchange. In countries with concentrated ownership structures (most continental European countries), buyout transactions are often characterised by squeeze-out transactions, where controlling owners take the company private by compensating the minority shareholders (Djama *et al*., 2011).[4] Low interest rates, bountiful global liquidity and savings, increases in equity finance costs after the dot-com bubble, and high corporate governance pressure after Sarbanes-Oxley have been important factors driving the trend of increasing private equity LBOs (Blundell-Wignall, 2007), which has been an important driver behind voluntary delistings.

In a study concerning the rationale for going dark, Leuz *et al*. (2008) examined factors relating to the cost of compliance and agency conflicts. They found that increased compliance costs after the Sarbanes-Oxley Act was an important factor behind the trend; but they also found that controlling owners took their firms dark to protect private benefits of control and decrease outside scrutiny. Another study on delistings from the London Stock Exchanges' AIM market indicates that the inability to raise additional funding was a major rationale for delisting and that delisted firms had significantly higher leverage compared to those that remained listed (Pour and Lasfer, 2011). Marosi and Massaoud (2007) support the importance of compliance costs, particularly for smaller companies, as well as the theory that the firms that went dark had a higher leverage. They also indicate, however, that companies with fewer growth oppurtunities, greater insider ownership, lower institutional ownership and lower market momentum are more likely to go dark.

Studies indicate that (apart from high leverage opportunities over the first decade) decisions to go private are driven by factors similar to those for going dark. A study of French buyout offers (Serve and Martinez, 2010) also found that companies that went private performed worse than their peers, with low levels of liquidity and financial visibility. In addition, it has been claimed that the French Financial Security Law that was enacted in 2003 led to additional costs and contributed to delistings.

In many countries, delistings have been coupled with a trend of share buybacks. Depending on the technique that is used, a share buyback can, in some cases, be seen as an inverse public offering by reducing the companiy's equity base (European Central Bank, 2007). Many explanations for the use of share buybacks have been provided and as early as 1966, Bierman and West argued that tax advantages of capital gains over dividends is the dominating motivation for companies to repurchase their own shares. The tax advantage still appears to be a commomly accepted explanation today, but other reasons have also been suggested, including the argument that buybacks give discretion to shareholders to opt in or out and to signal that the company is undervalued (OECD, 2007b).

In 1999, the share buyback volume in the United States exceeded the total dividends paid by non-financial companies for the first time and has since then remained a common way of returning money to shareholders rather than paying dividends (ECB, 2007). Share buybacks have been allowed or facilitated in other countries as well. In Japan, for example, the 2001 revision of the Commercial Code abolished restrictions on companies aquiring their own shares, allowing them to repurchase any number of shares for any purpose. After the

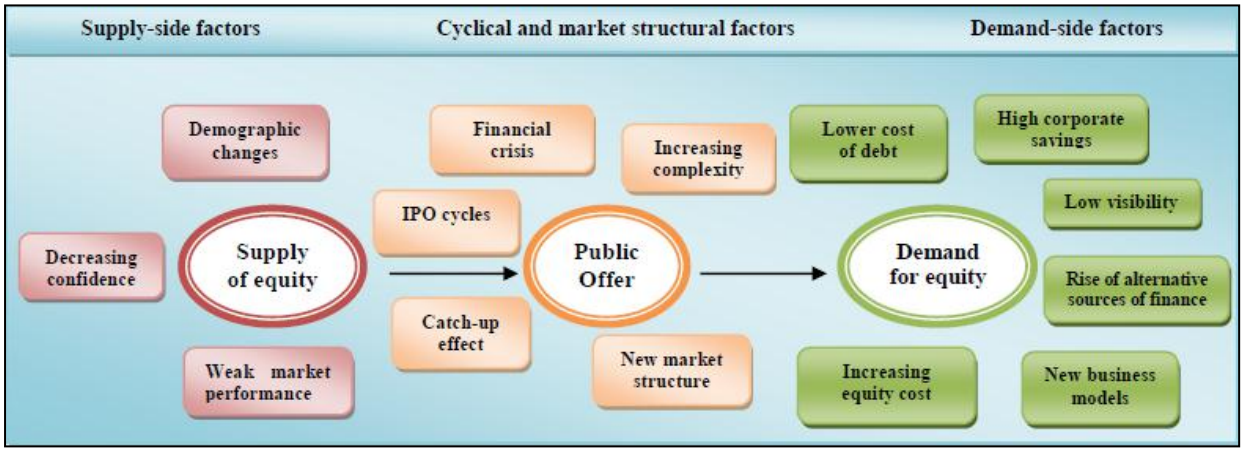
[4] For example, a study of Djama *et al*. (2011) revealed that 300 companies went private in France following a squeeze out while only 50 were taken private by LBO transactions during the 1997-2006 period.

regulatory change, share buybacks increased from USD 18 billion in 2001 to USD 52 billion in 2006 (Teng and Hachiya, 2011).

2.8. Explanations for the recent trends in primary equity markets

A number of explanations for the trends in primary equity markets have been offered in the public and academic debate. In this section, we divide these explanations into three main groups: *i)* factors that affect the demand for equity; *ii)* factors that affect the supply of equity; and *iii)* cyclical and market structural factors. Figure 2.10 provides a summary of the explanations, which are often interrelated. They may also differ in relative importance between countries, over different periods and for different company sizes and sectors.

Figure 2.10. Factors behind the recent trends in primary equity markets



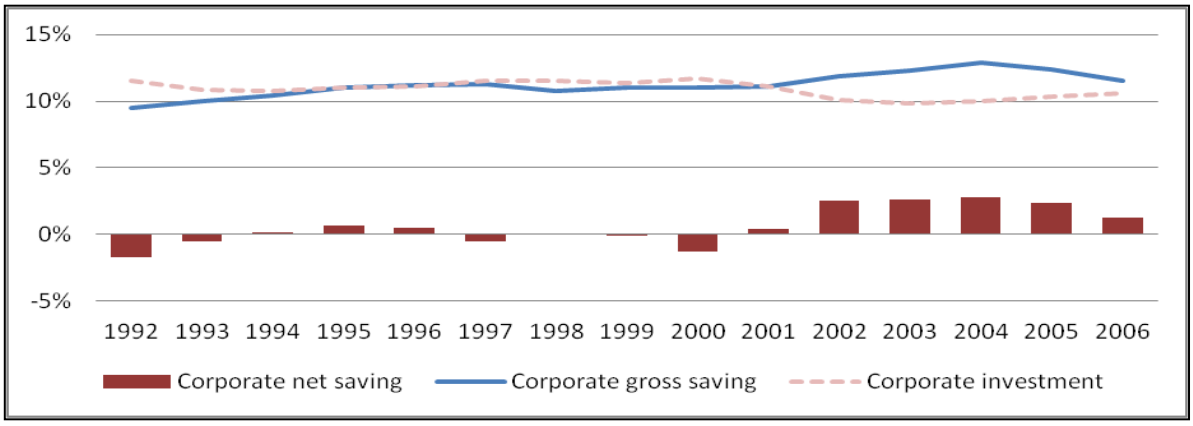
2.8.1. The demand for equity

Companies' demand for equity capital is obviously one of the most important determinants of primary market acitivity (Lowry, 2003). Simply put, the need for external funding is determined by the difference between the level of investment and the amount of a company's savings. Once the need for external funding has been determined, the entrepreneur or the company will seek the best source of funding based on their analysis of the relative cost and conditions of the different sources.

Before the 2008 financial crisis, the global economy experienced important changes in both the level of business investment and corporate savings. Figure 2.11 indicates that after 2002, both corporate gross savings and investments moved to decrease the need for external funding. Across the OECD, the corporate sector as a whole moved from a net borrowing position to a net savings one.

Several explanations have been offered with respect to the trend in corporate savings, including: increased profitability in both the financial and non-financial sectors, low levels of corporate investments relative to GDP, a relative decrease in the price of investment goods and increased investments outside the OECD area (OECD, 2007b). It has also been observed that while operating profits do not appear to have been abnormally high during the period, overall profits were elevated due to low interest rates and a reduction of corporate taxes. Other explanations that have been offered for the increase in corporate savings include a decline in nominal interest rates and uncertainties associated with unfunded corporate pension liabilities, as defined benefit pension plans are estimated to be significantly underfunded (IMF, 2006). It has also been argued that there is a liquidity motive caused by an increase in the volatility of net income over time (Boileau and Moyen, 2010).

Figure 2.11. Corporate saving and investment in OECD economies (% of GDP)



Note: Data include Australia, Canada, Denmark, Finland, France, Germany, Italy, Japan, the Netherlands, the United Kingdom and the United States. Net saving is not equal to the difference between gross saving and investment as it is also affected by changes in inventories and capital transfers.

Source: OECD (2007), *OECD Economic Outlook*, Vol. 2007/2, OECD Publishing, doi: *10.1787/eco_outlook-v2007-2-en*.

In order to understand how the observed changes in corporate savings may have influenced the demand for equity among non-financial companies, it is important to look at disaggregated data. While the decline in IPOs is focused on non-financial corporations, the reported corporate saving in Figure 2.11 also includes financial corporations. If we single out the financial sector corporations, we find that their contribution to the overall increase in savings during the peak period 2001-2005 was 20%, which is more than double their contribution to GDP over the same period (OECD, 2007b). To understand the true demand structure for equity among non-financial companies, it may not be sufficient to break the aggregate corporate savings numbers down between financial and non-financial firms; it may also be useful to analyse the difference in demand between large mature corporations on the one hand, and growth and medium-sized companies on the other.[5]

Modigliani and Miller's Proposition I in their influential study from 1958, which states that in perfect market conditions and without corporate taxes, the value of a company is independent of its debt/equity ratio (capital structure). This theorem has given the composition and cost of capital a central role in financial theory. But it has been widely misunderstood, and as stated by Miller (1988) 30 years after their seminal work, the "nothing matters" interpretation of the theorem is a grave misinterpretation of its conclusions. Rather, what their model intends to do is to help understand how *deviations* from perfect market conditions influence corporate finance decisions. Such deviations obviously include taxes and other financial and non-financial conditions, such as regulations, that are associated with different sources of funding – all with their specific characteristics. This also includes equity, which in itself is not a homogenous instrument. For example, are the conditions (and costs) associated with equity that is provided through a purely private deal different from equity that is provided through an initial public offering, which is associated with a number of expenses before, during and after the introduction? The ambition to minimise the cost of capital (thus maximising the value of the company) will take such differences into account and, for example, influence attitudes towards listing. As a consequence, if conditions are

[5] Commonly used examples of large companies' high level of savings include the German engineering company Siemens' request for a banking licence to use its cash reserves to lend to customers (Economist, 2010) and Apple's accumulated USD 90 billion retained earnings as of 2011.

such that the relative cost of equity capital, for whatever reason, increases in public markets, companies are more likely to stay private (Bharath and Dittmar, 2006).[6]

At the same time that the cost of debt financing has decreased over the last decade, it is also argued that an increased regulatory burden on listed companies and higher intermediation costs have pushed up the relative cost of public equity financing.

The Sarbanes-Oxley Act of 2002 is usually at the centre of the regulatory burden discussion. In response to major corporate scandals of large public companies, the act was introduced in the United States *to protect investors by improving the accuracy and reliability of corporate disclosure*.[7] However, it has been argued that in the process of trying to restore public confidence, the act has also created a regulatory burden for public companies that has discouraged foreign and domestic companies from going public (Grant Thornton, 2010).[8] The Sarbanes-Oxley Act was followed by other regulatory initiatives around the world, particularly in countries which experienced corporate scandals, such as the Financial Security Law of 2003 in France and the Law on Savings of 2006 in Italy.

Against this background, today's policy discussions have come to focus more on the costs and efficiency of reporting and compliance requirements. For example, respondents to the interim report of the *Kay Review* (2012) indicated that *quarterly reporting and interim management statements fell into the category of useless and misleading information*. There was also a common claim that it had led to a focus on *making the numbers* at the expense of long-term growth and development of the business. Following the *Kay Review*, the UK government has put forth a draft regulation for comments that aims at removing several reporting requirements from all or some companies (Department for Business, Innovation & Skills, 2012).

The *Kay Review* also addresses institutional factors that may have increased the cost of equity capital. The review concludes that there was wide agreement among respondents to its call for evidence that the cost of equity capital for companies is high by historical standards, while expected returns to equity investors do not appear to be abnormal. One of the two explanations[9] provided for this difference between the anticipated costs to companies and the returns to investors is the rising cost of intermediation, which decreases the ultimate return to savers on their investments and widens the gap between the cost of capital for the company and the returns to savers.

It has sometimes been argued that the demand for equity raised in public markets has been substituted for an increased reliance on so-called private equity funds, which in turn are highly leveraged through the use of relatively inexpensive debt. Recorded assets under private equity management did experience a spectacular surge until 2007.

---

6 A tax advantage of debt financing over equity financing significantly affects the relative cost of debt and equity financing. However, this is a long-standing "problem" rather than a recent change. And, if anything, the decreasing trend of corporate tax rates globally have probably reduced the advantage of debt tax financing.

7 Sarbanes-Oxley Act, *www.gpo.gov/fdsys/pkg/PLAW-107publ204/pdf/PLAW-107publ204.pdf*.

8 The report notes that market structural changes, such as online brokerage and decimalisation (decreasing the smallest increment for a stock price movement), were significantly more damaging to the IPO market than the regulatory burden caused by the Sarbanes-Oxley Act.

9 The *Kay Review*'s second explanation for this difference is the divergence of companies' perception of their cost of capital and investors' perception of their returns, which is also a result of the lengthening of the investment chain that comes with intermediation, together with the growth in the complexity of the modern corporation.

However, in order to assess the role of private equity in replacing equity raised in public markets, we must look at the amount of equity that private equity firms actually supply to companies. The total value of assets under management by private equity firms was estimated to be USD 3 trillion at the end of 2011 (Preqin, 2012). However, about one-third of this capital (USD 927 billion) is in the form of so-called “dry powder”, which is capital that is not invested (Bain & Company, 2012). The remaining USD 2 trillion is invested in different asset classes, including real estate. As a result, and excluding dry powder, the total global investments of private equity firms in 2011 is estimated to be about 4% of global market capitalisation.

One could argue that since private equity is a relatively new phenomenon, the accumulated investment value of private equity firms should be expected to be fairly low compared to total market capitalisation. However, flow figures indicate a relatively modest role of private equity as a source of equity funding. Despite the sharp increase in private equity volumes and a decrease in IPOs, the average global buyout deal volume between 2001 and 2011 was considerably lower than the amount raised through primary markets in the same period (USD 259 billion compared to USD 450 billion worldwide).

Unlike equity raised in public markets, the private equity investment model does not necessarily imply the injection of long-term risk capital to companies. A large part of private equity transactions can be classified as trade activities in secondary markets rather than a primary supply of risk capital. For instance, more than 50% of the buyout transactions in Europe in 2011 were private equity to private equity transactions (Bain & Company, 2012).[10]

Another explanation of why companies may demand less equity from public markets is offered by Gao *et al*. (2012). After studying more than 7 400 IPOs in the United States between 1980 and 2009, they suggest that there has been a fundamental change in corporate growth strategies. They argue that an increased importance of bringing products to market quickly has resulted in lower profits for independent small firms relative to the potential profits generated as part of a larger organisation that can realise economies of scope. The result has been a strategic re-orientation of small companies away from organic growth with the help of an IPO to a strategy of mergers or acqutisiton.

Another important factor that has been claimed to erode the incentives for entering the public equity market is the lack of visibility in today’s equity market environment. The dominance of short-term trade practices, indexing and exchange-traded funds (ETFs) are criticised for moving liquidity to large companies and leaving the stocks of the remaining small companies illiquid (Bradley and Litan, 2010). Together with the lack of long-term focus, the emphasis on short-term trading has also resulted in a decrease in analyst coverage, which is argued to have further undermined the incentives of growth companies to enter the public equity market (Doidge *et al*, 2011).

2.8.2. The supply of equity

The willingness of savers and intermediaries to supply corporations with equity through primary markets depends on a range of factors that influence the relative risk-adjusted rate of return on equity compared to other investment opportunities. While it may be hard to quantify, that assessment also includes the investor’s perception of trust (or confidence) in market mechanisms and market institutions.

[10] The recent regulatory initiatives in Europe, such as Solvency II, are claimed to cause a decrease in the private equity investments of some financial groups and significant offloading of long-held stakes in private equity funds (Pignal, 2012).

As a consequence, it is no surprise that explanations for a change in equity supply by savers and intermediaries include a decrease in investor confidence, which was supposedly eroded both by corporate scandals, not least in the financial sector, and perceived failures in the way equity markets are supposed to function. The Chicago Booth/Kellogg School Financial Trust Index, which measures trust in financial markets, reports that only 15% of the respondents in mid-2012 had trust in the stock markets. This is the lowest level among all of the elements included in the index and barely half of the trust reported for the banking sector (Sapienza and Zingales, 2012).

Factors that are suggested to contribute to a decrease in trust include developments in terms of the equity market structure and trade practices. Particular attention has been given to the effects of market fragmentation and the growth of dark pools that may distort the quality of the price discovery process (IOSCO, 2011a; European Commission, 2010). High frequency trading (HFT), where certain traders may obtain privileged access to market information through dedicated data feeds, has also been subject to discussion (Linton and O'Hara, 2012). In terms of market failures, the US Securities and Exchange Commission (SEC) recorded that the so-called Flash Crash event was followed by a fairly substantial withdrawal of equity from equity markets by some traditional institutional investors, such as mutual funds (Schapiro, 2010).

A report by Grant Thornton entitled *Market Structure is Causing the IPO Crisis – and More* (Grant Thornton, 2010) argues that the decline in IPO activities is caused by unintended consequences of uncoordinated regulatory changes and inevitable technological advances. The report claims that the new market structure promotes speculative and complex trading practices at the expense of long-term investing based on corporate fundamentals. It has also been claimed that market developments have reduced trade in the shares of smaller companies (Friederich and Payne, 2011), which provides less liquidity and fewer incentives to go public (Bradley and Litan, 2010).

Another explanation for a structural decrease in the supply of equity in primary markets is the ageing population in some major economies, especially in Europe and Japan, which is supposed to influence the balance of asset allocation from equities to fixed-income securities. The McKinsey Global Institute (2011) has estimated that European investors 30-65 years old allocate 35% of their savings to equities, while persons over 65 only allocate 20%. Together with possible regulatory restrictions on the asset allocation of institutional investors, such as pension funds and insurance companies, it is argued that we will experience a successive decrease in the appetite for equity.[11]

2.8.3. Cyclical and structural factors

Trends in IPO developments have also been explained by cyclical variations that are driven by the relationship between the volume of IPOs and intial returns. A study by Lowry and Schwert (2002) indicates that IPOs that are followed by high and increasing initial returns tend to be followed by an increasing number of companies going public, which in turn leads to periods of lower initial returns. This pattern, they claim, was repeated several times in the US market between 1960 and 2001. One explanation for such cycles is that in their evaluations, underwriters seem to be biased in favour of the recent IPO valuations relative to corporate fundamentals (Lowry and Schwert, 2002). Another, fairly straightforward,

[11] The regulatory changes related to insurance and pension funds are sometimes criticised for reducing the supply of equity (Kay Review, 2012). Solvency II, which is likely to be applicable from 1 January 2014 and will regulate the European insurance sector's capital adequacy requirements, has raised particular concerns (Rolet, 2012).

explanation for variations in the number and size of IPOs is the influence of general market conditions. When market conditions worsen, stock prices drop and companies stay private to wait for more favorable conditions before going public (Pastor and Veronesi, 2005).

The "catch-up effect" refers to the tendency of countries that start at a lower level of economic activity to grow faster than those that have already obtained a high level of economic activity (IMF, 2012). This phenomenon may help to understand the global shift in primary markets towards non-OECD countries. Today, most countries have an established stock market infrastructure and have adopted regulatory frameworks that make it possible for companies to raise funds domestically. Since initial public offerings by non-OECD corporations in OECD markets as a whole has always been limited (4.5% between 1995 and 2003), the decline in IPO activities in OECD markets cannot be explained by a shift of non-OECD corporations fundraising from OECD to non-OECD markets. On the contrary, as shown in Figure 2.6, there has actually been a substantial absolute increase in non-OECD primary markets since 2005.

2.9. Policy responses to the initial public offerings crisis

Two important policy initiatives undertaken by OECD countries in response to the IPO crisis are the JOBS Act (Jumpstart Our Business Startups Act) in the United States that was signed into law by President Obama on 5 April 2012 and the *Kay Review* commissioned by the UK Secretary of State for Business, Innovation and Skills. In September 2012, The UK Department of Business, Innovation and Skills (BIS) also announced an initiative with the London Stock Exchange aiming to stimulate access to equity for growth companies.

As defined by the JOBS Act itself, its ultimate objective is "*to increase American job creation and economic growth by improving access to the public capital markets for emerging growth companies"*. Mainly, the act defines a new type of issuer, an emerging growth company, that had total gross revenue of less than USD 1 billion and who could benefit from reduced regulatory and reporting requirements for a period of up to five years from its IPO. These reduced regulatory and reporting requirements basically involve financial reporting requirements for prospectuses, scaled executive compensation disclosure and the auditor attestation of internal control over financial reporting. The act also raised the limit of the small issue offering exemption from SEC registration requirements from USD 5 million to USD 50 million within any 12-month period as well as the shareholder threshold to register a class of equity securities with the SEC from 500 to either 2 000 persons or 500 or more persons who are not accredited investors.

The *Kay Review* aims to "*review activity in UK equity markets and its impact on the long-term performance and governance of UK quoted companies*". It provides a comprehensive analysis of the UK secondary market and draws conclusions that are also relevant to other OECD economies. In addition, the most recent policy response from the BIS, which makes explicit reference to the United States' JOBS Act, is described in their press release as follows:

> In further action to make Britain one of the best places in the world to start, run and grow a business, the [g]overnment has developed a set of ambitious proposals with London Stock Exchange to attract entrepreneurs and high-growth companies. Proposals will include a planned new route to the UK IPO market for high-growth companies, which is likely to feature reformed rules on free float, eligibility criteria and reporting requirements. … In addition, [the g]overnment will also investigate the current regulatory rules that may be deterring investors from funding growth companies, and will work with London Stock Exchange to widen the availability of

> equity capital for both UK and international businesses looking to make the UK their global base. (Department of Business Innovation & Skills, 2012d)

In November 2012, the UK government released its response to the *Kay Review*, stating that "*the [g]overnment accepts Professor Kay's analysis and the conclusions of his report*". Particularly, the government's detailed response to the *Kay Review*'s 17 specific recommendations are mostly supportive, including the establishment of an investors' forum as a mechanism for collective action, removal of mandatory quarterly reporting and full disclosure of costs and charges in the investment chain. However, there are also critical approaches to the conclusions of the review. For instance, the National Association of Pension Funds (NAPF), while noting that to a large extent they endorse the conclusion that the investment chain is too long and costly, stated that they "*were underwhelmed with the proposed solution to address this which largely boiled down is: leave it to the market.*"[12]

[12] NAPF, Business, Innovation and Skills Select Committee; Inquiry into the *Kay Review* of UK Equity Markets and Long-Term Decision Making, *www.napf.co.uk*.

PART III

EFFICIENT ALLOCATION AND DEVELOPMENTS IN THE SECONDARY EQUITY MARKETS

While the economic relationship between capital formation and growth is well established, it is not only the *absolute* amount of investment that is important. Equally important for innovation and growth are the conditions under which capital is made available and the efficiency with which the market can allocate capital among different possible uses. With respect to equity, the degree of allocative efficiency will, to a great extent, depend on the incentives and ability of shareholders to actively seek and use information about the long-term prospects of the companies in which they invest.

This is why the *OECD Principles* assign considerable importance to the quality of disclosure and transparency that will help shareholders perform this task by having equal and timely access to information.

But information that is made publicly available is not enough. Genuine value creation in society also requires that shareholders have the incentives to individually, and at their own expense, seek, analyse and use information that they gather themselves. The constant search for such idiosyncratic information can be seen as an investment by the shareholder, and fills the socially important function of bringing new and unique knowledge to the economy. This does not necessarily mean that shareholders themselves engage in entrepreneurial activities. But it does imply that they take a genuine interest in understanding the full long-term economic value of such activities among the plethora of investment opportunities that are available to them in the economy. When the shareholders' interests are aligned with the long-term performance of the company, seeking and using this knowledge will contribute to identifying and supporting long-term value creation. Obviously, it may in some cases also generate information on how to make better use of corporate resources in a way that other shareholders and the incumbent managers do not understand or want to exploit.

Since legal and economic doctrine assumes that shareholders actually have the incentives to seek information about the long-term prospects of the corporation, they are also given a set of rights to act on this information by influencing the direction of corporate activities. These rights are mainly formulated in Section II of the *OECD Principles*. To make informed use of these rights and thereby support the corporation's long-term performance is a key shareholder function that is essential to the effective allocation of capital.

Needless to say, collecting, analysing and using information (be it publicly available or self-generated) is associated with costs – sometimes considerable – for the shareholder. In order to motivate these costs, shareholders must be able to expect corresponding private gains from this socially beneficial "generation of new knowledge". These private gains can come from different sources and range from simply buying a stock that is expected to rise in value to more discretionary gains associated with a complete takeover aiming at realising unexploited values and business opportunities.

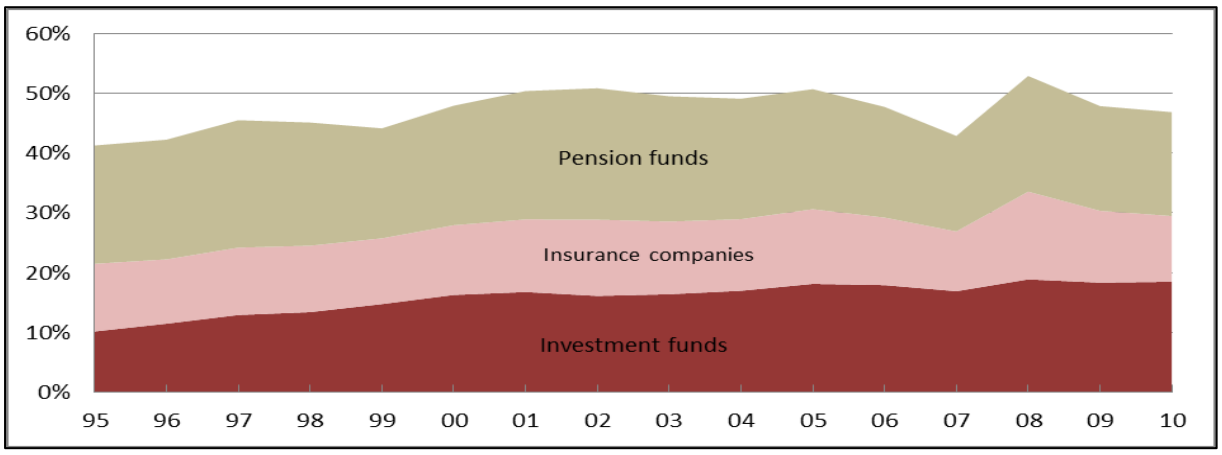
This part provides an overview of market developments that may have influenced shareholders' incentives and capability to carry out these key corporate governance functions. For that purpose, it is important to know who the owners are, why they hold their shares, how they hold them and how they trade. Section 3.1 looks at the character of today's investors, keeping in mind the difference between direct investors and institutions that typically serve as intermediary investors between the ultimate saver and the company. We also note that institutional investors come in many different shapes and forms, with different business models, investment strategies and trading practices that may influence their incentives and their ability to carry out their corporate governance tasks. Section 3.2 describes developments in terms of equity market structures and trading practices, notably market fragmentation, HFT, ETFs and the use of dark pools. Section 3.3 discusses related corporate governance issues and recent policy concerns.

3.1. Who are the owners?

Over the last 50 years, the ownership structure of listed companies in most OECD markets has moved from direct ownership to intermediary ownership. In the United Kingdom, for instance, direct individual ownership in listed companies has decreased from 54% to only 11.5%. In the United States, direct ownership has dropped from 84% to 37%.[13]

In 2010, pension funds, mutual funds and insurance companies held nearly half of the listed equities in the world, with a total market value of USD 26 trillion (Figure 3.1). This is an increase of about 40% in 1995. It is worth noting that these numbers are calculated based on the total market value of the corporations, which means that the institutional ownership of the global free float is likely to be considerably higher. Within each of these three broad categories of institutional investors, there is a great variety in terms of business models, investment strategies and trading practices.

Figure 3.1. Share of institutional investors in global equity markets (% of total market capitalisation)



Note: Institutional investor data do not cover non-OECD countries; however, large non-OECD economies' institutional investors' investment in the global public equity market is estimated to be quite low compared to OECD economies (OECD, 2011).

Source: based on institutional investors' investments in "share and other equity" data from OECD Institutional Investors Statistics and market capitalisation data from World Bank World Development Indicators.

[13] The UK Office for National Statistics and the US Federal Reserve.

Compared to the traditional institutional investors identified in Figure 3.1, hedge funds, private equity funds and sovereign wealth funds are estimated to hold relatively smaller portfolios of public equity. The total assets under management of the hedge funds are estimated to be USD 1.8 trillion, private equity funds USD 3 trillion and sovereign wealth funds USD 4 trillion.[14]

With increased international integration of equity markets, the share of foreign portfolio investors has increased in most countries. In the United Kingdom, the share of listed equity held by foreign investors increased from 7% to 41.20% between 1963 and 2010. In the United States, the share held by foreign investors increased from 2.24% to 13.03% over the same period (UK Office for National Statistics; US Federal Reserve). In Japan, the share of foreign investors in the equity markets increased from 4.4% to 26.9% between 1989 and 2011 (Bank of Japan).

National data do not identify foreign owners with respect to their category (for example, pension fund, household, insurance company, etc.). As a consequence, the increase in "foreign ownership" makes it increasingly difficult to track the relative importance of different categories of owner at a national level. While a global increase in equity holdings by institutional investors can be observed, some national data actually indicate a decrease in institutional investors' share in local markets, at the same time as an increase of foreign shareholdings. This may result in a misinterpretation of trends in ownership structure, since a large portion of the foreign portfolio investors are likely to be institutions like pension funds, mutual funds and insurance companies. A comprehensive analysis of the relative importance of different categories of owners, their incentives and abilities to exercise corporate governance, needs to also include a breakdown of foreign investor into different categories.

A relatively new "category" of owner is institutions engaged in HFT, which is typically carried out as proprietary trading. High frequency trading has increased dramatically in recent years, and today more than 60% of the total volume of the US equity trade (Lash and Spicer, 2009) and 38% of European equity trade (IOSCO, 2011a) is generated by high frequency traders, such as hedge funds and investment banks. However, the dominance of these proprietary traders in terms of trading volume is not reflected in any increase in their share ownership. Banks and other financial institutions are estimated to hold only 1% of the shares in the US market.

Two main reasons have been provided for this discrepancy between trading volume and ownership. The first is that HFT almost per definition does not require a large portfolio. Second, it has been suggested that other actors, such as "foreign" institutions (for which we do not have ownership data) and traditional investors also engage in HFT and that they make up a significant portion of the HFT volume.[15] The second explanation is not likely, however, to alter the observations that entities dominating trading actually hold a very small portion of the total outstanding amount of shares.

Another important development in terms of trading practices has been the decrease in holding periods. The average holding period at the New York Stock Exchange fell from eight years in the 1960s to around five days in 2010 (Kleintop, 2012). This was mostly caused by the boost of HFT and ETFs, and does not in itself indicate a more general trend of short-termism. Additionally, holding period data based on stock turnover may be misleading

[14] Hedge funds, 2011, IMF; Private equity and SWFs, 2011, Preqin.

[15] A survey (Foresight, 2011) among UK investors indicates that some traditional investors are aware that their brokers may be deploying HFT techniques to execute their orders.

as the use of complicated investment strategies, such as high trade in continuously held stocks, has increased.[16]

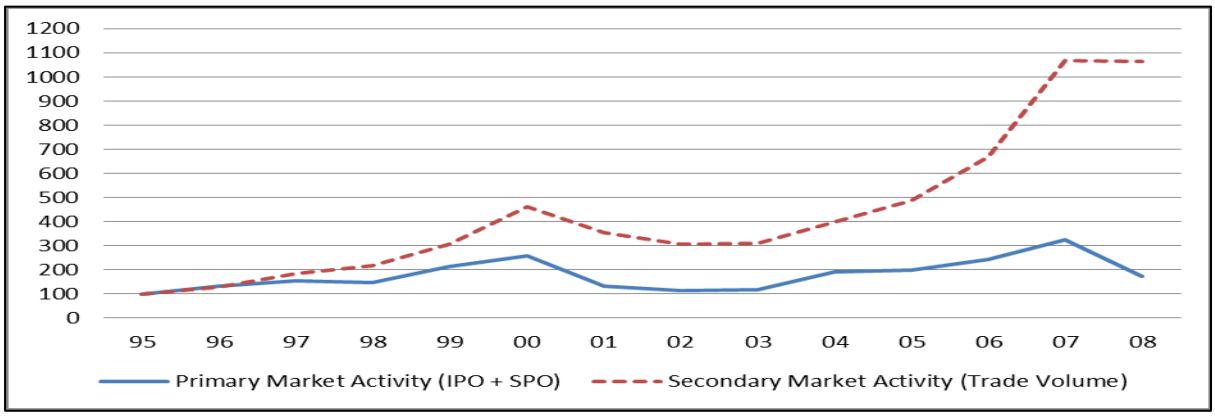
Since the specific business models and investment strategies of intermediary investors directly influences their incentives and ability to exercise their corporate governance functions, additional empirical data concerning the relative importance of different categories of owners, their investment strategies and trading practices is desirable.

3.2. Changes in market structure and trading practices

The last decade has seen some fundamental changes in the structure of equity markets. These changes have been driven by both technological advancements and regulatory initiatives such as NMS in the United States and MiFID in the Europe. Trade practices have become more sophisticated, markets have become fragmented and new equity-based instruments have increased in importance.

Even if we limit ourselves to data from the "traditional" stock exchanges, trading in equity has increased much faster than the supply of new equity capital through initial and secondary public offerings. Particularly during the pre-crisis period, between 2004 and 2007, the increase in trade volume was three times the increase in primary market volume.

Figure 3.2. Evolution of trade and the supply of new equity



Source: based on data from Thomson Reuters *New Issues Database*, DataStream, stock exchanges' and companies' websites. Trade volume data are from World Federation of Exchanges.

Together with the decline in IPO activities in OECD economies addressed in Part II, the fragmentation in equity markets, emergence of new investment techniques such as HFT and the rise of ETFs are major developments, discussed in Sections 3.2.1-3.2.3 below.

3.2.1. Fragmentation in equity markets

For a long time, services of stock exchanges were seen as similar to public utilities and often protected by a legal monopoly status which prevented the emergence of competitors (Di Noia, 1998). However, the integration of financial markets accelerated by technological

[16] A study of the United Kingdom's Investment Management Association (2011) claims that given the wide range of investors, stock turnover is not an appropriate indicator of holding periods and investment behaviour. By using the weighted value of continuous holdings, the study argues that 42% of total equity is continuously held by investment funds in the United Kingdom for five years or more.

advancements made it increasingly difficult for traditional stock exchanges to perform this important and "straightforward" function.[17] Like in many other industries, technological advancements also streamlined the quality of services in terms of market infrastructure. For instance, at the beginning of the competition era, nearly all European stock exchanges were using the same trading mechanism (Steil, 1996 cited in Di Noia, 1998).

The first demutualisation of the Stockholm Stock Exchange has been followed by an international trend towards demutualisation with incorporated exchanges being listed on their own markets. During this process, the stock exchange industry has also experienced a considerable degree of consolidation both at a national and international level, such as the merger of the NYSE and Euronext in 2006, NASDAQ's acquisition of the OMX and the London Stock Exchange's merger with Borsa Italiana in 2007 (Christiansen and Koldertsova, 2009).

While the "registered" stock exchange industry has experienced consolidation, the "dark" part of the equity market has moved in the opposite direction. The result is that equity markets today are highly fragmented into traditional organised stock exchanges and non-exchange trading venues, such as alternative trading venues (ATS) in Canada and the United States, multi-lateral trading facilities (MTFs) in Europe, and broker networks (IOSCO, 2011a).

The fragmentation is not only between traditional stock exchanges and new venues for trading but also between so-called dark and lit markets. Table 3.1 indicates that in September 2009, 74.6% of US trade was executed in the registered exchanges (NYSE, NASDAQ and others) and five electronic communication networks. The remaining 25.4% was traded in 32 different dark pools and in more than 200 different broker-dealer networks that do not display "best-price orders" (SEC, 2010a). Although the use of dark pools has not reached the same levels as in Japan, there is still an upward trend. A study by IOSCO shows that during the last week of 2010, no less than 9.2% of total trade by value in Japan was executed in dark pools (IOSCO, 2011b).

Table 3.1. Estimated share of trade volume in the United States (%, September 2009)

Registered exchanges	63.8
Electronic communication networks	10.8
Total displayed trading	74.6
Dark pools (32)	7.9
Broker-dealer internalisation (>200)	17.5
Total undisplayed trading	25.4

Source: US Security and Exchange Commission (SEC) (2010), "Concept Release on Equity Market Structure", SEC, Washington, DC, *www.sec.gov/rules/concept/2010/34-61358.pdf*.

3.2.2. High frequency trading

One of the most important changes in trading practices over the last decade is the dominance of algorithmic trading, which means that orders are executed by computer-based systems according to a pre-designed set of rules and procedures. The characteristics of algorithmic trading are defined very broadly from agency activities (on behalf of clients) to

[17] The United States' Securities Exchange Act of 1934 defines an exchange as "…which constitutes, maintains, or provides a market place or facilities for bringing together purchasers and sellers of securities..."

proprietary trading (with own money), aggressive strategies (liquidity-consuming) to passive strategies (liquidity-supplying), and informed (try to predict very short-term returns) to uninformed (not trying to rebalance portfolios based on very short-term variation in returns) traders (Friederich and Payne, 2011). However, the current public discussion focuses primarily on one particular type of algorithmic trading, namely so-called high frequency trading (HFT), which also represents the largest and increasing share in trade volumes in some OECD markets.

Although there is no commonly accepted definition, the main features of HFT can be identified as proprietary trading, using extraordinarily high-speed computers with sophisticated software, applying co-location services and the use of individual data feeds that are offered for a fee by stock exchanges. HFT is also characterised by very short timeframes for transactions, cancelation of orders shortly after the submission and ending the trading day with a maximum flat position (SEC, 2010a). In 2009, HFT accounted for nearly 60% of the total trading volume in the US equity market (Lash and Spicer, 2009). In Europe, it represented some 38% of total trade volume in 2010 with an upward trend (IOSCO, 2011a).

From a corporate governance perspective, it is important to note that HFT is more than a technological advancement allowing high-speed computer trading. It can also be seen as an investment strategy with a very short-term focus. The ambition is not to assess and trade on genuine information concerning the long-term performance of any individual company. Rather, the strategy is heavily based on short-term arbitrage opportunities that are often obtained by unique and fast access to trading information.[18]

Although technological advancements that make it possible to develop and adopt sophisticated and rapid computerised trading practices were the critical factors behind the increase of HFT, changes in the regulatory framework, trading rules and practices have also contributed to this rapid transformation. This includes regulatory reforms such as NMS in the United States, MiFID in Europe and Marketplace Rules in the Canada, that aimed at promoting competition in trading services (IOSCO, 2011a), decreasing the tick sizes[19] that make it easier for investors to engage in speculative activity (Grant Thornton, 2010) and the possibility of co-locating the computer servers of trading firms within the stock exchanges to gain faster access.

3.2.3 Exchange-traded funds

The increase of intermediary ownership has for a long time been coupled with a rise of passive investment strategies that are based on a closely pre-defined set of criteria. The most obvious example is various forms of index tracking, which has become an important “strategy” for a broad spectrum of investors (Rey and Seiler, 2001). Already in the beginning of 1990s, many pension funds allocated more than half of their investments in equities to indexes. Two important factors driving this development were that passive investment strategies (indexing) helped investors to dispose of heavy brokerage commissions and advisory fees, and that active institutional investors were unsuccessful in beating the market averages over time (Lowenstein, 1991).

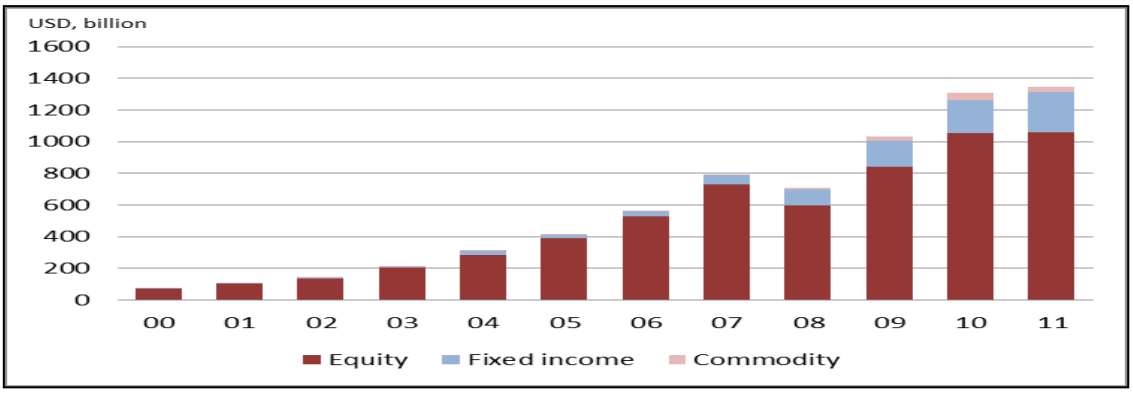
---

[18] Beside general characteristics, HFT covers a wide number of financial strategies with different market impacts, such as: market-making strategies, arbitrage strategies and directional strategies (IOSCO, 2011a).

[19] The smallest increment for a stock price movement.

In the mid-1990s, the use of indexing was taken to yet another level by the development of exchange-traded funds (ETFs). Since then, ETFs have emerged as alternative investment vehicles for both passive and active investment strategies. ETFs share the common characteristics of mutual funds but are also tradable like shares on exchanges (Ramaswamy, 2011). As a result, investing in ETFs makes it possible to both decrease the transaction costs and diversify the portfolio for passive investors, and at the same time follow an active strategy for holding and trading different ETFs. As shown in Figure 3.3, the total market value of assets under ETFs has grown dramatically during the last decade and, after a slight decrease in 2008 during the global financial crisis, reached USD 1 351 billion in 2011.

Figure 3.3. Global exchange-traded fund assets (USD, billion)



Source: BlackRock.

3.3. Issues and policy reactions

The developments in terms of institutional ownership, equity market structure and trading practices described in Sections 2.1 and 2.2 have all been discussed in relation to their impact on the incentives and ability to exercise long-term corporate governance. This section discusses four of the main concerns that have been raised, namely: *institutional ownership and misalignment of incentives; erosion of investor incentives and market trust; crowding out of long-term ownership; and decreased interest in using primary equity markets*. Brief examples of policy reactions or responses are provided for each of the areas.

3.3.1. Misalignment of incentives

In most OECD countries the majority of traded shares are held by intermediaries, such as pension funds, mutual funds and insurance companies, that basically invest the money of ultimate savers for a fee. While intermediation in itself lengthens and weakens the link between savers and corporations, the presence of proxy advisors, asset managers and other service providers in the investment chain also make the corporate governance process more complex. With every additional actor, there is a risk that the ultimate saver's objectives becomes misaligned. This misalignment may not only be in terms of investment strategy but in terms of corporate governance priorities as well.

Since intermediary investors themselves differ in terms of their business models, their incentives and priorities in terms of exercising long-term corporate governance also differ. In the pursuit of effective policies, it is essential that policy makers develop a better understanding of the role and incentives of intermediaries. Such a taxonomy would go a long

way to understand the effectiveness and rationale for individual corporate governance rules and regulations.

The move away from the traditional individual direct shareholders who experience a direct link between corporate performance and their own income, is recognised in the *OECD Principles* and makes "…the effectiveness and credibility of the entire corporate governance system and company oversight … to a large extent depend on institutional investors". However, the common expectation of *increasing demand for a voice in corporate governance* (OECD, 2004) due to the rise of professional investors has not always been met. One of the most straightforward explanations is simply that a great majority of intermediary investors actually lack the incentives to exercise their ownership functions.

In some countries, the response has been to introduce institutional investor codes to promote engagement in corporate governance and align institutional investors' interests with the ultimate savers. The key principle is that institutional investors should monitor their investee companies (UK Stewardship Code) and decide in a careful and transparent way whether they wish to exercise their shareholder rights (Dutch Corporate Governance Code). Despite such attempts, it has been argued that the 2008 financial crisis highlighted the problem of misaligned interests and that shareholders' lack of interest in corporate governance raises questions about the effectiveness of existing corporate governance rules (European Commission, 2010). The *Kay Review* (2012) also noted that the growth of intermediation has increased the potential for misaligned incentives, and together with the erosion of trust, is a major source of economic short-termism.

3.3.2. Lack of confidence, crowding out and the use of primary markets

Before the financial crisis, developments such as market fragmentation,[20] HFT, ETFs, co-location practices, indication of interests (IOI) and direct electronic access were generally welcomed. They were primarily seen as means to increase competition, drive down transaction costs, facilitate the execution of large-scale transactions and make trade faster and more accessible.

In recent years, however, concerns have also been raised that these developments in terms of equity market structure and trading practices have had an adverse impact on the incentives and behaviour of both investors and corporations. It is sometimes claimed that developments have eroded not only confidence in equity markets as a level playing field where all investors have the same opportunities but also the incentives to engage in long-term corporate governance. Second, it has been argued that current market conditions tend to crowd out long-term investors and strategies that focus on a fundamental analysis of corporate prospects. Third, it has been suggested that developments have made entrepreneurs and growth companies more hesitant to use primary equity markets as a source of funding. These issues are discussed below.

The complexity of today's equity markets means that the effects of different developments such as fragmentation and HFT on the incentives and ability to pursue long-term corporate governance practices cannot be analysed in isolation. Several different developments may simultaneously influence, for example, market confidence or investor incentives. There may of course also be counter-veiling forces. The complexity of the issues as well as the

[20] The changing ownership structure of, and competition among, stock exchanges and its impact on the role of stock exchanges in corporate governance was addressed in the previous work of the OECD, see Christiansen and Koldertsova (2009).

increased public scrutiny of market structures and trading practices, can be illustrated by the debate that followed the so-called Flash Crash in May 2010.

The Flash Crash was the largest price decline and reversal since 1929 in the US market; market indexes dropped more than 5% in 5 minutes and recovered almost entirely in the next 90 seconds; 324 company shares suffered price moves of more than 60% and exchanges cancelled more than 20 000 trades (Schapiro, 2010). The size and the complexity of the event made the Flash Crash somewhat of a defining moment in the discussion on market structure and trading practices.

The Flash Crash received additional public policy attention by the fact that it coincided with the end of the comment period for a Concept Release on Equity Market Structure issued by the SEC in January 2010 (SEC, 2010a). The Flash Crash was immediately followed by a critical address[21] by the SEC Chair, which, with references to "clear market failures",[22] moved the issues of market structure and trade practices to the top of the policy agenda.

Following the Flash Crash, a joint report by the US Commodity Futures Trading Commission (CFTC) and the US SEC (2010) concluded that one of the key lessons to be learnt from the event is that the interaction between automated execution programmes and algorithmic trading strategies can quickly erode liquidity and result in disorderly markets. Especially in times of significant volatility, like 6 May 2010, high trading volume is not necessarily a reliable indicator of market liquidity. A report from the Kauffman Foundation (Bradley and Litan, 2010), confirms not only the complexity of the event, but that of the current market structure as well. It noted that the Flash Crash was the first electronic market crash and claimed, contrary to the SEC report, that although HFT has dramatically increased in importance, it is not to blame for the equity market problems. Instead, the Kauffman Report argues that policy makers should pay far more attention to the increased importance of ETFs, which introduce systemic risk in the market while discouraging investor interest in public offerings. In sum, and considering the findings of other studies, the impact of market structure, trading practices and new equity instruments is not always straightforward, and since certain trading practices require or benefit from certain market structures (such as dark pools and co-location), developments are also likely to be mutually reinforcing.

The Flash Crash has been followed by a number of other national initiatives, notably the UK Foresight Report on the future of computer trading in financial markets and the European Commission's proposal on MiFID, which address issues regarding electronic trading and dark pools. The Australian and Canadian securities commissions have also published consultation papers on the new market structure and are conducting reviews of the current regulatory framework.

---

21 "I recognise that there may be a variety of reasons for reduced participation in the equity markets, but the trend is troubling, particularly if concerns about equity market structure are playing even a small role in investor decision-making… Less than 50% of the buy-side respondents, for example, expressed confidence in the current market structure. When these professionals … express concern in the U.S. equity market structure, we must listen closely". (Schapiro, 2010).

22 Chairperson Mary L. Schapiro's interpretation on the Flash Crash event. Examples of recent market glitches, problems confronted in the IPO of Facebook in May, Knight Capital Group's loss of USD 440 million owing to a software problem in August and the cancellation of orders for Kraft Foods Group shares in October 2012 (Reuters, 3 October 2012).

3.3.2.1 Eroding incentives and investor confidence

Together with providing liquidity, price discovery is one of the important functions of a well-functioning equity market (O'Hara, 2003). Defined as the search for an equilibrium price (Schreiber and Schwartz, 1986), the price discovery process plays a central role in the allocation of equity capital. During the formation of an equilibrium price, the individual investor compares the relevant information, including publicly available company information and available market prices of equities, with his/her own idiosyncratic information. Differences in expectations compared to the available market price then serve as the basis for the investors' investment decisions, which in turn will influence the market price and the move to a new equilibrium price.

This key role of price discovery in the allocation of capital in secondary markets makes efficient and fair price formation critical; not only for efficiency, but also for investors' confidence in the integrity of the markets and their incentives to identify and invest in long-term performance. While recognising the usefulness of dark pools for executing large trade orders, both IOSCO (2011a) and the European Commission (2010), emphasised the regulatory concerns related to them, as they may ultimately affect the quality of price discovery.

Weaknesses in price discovery may also have a negative effect on secondary public offerings, since the functioning of the secondary public offering markets relies on the efficiency of the price discovery process.

One reason why dark pools generate unequal access to market data is that they do not publicly display orders. To compensate for this, as required in the MiFID, for example, prices in the dark pools should be determined by reference to a widely published price generated by another system and regarded generally by market participants as a reliable reference price. However, as dark pools are getting larger and lit pools are shrinking in terms of trade, the question arises as to where the breaking point is for using prices in small lit pools as the reference for the majority of trading taking place in dark venues.

Equal access to accurate market information is also a problem in relation to HFT, since high frequency traders generally use dedicated data feeds that provide them with information before consolidated information is delivered to the public (Linton and O'Hara, 2011). Another important aspect of the HFT price discovery process relates to order cancellations. Today, more than 90% of the total trade orders are cancelled by high frequency traders immediately after they are placed.

It is claimed that the increasing complexity of equity markets and experienced market failures have undermined investor confidence. In addition to dark pools, the general fragmentation of equity markets also makes it harder and more expensive for market participants to monitor markets. It has also led to widespread criticism from individual investors and, according to some, resulted in pull backs from the equity market (Shapiro, 2010).

3.3.2.2 Crowding out of long-term investment

While the effects of HFT on market liquidity are still under discussion,[23] its contribution to short-termism is quite clear, at least in terms of the decrease in the average holding period

[23] Linton and O'Hara (2011) claim that as measured by bid/ask spreads and other metrics, the liquidity in markets has improved over the last decade. They also point out periodic illiquidity, as the speed of trading and interconnectedness of markets make it possible for high frequency

of shares. Krugman (2009) discussed HFT by underlining the social function of markets to efficiently allocate equity capital. He questions the role of high frequency traders in promoting this function by placing their orders one-thirtieth of a second faster than anyone else does.[24]

High frequency traders mainly base their trading on market information rather than analysis of corporate fundamentals and analyst research. Because of its rapid increase and dominance in the market, fewer resources are in aggregate spent on fundamental analysis of the long-term value creation potential of corporations. In addition, HFT requires expensive investments in technological infrastructure and human resources devoted to programming, which highlights the issue of a level playing field between high frequency traders and investors that do not have the possibility or need to invest in that technical and human capacity (IOSCO, 2011a). This is claimed to force institutional investors who consider themselves disadvantaged in the current market structure to leave the market or to adapt their trading strategies to HFT, which further diminishes the portion of equity investors with a long-term strategy supported by corporate fundamentals. As seen from Figure 3.1, institutional investors' share in the global equity market has fallen by 5% after 2008, but, there is no evidence that this decrease has been caused by new market structures and trading practices. The only indication is the outflow of equity capital from mutual funds in the United States after the Flash Crash (Schapiro, 2010).

3.3.2.3 Hampering the use of primary equity markets

Concerns have also been raised that new market structures and trading practices impact the willingness of new companies to enter public equity markets and as well as that of already listed companies to raise additional funds through secondary offerings. As discussed above, these concerns are partly based on the lack of reliable price discovery mechanisms.

Moreover, it is argued that high frequency traders pay less attention to small and growing firms, focusing their trading instead on the liquid shares of large corporations. When institutional investors follow this pattern, the shares of small companies face an illiquidity problem (Economist, 2009). Evidence from the United Kingdom confirms a decrease in that trading in small companies, which coincides with the increase in ETFs and HFT during the second half of the last decade (Friederich and Payne, 2011).

Also, ETFs are criticised for reducing the liquidity in the shares of small companies. The likelihood of ending up as part of an ETF, but with an illiquid stock, thus discourages new companies from entering the market (Bradley and Litan, 2010a). In addition, it is argued that the disappearance of a long-term focus in favour of short-term trading makes the use of analyst reports superfluous (particularly for smaller companies), increasing the risk of mispricing and further undermining the willingness of new companies to enter the public equity market (Doidge *et al.*, 2011).

---

traders to transmit disruptions almost instantaneously across markets. The US CFTC and SEC's joint report (2010) also pointed out the potential short-term liquidity problems caused by HFT, especially in times of significant volatility.

[24] "It's hard to imagine a better illustration than high-frequency trading. The stock market is supposed to allocate capital to its most productive uses, for example by helping companies with good ideas raise money. But it's hard to see how traders who place their orders one-thirtieth of a second faster than anyone else do anything to improve that social function." (Krugman, 2009)

PART IV

DEVELOPMENTS IN SHAREHOLDER MONITORING AND ENGAGEMENT

In addition to influencing the conditions for access to and allocation of equity (as described in Parts II and III), the corporate governance framework also decides how shareholders can monitor and engage in the corporate decision-making process. The possibilities for such monitoring and engagement cover a vast number of means and issues, including the ability to sell the stock, which may signal dissatisfaction, as well as more direct ways of engagement, for example in shareholder meetings, through board representation or even a takeover.

All of these rights are given to shareholders under the assumption that they, as residual claimants, have a unique incentive to care and inform themselves about the long-term success of the enterprise. It is assumed that there is a direct link between the performance of the corporation and the shareholder's income. On these grounds, attention has not only been given to what rights shareholders actually have, but also to their ability – and even willingness – to exercise those rights.

In most OECD countries today, there are few objective obstacles for shareholders to exercise their rights. There are few restrictions on buying and selling stocks in listed companies, the quantity and quality of corporate information is constantly growing and through information technology, the organisation of and participation in shareholder meetings has been greatly facilitated. This is manifested in relatively high participation ratios at shareholder meetings, even in countries with a predominantly dispersed ownership structure such as the Netherlands, the United Kingdom and the United States.

Instead, the corporate governance policy discussion has come to focus on the actual *quality* of shareholder monitoring and engagement, and questions whether today's shareholders actually have the incentives to use their rights in an informed way and thereby serve the long-term interest of the economy. To what extent do different categories of shareholders actually perform their fundamental role to bring new and independent information about corporate prospects to the market? Has the fundamental incentive for active and informed ownership – on which so much of the corporate governance doctrine rests – simply disappeared for large or dominant groups of shareholders?

The empirical basis for this question has little to do with the equity instrument itself. Instead, explanations are typically sought in a more complex chain of intermediary investors and the *incentives* that follow from the business models, competitive situation and investment strategies of institutional investors.

To shed some light on these questions, this part describes developments with respect to various means of shareholder participation in the corporate decision-making process together with some empirical evidence of how and to what extent shareholders participate in the decision-making process of the corporation. It also provides a discussion on the emergence of new categories of investors, how they exercise their shareholder functions and how their actions relate to the objectives of the ultimate beneficiaries.

4.1. Different types of shareholder monitoring

The European Commission's *Green Paper on Corporate Governance* (2011) defines shareholder engagement as actively monitoring companies, engaging in a dialogue with its

management and using shareholder rights, including voting and co-operation with other shareholders, to improve the governance of the investee companies in the interest of long-term value creation.[25] This approach provides a broad spectrum of shareholder means, from selling and buying shares to expressing their views on a large number of issues from board composition to major transactions and takeover bids (Gillan and Starks, 2007).

The basic legal and economic doctrine behind the *OECD Principles* is that shareholders have the incentives to obtain sufficient and reliable information about their investee companies so that they, in an informed fashion, can look after their own interests. This assumes that shareholders not only make rational use of any information that is disclosed by the company itself, but that they also – at some cost – gather information from other sources that are not necessarily public. This plurality in terms of information gathering and independent assessments about corporate prospects by a large number of different shareholders is the very basis for a well-functioning market economy, effective price formation and capital allocation. The information can be used either to trade the stock of a particular company or as the basis for influencing corporate practices through the corporate governance process.

One way to measure the degree of shareholder monitoring and engagement is the participation and voting patterns at shareholder meetings. Figure 4.1 shows the average shareholder turnout and average level of dissent in shareholder meetings in some OECD countries. In line with other studies (Institutional Shareholder Services, 2011; European Parliament, 2009), it illustrates the relatively high level of shareholder participation. In all of the surveyed countries, turnout was above 50% of all issued shares. Notably, among the countries with the highest turnout are the United Kingdom and the United States, two countries with predominantly dispersed ownership at the corporate level. In the United Kingdom, the average turnout was almost 70% and in the United States it was no less than 80%. While we do not have access to data, turnout levels in many emerging market companies can be expected to be fairly high, primarily due to a relatively limited free float or otherwise concentrated ownership structure.[26]

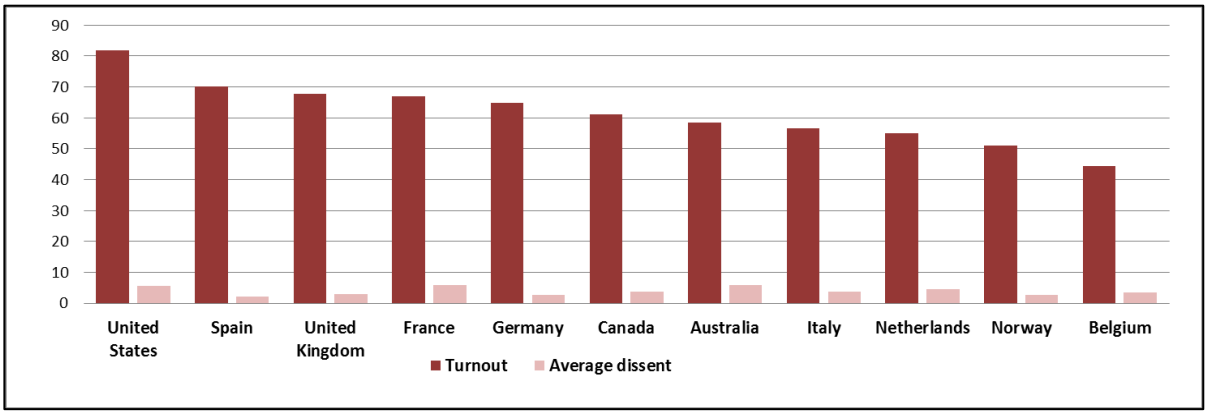
Another measure of engagement is the the degree of dissent and the number of shareholder proposals that are tabled. Figure 4.1 shows that the degree of dissent is quite low among the surveyed countries, varying between 2-6%. One explanation could be that shareholders find management (or board) proposals to be well aligned with their own interests (Institutional Shareholder Services, 2011). However, it may raise questions about shareholders' awareness and conformity in opinions.

---

[25] The effectiveness and outcomes of shareholder engagement is also discussed. It is argued that shareholders of financial institutions sometimes encourage the financial institution to take excessive risks as they have a short-term investment horizon (European Commission, 2010). It is also argued that even if shareholders exercised their rights effectively, they would still not to do so to maximise shareholder wealth. This is explained by the market, political and social incentive-creating forces driving institutional investors to value things other than shareholder value, which arises from the conflict of interest between institutions (union, state agent, etc.) and shareholders (Camara, 2005).

[26] With limited data availability, Hewitt's (2011) study also indicates a high turnover in some emerging markets, such as Brazil (77%), Turkey (69%) and Poland (66%).

Figure 4.1. Shareholder turnout and average dissent, 2010 (%)

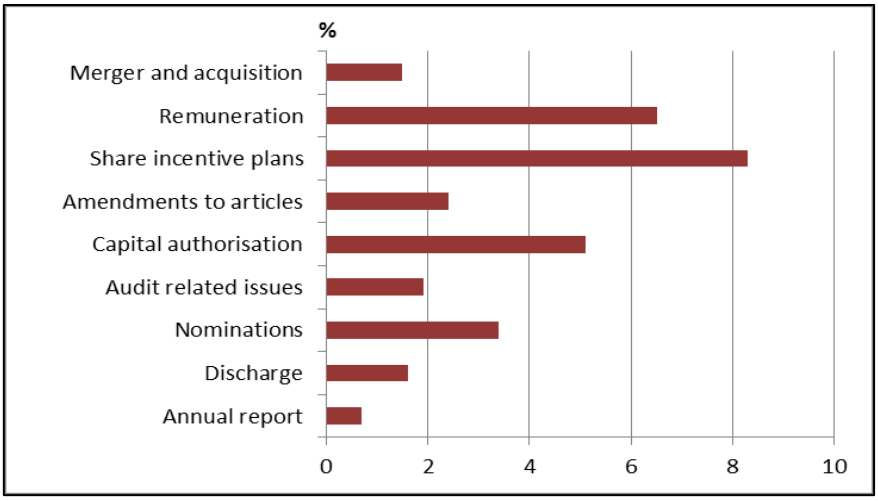


Note: Turnout is the percentage of the issued shares represented at the shareholder meeting. Dissent is the percentage of votes cast against the recommendation of company's management on a resolution.

Source: Hewitt, P. (2011), "The Exercise of Shareholder Rights: Country Comparison of Turnout and Dissent", *OECD Corporate Governance Working Papers*, No. 3, OECD Publishing, doi: *10.1787/5kg54d0l1lvf-en.*

Even in the controversial case when the Royal Bank of Scotland and Fortis proposed a takeover of ABM Amro, which was subject to extensive and vivid public debate before the shareholder meeting, dissent among shareholders was only about 5%. The acquisition was generally considered as a failure and was followed by the bankruptcy and subsequent nationalisation of the two acquiring banks (OECD, 2009). Another indication of the degree of discretion in shareholder voting is provided in Cai et al. (2009), which found that for board elections in the United States, even for underperforming directors and companies, almost 94% of votes were cast in favour of the proposed candidates.

Figure 4.2. Average dissent in Europe, 2010



Source: Institutional Shareholder Services (2011), *Voting Results Report: Europe*, ISS, available at: *www.issgovernance.com/files/private/VotingResultsReportEurope2011.pdf*.

As shown in Figure 4.2, on average, remuneration policies and the introduction of share incentive plans received the largest number of dissent votes in Europe in 2010, while dissent votes for issues related to mergers and acquisitions were much lower. One explanation could be that both remuneration proposals and share incentive plans typically include a fairly direct element of current or future pay-outs and share dilutions, whereas the consequences

of mergers and acquisitions are harder to foresee and require much more time and resources to analyse.

An even less common expression of shareholder engagement is to propose a resolution to a shareholder meeting (Hewitt, 2011). Again, one explanation may be that they may require substantial time and resources to prepare and pursue. Also, experience has shown that resoutions are most often unsuccessful and may send negative signals to the market about the performance or the governance of the company, which in turn could result in a negative reaction of the stock market (European Parliament, 2009).

A study by Van der Elst (2011) of five European countries[27] found that ownership concentration increased the overall voting turnout while financial performance does not have any effect on the level of participation. He also found that the presence of director elections on the agenda was positively correlated to shareholder turnout. A report by the European Parliament (2009) confirmed that the average attendance level is significantly higher in companies with a controlling owner. The report also claimed that smaller shareholders seem to abstain from participating in the shareholder meeting when there is a non-controlling large shareholder. This behaviour can perhaps be explained by a sentiment among shareholders that their voices will not be heard. It can also be interpreted as a sign of confidence that the large non-controlling owner has the incentives and capacity to perform the monitoring function of management on behalf of the smaller shareholders.

An important explanation for the high turnout, particularly in the United Kingdom and the United States, is the use of proxy voting.[28] In both countries, proxy voting has become the principal way in which shareholders exercise their voting rights: voting occurs almost entirely by the use of proxies that are solicited before the meeting (SEC, 2010b). With the help of information technology, proxy voting is not only a cost-effective means for shareholder participation, the process of solicitation is also a means to influence decisions and verify the outcome before the formal shareholder meeting.

A less formal way of monitoring is through dialogue with the board or the management of the company. In a survey by IRRC and ISS (2011), more than half of the asset owners, asset managers and issuers reported such engagement activity in 2010. The engagement practices vary from campaigns to persuade a company to change its behaviour to a routine email exchange or telephone call. It is worth noting that that 76% of asset owners and 56% of asset managers stated that they had five or less staff members devoted to engagement with investee companies. This number should be related to the hundreds or perhaps thousands of companies that these institutions may hold in their portfolios. Against this background, it is not surprising that limited staff was identified to be the main impediment to engagement.

An *ex-post* form of monitoring is shareholder suits. According to Securities Class Action Clearinghouse data, nearly 200 class action lawsuits were filed annually between 1997 and 2011 in the United States.[29] While it is argued that the vast majority of shareholder suits settle without a trial (Black et al., 2006), this does not make them less efficient in terms of

---

[27] Belgium, France, Germany, the Netherlands and the United Kingdom.

[28] In addition to companies and shareholders, the proxy system involves brokers, banks, custodians, depositories, transfer agents, proxy solicitors, proxy service providers, proxy advisers and vote tabulators. Basically, shareholders cast their votes through intermediaries who use a proxy service provider to collect and send the votes to the vote tabulator (SEC, 2010b).

[29] Stanford Law School Securities Class Action Clearinghouse, *http://securities.stanford.edu/litigation_activity.html*.

shareholder engagement. Depending on the legal framework, ownership structure and investment culture, the role of lawsuits as a way of engaging shareholders varies across countries. A study by Girard (2009) on French shareholder activism between 1989 and 2008 found that although shareholder activism was limited compared to the United States and the United Kingdom, lawsuits do play an important role. In nearly 50% of the total shareholder activism cases (100 out of 203) identified in the study, a lawsuit was part of the process. Suitors were often investors associations.

Vermeulen and Zetzsche (2010) studied shareholder suits in the Netherlands and in Germany. In the Netherlands, out of 23 inquiry requests with respect to public companies, an injunctive relief was requested in 21 cases and preliminary remedy was granted in 12 (57%). Preliminary remedies included the appointment of independent directors, the prohibition of voting on particular agenda items and deviation from the articles of association. The company and its shareholders mostly followed the preliminary relief and reached a settlement. In Germany, they found that every year approximately 12% of all companies whose shares are traded on the stock market were subject to a recession suit regarding their shareholder meetings.[30] In this process, any shareholder can initiate a court proceeding against the result of a shareholder meeting without a precondition to have a personal interest. Essentially shareholders contested on their own, even sometimes with a few shares.

4.2. Different ownership categories and monitoring

In the introduction to this part we pointed to the fundamental economic rationale for providing shareholders with the means to monitor and engage and proposed that at the heart of this doctrine is the assumption that there is a direct link between corporate performance and the shareholder's income. Other parts of this report concluded, however, that this direct link is broken by an increasingly complex universe of intermediaries whose business is to manage other people's money. As a consequence, the ownership community is far from homogenous in terms of their incentives to monitor corporate performance. It is worth illustrating the consequences of this using a very simplified arithmetic example:

Consider a company owned by 1 000 profit-maximising funds that all manage their client's money for a fixed fee and hold similar and pre-defined indexed portfolios. One of the funds has the possibility to pay EUR 50 for a set of unique information on how to improve the company's performance by EUR 100 000. If this information is conveyed and used by the company, all funds will gain EUR 100. However, the net gain for the "engaged" fund is only EUR 50, since it also invested EUR 50 in obtaining the performance-enhancing information. As a consequence, at the end of the year, the fund will show a lower net rate of return on its portfolio than all of its competitors, and if savers can move their money without the costs being too high, will go out of business. It will also return lower profits to its owner, which, in principle, could be compensated by increasing the fees that it charges its clients; an option that does not seem viable considering that the fund's track record shows underperformance in relation to its competitors. Hence, we are left in a situation where the socially optimal behaviour of engagement that improves corporate performance and creates additional value for society drives the "engaged fund" out of business. In this simplified example, the "production" of socially valuable information will not take place.

The outcome in this example has nothing to do with the classical Berle & Means problem of dispersed (or atomized) ownership, where the gross cost of engagement for a very large

[30] There is a risk of double counting in this calculation as one issuer may be subject to more than one suit if an extraordinary shareholder meeting is held (Vermeulen and Zetzsche, 2010).

number of very small owners does not correspond to the net gains. Instead, it is driven by assumptions regarding the business model, competitive environment and investment practices of the intermediary investors.

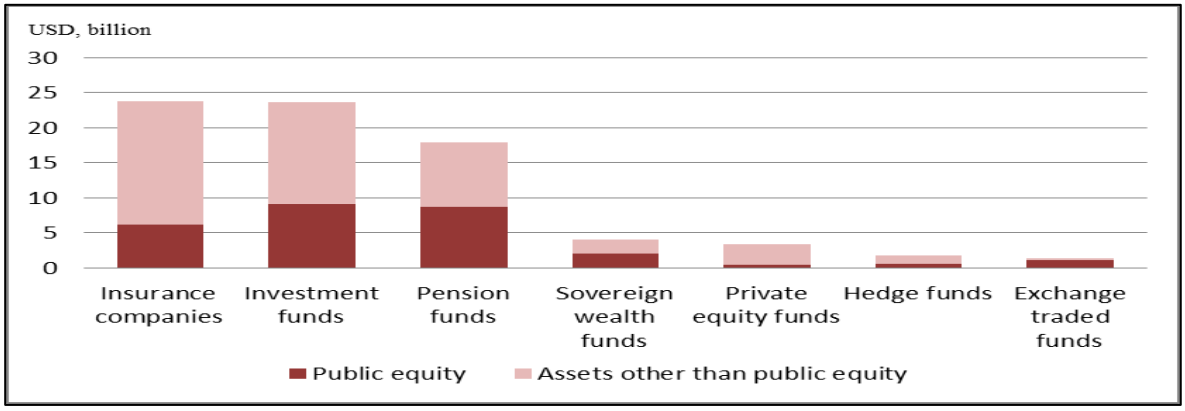
Again, the example is simplified. But as a framework for analysing shareholder behaviour and engagement, it has practical relevance. In almost every case of intermediation, an adapted version of this analytical approach can be applied to predict behaviour by identifying the business model, competitive environment and investment practices for different categories of owners and the incentives that follow. It also points to the important conclusion that genuine and informed shareholder engagement that improves corporate performance is closely related to the individual shareholder's possibility to internalise or privately appropriate the returns on his investment in research and information.

For some non-commercial institutional investors, for example public pension funds, the incentives for engagement may again be different. For such investors, and depending on their institutional structure, the analysis of their incentives and objectives for corporate activism may (for example) benefit from experiences with public choice theory and how bureaucrats and political appointees responsible for the fund's investment may maximise their own personal and political preferences rather than the benefits to the ultimate beneficiaries, such as current and future retirees.

As discussed in Part III, most OECD countries have seen a marked shift from direct ownership to intermediary ownership over the last few decades. As we will discuss below, the universe of intermediaries has also become more complex. Today we see a mix of "traditional" institutional intermediaries, such as pension funds and insurance companies, alongside "alternative" institutional investors, such as hedge funds, sovereign wealth funds and private equity firms. Furthermore, the different categories may, within themselves, carry out similar functions, for example asset management services.

Partly as a result of this complexity, data on different categories of institutional investors' portfolio allocations and investment strategies is limited. A rough overview is provided in Figure 4.3, which shows that while "traditional institutional investors" (pension funds, mutual funds and insurance companies) hold the absolute lion's share of public equities, about USD 4 trillion (7%) of publicly traded equity is held by other "institutions", all with their own business models and incentives for monitoring and engagement.

Figure 4.3. Institutional investors' allocation to public equities (2011)



Note: Investment funds, insurance companies and pension funds data do not cover non-OECD economies. Since institutional investors also invest in other institutional investors, for instance pension funds' investments in hedge funds, the comparability of different data is not verified.

Source: OECD *Institutional Investors Database*, Preqin, BlackRock, IMF, McKinsey Global Institute.

4.2.1. Pension funds, mutual funds and insurance companies

Today, "traditional" institutional investors (pension funds, mutual funds and insurance companies) hold nearly half of the listed equities in the world, but there is no available data that identifies the participation of different categories of investors in shareholder meetings. Nevertheless, considering the generally high turnout at shareholder meetings and the low participation by individual shareholders, it can be assumed that institutional owners typically participate in shareholder meetings. This assumption is particularly strong for the United States and the United Kingdom, where turnout levels are very high and institutional owners hold nearly 70% of the listed equities.[31]

A study by Institutional Shareholder Services (2010) on European listed companies, which was based on the assumption that all shareholders holding more than 5% of the issued share capital exercise their voting rights, found that, with the exception of the United Kingdom, the majority of the remaining smaller shareholders do not participate in the meetings. In some cases, such as Belgium and Italy, participation among shareholders with less than 5% of the shares was under 20%.

The low participation by individual shareholders is confirmed by their low participation in the general proxy voting process. The SEC (2010b) notes that broker-dealers have estimated that only 20-30% of their individual customers usually vote.

The principal means of shareholder participation by pension funds, mutual funds and insurance companies is through proxy voting. That is why over the last decade they have substantially increased their use of so-called proxy advisors (SEC, 2010b); a practice that has also grown in Europe. A survey conducted by the Dutch Corporate Governance Code Monitoring Committee (2011) found that 88% of institutional investors in the Netherlands made use of the voting advice from third parties.[32]

An important driver behind the use of proxy advisors is regulatory requirements for some institutional investors to vote their shares. Voting thousands of shares can be a costly exercise and to rationalise the procedures it is routinely contracted out. As the director of proxy voting services at Wells Fargo expressed it: "s*ince we invest by formula, we vote by formula"* (Lowenstein, 1991). The ERISA Act of 1974 and interpretive bulletins in the United States were of particular importance for the creation of this market for proxy services. These were was soon followed by the establishment of proxy advisory firms, such as the Institutional Shareholder Services (ISS) in 1985.

While there is no requirement under the ERISA Act to disclose overall voting policies with respect to a pension fund's investments,[33] it has been claimed that pension plans and mutual funds have considered it mandatory to vote their shares under the act and the Department of Labor's interpretive guidance to the act (Hewitt, 2011).

---

[31] On the other hand, some surveys (Dutch Corporate Governance Code Monitoring Committee, 2011) show that a large majority of institutional investors make use of the voting advice of third parties, which can be seen as a sign of their participation in the shareholder meetings.

[32] 22 out of 25 institutional investors.

[33] US response to the OECD questionnaire on the role of institutional investors in promoting good corporate governance.

In addition to the effects of direct regulatory demands, it has also been argued that changes in board structures and board election processes have further increased the demand for proxy advisory services. In the United States, most listed companies have shifted from plurality voting to majority voting, which requires that a nominee for board membership receive a majority of the votes cast. Moreover, many companies have abandoned the practice of staggered boards, which declined from 55% in 2005 to 40% in 2007 among S&P 500 companies. The NYSE has adopted a rule which bans brokers from voting without instructions from beneficial owners on director elections (Choi et al., 2010).[34]

The business of proxy advisors is to sell recommendations to institutional investors on how to vote and to sell services that help with the actual process of exercising the voting rights. They also sell corporate governance related consulting services to corporations and undertake so-called corporate governance ratings of these companies. Concerns have been raised about a potential conflict of interest, as proxy advisors sell recommendations to shareholders about corporate governance practices in corporations to which they sell consulting services (SEC, 2010b).

Concerns have also been raised about market concentration in the proxy advisory industry, with a few firms having a large share of the market without appropriate oversight or actual economic interest in the long-term value of the companies (OECD, 2010; European Securities and Market Authority, 2012; SEC, 2010b). The largest proxy advisory firm, ISS, claims to serve over 1 700 institutional clients, including 24 of the top 25 mutual funds, 25 of the top 25 asset managers and 17 of the top 25 public pension funds (Daines et al., 2010). According to its website, ISS covers more than 40 000 shareholder meetings in over 100 developed and emerging markets worldwide with a team of 600 experts, including research, technology and client service professionals. Very simply put, this means that each employee is responsible for researching almost 70 shareholder meetings (companies) a year in order to develop voting advice on a vast number of complex issues that are up for decision.

There are also important questions about the quality of proxy advisors' analytical methods and criticism that it does not take company- and country-specific characteristics into account (European Commission, 2011), but rather adopts a mechanical and potentially box-ticking approach in its analysis (European Securities and Market Authority, 2012).

The influence and efficiency of proxy advisory firms are attracting growing interest from researchers. A study of Cai et al. (2009) addressed the influence of a proxy advisor's recommendation on the election of a board member and found that the nominees who received a negative recommendation from ISS received 19% fewer votes compared to other candidates. Another study by Daines et al. (2010), which examined the corporate governance rating activities of proxy advisors, concluded that despite claiming the contrary, these firms have limited or no success in predicting company performance or other outcomes of interest to shareholders. In fact, the study showed a negative correlation between the corporate governance index of Risk Metrics and the value of the company as measured by Tobin's Q. They also found a negative correlation between corporate governance ranking and corporate performance. These results are largely confirmed in a study by Bebchuck and Hirst (2009), which emphasised the need to take differences in

[34] The discretionary broker votes are estimated to be about 19% of the votes cast in the shareholder meetings in the United States and are mainly supportive of management's proposals. Interestingly, if the rule had been in effect during Citigroup's 2009 shareholder meeting, two of the group's nominees would not have been elected, as broker votes were 46% of the total votes cast (Choi et al., 2010).

ownership structure into account when assessing the quality of corporate governance in individual companies.

In light of a growing discussion about the role of proxy advisors, the French securities regulator, AMF, has published a recommendation on proxy advisors and the United States' SEC and the European Securities and Market Authority (ESMA) have published consultation papers on the proxy advisory industry.[35]

4.2.2. Alternative institutional investors

The total assets under management of what we here call "alternative" institutional investors (hedge funds, private equity funds and sovereign wealth funds), is relatively small compared to the combined holdings of "traditional" institutions, defined as pension funds, mutual funds and insurance companies. While the exact numbers are hard to come by, the estimated holdings of "traditional" institutions are about USD 65 trillion, whereas "alternative" investors hold around USD 8.8 trillion.[36] As a group, the "alternative" investors hold a smaller part of their assets in publicly traded equity. Sovereign wealth funds have the largest allocation in their portfolios to public equity, while private equity firms have the smallest.

Despite their relatively modest investment in public equity, hedge funds and private equity funds have featured prominently in the public discussion about shareholder activism and have by some commentators been seen to hold great promise as active shareholders in the absence of "traditional" institutional investors (Kahan and Rock, 2007). Particularly before the financial crisis, activist hedge funds and private equity firms were often seen as the representatives of an increasing demand for a voice in corporate governance. While they noted that private equity funds and hedge funds are very seldom large shareholders in European listed companies, in 2007 the European Parliament (2007) pointed to their growing role as active shareholders. The OECD described their business model as seeking to increase the market value of their capital through active engagement with individual public companies from which they demand changes in management, the composition of the board, dividend policies and company strategy (OECD, 2007a).

An important difference compared to "traditional" institutional investors who typically charge a fixed fee on assets under management is that hedge funds and private equity funds typically charge various forms of performance-related fees. It has been claimed that this remuneration system creates greater incentives to pursue activist investment strategies (European Parliament, 2009).

While their interest in shareholder voice may be similar, the strategies of hedge funds and private equity firms to provoke change are quite different. Hedge funds usually influence public corporations through small, non-controlling holdings. By using derivatives and other financial techniques such as share lending, they partly rely on other investors, including "traditional" institutions, to increase their potential voting power to influence change (OECD, 2007a). These techniques have raised concerns that activist hedge fund strategies favour short-term profits rather than long-term value creation (European Parliament, 2009). It is argued that they do not have an incentive to focus on the long-term success of the

---

[35] Autorité des marché financiers (2011); SEC (2010b); European Securities and Market Authority (2012).

[36] The total assets under management are estimated to be USD 8.8 trillion, of which: hedge funds, USD 1.8 trillion; private equity funds, USD 3 trillion; and sovereign wealth funds, USD 4 trillion. (Sources: IMF, 2011; Preqin, 2011).

companies whose stock they hold, as there are strong links between their short-term performance and ability to raise additional funds (Anabtawi, 2005).

Private equity firms, on the other hand, typically acquire large or controlling shares of companies that are suited for a (leveraged) buyout and delisting. The differences in techniques also indicate a difference in time horizon, as private equity funds have a longer horizon than activist hedge funds (Achleitner et al., 2010). Unlike hedge funds, which may immediately realise the gains from their interventions through the use of derivatives and other instruments, the full gains to private equity funds only occur after restructuring and sale of the company. This sale can be either to another private equity firm, a company, a strategic investor or the general public through an IPO (McCahery and Vermeulen, 2008).

A third category of "alternative" institutional investors consists of what is often labelled sovereign wealth funds (SWFs). Like almost all of the different categories of institutional investors, this is also quite a heterogeneous group, varying from fiscal stabilisation funds to investment corporations and pension reserve funds without explicit pension liabilities. In some cases they also serve as central ownership agencies of state-owned assets, but may at the same time hold portfolio investments in publicly listed companies.[37] In the *Santiago Principles* (2008), they are simply defined as special purpose investment funds that are owned by the general government.

Unlike activist hedge funds and private equity funds, SWFs usually follow passive investment strategies in terms of portfolio investments. As a consequence, the debate about their ownership role is not primarily related to shareholder activism, but rather to concerns about political interference, protectionism and their own transparency and accountability (Blundell-Wignall et al., 2008).

The fastest growing category of "alternative" institutional investors in recent years is exchange-traded funds (ETF), which have become a significant component of passive investment strategies. ETFs cater to the demand for passive, indexed investment strategies and as such do not have incentives to exercise any shareholder rights that come with their holdings. This is amply manifested by the fact that some ETFs, instead of charging management fees, rely totally on proceeds from securities lending to generate income (Wong, 2010).

With a dramatic surge in HFT, a special "category" of owners in the form of proprietary traders has attracted increasing public attention. Proprietary traders are not a special category in the sense of legal form or business model, but a practice carried out by a wide range of institutions. In the Dodd-Frank Act, proprietary trading is referred to as engaging as a principal for the trading account of the corporation in any transaction to purchase or sell equities and other financial instruments. The practice is mainly carried out by independent HFT firms, hedge funds and the proprietary trading desks of investment banks. It is estimated that proprietary trading accounts for 10% of Goldman Sachs' revenues and less than 5% of Morgan Stanley's and Citibank's (Wall Street Journal, 2010). Crotty et al. (2010) argue that there is strong evidence that these figures underestimate the importance of proprietary trading. However, available data is limited.

As mentioned in Part III, there is also a lack of reliable data concerning the actual shareholdings of high frequency traders, but it is generally estimated that their direct

[37] For example, in Saudi Arabia the SWF holds 36% of the total market capitalisation (Markaz, 2008), more than 80% of which is non-free float controlling shares of some large listed SOEs (SABIC, Saudi Telecom and Saudi Electricity Company).

shareholdings are very small in relation to their trading volume. In the United States, for example, banks and other financial institutions hold only about 1% of listed stocks.

The debate on their role in the financial crisis was not primarily related to their role as shareholders, but rather to their portion of the trading volume in derivate and debt instruments. The Flash Crash in May 2010 set off the discussion about their impact on public equity markets. The so-called Volcker Rule, which was expected to be implemented in July 2012 as part of the Dodd-Frank Act, includes prohibitions and restrictions on the ability of a banking entity and non-bank financial company to engage in proprietary trading. However, it is claimed that firms would continue proprietary trading in different formats, such as indirect ownership of trading firms (Wall Street Journal, 2012). It is also worth mentioning that the rule does not cover all investors engaging in proprietary trading, for example hedge funds and specialised HFT firms.

An important characteristic of proprietary traders, compared to other institutional investors, is that they are not intermediary investors. Instead, they invest on their own behalf and in their own name. This makes them similar to hedge funds. As mentioned above, some hedge funds also engage in proprietary trading. Proprietary trading is closely linked to HFT and to a large extent driven by technological advancements in computer capacity and privileged access to market information. Since the trading strategy has a very short-term focus based on arbitrage opportunities, it does not require any engagement with the investee company.

4.3. Obstacles to monitoring

As mentioned in the introduction to this part, the last couple of decades have seen major improvements in the conditions for shareholders to participate in shareholder meetings. For a select number of countries, participation rates are indeed relatively high. Today, the discussion on regulatory obstacles to shareholder participation is mainly focused on shareholder co-operation and cross-border voting.[38]

In terms of co-operation among shareholders, one source of concern has been that national regulations do not clearly define the boundaries for collaboration among investors, or acting in concert. The claim is that unclarity makes institutional investors reluctant or unduly cautious to co-operate on corporate governance matters (OECD, 2010). An initiative to remove such concerns and bring greater clarity was taken by the UK Financial Services Authority[39] and the UK Takeover Panel (2009). In 2009, they issued public statements that their regulatory frameworks do not prevent institutional investors from co-operating or undertaking collective action. The European Union has also launched an initiative to increase legal certainty on the relationship between co-operation among investors and the rules for shareholders that are acting in concert (European Commission, 2012). Co-operation obviously requires the ability to identify other shareholders. To facilitate this, the European Commission's Corporate Governance Action Plan (2012) proposes an initiative that would improve the visibility of shareholdings in Europe.

---

[38] In some jurisdictions there are also important discussions about the fact that most shareholder meetings take place during a very limited time period, there are restrictions on putting an item on the agenda, procedures for convening the meeting and difficulty in accessing meeting documents.

[39] An open letter from the Financial Services Authority to the Institutional Shareholders' Committee, 19 August 2009, *www.frc.org.uk/FRC/media/Documents/shareholder_engagement_FSA_letter.pdf*.

Potential obstacles to cross-border voting have announced themselves in the wake of increased globalisation of share ownership. Today, the share of listed equities held by foreign investors is over 40% in the United Kingdom, over 25% in Japan and around 15% in the United States. It is argued that cross-border voting is still difficult in many jurisdictions and that even within the single market of the European Union, there are important obstacles (European Commission, 2010).

In some countries, there are also regulatory restrictions on the maximum size of institutional investors' equity ownership in a single company. It could be argued that these limitations restrict their ability to take large ownership stakes in individual companies. This may indeed be true in some cases, but in practice, and since many of the institutions pursue an index strategy, their holdings in individual companies is typically far smaller than the required maximum limit.

4.4. Shareholder incentives for monitoring

While some obstacles may remain, there is a general consensus that shareholder rights in OECD countries have been substantially strengthened in the last decades and that there is a general trend to empower the shareholder meeting in the corporate decision-making process, particularly with respect to board nomination and remuneration policies. Nevertheless, the OECD's analysis of the financial crisis (OECD, 2010) concluded that "*shareholders have been largely passive and reactionary in exercising their rights, in many cases voting in a mechanical manner relying on proxy voting advisers and generally failing to challenge boards in sufficient number to make a difference.*"

As concluded in the introduction to this part, the degree and quality of shareholder engagement can mainly be explained by *understanding the incentives* for their engagement that follows from the business model, the competition environment and the investment strategies of the institutional shareholders. Today, many shareholders are themselves profit-maximising corporations acting in highly competitive markets where their main income is the fees that they charge for capital under management. This, together with the challenge to meet the market, has often led to investment strategies based on broad indices that may include holdings in hundreds, and often thousands, of companies.

The widespread use of indexing, with small holdings in a very large number of companies, obviously increases the total costs of engagement with portfolio companies. It also decreases the incentives to do so, either for competitive reasons as explained in the introduction to this part, or through the mere fact that the absolute expected returns from engagement are too small relative to the costs that are associated with informed monitoring and engagement.

In light of this development and the experiences from the financial crisis, a number of initiatives have been taken to overcome what is often seen as a *passive, reactive and mechanical* attitude to shareholder engagement among institutional investors. The most prominent example is probably the UK Stewardship Code.

For such codes or recommendations to be effective, however, it is necessary to understand the intrinsic incentives for engagement among the many different kinds of institutional investors. It is not adequate to refer to "institutional investors" in general. As we have shown, institutional investors is a concept that covers a very diverse group of entities and legal forms, ranging from public pension funds and mutual funds to hedge funds and investment banks, each with its own business models, profit-maximising objectives and competitive circumstances that will influence its investment strategies' trading practices and its incentives for monitoring and engagement.

Moreover, the actual management of the equity portfolio is (like voting) often outsourced to specialised service providers. This makes the ownership landscape increasingly complex and often decreases the precision of any generic regulation or recommendations with respect to stewardship. Particular interest has been given to the concept of so-called fiduciary duty, which is discussed in some detail below.

In order to design effective regulation or recommendations with respect to shareholder monitoring and engagement, it would be useful to first have a detailed understanding of the different business models, competitive circumstances and investment strategies of the many different institutional investors, and the resulting incentives.

4.4.1. The concept of fiduciary duty

When the *OECD Principles* address the role of institutional investors in corporate governance, they are focused on the responsibilities of institutional investors that invest in their own name and have a fiduciary duty to the ultimate beneficiaries. The fiduciary concept for institutional owners generically means that the institutions shall serve the interest of the beneficiaries, rather than their own immediate interest. A common and implicit interpretation of this fiduciary duty is that institutions should monitor and engage with investee companies.

It is important to understand, however, that a fiduciary obligation in itself does not imply any particular investment strategy or any specific degree of governance engagement by the institutional investor. If the fiduciary duty is generically defined as maximising the financial returns to the ultimate beneficiary, and if engagement costs exceed the engagement benefits, the way to meet the fiduciary duty obligation may in current equity markets very well be to invest in expensive computer capacity and engage in algorithmic HFT. Meeting the fiduciary duty may not even – again, depending on the context – imply any obligation to vote the stocks of portfolio companies. When voting costs are high and returns are low, it is mainly an empirical matter, what strategy and type of engagement (if any) best serves the institution's ultimate beneficiaries.

Of particular interest has been the outsourcing of asset management and governance functions to independent asset managers, which, according to some commentators, has made the interpretation of fiduciary duties in the investment industry increasingly dysfunctional (FairPensions, 2012), particularly if asset managers do not consider themselves as fiduciaries (Financial Times, 2012)[40] but rather as a specialised service provider.

Globally, independent asset management firms are estimated to have more than USD 32 trillion under management, including assets managed on behalf of mutual funds, pension funds and private investors. This amounts to almost half of total assets held by the investment industry and points to the scale of outsourcing from traditional institutions (TheCityUK, 2012). The asset management industry is not only large, it is also quite profitable. In 2011, the pre-tax profit margins in the United States' asset management industry was an impressive 28% (McKinsey, 2012). In the United Kingdom, it was even higher, amounting to 34% of revenues (TheCityUK, 2012). As a comparison, the average pre-tax corporate profit margins (including the financial industry) globally in 2010 were estimated at less than 17% (BlackRock, 2011).

[40] UK FSA Chairman: "In some of my meetings with portfolio managers I have been surprised to see how little interest they have shown in vital issues like strategy and risk management."

Considering the magnitude of outsourcing to asset managers, the UK Stewardship Code's definition of institutional investor also includes asset managers, with a day-to-day responsibility of managing investments on behalf of other institutions, such as pension funds. While noting that the stewardship responsibilities of asset owners may be different from asset managers, the UK Stewardship Code defines institutional investors' main duty to act in the interests of their clients or beneficiaries.

The *Kay Review* also addressed the importance of asset managers and the potential conflicts of interest that arise from the differences in business models between asset managers, institutional asset owners and their ultimate beneficiaries. In a report by the European Commission (2010), it is argued that performance evaluation structures for asset managers, and therefore compensation structures, contribute to a short-termism in equity markets. Many asset managers are selected and compensated based on short-term performance, which naturally encourages them to have a short-term focus, while the liabilities of the asset owners that pay for their services are often long-term.

Beyond the "traditional" institutional investors, there are also a number of institutions for which the concept of fiduciary duty and beneficial owner are ambiguous or absent. One example is private equity firms, where the general partner and investment advisor co-invest with the limited partners for a contractually agreed remuneration that is based on both capital under management and performance. Similar issues concerning the concept of fiduciary duties may also arise for hedge funds.

In general, it is not evident that reliance on fiduciary obligations in itself will have a positive impact on the degree and quality of monitoring and engagement by institutional investors.

4.4.2. The "market" for shareholder co-operation

Another avenue to improve institutional investors' engagement has been to encourage or facilitate their co-operation. Most "traditional" institutional investors diversify their portfolios and the active monitoring of many thousands of portfolio companies becomes excessively expensive.

The *OECD Principles* and many national frameworks point to co-operation among institutional investors as a way to resolve this problem. The *OECD Principles* state that institutional investors should be allowed, and even encouraged, to co-operate when they take action to improve corporate governance in investee companies.

The question arises, however, how such co-operation is carried out in practice. There are certainly examples of co-operation between investors that may be driven by specific events, for example, a major takeover or a merger; situations that can lead to discussions and solicitations where institutions exchange different elements of information, assessments and perspectives.

The most common form of co-operation, however, seems to be based on a "market" solution based on outsourcing and driven by cost sharing, where institutions either set up their own joint advisory functions or make use of independent commercial service providers, such as proxy advisors.[41]

[41] Around the world, there are many examples of industry initiatives to share the cost of monitoring and voting by establishing private associations to undertake background research and provide voting services. For instance, the Australian Council of Superannuation Investors (ACSI), which provides research and advice to its institutional investor members in material corporate

While the demand for such services in some cases may be genuine, it is also driven by regulatory requirements or informal expectations. If regulation requires institutions to vote their shares who otherwise would not do so, a logical response from the institution would be to minimise the cost by sharing it with other like-minded institutions through an external service provider. Likewise, if co-operation is encouraged or expected, using a common co-ordinating and advisory body seems like a plausible and efficient way to share the costs of co-ordination.

The question, however, is whether these outcomes achieve what the regulation or recommendations actually aimed for, namely to strengthen the independent and pluralistic monitoring of corporate performance, which is so important for a well-functioning stock market. This debate has been most salient with respect to proxy advisors. As described in Section 4.2.1, the proxy advisory industry is highly concentrated, which may lead to herd behaviour in terms of voting, rather than the market-driven diversity of independent assessments and opinions that is so important for a well-functioning economy. Questions have also been raised with regard to the quality of the analytical models that are used and the correlation between the commercial corporate governance ratings and firm performance (European Commission, 2011; ESMA, 2012).

From a regulatory perspective, it would be important to analyse the effects of these “market” solutions to regulatory requirements and voluntary initiatives. It would be of particular interest to analyse if they are compatible with the original intention of regulations, codes or guidelines with respect to informed, value-adding and engaged participation through shareholder voting and co-operation among institutional investors.

governance issues, also provides services on local and international voting. The Ethos in Switzerland, a foundation of institutional investors, owns a company which provides proxy voting and company dialogue services to its members.

REFERENCES

Achleitner, A., A. Betzer, M. Goergen and B. Hinterramskogler (2010), "Private Equity Acquisitions of Continental European Firms: The Impact of Ownership and Control on the Likelihood of Being Taken Private", *European Financial Management*, doi: *10.1111/j.1468-036X.2010.00569.x*.

Anabtawi, I. (2005), "Some Skepticism about Increasing Shareholder Power", University of California, School of Law, *Law and Economics Research Paper Series*, No. 05-16.

Autorité des marches financiers (AMF) (2011), "AMF Recommendation No. 2011-06 of 18 March 2011 on Proxy Advisory Firms", AMF, Paris, *www.amf-france.org/documents/general/9915_1.pdf.*

Bain & Company (2012), *Global Private Equity Report 2012*, Bain & Company, Boston, MA, *www.bain.com/bainweb/pdfs/Bain_and_Company_Global_Private_Equity_Report_2012.pdf*.

Bebchuk, L.A. and S. Hirst (2009), "Private Ordering and the Proxy Access Debate", *Harvard Law and Economics Discussion Paper*, No. 653.

Bharath, S. and A. Dittmar (2006), "To Be or Not To Be (Public)", *University of Michigan Ross School of Business Research Paper.*

Bierman and West (1966), "The Acquisition of Common Stock by the Corporate Issuer", *The Journal of Finance*, Vol. 21, No. 4, pp. 687-696

Black, B., B. Cheffins and M. Klausner (2006), "Outside Director Liability", *Stanford Law Review*, Vol. 58, pp. 1 055-1 159.

BlackRock (2011), *Can Investors Continue to Profit from Corporate Margins?*, BlackRock Investment Institute, *www2.blackrock.com/webcore/litService/search/getDocument.seam?venue=PUB_IND&source=GLOBAL&contentId=1111144794*.

Blundell-Wignall, A. (2007), "The Private Equity Boom: Causes and Policy Issues", *OECD Financial Market Trends*, Vol. 2007/1, doi: *10.1787/fmt-v2007-art4-en*.

Blundell-Wignall, A., Y. Hu and J. Yermo (2008), "Sovereign Wealth and Pension Fund Issues", *OECD Working Papers on Insurance and Private Pensions*, No. 14, OECD Publishing, doi: *10.1787/243287223503.*

Bogle, J.C. (2012), *The Clash of the Cultures: Investment vs. Speculation*, John Wiley & Sons Inc., New Jersey.

Boileau, M. and N. Moyen (2010), "Corporate Cash Savings: Precaution Versus Liquidity" *CIRPEE Working Paper*, No. 09-53.

Bradley, H. and R.E. Litan (2010), *Choking The Recovery: Why New Growth Companies Aren't Going Public and Unrecognised Risks of Future Market Disruptions*, Ewing Marion Kauffman Foundation, *www.kauffman.org/uploadedFiles/etf_study_11-8-10.pdf*.

Cai, J., J.L. Garner and R.A. Walkling (2009), "Electing Directors", *The Journal of Finance*, Vol. 64, No. 5, October.

Camara, K.A.D. (2005), “Classifying Institutional Investors”, *Journal of Corporation Law*, Winter.

Commodity Futures Trading Commission (CFTC) and SEC (2010), Findings Regarding the Market Events of 6 May 2010, Report of the Staffs of the CFTC and SEC to the Joint Advisory Committee on Emerging Regulatory Issues.

Choi, S., J.E. Fisch and M. Kahan (2010), “The Power of Proxy Advisors: Myth or Reality?”, *Emory Law Journal*, Vol. 59.

Christiansen, H. and A. Koldertsova (2009), “The Role of Stock Exchanges in Corporate Governance”, *OECD Journal: Financial Market Trends*, Vol. 2009/1, doi: *10.1787/fmt-v2009-art10-en*.

Claessens, Stijn (2006), “Corporate Governance and Development”, *World Bank Research Observer*, Vol. 21, No. 1, pp. 91-122, Spring.

Crotty, J., G. Epstein and I. Levina (2010), “Proprietary Trading is a Bigger Deal Than Many Bankers and Pundits Claim”, Political Economy Research Institute, University of Massachusetts, *Policy Brief*, No. 20.

Daines, R.M., I. Gow and D. Larcker (2010), “Rating the Ratings: How Good Are Commercial Governance Ratings?”, *Journal of Financial Economics*, Vol. 98, pp. 439-461.

Demirgüç-Kunt, Asli and Ross Levine (2008), “Finance, Financial Sector Policies, and Long-Run Growth”, *World Bank Policy Research Working Paper*, No. 4469, The World Bank, *http://ssrn.com/abstract=1081783*.

Department for Business, Innovation & Skills (BIS) (2012a), *The Government Response to Kay Review*, November, Department for Business, Innovation & Skills, London, *www.bis.gov.uk/assets/biscore/business-law/docs/e/12-1188-equity-markets-support-growth-response-to-kay-review.pdf*.

Department for Business, Innovation & Skills (BIS) (2012b), *The Kay Review of UK Equity Markets and Long-Term Decision Making*, July, Department for Business, Innovation & Skills, London, *www.bis.gov.uk/assets/biscore/business-law/docs/k/12-917-kay-review-of-equity-markets-final-report.pdf*.

Department for Business, Innovation & Skills (BIS) (2012c), *The Future of Narrative Reporting: A New Structure for Narrative Reporting in the UK*, Department for Business Innovation and Skills, London, October.

Department for Business, Innovation & Skills (BIS) (2012), *Bold action to open up London’s equity markets to high-growth companies*, http://news.bis.gov.uk/Press-Releases/Bold-action-to-open-up-London-s-equity-markets-to-high-growth-companies-6805e.aspx

Di Noia, C. (1998), “Competition and Integration among Stock Exchanges in Europe: Network Effects, Implicit Mergers and Remote Access”, *Working Paper*, No. 98/03, The Wharton Financial Institutions Center.

Djama, D. *et al* (2011), “What Do We Know About Delistings? A Survey of the Literature”, *Thema Working Paper*, No. 2012-38, Université de Cergy Pontoise, France.

Doidge, C., G.A. Karolyi and R.M. Stulz (2011), “The U.S. Left Behind: The Rise of IPO Activity Around the World”, National Bureau of Economic Research *Working Paper*, No. 16 916.

Dutch Corporate Governance Code Monitoring Committee (2011),

Dutch Corporate Governance Code Monitoring Committee (2012), *Fourth Report on Compliance with the Dutch Corporate Governance Code*, The Hague, *http://commissiecorporategovernance.nl/monitoring-reports*.

European Securities and Market Authority (ESMA) (2012), *An Overview of the Proxy Advisory Industry. Considerations on Possible Policy Options,* ESMA, Paris, *www.esma.europa.eu/system/files/2012-212.pdf.*

Economist (2009), "Rise of the Machines; Algorithmic Trading Causes Concern among Investors and Regulators", *The Economist*, July 30.

Economist (2010), 1 July.

European Central Bank (2007), "Share Buybacks in the Euro Area", *Monthly Bulletin*, May, pp. 103-111.

European Commission (2010), *Green Paper on Corporate Governance in Financial Institutions and Remuneration Policies*, European Union, Brussels.

European Commission (2011), *Green Paper on the EU Corporate Governance Framework,* European Union, Brussels.

European Commission (2012), *Action Plan: European Company Law and Corporate Governance: A Modern Legal Framework for More Engaged Shareholders and Sustainable Companies*, European Union, Brussels.

European Parliament (2009), The *Economic Consequences of Large Shareholder Activism*, European Parliament,Brussels .

FairPensions (2012), *The Enlightened Shareholder: Clarifying Investors' Fiduciary Duties*, FairPensions, London, *www.fairpensions.org.uk/sites/default/files/uploaded_files/policy/EnlightenedFiduciaryReport.pdf*.

Financial Times (2012), "UK Debates Fiduciary Duty Confusion", *Financial Times*, 15 July.

Foresight (2011), *End-user Perspectives on Computerised Trading*, The Future of Computer Trading in Financial Markets, Foresight, London, *www.bis.gov.uk/assets/foresight/docs/computer-trading/12-679-end-user-perspectives-on-computerised-trading.pdf*.

Friederich S. and R. Payne (2011), "Computer Based Trading, Liquidity and Trading Costs", The Future of Computer Trading in Financial Markets, DR-5, Foresight, London, *www.bis.gov.uk/assets/foresight/docs/computer-trading/11-1240-dr5-computer-based-trading-liquidity-and-trading-costs.pdf*.

Gao, X., J.R. Ritter and Z. Zhu (2012), "Where Have All the IPOs Gone?" Working Paper.

Gillan, S.L. and L.T. Starks (2007), "The Evolution of Shareholder Activism in the United States", *Journal of Applied Corporate Finance*, Vol. 19, No. 1, Winter.

Girard, C. (2009), "Comparative Study of Successful French and Anglo-Saxon Shareholder Activism", Audencia, Nantes, France.

Goldman Sachs (2010), "EM Equity in Two Decades: A Changing Landscape", *Global Economics Paper*, No: 204, September.

Grant Thornton (2010), "Market Structure is Causing the IPO Crisis – and More", *Capital Market Series*, David Weild and Edward Kim, Grant Thornton,

www.gt.com/staticfiles//GTCom/Public%20companies%20and%20capital%20markets/Files/IPO%20crisis%20-%20June%202010%20-%20FINAL.pdf.

Hewitt, P. (2011), "The Exercise of Shareholder Rights: Country Comparison of Turnout and Dissent", *OECD Corporate Governance Working Papers*, No. 3, OECD Publishing, doi: *10.1787/5kg54d0l1lvf-en*.

Investment Management Association (IMA) (2011), *Understanding Equity Turnover Data: Initial Findings from IMA Research Submitted to the Kay Review*, IMA, London, November, *www.investmentfunds.org.uk/research*.

IMF (2006), "Awash with Cash: Why Are Corporate Savings So High?", Chapter 4, *World Economic Outlook*, IMF, Washington, DC, April, *www.imf.org/external/pubs/ft/weo/2006/01/pdf/c4.pdf*.

IMF (2012), *Global Financial Stability Report: Restoring Confidence and Progressing on Reforms,* IMF, Washington, DC, *www.imf.org/external/pubs/ft/gfsr/2012/02/pdf/text.pdf*.

Institutional Shareholder Services (ISS) (2010), *Voting Results Report: Europe*, ISS, *www.issgovernance.com/files/private/ISS2010EuropeVotingResults.pdf*.

ISS (2011), *Voting Results Report: Europe*, ISS, *www.issgovernance.com/files/private/VotingResultsReportEurope2011.pdf*.

International Working Group of Sovereign Wealth Funds (IWG) (2008), "Sovereign Wealth Funds: Generally Accepted Principles and Practices: 'Santiago Principles'", IWG, *www.iwg-swf.org/pubs/eng/santiagoprinciples.pdf.*

IOSCO (2007), "Board Independence of Listed Companies", Technical Committee of the International Organization of Securities Commission, in consultation with the OECD, IOSCO, Madrid, *www.iosco.org/library/pubdocs/pdf/IOSCOPD238.pdf*.

IOSCO (2011a), *Regulatory Issues Raised by the Impact of Technological Changes on Market Integrity and Efficiency*, IOSCO, Madrid, *www.iosco.org/library/pubdocs/pdf/IOSCOPD361.pdf*.

IOSCO (2011b), *Principles for Dark Liquidity*, IOSCO, Madrid, *www.iosco.org/library/pubdocs/pdf/IOSCOPD353.pdf*.

IRRC and ISS (2011), *The State of Engagement between U.S. Corporations and Shareholders*, IRRC Institute, New York, NY, *www.irrcinstitute.org/pdf/IRRC-ISS_EngagementStudy.pdf*.

IRRC and ISS (2012), *Controlled Companies in the Standard & Poor's 1500: A Ten Year Performance and Risk Review,* IRRC Institute, New York, NY, ISS, Rockville, MD, *http://irrcinstitute.org/pdf/FINAL-Controlled-Company-ISS-Report.pdf*.

Isaksson, M. (2004), "Corporate Governance and Public Policy", *The Future of Corporate Governance*, ed. Mats Isaksson and Rolf Skog.

Jorgenson, D., F.M. Gollop and B.M. Fraumeni (1987), *Productivity and U.S. Economic Growth*, Harvard University Press.

Kahan, M. and E.B. Rock (2007), "Hedge Funds in Corporate Governance and Corporate Control", *University of Pennsylvania Law Review*, Vol. 155, p. 1 021.

Kay Review (2012), *The Kay Review of UK Equity Markets and Long-term Decision Making*, Department for Business, Innovation & Skills, London, *www.bis.gov.uk/assets/biscore/business-law/docs/k/12-917-kay-review-of-equity-markets-final-report.pdf.*

Kleintop, J. (2012), “What the Fed Can’t Do”, LPL Financial Research, *Weekly Market Commentary*, 6 August, *www.emeraldhost.net/files/LPL/Research/Copy%20of%20WMC_WhattheFedCantDo_RES%203794%20080612.pdf.*

Knight, F. (1921), *Risk, Uncertainty and Profit*, The Riverside Press, Cambridge, MA.

Krugman, P. (2009), “Rewarding Bad Actors”, *The New York Times*, 2 August.

Lash, H. and J. Spicer (2009), “Who’s Afraid of High-frequency Trading?”, Thomson Reuters, *www.reuters.com/article/2009/12/02/us-highfrequency-idUSN173583920091202*.

Leuz, C., A. Triantis and T. Wang (2008), “Why Do Firms Go Dark? Causes and Economic Consequences of Voluntary SEC Deregistrations”, *Working Paper*, University of Maryland Robert H. Smith School of Business, No. RHS-06-045.

Linton, O. and M. O’Hara (2011), “The Impact of Computer Trading on Liquidity, Price Efficiency/Discovery and Transaction Costs”, The Future of Computer Trading in Financial Markets, Working Paper, Foresight, London, *www.bis.gov.uk/assets/foresight/docs/computer-trading/11-1276-the-future-of-computer-trading-in-financial-markets.pdf*.

Lowenstein, L. (1991), *Index Investment Strategies and Corporate Governance*, The University of Toledo, College of Law, March.

Lowry, M. (2003), “Why Does IPO Volume Fluctuate so Much?”, *Journal of Financial Economics*, Vol. 67, pp. 3-40.

Lowry, M. and W. Schwert (2002), “IPO Market Cycles: Bubbles or Sequential Learning?”, *The Journal of Finance*, Vol. LXVII, No. 3, June, pp. 1 171-1 198.

Macey, J., M. O’Hara and D. Pompilio (2008), “Down and Out in Stock Market: The Law and Economics of the Delisting Process”, *Journal of Law and Economics*, Vol. 51, No. 4, pp. 683-713.

Markaz (2008), *The Golden Portfolio: Reach of Sovereign Wealth Funds in GCC*, Kuwait Financial Centre “Markaz”, Safat, Kuwait, *www.markaz.com/DesktopModules/CRD/Attachments/The%20Golden%20Portfolio%20Reach%20of%20SWF.pdf*.

Marosi, A. and N. Massaoud (2007), “Why Do Firms Go Dark?”, *Journal of Financial and Quantitative Analysis*, Vol. 42, No. 2, June, pp. 421-442.

Mayer, C. (2002), “Financing the New Economy: Financial Institutions and Corporate Governance”, *Information Economics and Policy*, No. 14 (2002), pp. 311-326.

McCharey, J.A. and E.P.M. Vermeulen (2008), “Private Equity and Hedge Fund Activism: Explaining the Differences in Regulatory Responses”, *European Business Organization Law Review*, No. 9, pp. 535-578.

McKinsey Global Institute (2011), *The Emerging Equity Gap: Growth and Stability in the New Investor Landscape*, McKinsey Global Institute, New York, NY.

McKinsey (2012), *The Asset Management Industry: Outcomes are the New Alpha*, McKinsey Global Institute, New York, NY.

Miller, M. (1988), “The Modigliani-Miller Propositions After Thirty Years”, *The Journal of Economic Perspectives*, Vol. 2, No. 4, pp. 99-120.

Modigliani, F. and M.H. Miller (1958), "The Cost of Capital, Corporation Finance and the Theory of Investment", *The American Economic Review*, Vol. XLVIII, No. 3, June.OECD (2004), *OECD Principles of Corporate Governance*, OECD Publishing, doi: *10.1787/9789264173705-en*.OECD (2007a), "The Role of Private Pools of Capital in Corporate Governance: Summary and Main Findings about the Role of Private Equity Firms and 'Activist' Hedge Funds", *Financial Market Trends*, Vol. 2007/1, doi: *10.1787/fmt-v2007-art5-en*.

OECD (2007b), "Corporate Saving and Investment: Recent Trends and Prospects", *OECD Economic Outlook,* Vol. 2007/2, OECD Publishing, doi: *10.1787/eco_outlook-v2007-2-39-en*.

OECD (2007c), *OECD Economic Outlook*, Vol. 2007/2, OECD Publishing, doi: *10.1787/eco_outlook-v2007-2-en*

OECD (2009), *Corporate Governance and the Financial Crisis: Key Findings and Main Messages*, June, *www.oecd.org/daf/ca/corporategovernanceprinciples/43056196.pdf*.

OECD (2010), *Corporate Governance and the Financial Crisis: Conclusions and Emerging Good Practices to Enhance Implementation of the Principles*, OECD Steering Group on Corporate Governance, OECD, Paris, available at: *www.oecd.org/daf/ca/corporategovernanceprinciples/44679170.pdf.*

OECD (2011), *The Role of Institutional Investors in Promoting Good Corporate Governance*, OECD Publishing, doi: *10.1787/9789264128750-en.*

O'Hara, M. (2003), "Presidential Address: Liquidity and Price Discovery", *The Journal of Finance*, Vol. LVIII, No. 4

Pastor, L. and P. Veronesi (2005). "Rational IPO Waves", *The Journal of Finance*, Vol. LX, No. 4.

Pignal, Stanley (2012), "Financials Selling Private Equity Stakes", *Financial Times*, 3 June.

Pour, E.K. and M. Lasfer (2011), *The Impact of Leverage on the Delisting Decision of AIM Companies*, Lancaster Seminars in Accounting and Finance, Lancaster University.

Preqin (2012), "Private Equity Assets Hit $3tn: Growth of Industry Continues as Performance Figures Show Recovery", press release, 30 July, *www.preqin.com/docs/press/2012_Performance_Monitor.pdf.*

Ramaswamy, S. (2011), "Market Structures and Systemic Risks of Exchange-Traded Funds", *BIS Working Papers*, No. 343, April.

Rey, D.M. and D. Seiler (2001), "Indexation and Tracking Errors", WWZ – Department of Finance, *Working Paper*, No. 2/01.

Rolet, Xavier (2012), "Unleash the Power of Equity Finance", *Financial Times*, 10 July.

Sapienza, Paola and Luigi Zingales (2012), "The Chicago Booth/Kellogg School Financial Trust Index: The Results: Wave 15", 24 July, *www.financialtrustindex.org/resultswave15.htm*, accessed 12 October 2012.

Schapiro, M.L. (2010), Speech by SEC Chairman: *Strengthening Our Equity Market Structure*, SEC, given to the Economic Club of New York, 7 September, *www.sec.gov/news/speech/2010/spch090710mls.htm*.

Schreiber and Schwartz (1986), "Price Discovery in Securities Markets", *The Journal of Portfolio Management*, Vol. 12, No. 4, pp. 43-48

Security and Exchange Commission (SEC) (2010a), *Concept Release on Equity Market Structure*, SEC, Washington, DC, *www.sec.gov/rules/concept/2010/34-61358.pdf*.

Security and Exchange Commission (SEC) (2010b), *Concept Release on the U.S. Proxy System*, SEC, Washington, DC, *www.sec.gov/rules/concept/2010/34-62495.pdf*.

Serve, S. and I. Martinez (2010), "The Delisting Decision: The Case of Buyout Offers with Squeeze-Out (BOSO)", *International Review of Law and Economics*, Vol. 31, pp. 228-239.

Steil, B. (1996), "Equity Trading IV: The ISD and the Regulation of European Market Structure," *The European Equity Markets*, The Royal Institute of International Affairs.

Takeover Panel (2009), "Practice Statement 26: Shareholder Activism", Takeover Panel, London, *www.frc.org.uk/FRC/media/Documents/Takeover_Panel_Shareholder_Engagement_PS26.pdf.*

Teng, M. and T. Hachiya (2011), "The Impact of Regulatory Reform on Stock Repurchases: Evidence from Japan", *Journal of Applied Finance & Banking*, Vol. 1, No. 3, pp. 159-187.

TheCityUK (2012), "Fund Management", *Financial Market Series*, November.

Van der Elst, C. (2011), "Revisiting Shareholder Activism at AGMs: Voting Determinants of Large and Small Shareholders", European Corporate Governance Institute, *Finance Working Paper*, No. 311/2011.

Vermeulen, E.P.M. and D.A. Zetzsche (2010), "The Use and Abuse of Investors Suits: An iInquiry into the Dark Side of Shareholder Activism", *European Company and Financial Law Review*, Vol. 7, No. 1.

Wall Street Journal (2010), "New Bank Rules Sink Stocks", *Wall Street Journal*, 21 January.

Wall Street Journal (2012), "Confusion Still Reigns on 'Volcker Rule' Date", *Wall Street Journal*, 6 May.

Wong, S. (2010), "Why Stewardship is Proving Elusive for Institutional Investors", *Butterworths Journal of International Banking and Financial Law*, July/August.

Yung, C., G. Çolak and W. Wei (2007), "Cycles in the IPO Market", *Journal of Financial Economics*, Vol. 89, No. 1, pp. 192-208, July.

Zigrand, J. *et al*. (2011), "Financial Stability and Computer Based Trading", The Future of Computer Trading in Financial Markets, Working Paper, Foresight, London, *www.bis.gov.uk/assets/foresight/docs/computer-trading/11-1276-the-future-of-computer-trading-in-financial-markets.pdf*.