Andrew G Haldane: Who owns a company?

Speech by Mr Andrew G Haldane, Executive Director and Chief Economist of the Bank of England, at the University of Edinburgh Corporate Finance Conference, Edinburgh, 22 May 2015.

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Introduction

This might seem like a simple question with a simple answer. At least for publically listed companies, its owners are its shareholders. It is they who claim the profits of the company, potentially in perpetuity. It is they who exercise control rights over the management of the company from whom they are distinct. And it is they whose objectives have primacy in the running of the company.

This is corporate finance 101. It is the centrepiece of most corporate finance textbooks. It is the centrepiece of company law. It is the centrepiece of most public policy discussions of corporate governance. And it is a structure which, ultimately, has survived the test of time, having existed in more or less the same form for over 150 years in most advanced economies.

That the public company has been a success historically is not subject to serious dispute. It was no coincidence that its arrival in a number of advanced economies, in the middle of the 19th century, marked the dawn of mass industrialisation. The public company was a key ingredient in this second industrial revolution. Perhaps for that reason, the public company is, in many people's eyes, the very fulcrum of capitalist economies.

Yet despite its durability and success, across countries and across time, this corporate model has not gone unquestioned. Recently, these questions have come thick and fast, with a rising tide of criticism of companies' behaviour, from excessive executive remuneration, to unethical practices, to monopoly or oligopoly powers, to short-termism. These concerns appear to be both strongly-felt and widely-held.

Among the general public, surveys suggest a majority do not trust public companies, especially big companies.[1] Among professional investors, sentiment is well-encapsulated by the following quote from Larry Fink, CEO of Blackrock – the world's largest asset manager – in a letter sent to the Chairmen and CEOs of the top 500 US companies earlier this year:[2]

> "[M]ore and more corporate leaders have responded with actions that can deliver immediate returns to shareholders, such as buybacks or dividend increases, while underinvesting in innovation, skilled workforces or essential capital expenditures necessary to sustain long-term growth."

Among academics, John Kay's UK government-initiated review into short-termism in equity markets and their effect on listed companies (Kay (2012)), Colin Mayer's *Firm Commitment*

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1 2015 Edelman TrustBarometer. For further details please see: http://www.edelman.com/.

2 Full letter published on Business Insider. See http://www.businessinsider.com/larry-fink-letter-to-ceos-2015-4?IR=T.

(Mayer (2013)) and Lynn Stout's *The Shareholder Value Myth* (Stout (2012)) each raise deep and far-reaching questions about the purpose and structure of today's companies.

Are these concerns legitimate? What is their precise *micro-economic* source? And are they now of sufficient *macro-economic* importance to justify public policy intervention? To answer those questions, it is useful to start with the origins of modern-day companies, before looking at the potential incentive problems among stakeholders embedded in those structures. Finally, I consider public policy actions that might mitigate these problems.

These problems are not specific to any industry. But banks' balance sheets and governance structures mean they may be especially prone to these incentive problems. So I will use them to illustrate some of the micro-economic frictions and their macro-economic impact. Indeed, it is no coincidence that the most significant changes to corporate governance practices recently have been within the banking sector.

A short history of companies

Let me begin by defining "corporate governance" in its broadest sense: as the set of arrangements that determine a company's objectives and how control rights, obligations and decisions are allocated among various stakeholders in the company (Allen and Gale (2000)). These stakeholders comprise not only shareholders and managers, but also creditors, employees, customers and clients, government, regulators and wider society.

Over the past two centuries, several dozen pieces of company legislation have been enacted in the UK alone. This legislation has successively defined and redefined these purposes, rights and obligations among stakeholders. This legislative path has been long and winding – Table 1 provides a summary. It has been shaped importantly by the social, legal and economic climate of the day. And it is the interplay between these contextual factors that, through an evolutionary process, has delivered today's corporate governance model.

Moving to incorporation

Tracing definitively the origins of what today are called companies is not straightforward. It is possible to sketch a timeline stretching back at least to Rome around 700BC to find something resembling a company (Shelton (1965)). Certainly, by the sixth century AD a number of corporate entities were codified in Roman Law (Moyle (1913)).

Modern concepts of tradable "shares" in companies appear to have emerged in the mid-thirteenth century in continental Europe. In England, early methods of incorporation were set out in a common law case in 1615: incorporation was a privilege bestowed by the state, either by a Royal Charter or a private Act of Parliament.[3] At least in principle, this meant a company was incorporated with public good objectives in mind.

A prominent early example of such a company was the Bank of England. It was established in 1694 under both a Royal Charter[4] and an Act of Parliament.[5] The Charter establishing the Bank made clear that its purpose was "*to promote the public good and benefit of our people*". And so it remains today.

But this incorporation process was costly, lengthy and cumbersome. It was also subject to favouritism and abuse. Lawyers and businessmen began to find legal loopholes allowing them to found companies while remaining unincorporated. These unincorporated entities

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3 Chief Justice Coke set out how "*lawful authority of incorporation…may be by four means*[:]…*by the Common Law, as the King himself;…by authority of Parliament; by the King's Charter; and by prescription.*" See Hunt (1936), and http://oll.libertyfund.org/titles/911/106352#lf0462-01_head_102

4 http://www.bankofengland.co.uk/about/Documents/legislation/1694charter.pdf

5 http://www.bankofengland.co.uk/about/Documents/legislation/1694act.pdf

were generally small partnerships, whose members both owned and controlled the company and faced unlimited liability.

This model was an incentive-compatible one. It delivered a close alignment between the interests of directors and shareholders – typically, they were one and the same. Meanwhile, unlimited liability created sharp incentives among owners to avoid insolvency as typically their very livelihoods depended on it. And this, in turn, helped protect wider stakeholders, including creditors and customers, from company risk.

From unlimited to limited liability

Times were, however, changing. Approaching the middle of the 19th century, the era of mass industrialisation was dawning. Pressures to expand companies, financed by larger pools of capital, began to mount. Unlimited liability was felt by some to create an insurmountable barrier to such expansion, inhibiting prospective deep-pocketed investors from putting their money into unlimited liability ventures.

As Liberal MP William Clay said in 1836 "*unlimited liability has a tendency to deter persons of fortune, intelligence and respectability from becoming partners or managers of joint-stock banks*". Walter Bagehot attacked unlimited liability on the grounds that its financial benefits were illusory, as most shareholders simply did not have deep enough pockets to make good prospective losses (Bagehot (1862)).

International practices were also shifting. Limited liability had been introduced in parts of continental Europe from the 17th century onwards. It had also begun its journey across the Atlantic, with Connecticut and Massachusetts adopting it from 1817 (Haldane (2011)).

In 1854, a Mercantile Law Commission in the UK reported on its review into limited liability. Its verdict was clear: "*although the details of our mercantile laws may require correction…it would be unwise to interfere with principles which…have proved beneficial to the general industry of the country*" (Johnson (2013)). In short, the costs of limiting liability outweighed its benefits.

It was to no avail. A well-connected, and newly wealthy, middle class was eager to protect its riches when owning and investing in business (Ireland (2010)). And an eager-to-please political class was keen to expand business to stimulate economic activity (Blumberg (1986)). Parliament passed the Limited Liability Act in 1855.

With limited liability, incentives to avoid insolvency were no longer so sharp. As share ownership widened, directors and shareholders became distinct entities. In the eyes of the law, a share was no longer an equitable interest in a company's assets (Ireland (2010)). Instead it was a residual claim on its future profits. A Rubicon had been crossed.

Britain's early banks

Interestingly, banks followed a somewhat more circuitous route, albeit to the same end-point. Until 1826, the number of partners in a note-issuing bank in England was limited to six. The six-partner rule for English banks was relaxed in 1826. But it was not until 1858 that English banks were allowed to limit their liability, three years after non-financial institutions. This was recognition that the risks posed by banks were on an altogether greater scale.

Even after legislation was passed, the initial response by banks was lukewarm. Their directors fretted about the signal that limited liability sent to depositors. That concern was reinforced when Overend and Gurney failed in 1866; it had adopted limited liability just months before its failure. For the eleven British banks with unlimited liability that failed between 1836 and 1878, every depositor had been paid out in full (Turner (2014)).[6]

[6] Turner (2014) Table 5.6.

Shareholders' willingness to do so was helped by them vetting share transfers to exclude owners without sufficient funds. Indeed, banks' shareholders remained liable even after they had sold their shares: in Scotland, former shareholders were liable for debts incurred when they had been a shareholder, while in England and Ireland a shareholder remained liable for three years after they had sold their shares (Button et al (2015)).

But critics of unlimited liability for banks were becoming increasingly vocal. George Rae, an Aberdonian who became a prominent banker during the 19th century, feared that "*men of wealth and position would gradually sell out*" such that unlimited liability was reduced to "*a husk without its kernel*" (Rae (1885)).[7] The tide was gradually turning.

In 1849, only the five original joint-stock banks set up by state charter – the Bank of England, the

Bank of Scotland, the Royal Bank of Scotland, the Bank of Ireland and the British Linen Bank – were statutorily permitted to operate with limited liability. By 1869, roughly a third of British banks had limited their shareholders' liability.[8]

But it was the failure of the City of Glasgow Bank in 1878 that precipitated a decisive shift away from unlimited liability.[9] Such a large proportion – 86% – of its shareholders were wiped out that a public relief fund was set up to support them. As *The Economist* reported at the time, "*the share lists of most of our banks exhibit a very large – almost an incredible – number of spinsters and widows*" (Button et al (2015)).

The Companies Act 1879 introduced a different liability concept – reserve liability – under which a shareholder was liable to meet a bank's debt up to a fixed multiple of their equity investment in the case of its failure. This was analogous to the double-liability system adopted for US bank shareholders at the time.[10] By 1889, all bar two British banks had limited their shareholders' liability and nearly two-thirds had opted for reserve liability.[11]

But even reserve liability was felt to be precarious, stoking rather than abating banking crises. As Bank of England Deputy Governor Catterns stated in a secret memo of 1937 "*today a bank could not in a crisis make a call on shareholders without aggravating the crisis*".[12] In the 1950s, the major British banks eliminated their remaining uncalled capital (Turner (2009)).

Entrenching shareholder rights

Yet, even once firmly rooted, limited liability quickly gave rise to a new set of questions. If managers were no longer personally liable for failure, what incentivised them to protect investors' money? And what provided the incentives for shareholders, increasingly dispersed and with their claims protected from downside risk, to remain engaged?

In the 19th century, maximising shareholder return was not the centrepiece of companies' objectives or directors' duties. To be sure, paying a regular dividend was important and shareholders could – and often did – challenge directors regarding its size. But wider considerations played as important a role.

Introducing his reflections in 1885 on "*the rights and duties of shareholders*", George Rae observed that "*when a man becomes a shareholder in a bank he becomes to all intents and*

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7 Rae (1885).

8 Acheson, Hickson & Turner (2010).

9 Button et al (2015).

10 Esty (1998).

11 Acheson et al (2010).

12 Turner (2014).

purposes a co-partner in the business transacted by it. True, he is only one partner amongst a thousand others in your Bank; but that does not release him from the obligation of doing what he can for the common good" (Rae (1885)).

Walter Leaf, chairman of Westminster Bank Ltd, writing in the 1920s remarked: "*The confidence in British banking which has been acquired by long experience is mainly due to the sense that Directors have conducted the business of their banks with constant attention to public interests in the first place*" (Leaf (1937)). The public good remained centre-stage in companies', and in particular banks', objectives.

Yet even as Rae and Leaf were writing, shareholders' focus on returns was sharpening. Rae comments: "*There are shareholders to be found here and there, to whom their own Bank would appear to be a hostile institution, which it is their business to attack on the slightest pretext… He is disappointed with the dividend, and objects to the balance carried forward to next year as excessive*" (Rae (1885)).

The legal framework underpinning companies was also starting to fray. It had failed to keep pace with the boom in the number of shareholders and their quest for dividends. Cases of company fraud began to proliferate (Ireland (2010)). In 1848, Arthur Smith published a pamphlet where he uncovered that most railway companies – the poster child for the modern corporation – were in fact profitless and paying dividends to shareholders out of capital (Smith (1848)).

The law responded with a number of measures to protect shareholders. These included the requirement for companies to disclose information about their operations, such as through company accounts, and powers for shareholder to sue directors (Bryer (1993)). These were augmented with shareholder General Meetings (GM), the forerunner of today's Annual General Meetings (AGMs).

Initially, shareholders' voting powers at these GMs varied significantly. In a sample of pre-1850 companies, 233 different shareholder voting systems were found. The Companies Clauses Consolidation Act of 1845 set as the default voting structure a graduated system of shareholder rights, in which rights reduced according to the scale of shareholding. But during the course of the 19th century, the "one share, one vote" voting model familiar today gradually came into the ascendency (Freeman et al (2012)).

Shareholder primacy

Accompanying this rise in shareholder rights was a steady rise in acceptance of shareholder primacy as the key objective of a company, at least in the UK and US. A number of legal case decisions, on both sides of the Atlantic, saw this objective enshrined.

In the UK, the case of Hutton vs West Cork Railway Company in 1883, the company had been wound up and yet still resolved to pay directors for their past service. Shareholders successfully challenged these awards on the grounds that they did not benefit the company which, crucially, was interpreted to mean its shareholders (Mukwiri (2013)).

In the US in 1919, a case against Henry Ford was brought before the Michigan Supreme Court by the Dodge brothers, a minority shareholder. They challenged Ford's decision to reinvest the firm's profits to expand the business and pay better wages, which they felt contradicted the purposes of the corporation – maximising shareholder return. The Court ruled that Ford owed a duty to his shareholders and ordered him to pay a special dividend (Fisch (2006)).

In the light of these cases, lawyers began to debate shareholder primacy as a company objective. In a series of law review articles in the 1920s and 1930s, Adolf Berle proposed treating corporate managers as trustees with fiduciary obligations to act for the benefit of shareholders. Berle's motivation, interestingly, was in having a corporate governance model that redistributed power away from managers and towards "the people".

Together with economist Gardiner Means, Berle published in 1932 *The Modern Corporation and Private Property* (Berle and Means (1932)). It argued that the ever-wider dispersion of shareholders risked entrenching the power of management, creating "ownerless corporations". Around the same time, Joseph Schumpeter warned that corporations could become increasingly bureaucratic and run for their own ends, hampering the dynamism of capitalism (Schumpeter (1942)). The solution proposed by Berle and Means was to give shareholders primacy in a company's objectives, together with the control rights necessary to meet this objective.

In the 1960s, Henry Manne started to weave Berle's legal perspective into economics (Manne (1965)). He argued that shareholder primacy acted as a disciplining device on management. Inefficient management would be reflected in a lower share price, making the company an attractive target for a more efficient competitor. In other words, it was possible to create a market in corporate control which could drive out company inefficiencies.

The shareholder-centric model also appeared efficient from a risk allocation perspective. If control rights were placed in the hands of the party shouldering greatest risk – shareholders – this provided the strongest possible incentives to safeguard the fortunes of the company. The shareholder-centric model appeared to be a recipe for higher economic returns at the lowest possible risk. This was an awe-inspiring combination. By the 1980s, corporate success and the level of share prices had, in effect, become synonyms.[13]

Corporate governance today

The UK Companies Act 2006 can, in some respects, be seen as a natural evolution of this historical trajectory. It arose out of the work of The Company Law Review Steering Group, appointed by the government in 1998.[14] Two fundamental issues arose. First, should the law expect companies to consider responsibilities broader than shareholder maximisation? And second, should the law attribute specific responsibilities to company directors?

It concluded that directors' duties should not be recast to include a wider set of stakeholders. Giving directors pluralist duties risked turning *"company directors from business decision makers into moral, political or economic arbiters".* In other words, shareholder primacy was not just retained but now made legally explicit in Section 172 of the UK Companies Act (2006):

> "A director of a company must act in a way he considers, in good faith, would be most likely to promote the success of the company *for the benefit of its members as a whole*…"

The Group also suggested that directors' duties be defined in law. They were to serve the interests of shareholders, first and foremost, but also had to "have regard" to wider interests, including employees, customers, suppliers and the wider community. This "enlightened shareholder value" objective was to be supported by public accountability, with annual reporting on how companies were meeting their wider interests.[15]

The findings of the review were drafted into legislation, with the Company Law Act of 2006. Under it, shareholders were given new legal rights to initiate proceedings against directors if they breached their responsibilities. And the precise role of the "have regards" provisions

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[13] Empirical evidence appeared to support this case. Companies in which shareholders had stronger rights relative to management had higher stock returns and relative to the market (Gompers, Ishii and Metrick (2003)), while acquisitions involving companies where there were stronger takeover defence measures tended to have lower shareholder returns (Masulis, Wang and Xie (2007)).

[14] See Chapter 1 of The Company Law Review Steering Group (1999).

[15] See paragraph 3.2 of The Company Law Review Steering Group (2000).

was left open to interpretation. Meanwhile, for the first time in history, shareholder primacy had been hard-wired into companies' statutory purposes.

The microeconomics of companies

Given this corporate structure, what incentive problems might arise among stakeholders? It is worth noting up front that the existence of these frictions is not, in of itself, a criticism of the current corporate model. All corporate governance models embody these frictions to some degree. A set of fully state-contingent contracts among all stakeholders could eliminate them. But this first-best is infeasible (Hart (1995)). So the aim of any corporate governance model is to minimise these frictions, rather than eliminate them, in a second-best or worse world.

In identifying incentive frictions within a company, it is useful to consider three distinct sets of stakeholder relationships:

- First, between shareholders and managers.
- Second, between shareholders/managers and other company stakeholders (bondholders, depositors, borrowers and employees).
- Third, between the firm's internal stakeholders and external stakeholders (regulators, government and wider society).

Shareholders and managers

In a modern public company, shareholders and managers are distinct and serve distinct roles. This separation has a micro-economic rationale. From Fama and Jensen (1983), it generates gains from specialisation, with risk/return *monitoring* undertaken by the board of Directors (acting on behalf of shareholders) and risk/return *decision-making* by management. The micro-economic question is at what cost this separation is achieved.

(a) Classic principal/agent problems

Following the work of Jensen and Meckling (1976), the most extensively studied cost of separation arises when management pursues their own private interests at the expense of shareholders: for example, through corporate perks such as private jets or sponsored football teams, empire-building such as value-destroying acquisitions, or rent extraction through excessive executive remuneration. This is a classic principal/agent problem.

Those theoretical concerns gained practical prominence during the 1970s. The response then was, on the face of it, ingenious: to align shareholder and managerial incentives, remuneration contracts for management needed simply to be linked to shareholder returns. This could be achieved by paying managers not in cash but in equity or in equity-linked instruments, such as stock options.

And so it came to pass. Between 1980 and 1994, the average value of stock options granted to CEOs of large US companies rose by almost 700%, while salaries and bonuses rose by less than 100% (Hall and Liebman (1998)). The proportion of companies remunerating their CEOs in stock more than doubled.

Those trends have continued apace in the two decades since. In 1994, US CEO compensation was split roughly one third salary, one third bonus and one third stock and stock options. By 2006, the dawn of the crisis, that split was less than 20% salary, less than 30% bonus and more than half stock and stock options. Among banks, the latter fraction was higher still.

Whether this shift in compensation practices put a lid on CEO rent-seeking seems altogether more questionable. Experience in the run-up to the crisis suggests, if anything, the opposite. Paying in equity appears to have increased the probability of failure. Among US bank CEOs pre-crisis, the top five equity stakes were held by Dick Fuld (Lehman Brothers), Jimmy Cayne (Bear Stearns), Stan O'Neill (Merrill Lynch), John Mack (Morgan Stanley) and Angelo

Mozilo (Countrywide). This is not a random sample.[16] It also suggests the macro-economic costs of this principal/agent problem may have been non-trivial.

(b) Collective action problems: the "ownerless corporation"

A second stakeholder friction arises because a diffuse and dispersed set of shareholders are likely to find it difficult to corral management (Shleifer and Vishny (1986)). There is a co-ordination problem among shareholders. Moreover, most individual shareholders tend to have modest amounts of skin in the game. This reduces their incentives to exercise corporate control in the first place.

This shareholder collective action problem is not new. It lay at the heart of Berle and Mean's concern about "ownerless corporations" in the 1930s. But there are good reasons for believing this problem may have become more acute since then, as the shareholder base has become more fragmented and diffuse and shareholder co-ordination more difficult (Kay (2012)).

One reason is that the role of institutional investors has changed. They have tended historically to play an important stewardship role. But this role has waned. As recently as 1990, pension funds and insurance companies held more than half of UK equities. Today, that fraction is less than 15%.

There has also been a sharp fall in the fraction of shares held directly by individuals, from more than 50% in the 1960s to little more than 10% today. Today, these individual holdings tend to be indirect, operating through investment intermediaries of various types. That means the beneficial owners of shares – individuals – tend to have little direct communication with, involvement in, or indeed knowledge of, the firms in which they are investing.

One consequence of a more dispersed and disinterested ownership structure is that it becomes harder to exert influence over management, increasing the risk of sub-optimal decision-making.[17] There is some empirical support for this hypothesis. For example, companies tend to have higher valuations when institutional shareholders are a large share of cashflow, perhaps reflecting their stewardship role in protecting the firm from excessive risk-taking (La Porta et al (2002), Claessens et al (2002)).

(c) Short-termism

A third friction in the manager/shareholder relationship, distinct but related, arises when different classes of shareholder have different rates of time preference. In particular, there have been concerns about the rising share of investors with excessively high discount rates and low holding periods – in other words, about "short-termism" (Kay (2012)).

There is clear evidence of the investor scales having rebalanced in this direction over time. Average holding periods of shares have been in secular decline in a large number of countries for a number of decades (Chart 1). In the UK and US, they have fallen from around 6 years in 1950 to less than 6 months today.[18]

Another diagnostic on short-termism is found by looking at company pay-out behaviour. Chart 2 compares dividend pay-out behaviour among companies during two eras – the mid-19th century period before shareholder primacy took hold, and the period since 1980 when it has been uppermost in the minds of management (Haldane (2010)).

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16 Haldane (2011).

17 Recognition of this problem lay at the heart of John Kay's proposals, in his review, for an "Investor Forum". This was a mechanism for bringing together in particular institutional investors to mobilise and strengthen their hand (Kay (2012)).

18 See Haldane (2010). Within this, the move to high frequency trading has contributed to a downwards shift in this average holding period.

In the earlier period, dividends decreased as often as they increased. This is as we would expect if profits fluctuate both up and down. After 1980, however, we see a one-way street. Dividend payout ratios almost never fall. This is evidence that the short-term quest for smoothing shareholder returns has come to dominate payout behaviour, almost irrespective of profitability.

Another way to remit profits to shareholders is through share buybacks. These, too, have risen in prominence. Among UK companies, share buybacks have consistently exceeded share issuance over the past decade, albeit to a lesser degree more recently (Chart 3). In other words, over the past decade the equity market no longer appears to have been a source of net new financing to the UK corporate sector.

These patterns are, if anything, even more acute among US companies. Total buybacks by US S&P 500 companies totalled over $500 billion in 2014, taking them back to their peak levels in 2007. Total payouts to shareholders, both dividends and buy-backs, are also back to their pre-crisis peaks, totalling almost $1 trillion in the US, and £100 billion in the UK, in 2014 (Chart 4). More generally, total payouts by companies have been on a steadily rising trend since the 1970s, from around 10% of total internal cashflow in 1970 to around 60% today (Chart 5).

The macro-economic consequences of this behaviour are likely to be far from benign. The other side of the coin to high pay-out ratios from internal funds is low investment. There is both direct and indirect evidence of investment having been adversely affected by short-termism on the part of either investors or managers or both.

The indirect evidence comes from looking at the discount rates used in, for example, equity markets to assess investment projects. My own work has found evidence that these discount rates appear to be around 5–10% higher than would rationally be expected at the one year horizon (Davies and Haldane (2011)). And while that may sound modest, accumulated and compounded that would act as a significant barrier to longer-horizon investment projects. Moreover, this “excess” discounting has increased over time.

Evidence on companies’ investment behaviour supports that conclusion – for example, by looking at the investment choices of two otherwise-identical firms, one of which is publically listed, the other private-owned. Studies in the US have found evidence otherwise-identical private companies consistently invest considerably more, for given profits, than public companies (Asker et al (2014)).

Chart 6 shows some diagnostics for a matched sample of public and private UK companies (Davies et al (2014)). In line with US evidence, it suggests that investment is consistently and significantly higher among private than public companies with otherwise identical characteristics, relative to profits or turnover. In other words, shareholder short-termism may have had material costs for the economy, as well as for individual companies, by constraining investment.

Shareholders/managers and other stakeholders

(a) Risk-shifting

A fourth incentive friction arises in the relationship between shareholders and creditors in a company. From the work of Robert Merton, under limited liability the equity of a company can be valued as a call option on its assets, with a strike price equal to the value of its liabilities (Merton (1974)).

The value of this option is enhanced by increases in the volatility of asset returns. Why? Because, under limited liability, this increases the upside return to shareholders, without affecting their downside risk. So for a firm seeking to maximise shareholder value, an expedient way of doing so is simply to increase the volatility of company profits.

This risk does not, however, disappear into the ether. Instead it is shifted onto other stakeholders in the company, most obviously creditors. There is, in the words of Jensen and Meckling (1976), an incentive for the management of a limited liability company to engage in "risk shifting" from shareholders to debtors, by increasing company-specific risk.

The scale of these incentives will depend importantly on how alert creditors are to this risk. If they are wide-awake and price that risk by charging the firm a higher interest rate in anticipation of risk-shifting, this serves as a disciplining device on management. Risk shifting will then be stymied. However, if creditors lack the information or incentives to monitor risk, risk-shifting will be amplified given the cheap costs of borrowing. The upshot, then, will be companies engaging in a sub-optimally high amount of risk-taking from a stakeholder, if not shareholder, perspective.

Banks provide an interesting case study of these incentive dynamics in practice and their adverse implications for creditors and the wider economy. They have a particularly simple way of increasing the volatility of their asset returns – increasing leverage. They may also have stronger incentives to do so if their creditors – largely depositors – are de-sensitised to risk when setting their cost of borrowing (Haldane (2012)).

If so, this is a recipe for super-charged risk-shifting – and was in the run-up to the crisis. Leverage among global banks rose at real pace in the pre-crisis period, in a quest for ever-higher banking returns on equity (Chart 7). And this quest for shareholder returns was in turn aided and abetted by creditors who, far from pricing this rising risk, charged a low and falling interest rate to the banks, further fuelling risk-taking incentives.

This risk-shifting crystallised as the crisis broke. At that point, yields on bank borrowing shot up and risk-taking was crushed. Creditors bore large losses, which would have been larger still without government support. This experience makes clear that risk-shifting is not a theoretical phenomenon; it is very much real, with large costs for creditors and for the wider economy.

Indeed, the welfare implications of risk-shifting are doubly troubling. Not only does it generate excessive risk-taking and credit creation during upswings. As importantly, it also contributes to excessive caution and a credit crunch during the downswing. Risk-shifting results in two-sided deadweight costs, for creditors and for the macro-economy.[19] Both have been much in evidence over recent years.

(b) Risk-alignment

A related, but distinct, micro-economic risk friction concerns how rights are allocated to different stakeholders in a company. Standard corporate finance theory sets out, on the face of it, a coherent allocation of control rights and risks. Shareholders have a junior claim on the profits of a company, in that they are paid out after employees, creditors and the taxwoman. Theirs is the riskiest piece of the profits pie.

This means "ownership" is really a misnomer when applied to shareholders. What defines shareholders is not that they own most or all of the company. Rather they "own" least, as residual claimants. Associating "shareholding" with "ownership" thus makes little substantive sense, despite its widespread use in popular discourse.

Indeed, it is precisely because shareholders own least, not most, that justifies granting them control rights over management in the first place. By vesting control rights in the stakeholder whose claim is riskiest, the firm is immunised against taking too much risk in the first place. The shareholder model is thus, in principle, incentive-compatible, as it properly aligns risks and rights within a company.

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[19] Research with Peter Richardson and Matthew Willison casts these results in a theoretical model (Haldane, Richardson and Willison (*forthcoming*).

The problem with this line of argument, as Martin Wolf of the *Financial Times* has articulated brilliantly, is that it confuses diversifiable and un-diversifiable risk (Wolf (2014)). While shareholders hold the residual risk in a company, this risk can easily be diversified away by holding a broad portfolio of assets. Shareholders are hence likely to be rather risk-*insensitive* and unlikely to discipline risk-taking by management.

Interestingly, the situation is different for other stakeholders in the company – for example, employees, customers and clients. Typically, the company risk they face is not easily diversifiable. They cannot easily invest in a portfolio of jobs, or products or supply lines. So their incentives to restrict excessive risk-taking are likely to be, if anything, sharper and more acute than among shareholders.

But under the current shareholder-centric model, these wider stakeholders are not given any control rights over management. This constrains their ability to rein in managerial excesses, even though their incentives to do so may be sharpest. In other words, the standard corporate governance model may be predicated on a misclassification of risk and, as a result, a misalignment between these risks and control rights, with potentially adverse implications for corporate risk-taking.

Companies and society

(a) Externalities and systemic risk

At least for some types of firms, their actions can have an impact beyond internal stakeholders – shareholders, creditors, employees, customers and clients. They impose *social* externalities on the economy and wider society. If companies' objectives are shareholder-centric, these externalities are unlikely to be internalised fully within firms' decision-making. In other words, there is a potential disconnect between company and societal incentives.

These externalities can be both good and bad. For example, many companies are in the business of creating public or quasi-public goods – for example, health, education, transport and utilities. And that is why, historically, their corporate governance structures have typically tended to weigh broader stakeholder and societal interests.

In other cases, these social externalities may be negative – the creation of public "bads". The classic example is environmental pollution. But these social externalities can also arise in more subtle ways – the mistreatment of customers and clients through delayed payment or mis-selling, exploitation of employees through inadequate working practices, or attempts to avoid paying sufficient tax to government.

Banking produces a particular form of social pollution – financial crises. We have had many hundreds of years of experience of such crises. The global financial crisis will, however, almost certainly require a re-think of their costs. The cumulative GDP costs of the crisis so far in the US, UK and the euro-area are well in excess of 25% of GDP (Chart 8). In net present value terms, they could easily end up equating to a year's GDP or more.

This suggests, pre-crisis, the misalignment between private and social incentives in banking was larger than perhaps at any time in the recent past. In the language of Jensen and Meckling, risk had been shifted by management and shareholders onto a much wider set of societal stakeholders, with significantly adverse macro-economic implications.

(b) Moral hazard

That brings me to the final of the incentive frictions. When the social costs of an activity are high, as during financial crises, there are strong incentives to cushion the effects on wider society. The global financial crisis provides no better example of those incentives, with extra-ordinary levels of government support to the global banking system in the form of recapitalisation, liquidity support and guarantees.

While these levels of support were arguably necessary to limit the costs of the crisis, they came with their own longer-term costs. The most important of those costs was probably the adverse effects of such interventions on risk-taking incentives – in other words, the moral hazard of government insurance (Alessandri and Haldane (2009)).

This is not a new issue. The historical evolution of the financial system has been a game of cat and mouse between the state and the banking system (Haldane (2010)). Because the cat has typically failed to keep pace with the mouse, the result has been a widening and deepening of support mechanisms for banks over time. Elsewhere, I have called this dynamic link between bank and sovereign balance sheets the "doom loop" (Haldane (2012)).

One measure of the extent of this problem is found in estimates of the "implicit subsidy" banks earn as a result of the expectation of government support. Chart 9 plots one measure of this "implicit subsidy" to UK banks. This peaked following the bail-outs at a remarkable £150bn in 2009. Since then, it has fallen substantially – to around £10bn in 2013 – as regulatory reforms have been put in place to constrain risk-taking and the financial strength of banks has improved. But it remains in positive territory, suggesting an on-going distortion to risk-taking incentives.

Public policy responses

The modern company harbours a range of micro-economic frictions. In some cases, these seem likely to have generated significant macro-economic costs, in the form of sub-optimally low rates of investment and sub-optimally high degrees of risk-taking. These issues – low growth and high risk – are the bread and butter of central banking. These costs are not the fault of any party, whether businesses or investors or other stakeholders. Rather they are the result of the incentives embodied within the current structure of companies.

These frictions are not just multiple, but potentially interact in important ways. When framing policy choices, that means heeding the "theory of the second best", in the sense of Lipsey and Lancaster (1956)): with multiple frictions, taking measures to address a friction in one place need not necessarily lead to an improvement in social welfare in aggregate.

As one example of that in a corporate governance context, the shift to equity-based compensation practices in the 1980s and 1990s addressed one incentive friction – the principal/agent problem between shareholders and managers. But it may have done so at the expense of amplifying other incentives frictions – for example, it may have amplified risk-shifting incentives from shareholders to creditors and to wider society.

In some areas, there has been considerable progress in tackling some of these incentive frictions since the crisis, especially among banking firms. One prominent example is regulatory capital reform. Significant increases in banks' equity and loss-absorbing capital have been put in place or are planned. This is likely to have reduced the incentives of shareholders to engage in risk-shifting, either to creditors or to wider society, thereby lowering the macro-economic costs of these activities.[20, 21]

But there are also areas where there has been somewhat less progress and more may be needed to mitigate corporate governance frictions. All involve acting on the structure of incentives at source, to generate higher returns for lower risk for businesses, investors and,

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[20] Admati and Hellwig (2014).

[21] There have also been initiatives aimed at increasing levels of accountability amongst senior individuals in financial institutions. One example is the PRA and FCA's Senior Managers Regime (SMR) which will come into force in March 2016. The SMR intends to create stronger incentives for senior individuals to run institutions prudently and to take greater responsibility for their actions. The PRA has also recently published a consultation on its expectations of the collective responsibilities shared by board members which will complement the SMR. The PRA published its consultation paper "Corporate Governance: Board Responsibilities" in May 2015, available at: http://www.bankofengland.co.uk/pra/Documents/publications/cp/2015/cp1815.pdf.

ultimately, wider society, helping central banks meet their objectives. Let me mention three areas in particular: *executive remuneration and accountability*; *control rights*; and *company law*.

Executive remuneration and accountability

Historically, perhaps the most commonly-pursued approach to tackling corporate finance problems has been to adjust managerial compensation practices – for example, the shift to equity-based compensation practices in the 1980s. This shift worsened incentive problems elsewhere within firms. In response, attention more recently has switched to paying executives in debt, rather than equity. The aim here is to align managerial incentives with those of wider stakeholders, specifically creditors, so mitigating risk-shifting incentives.

This is not a new idea. In their original paper on risk-shifting, Jensen and Meckling (1976) proposed structuring a CEO's compensation such that it was aligned with the firms' debt-to-equity ratio. In practice, companies in general, and financial firms in particular, have fallen well short of that objective. Fewer than 1% of bank CEOs have been found to have remuneration packages with debt-to-equity ratios greater than their firms.[22] The new EU bonus cap rules also arguably weaken the link between performance and compensation as they shrink the proportion of variable pay and make it harder to cut back total remuneration.[23]

Since the crisis, consideration has been given by both academics and policymakers to switching remuneration practices towards debt-like instruments (for example, Becht, Bolton and Roell (2011), PCBS (2013)). This appears to have had some policy impact. For example in Europe, payment in debt instruments is now permitted under the new Capital Requirements Directive IV (CRD IV).

To date, however, there are only limited signs of remuneration practices having shifted significantly towards debt. UK banks provide one case study. Their structures remain heavily skewed towards equity, at around 50–75% of total pay, compared with around 5–15% in debt (Chart 10). Among non-financial firms, the balance of pay appears, if anything, to be even more heavily skewed towards equity.

A second strand of the policy debate involves lengthening the horizon of remuneration contracts. This can be achieved by requiring bonus payouts to be deferred for a period ("deferral") and subsequently not paid out if performance is poor ("malus") or clawed back after payment. If deferral periods broadly match the duration of a typical risk cycle, incentives to risk-shift through time are likely to be significantly reduced. Incentives to act in a short-termist fashion should also be reduced.

These proposals have an element of back to the future about them too. Deferral and clawback in some respects mimic 19th century company practices, when shareholders and managers remained liable for losses that occurred on their watch, even after they had sold their stake. Recently, these ideas have been resurrected in some countries, at least for banking firms. For example, CRD IV in Europe requires that the variable portion of senior bank executives' pay be deferred for 3–5 years. Last July, the Bank of England consulted on a minimum deferral and clawback period of 7 years for Senior Managers and earlier this year these proposals were finalised. These rules now allow for clawback of up to ten years from award, providing a material incentive to reduce excessive risk taking by executives.[24] In finance, you generally reap the risks you sow over that horizon. This new policy aligns risks and horizons.

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[22] Bennett, Güntay, and Unal (2012).

[23] See Bailey (2014) for further details.

[24] The PRA and FCA published their Policy Statement, 'Strengthening the alignment of risk and reward: new remuneration rules' in June 2015, available at: http://www.bankofengland.co.uk/pra/Documents/publications/ps/2015/ps1215.pdf.

These positive moves have prompted new proposals. Some are not so innovative, including the use of role-based allowances as part of fixed pay, to link more explicitly reward to responsibility. But others are more pioneering – for instance the proposals being pursued by some banks to pay certain staff in "performance bonds", which they would forfeit in the case of the bank receiving a large fine. These could include Contingent Convertible bonds (CoCos), which either get wiped out when a bank runs into trouble or get exchanged into equity. All of these measures align personal incentives with the interests of creditors, and the longer-term wellbeing of the firm.[25]

A final area where progress has been made is shareholder control of remuneration policies. Since 2013, shareholders have had a "Say on Pay" in both the UK and US. Remuneration policies now need explicitly to be approved by a majority of shareholders (in the UK) or advised on (in the US). And in Europe, a *Shareholder Rights Directive* granting a "Say on Pay" is moving through European Parliament. It is too early to tell whether these initiatives will signal a "Shareholder Spring".

Taking pay issues together, progress on restructuring executive compensation has been made, particularly in the EU and particularly for banks. Elsewhere, however, progress has been relatively piecemeal and modest.

Control rights

A second way of addressing some of the agency problems embedded in the current company model would be to modify the control rights of shareholders – for example, by redistributing rights between them. This, too, has been an area of recent interest, among both academics and practitioners.

One example is the work of Bolton and Samama (2012) who have advocated so-called "loyalty shares" – shares whose voting rights increase the longer they are held by the investor.[26] They can be seen as an explicit attempt to tackle investor, and hence managerial, short-termism. Interestingly, these ideas are now beginning to find their way into custom and practice in some countries.

In April last year, France introduced a so-called *Florange* law, automatically granting shareholders in French-listed companies double voting rights if they are held for two years or longer. A similar law has recently passed in Italy, with loyalty shares automatically granted provided there is approval by two-thirds of shareholders. The provision for enhanced voting rights for longer-term shareholders has also been discussed in the context of the EU *Shareholder Rights Directive*.

There have been moves, similar in spirit if different in detail, in the US too. For example, a number of companies have recently adopted so-called "proxy access" – granting groups of longer-term shareholders the right to appoint directors on their behalf. At present, proxy access is a market-practice led initiative, rather than a legal or regulatory imposition.

A more radical reformulation of voting rights still would be to use so-called "dual class" shares. These involve granting differential voting rights to different classes of shares. This too, in some respects, is back to the future. It has echoes of the restricted or graduated shareholder rights models seen over a century ago.

Dual class listings remain common practice in a number of countries today, especially in emerging markets. Interestingly, however, there have also been some signs of dual class shares recently playing a greater role in the US. A number of recent high profile US company IPOs, such as Facebook and Google, have issued dual class stock.

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[25] See Carney (2014).

[26] See also Mayer (2013).

These laws and emerging practices are in their early throes and are not uncontentious, especially among institutional shareholders. Nonetheless, they are symptomatic of a common desire to strengthen long-term investors' hand in the oversight of companies. If these initiatives grew in prominence, they would begin to address some of the short-term and risk-shifting problems embedded in the current corporate governance model.

Corporate governance

If alterations to the balance of shareholder rights are increasingly under debate, the same is not true of the rights of creditors and other stakeholders. In principle, the case for recognising explicitly these broader interests seems sound enough. In a recent paper, I considered the risk-shifting problem within companies and various solutions to it (Haldane, Richardson and Willison (*forthcoming*)). The most effective was simply to alter the objectives of the company to reflect creditor, as well as shareholder, interests.

This is likely to be a fairly general result, whether the externality is between shareholders and creditors or between shareholders and wider society. The most straightforward way of tackling embedded stakeholder externalities is to have those stakeholders' interests weighed explicitly in the objectives and decision-making of the company. In practical terms, that would mean modifying the objectives, rights and responsibilities of a firm under Company Law.

Such modifications are not, in fact, that radical either from an historical or international perspective. History clearly suggests that shareholder primacy has not always been the centrepiece of company law. Nor has the current practice of endowing only shareholders with explicit control rights.

Even today, international experience suggests a range of other corporate models can operate successfully. The UK and US shareholder-centric model sits very much towards one end of the international spectrum (Allen and Gale (2000)). In countries such as Japan, German and France, employees and other firms, especially banks, are assigned a more prominent role on the boards and in the running of companies. In the language of German company law, there is "co-determination" in the decisions of the company.

As an illustration of that, Chart 11 is drawn from a survey of senior executives at large companies in the UK, US, Japan, Germany and France. On the question "Whose company is it?", a strong majority in all countries, bar Japan, view shareholders, rather than broader stakeholders, as the ultimate owners.

But when asked a subtly different question, about the relative importance of job security for employees versus dividends for shareholders, a strikingly different pattern emerges. A majority of Japanese, German and French company executives put employee job security above shareholder dividends. For UK and US companies, a strong majority place the balance the other way around. This suggests a very different set of managerial objectives and incentives across countries.

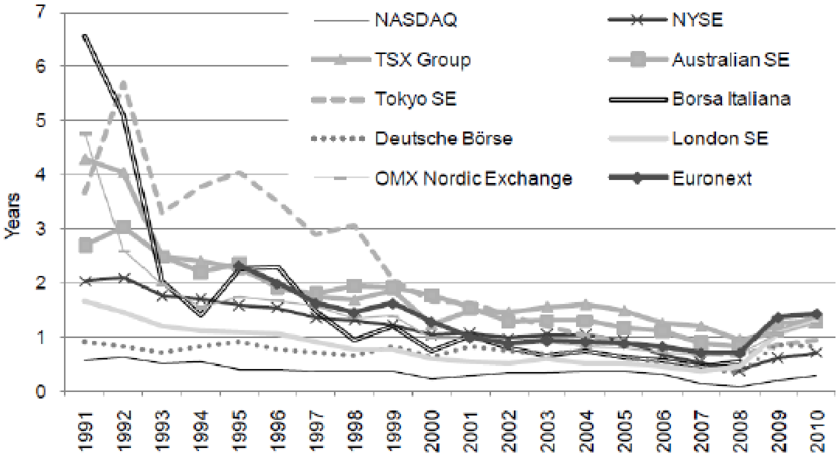
Empirical evidence on the relatively efficacy of these different models does not give a clear-cut answer. Prior to the crisis, some papers pointed to broader stakeholder representation boosting market value (Fauver and Fuerst (2006)), others to it reducing value (Gorton and Schmid (2004)). Experience since the crisis might provide clearer clues. For example, banks with shareholder-friendly boards in general fared worse during the crisis (Belratti and Stulz (2009)). The debate here seems set to continue and this is a place where further research would be valuable.

Conclusion

Challenges to the shareholder-centric company model are rising, both from within and outside the corporate sector. These criticisms have deep micro-economic roots and thick macro-economic branches. Some incremental change is occurring to trim these branches. But it may be time for a more fundamental re-rooting of company law if we are to tackle these problems at source. The stakes – for companies, the economy and wider society – could scarcely be higher.

Appendix

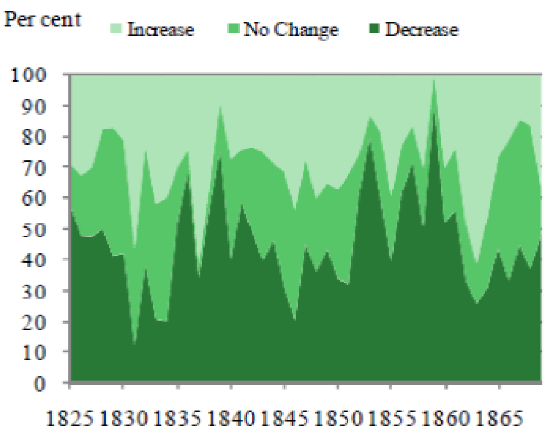
Chart 1: Average holding period of shares between 1991 and 2010



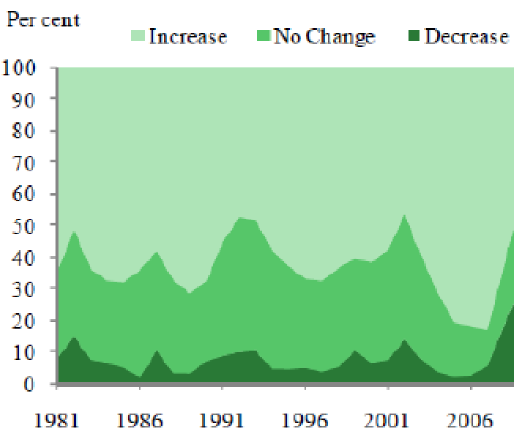
Source: OECD (2011) available here.

Chart 2: Dividend payouts

Dividend payouts in US firms in the 1800s

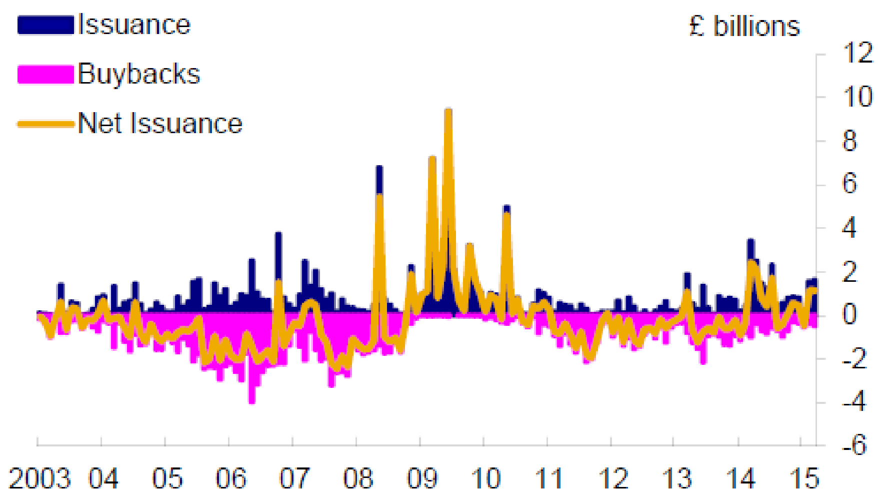


Dividend payouts in the world's largest 215 companies between 1980 – 2010



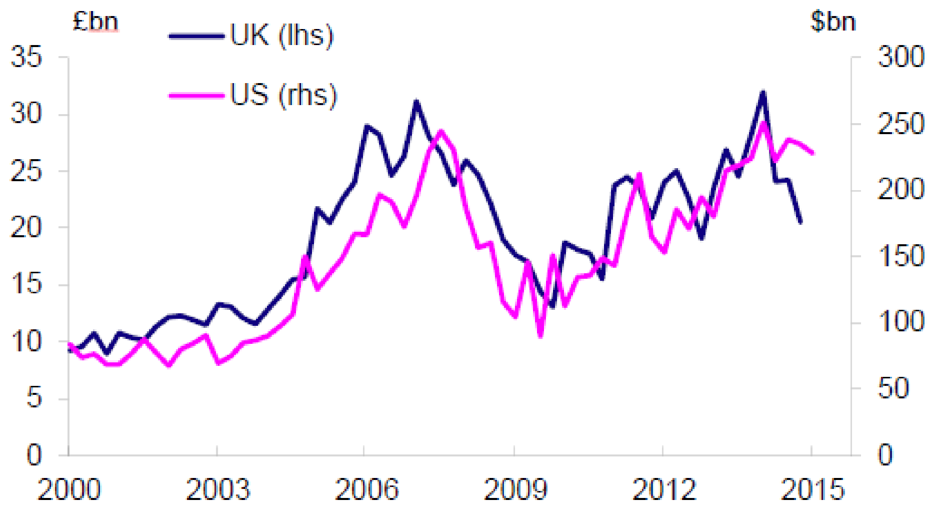
Source: Haldane (2010), available here.

Chart 3: Share buybacks by UK companies



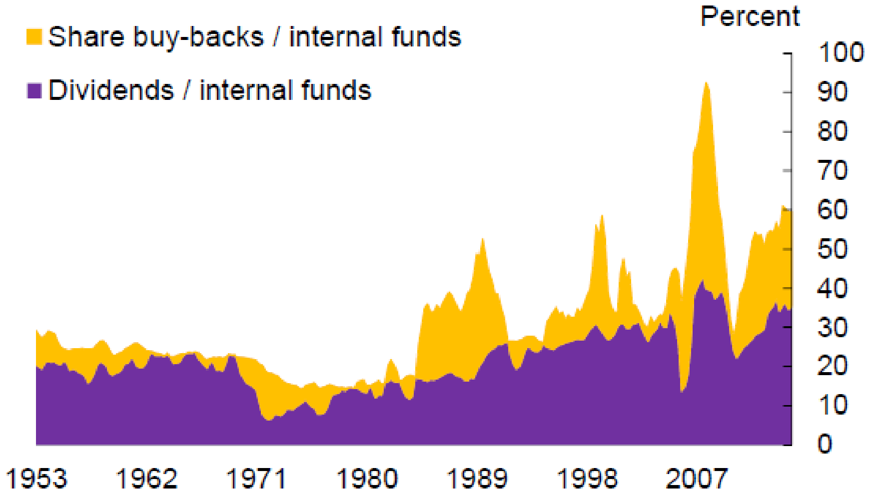
Source: Bank of England.

Chart 4: Total payouts to FTSE-All Share (UK) and S&P 500 (US) companies



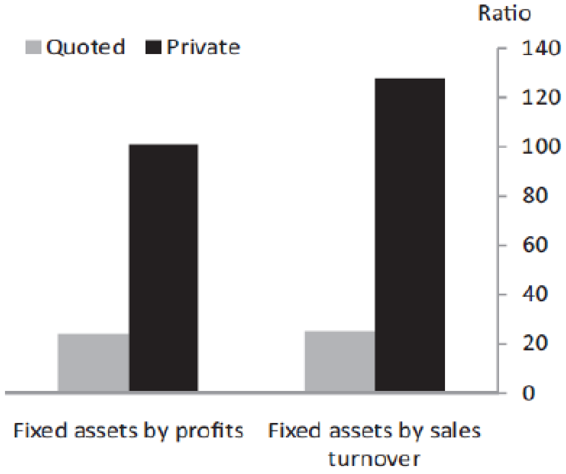
Source: Bloomberg.

Chart 5: Nonfinancial corporate dividends and buy-backs in the US



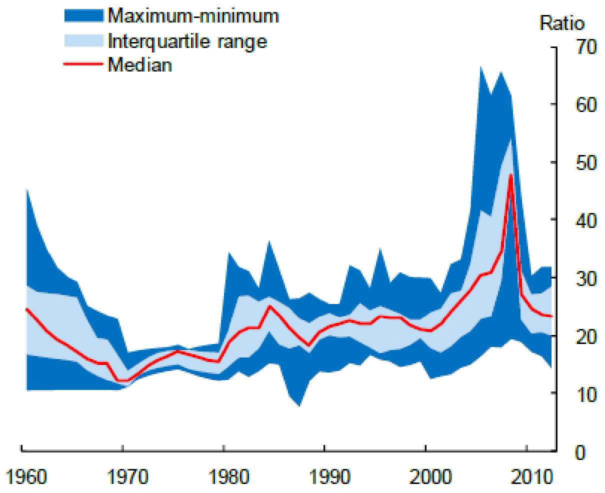
Source: Federal Reserve and Rachel & Smith (*forthcoming*).

Chart 6: Stocks of fixed assets of private and quoted firms scaled by profits and sales



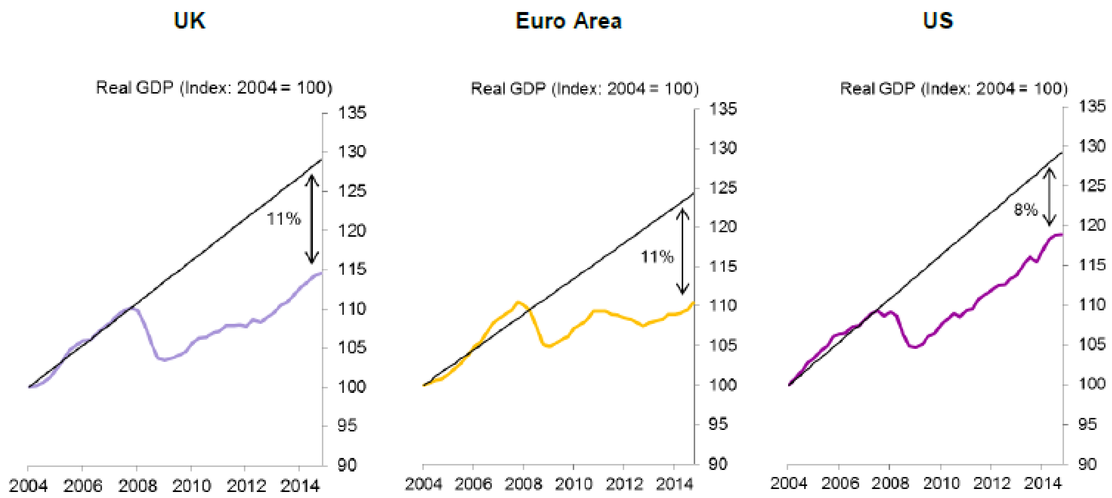
Source: Davies et al (2014), available here.

Chart 7: Leverage ratios of UK banks



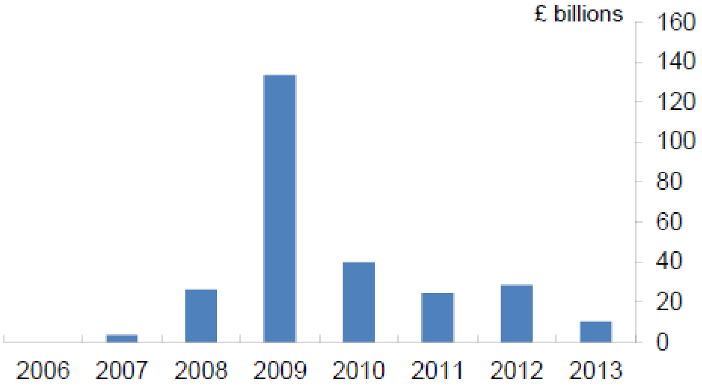
Sources: Published accounts and Bank calculations. Notes: The chart shows the ratio of total assets to shareholders' claims. The data are a backwardly consistent sample of institutions providing banking services in the United Kingdom in 2009. The sample includes the following financial groups: Barclays, Bradford & Bingley, HSBC, Lloyds Banking Group, National Australia Bank, Nationwide, Northern Rock, RBS and Santander UK. Where data are consistently available for the UK component of the banking group, these have been used.

Chart 8: Output losses following the financial crisis



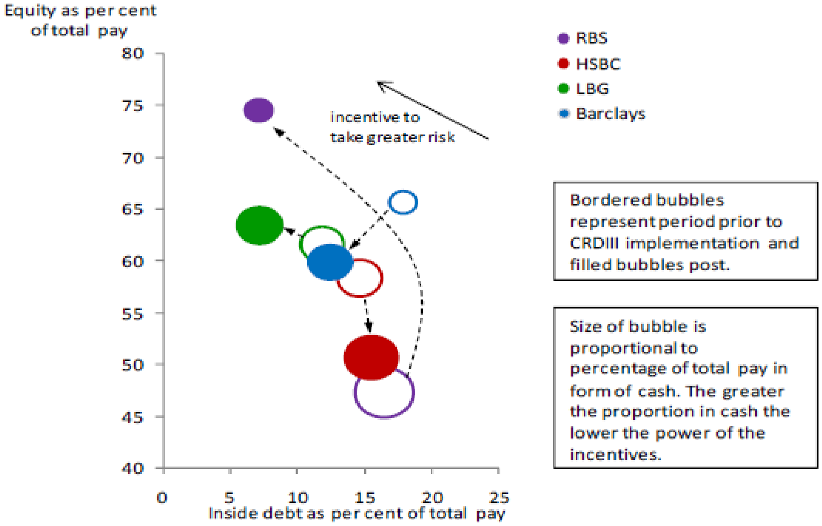
Source: Datastream; Bank calculations.

Chart 9: Implicit subsidies for large UK Banks



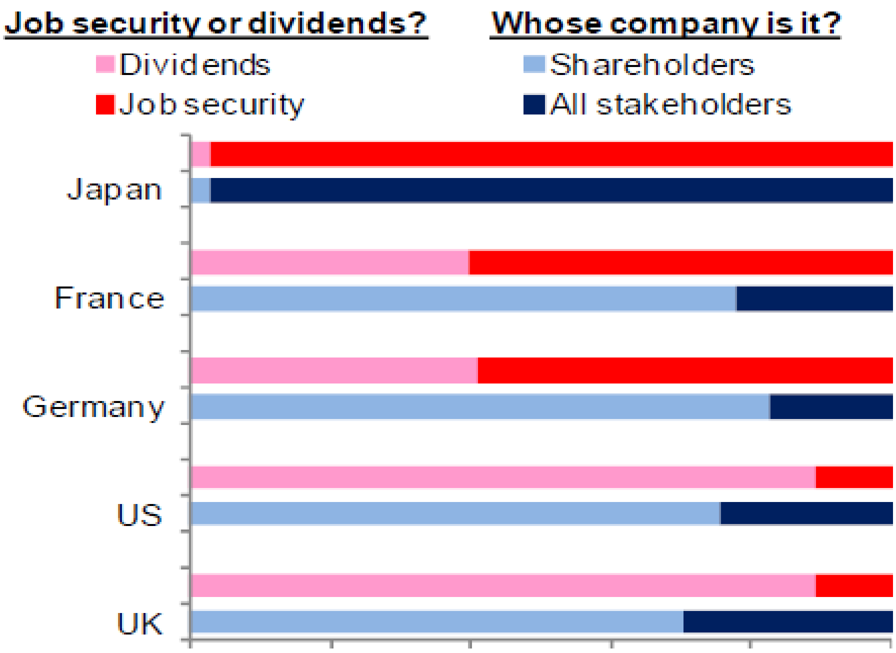
Source: BofA Merrill Lynch Global Research, Moody's and Bank calculations. Notes: The total value of the implicit subsidies to the largest UK banks - Barclays, HSBC, LBG and RBS. Estimates obtained by multiplying the differences in bond yields associated with Moody's support and stand-alone ratings by the corresponding quantity of ratings-sensitive liabilities. Measuring the scale of banks' risk-sensitive liabilities is subject to a degree of judgement. The estimate used here takes this to be the sum of their deposits from other banks and financial institutions, some financial liabilities designated at fair value (debt securities, deposits), and certain debt securities in issue (commercial paper, covered bonds, other debt securities and subordinated debt). See Noss, J and Sowerbutts, R (2012), 'The implicit subsidy of banks', Bank of England Financial Stability Paper No. 15, available at www.bankofengland.co.uk/research/Documents/fspapers/fs_paper15.pdf.

Chart 10: Executive remuneration packages across major UK banks 2007 to 2012



Source: Annual reports; Bank calculations. Notes: Data points are simple averages for the executive directors. Equity consists of equity awards and equity option awards. Inside debt consists of deferred cash awards, deferred pension awards and deferred debt instrument awards. Cash consists of non-deferred awards of cash and cash equivalents. Data points for the period prior to CRDIII implementation are simple averages of annual rewards in FY2007-FY2010. Data points for the period post CRDIII implementation are simple averages of annual rewards in FY2011-FY2012.

Chart 11: Survey results of senior executives at large companies



Source: Yoshimori (1995).

Table 1: Timeline of events

Date	Event	Detail
1250	**First Joint Stock Company (JSC)**	96 shares of the *Société des Moulins du Bazacle*, were traded at a value that depended on the profitability of the mills the society owned.
1288	**Stora Enso issues first recorded share certificate in history**	Issued a share certificate to help expand operations.
1602	**First shares issued to public by Dutch East India Company**	Issued shares to fund activities in Asia. Shares were tradable on an exchange for the first time.
1615	**Sir Edward Coke describes modern methods of incorporation**	Sir Edward Coke, Chief Justice under James VI of Scotland describes in a common law case the four methods of incorporation by: common law; the authority of parliament; the King's charter; and by prescription.
1720	**Bubble Act (repealed 1825)**	Prohibited JSCs that were not authorised by Royal Charter
1837	**Bligh vs Brent**	The issue before the court was whether a company's shares were realty. The Court rejected the view that company's shares were realty, arguing that shareholders had interests only in the profits of companies, not in their assets. The shares were personality, irrespective of the nature of the company's ownership of land.
1844	**Joint Stock Companies Act**	Allowed more Joint Stick Companies JSCs) to incorporate by reducing restrictions. Previously this was only possible by royal charter or private act).
1844 – 1849	**Winding up Acts**	1840 boom was followed by collapse, which increased demand for bankruptcy regulation. At the time, shareholders were personally responsible for losses, but it was difficult to ascertain who they were as many had bought or sold shares after main losses occurred. Thus, the separation of corporate assets and liabilities (through limited liability) was needed to

		make new winding up procedures work.
1849	**Burnes vs Pennell**	Original source of the rule that dividend cannot be paid except from profits. Lord Campbell ruled that declaration of dividends when there were no profits was fraudulent.
1855	**Limited Liability Act**	Companies of more than 25 owning members could incorporate as a limited liability.
1856	**Joint Stock Companies Act**	Provided a simple administrative procedure by which a group of seven people could register a limited liability company.
1862	**The Companies Act**	Overarching regulation, including right to incorporate, right to establish as a limited liability company and the right of the liquidator to bring criminal proceedings against director who committed offences in relation to the company. Also removed the minimum denomination for shares.
1878	**City of Glasgow Bank failure**	A £5.19 deficit existed between assets and liabilities, shareholders had to pay in excess of £12,000 as they faced unlimited liability. Few remained solvent after the collapse.
1879	**Companies Act**	Introduced the idea of reserve liability – where shareholder was liable to meet a bank's dent up to a fixed multiple of their equity investment.
1883	**Hutton v. West Cork Railway Co.**	Court overruled directors who wanted to award payment to officers for past service as it did not benefit the company to do so.
1897	**Salomon v. Salomon & Co Ltd**	Salomon incorporated as a limited liability. He held 20,000 shares, while his wife and five children each held one share, fulfilling the seven person criteria for limited liability incorporation. The company eventually folded and the assets could not cover the debts, so the liquidator sought to make Salomon personally responsible. The Courts initially ruled in the liquidators favour, as Parliament had never considered the extension of limited liability to sole traders. However the House of Lords overturned the decision and limited liability

		came to apply to private companies and sole traders.
1919	**Dodge v. Ford**	Ford wanted to invest profits in raising staff wages and lowering price of cars. Court ruled in favour of the Dodge brothers who claimed that Ford's intentions contradicted the sole purpose of the company to make profit.
1932	**Berle and Means publish 'The Modern Corporation and Private Property'**	Berle's belief was that managers must act in the interested of shareholders to constrain self-interest. The book expanded on these principles, stating that the increased dispersion of shareholders entrenched power to managers; they called for increased shareholder rights and primacy.
1948	**Companies Act**	Gave shareholders right to remove directors with a majority vote.
1985	**Companies Act**	Set out the responsibilities of companies, directors and their secretaries. Was largely a consolidation of pre-existing legislation, but was replaced by the Companies Act 2006.
2006	**Companies Act**	Act codified director's duties and introduced idea of 'Enlightened Shareholder Value'; that, although directors should act in a way that benefits the company's shareholders, they should, in the process, take account the interests of other stakeholders.

References

Acheson, G, Hickson, C and Turner, J (2010), "Does limited liability matter?" *Evidence from nineteenth –century British banking, review of Law and Economics, Vol 6(2), pages 247–73.*

Admati, A and Hellwig, M (2014), "The Bankers" New Clothes: What's Wrong with banking and What to Do about it', *Princeton University Press.*

Alessandri, P and Haldane A G (2009), "Banking on the State", *speech delivered at the Federal Reserve Bank of Chicago, available at:* http://www.bankofengland.co.uk/archive/Documents/historicpubs/speeches/2009/speech409.pdf.

Allen, F. and Gale, D (2000), "Comparing financial systems", *MIT Press.*

Asker, J, Collard-Wexler, A and De Loecker J (2014), "Dynamic Inputs and Resource (Mis)Allocation", *Journal of Political Economy, vol 122.*

Bagehot, W (1862), "Limited Liability in Banking" – I' and "Limited Liability in Banking" – II' in ***St John-Stevas, N (1978)*** "The Collected Works of Walter Bagehot Vol. 9", *The Economist, London.*

Bailey, A (2014), *speech delivered at the City Banquet London, available at:* http://www.bankofengland.co.uk/publications/Documents/speeches/2014/speech763.pdf.

Becht, M, Bolton, P and Roell A (2011), "Why Bank Governance is Difference" *Oxford Review of Economic Policy, vol 27.*

Bennett, R L, Güntay, L and Unal, H (2012), "Inside debt, bank default risk and performance during the crisis", *Mimeo.*

Berle, A and Means, G (1932), "The Modern Corporation and Private Property"*, Transaction Publishers*

Belratti, A and Stulz, R M (2009), "Why did some banks perform better during the credit crisis? A cross-country study of the impact of governance and regulation", *National Bureau of Economic Research Working paper 15180.*

Blumberg, P (1986), "Limited Liability and Corporate Groups"*, Journal of Corporate Law, Vol 11.*

Bolton, P and Samama, F (2012), "L shares: rewarding long term investors", *Mimeo.*

Bryer, R (1993), "The Late Nineteenth-Century Revolution in Financial Accounting: Accounting for the Rise of Investor or Managerial Capitalism?" *Accounting, Organizations and Society, vol. 18.*

Button, R, Knott, S, Macmanus, C and Willison, M (2015), "Desperate adventures and men of straw: the failure of City of Glasgow Bank and its enduring impact on the UK banking system", *Bank of England Quarterly Bulletin 2015 Q1, pages 23–35.*

Carney, M (2014), "The future of financial reform", *speech delivered at the 2014 Monetary Authority of Singapore Lecture, available at: http://www.bankofengland.co.uk/publications/Documents/speeches/2014/speech763.pdf*.

Claessens, S, Djankov, S, Fan, J and Lang L (2002), "Disentangling the incentive and entrenchment effects of large shareholdings", *Journal of Finance, vol 57, pages 2741–71.*

Davies, R and Haldane, A (2011), "The Short Long" *speech delivered in Brussels, available at:* http://www.bankofengland.co.uk/archive/Documents/historicpubs/speeches/2011/speech495.pdf.

Davies, R, Haldane A, Nielsen M and Pezzini S (2014), "Measuring the costs of short-termism" *Journal of Financial Stability, vol 12, pages 16–25.*

Esty. BC (1998), "The impact of contingent liability on commercial bank risk taking", *Journal of Financial Economics, vol 47, pages 187–218.*

Fama, E F and Jensen M C (1983), "Separation of Ownership and Control", *Journal of Law and Economics, vol 26, pages 301–25.*

Fauver, L and Fuerst, M E (2006), "Does good corporate governance include employee representation? Evidence from German corporate boards" *Journal of Financial Economics, Vol 82, pages 673–710.*

Fisch, J (2006), "Measuring Efficiency in Corporate Law: The Role of Shareholder Primacy", *Penn Law: Legal Scholarship Repository.*

Freeman, M, Pearson, R and Taylor, J (2012), "Shareholder Democracies? Corporate Governance in Britain and Ireland before 1850", *The University of Chicago Press.*

Gorton, G and Schmid, F A (2004), "Capital, Labor, and The Firm: A Study of German Codetermination", *Journal of the European Economics Association, vol 2, issue 5, pages 863–905.*

Haldane, A (2010), "Patience and Finance", *speech delivered at the Oxford China Busines Forum, Beijing, available at:* http://www.bankofengland.co.uk/archive/Documents/historicpubs/speeches/2010/speech445.pdf.

Haldane, A (2011), "Control rights (and wrongs)" *Wincott Annual Memorial Lecture.*

Haldane, A (2012), "The Doom Loop", *London Review of Books, vol 34, pages 21–22.*

Haldane, A, Richardson, P and Willison, M (forthcoming), "Risk shifting, debt contracts and corporate governance in the banking system", *Bank of England.*

Hall, B and Liebman, J (1998), "Are CEOs really paid like bureaucrats?" *Quarterly Journal of Economics, vol 113.*

Hart, O (1995), "Firms, Contracts, and Financial Structure", Oxford University Press.

Hunt, B C (1936), "The Development of the Business Corporation in England 1800–1867", *Harvard Economic Studies Vol. LII, Harvard University Press.*

Ireland, P (2010) "Limited liability, shareholder rights and the problem of corporate irresponsibility", *Cambridge Journal of Economics, Vol 34.*

Jensen, M C and Meckling, W H (1976), "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure", *Journal of Financial Economics, vol 3, pages 305–60.*

Johnson, P (2013), "Making the Market – Victorian Origins of Corporate Capitalism", *Cambridge University Press.*

Kay, J (2012), "The Kay review of UK equity markets and long-term decision making", *available at:* https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/253454/bis-12–917-kay-review-of-equity-markets-final-report.pdf.

La Porta, R, Lopez-de-Silanes, F, Shleifer, A and Vishny R (2002), "Investor protection and corporate valuation", *Journal of Finance vol 57 (3), pages 1147–70.*

Leaf, W (1937), "Banking", *Third Edition, revised by Ernest Sykes.*

Lipsey, RG and Lancaster, K (1956), "The general theory of second best", *review of economic studies vol 24 (1) pages 11–32.*

Manne, H (1965), "Mergers and the market for corporate control", *Journal of Political Economy, Vol 32.*

Mayer, C (2013), "Firm Commitment: Why the corporation is failing us and how to restore trust in it", *Oxford University Press.*

Merton, RC (1974), "The pricing of corporate debt: the risk structure of interest rates", *Journal of Finance, vol 29 (2) pages 449–70.*

Moyle, J B (1913), "The Institutes of Justinian"*, Clarendon Press, Oxford.*

Mukwiri, J (2013) "Myth of shareholder primacy in English law", *European business law review, 24.*

PCBS (2013), "Changing banking for good", *Parliamentary Commission on Banking Standards Final Report, available at:* http://www.parliament.uk/business/committees/committees-a-z/joint-select/professional-standards-in-the-banking-industry/news/changing-banking-for-good-report/.

Rachel, L and Smith, T (forthcoming), "Secular Drivers of the Global Real Interest Rate", *Bank of England.*

Rae, G (1885), "The Country Banker: His Clients, Cares, and Work", *London, John Murray.*

Schumpeter, J R (1942), "Capitalism, Socialism, and Democracy", Harper & Brothers.

Shelton, J P (1965), "The First Printed Share Certificate: An Important Link in Financial History", *Business History Review Vol. 39(3).*

Shleifer, A and Vishny R (1986), "Large Shareholders and Corporate Control", *Journal of Political Economy, vol 94 pages 461–88.*

Smith, A (1848), "The Bubble of the Age; Or, the Fallacies of Railway Investment, Railway Accounts, and Railway Dividends", *3 editions, Sherwood, Gilbert, and Piper.*

Stout, L (2012), "The Shareholder Value Myth: How Putting Shareholders First Harms Investors, Corporations, and the Public"*, Berrett-Koehler.*

The Company Law Review Steering Group (1999), *Modern company law for a competitive economy: the strategic framework.*

The Company Law Review Steering Group (2000), *Modern company law for a competitive economy: completing the structure.*

The Company Law Review Steering Group (2001), *Modern company law for a competitive economy: final report*.

Turner, J D (2009), "The last acre and sixpence: views on bank liability regimes in nineteenth-century Britain", *Financial History* Review Vol. 16(2).

Turner, J D (2014), "Banking in Crisis – the Rise and Fall of British Banking Stability, 1800 to the Present"*, Cambridge University Press.*

Wolf, M (2014), "AstraZeneca is more than investors" call', *Financial Times, available at:* http://www.ft.com/cms/s/0/6fe31054-d691–11e3-b251–00144feabdc0.html#axzz3gPwZ57K7.