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Erik E. Lehmann

Corporate governance

Corporate governance is a recent concept that encompasses the costs caused by managerial misbehavior. Corporate governance is concerned with how organizations in general, and corporations in particular, produce value and how that value is distributed among the members of the corporation, its stakeholders. The interrelation of value production and value distribution links the ubiquitous technological aspect (the production of value) with the moral and ethical dimension (the distribution of value). Corporate governance is concerned with this link in general, but more specifically with the moral and ethical dimensions of distributing the generated value among the stakeholders. Value in firms is created by firm-specific investments, and the motivation and coordination of value enhancing activities and investment is protected by the power concentrated at the pyramidal top of the organization. In modern companies, it is the CEO and the top management deciding how to create value and how to distribute it among the relevant stakeholders. Due to asymmetric information and the imperfect nature of markets and contracts, adverse selection and moral hazard problems occur, where delegated (selected) managers could act in their own interest at the costs of other relevant stakeholders.

Corporate governance is a two-tailed concept. The first aspect is about identifying the (most) relevant stakeholder(s), separating theory and practice into two different and conflicting streams: the stakeholder value approach and the shareholder value approach. The second aspect of the concept is about providing and analyzing different mechanisms, reducing the costs induced by moral hazard and adverse selection effects, and to balance out the motivation and coordination problems of the relevant stakeholders. Corporate governance is an interdisciplinary concept encompassing academic fields like finance, economics, accounting, law, taxation and psychology, among others.

Like countries differ according to their institutions (i.e. legal and political systems, norms, and rules), firms differ according to their size, age, dominant shareholders or industries. Thus concepts in corporate governance differ along these dimensions as well. And while the underlying characteristics vary in time, continuously or as an exogenous shock, concepts in corporate governance are dynamic and static, offering a challenging field of interest for academics, policy makers and firm managers.

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Corporate Governance¹

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Extended Abstract

Corporate governance is a recent concept that encompasses the costs caused by managerial misbehavior. Corporate governance is concerned with how organizations in general, and corporations in particular, produce value and how that value is distributed among the members of the corporation, its stakeholders. The interrelation of value production and value distribution links the ubiquitous technological aspect (the production of value) with the moral and ethical dimension (the distribution of value). Corporate governance is concerned with this link in general, but more specifically with the moral and ethical dimensions of distributing the generated value among the stakeholders. Value in firms is created by firm-specific investments, and the motivation and coordination of value enhancing activities and investment is protected by the power concentrated at the pyramidal top of the organization. In modern companies, it is the CEO and the top management deciding how to create value and how to distribute it among the relevant stakeholders. Due to asymmetric information and the imperfect nature of markets and contracts, adverse selection and moral hazard problems occur, where delegated (selected) managers could act in their own interest at the costs of other relevant stakeholders.

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Keywords: Corporate Governance, principal agent theory, transaction costs, theory of the firm, moral hazard, adverse selection, managerial misbehavior, merger and acquisition, board of directors, remuneration

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1. Defining Corporate Governance

Going back through time, philosophers, sociologists and economists commonly offer their opinion about two main problems facing society: the production of value (wealth) and its distribution. How these two questions are answered lies in the governance and politics of countries and thus determines the governance of corporations.¹ Corporate governance is concerned with how corporations produce value and how it is distributed among the different stakeholders. However, both the production and distribution of wealth and value are interrelated and shape each other: “the size of the pie depends on how it is carved” (Tirole, 2006, p.3). The interrelation of value production and distribution links the ubiquitous technological side of the firm, the production of value, with the moral and ethical dimension, the distribution of value. Corporate governance is concerned with this link in general and in particular with the moral and ethical dimensions of distributing the generated value among the stakeholders.

Each stakeholder offers a particular contribution as an input of a firm’s production function and receives a respective benefit. While the inputs enter the production function in a linear or complementary way, the expected benefits are almost substitutive. A higher value directed to stakeholder *A* would lead to a loss of value directed to stakeholder *B*. Higher wages payed to the employees decreases profits and thus dividends payed to the stock-owners or a reduction in share prices. Corporate governance is concerned about the alignments of the different stakes invested in the production function and in their remuneration and compensation. This leads to the age-old questions: who should get how much of the value and why, and what is the objective of the corporation (organization)?

Corporate governance is about answering these questions, i. e. to identify the relevant interests, to balance out the different interests of stakeholders, and to align them with the objective

of the firm. Consequently, definitions of corporate governance vary in identifying and defining the most relevant interests, and arguing how these interests should be protected, and which part of the pie should be dedicated to them.

Up until now the most prominent definition of corporate governance is Shleifer and Vishny (1997), defining corporate governance as the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment. This definition is focused on the objectives of the providers of finance, either shareholders or debtholders. They justify their argument in two ways. First, that investment in the firm by the providers of finance are typically sunk funds when the firm runs into trouble. Secondly, that the interests of the suppliers of finance could not be protected sufficiently ex post by contracts and markets and thus suppliers of finance may be reluctant to invest their capital ex ante, leading to underinvestment for individual firms and welfare losses for the whole society. To mitigate the underinvestment problem, corporate governance should be primarily concerned about aligning the firm's objective with the interests of the suppliers of finance, i.e. to maximize the returns to the shareholders and the debtholders. In this view, the suppliers of finance are the one and only relevant group of stakeholders. All other interests, the claims of employees, suppliers, customers or even the government could be protected ex post, i.e. after the investment, by contracts or markets.

Zingales (1998) puts doubt on this view and argues that not only the interests of shareholders should be protected against ex post bargaining, but also the claims of other stakeholders, which are prone to ex post opportunistic bargaining. In the spirit of Williamson (1985), Zingales (1998) defines a governance system as the complex set of conditions that shape the outcome of the ex post bargaining over the quasi-rents that are generated in the course of a relationship. While there is no universal agreement as to what the main objective of a corporation

should be, the definition of a corporation's objective and the most relevant stakeholder depends on a country's culture, its electoral system, its government's political orientation and its legal system. In this way, the definition of Shleifer and Vishny (1997) is prominent in Anglo-Saxon countries with a strong focus on shareholder protection while the definition of Zingales (1998) is more concerned about balancing interests as in Continental Europe and Scandinavian Countries. Both definitions may differ from the viewpoint of Chinese corporations, where the objective of firms is aligned to the interests of the communist party and the government's long term political orientation.

The corporate governance debate splits in into a normative and positive point of view: identifying normative solutions (how should corporate governance concepts work), and in a positive way, how they work in reality. The linchpin or pivotal point within this debate is the top management team, and in particular, the chief executive officer or CEO. The CEO, or any individual on the top of a firm's hierarchy, makes the final decision about the various inputs employed in the production function. The CEO controls the capital assets needed for the production, like financial capital, human capital, and intangible assets or infrastructure that are owned by others. In this scenario the CEOs' interests are often in conflict with the ones of the other stakeholders.

Adam Smith was one of the first highlighting problems associated with the separation of ownership and control and that "it cannot well be expected, that they [managers] should watch over it with the same anxious vigilance with which the partners in a private copartnery frequently watch over their own" (cited in Jensen and Meckling (1976, p. 305). While questions on corporate governance have been around in the literature since then, or more recently (Berle and Means, 1932), the term "corporate governance" did not exist in the English language until the late 1970's

(Zingales, 1998). Since the famous Jensen and Meckling (1976) paper, the term is used to describe questions of how to govern a firm and is now on everyone's lips, labeling every organization. Economists like Adam Smith (1776), Berle and Means (1932) or Jensen and Meckling (1976) were concerned about the separation of ownership and control, i.e. the agency relationships between an investor as the principle and the manager or insider as the agent. The manager, the agent, may undertake actions which are not in the interest of the principal, leading to the well-known principal-agent problem. This turning of the corporate governance debate towards the main and basic agency problem suggests a possible definition of corporate governance as addressing both an adverse selection and a moral hazard problem.

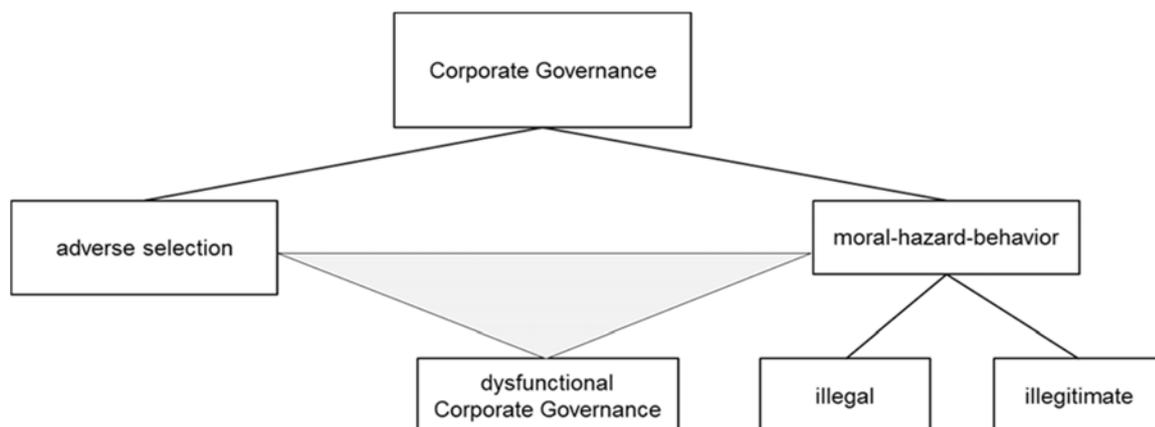
While the public debate focuses on issues like excessive payments, fraud and cross-border mergers, the academic literature is more concerned with why and how corporate governance matters and how this debate helps us in understanding the boundaries of firms. "But, what exactly is corporate governance? Why are there corporate governance problems and why does Adam Smith's invisible hand not automatically provide a solution?", Zingales asks (1998, p. 497).

2. Corporate Governance Problems

Corporate governance has attracted much attention in the past decades, and comes in many guises. The fundamental issue in corporate governance in such large and publicly traded companies is "how the surplus that accumulated at the top of the organizational pyramid could be taken away from the sticky fingers of top management and given to the rightful owners, the dispersed shareholders" (Rajan and Zingales, 2000, p. 201 et sq.). Media coverage has focused on transparency and a lack of compliance, managerial accountability, corporate governance failures, weak boards of directors, hostile takeovers, the protection of minority shareholders (like families),

or investor activism into phrases, both in corporations with strong managers and dispersed shareholders as is frequent in Anglo-Saxon Countries, and those with a controlling shareholder and minority shareholders, which is typical of the European corporate landscape or emerging countries like Russia and China. There are various ways in which management and in particular the CEO may not act in the firms' stakeholders' interest: adverse selection or asymmetric information and moral hazard or hidden-action problems. The many guises could be divided into two broad categories, problems caused by adverse selection effects and the moral hazard problem; both leading to dysfunction (see figure 1).

Figure 1: Corporate governance comes in many guises



Source: own figure

2.1 Adverse Selection Problem

The *adverse selection* problem results in selecting the wrong managers ex ante and the moral-hazard problem encompasses the ex post behavior, even when 'Mr. Right' is selected. Following

Akerlof (1970), adverse selection characterizes markets, like the market for agents (managers) in which one side, the principal (board of directors), is less informed than the other (the agent) about the relevant characteristics like his or her productivity, attitudes toward risk, or other personal traits. It is assumed that candidates could not credibly commit their characteristics, their 'quality', especially when higher quality directly corresponds to a higher remuneration. Consequently, even a candidate with a low level of the desired characteristics would always pretend to be the best for the job. With a uniform distribution of the 'quality' of potential candidates as managers, the uninformed principal sets a wage, which corresponds to the average 'quality' of the set of candidates. Candidates with a higher set of the desired characteristics would then leave the market for managers since their skill set is above the corresponding average remuneration. This however decreases the average 'quality' of the set of candidates and the 'principles' react by offering a lower average wage and so on. The presence of unidentifiable candidates with a low set of skills makes it difficult to hire candidates with the desired skill set, with the implication that the average quality of traded managers in the market is decreasing. This phenomenon has become known as the 'lemon' principle or adverse selection (Akerlof, 1970).

Among the potential set of characteristics, a few have been analyzed more intensively in the corporate governance literature, like the attitude towards risk. The attitude toward risk is assumed to follow a uniform distribution with risk-loving on the one end and a high degree of risk-aversion on the other tail. Following a risk-return function in that the return of a project is determined by its risk, the higher the riskiness of a project, the higher the expected returns of it. According to the principal's utility function, he or she likes to hire a candidate with a desired degree of risk-aversion. In conservative industries like trade, banking or insurance, the CEO should be more risk-averse to protect insolvency, while CEOs in dynamic and high-tech industries are

expected to be less risk-averse. CEO remuneration is directly linked to firm performance or the return of the project. So even less risk-averse managers may pretend to be risk-averse in order to be hired (and benefit from direct and indirect payment, like consumption-on-the-job) and vice versa. Traditionally hitherto conservative industries like banking and insurance have impressively shown how adverse selection effects may lead to fraudulent insolvency and bankruptcy.

Attitudes towards risk and risk preference is pivotal in corporate governance theory (O'Donoghue and Somerville, 2018) and still an under-researched topic, like personal traits (such as overconfidence and narcissism) are. Problems of adverse selection still remain a black box in the corporate governance discussion, and linking personal traits and attitudes towards risk to the selection of managers and to performance seems to be a fruitful and promising research gap which encompasses topics like career concern models in large corporations, succession in family firms or selection effects in entrepreneurial firms (Audretsch and Lehmann, 2014, 2015).

2.2 The Moral Hazard Problem

Compared to adverse selection, the moral hazard problem is intensively analyzed and discussed. Moral hazard consists of the fact that once a contract has been signed with a candidate, it may be in his or her interest to deviate and behave badly or less responsible in a way that harms the principle's interest. While adverse selection problems arise due to asymmetric information about the characteristics of the agent, morally hazardous behavior is induced by asymmetric information about the agent's actions or behavior.

Moral hazard behavior induced by the separation of ownership and control (Berle and Means, 1932) builds the pivotal point in corporate governance research, since the principal cannot keep track of the agent's actions all the time. Even in the case of failure, the principle cannot judge

whether failure is caused either by bad circumstances or by misbehavior of the hired agent. Only in a world with complete and symmetric information and with expected returns equal to the riskless interest rate would there be no moral hazard issue. In the absence of perfect and complete information, where expected returns are a function of project risk, moral hazard issues arise. The principal hires the agent to take at least some risk to run the project. The (expected) returns of the project are affected by the agent's effort and an exogenous risk (a risk not under the control of the agent). Doing business is taking risks – which opens the range for managerial discretion, where perquisites, empire building, insufficient effort, entrenchment and self dealing are the most prominent (see Tirole, 2006, p. 16/17).

Perquisites or simply 'perks' are fringe benefits and consist of on-the-job consumption by the agent (Jensen and Meckling, 1976). Perks may consist of excessively expensive managerial offices, luxury art objects, attendance of sport events, and private use of corporate jets, among others, all financed by the shareholders funds. Perks may also consist of *nepotism* behavior, giving jobs to family members, friends, or related people rather than to the most qualified candidates on the job market. Even while perquisites cause great public interest in the mass media, the amount of shareholders' funds they consume is relatively negligible compared to empire building (Yermack, 2006).

Empire building consists of the management pursuing growth rather than profits or shareholder value maximization. Jensen (1986) calls this the '*free cash flow problem*' because free cash flows are under the 'sticky fingers' of managers, while most other financial assets are fixed or require board approval. If managers act in the shareholder's interest, they would only invest in projects with a positive net present value, where future expected cash flows exceed their initial

investment outlay, or, that managers close down or sell unprofitable projects. Instead of selecting projects with a high net present value, where net returns are positive but created in future periods, managers may be more concerned about myopic returns, even when the net present value is negative and destroys shareholder value. Prominent examples of empire building are shopping tours when managers acquire other firms, even when they operate in different and unrelated fields. One explanation of empire building behavior is that managers derive fringe benefits from increasing firm size: social status, power, access to elitist inner circles, remuneration and other perks that are strongly correlated with firm size.

Managerial entrenchment or investment in entrenchment strategies is an effort by a manager to make himself irreplaceable, protect himself from being replaced and thus are losing the fringe benefits and consumption-on-the-job perks. A manager may pursue a strategy that may not be in the best interest of shareholders, but would make the manager look good because he runs it efficiently. In addition, a manager may attempt to resist a takeover even though it may benefit the shareholder. Managers invest in shields protecting them from hostile takeovers and internal disciplinary actions. Managerial entrenchment is manifested in 'quit life' or the avoidance of cognitively different or conflicting actions, like closing down unprofitable projects or laying employees off, or to invest in risky and uncertain but value enhancing projects.

Insufficient effort in general refers to the number of hours spent in the office or workplace. While contracting on a fixed number of hours spent in the office, employees may reduce the working time, when monitoring is costly. In the corporate governance debate, insufficient effort refers more to the allocation of work time to various tasks. While being hired for certain tasks, they may find it unpleasant or inconvenient ex post (after signing the contract), and avoid tasks, such as oversight of subordinates, firing incompetent employees or monitoring key operations.

Insufficient effort may be the result of incompetence or of significant extra-curricular activities. When the manager cares more about his time on the golf course, entertaining celebrities or participating in sport events, more than the inner workings of the company.

Self-Dealing increases the private benefits from running the firm by engaging in a wide variety of activities, ranging from benign to outright illegal activities (see table 2). Examples for self-dealing activities to increase private benefits are costly private jets, private VIP boxes at sport events, golf club memberships, extravagant entertainment expenses, expensive art or when the manager uses the company credit card as a personal benefit. Examples also include using company funds for a favored political candidate. Self-dealing can also reach illegality as in the case of thievery, insider trading, or engaging in transactions such as below-market price asset sales with affiliated firms owned by themselves, family members or close friends.

The scope of managerial misbehavior seems to be indefinite. Recent research in corporate governance has focused on the legal aspects of moral hazard in corporations, distinguishing among illegal and illegitimate behavior. Illegal behavior contradicts and violates existing law and statute, while illegitimate behavior hurts existing moral norms and rules. While illegal behavior inflicts a penalty and criminal prosecution, illegitimate behavior does not. Figure 2 lists some examples for illegal and illegitimate behavior, classifying whether the violation is deliberately or either grossly negligence.

The difference, albeit blurred, matters for criminal prosecution. CEO's are hired to make decisions under uncertainty and they make mistakes. Some mistakes are made in negligence, or gross negligence. Decisions made in an act of negligence are covered by the *business judgment rule* (Rule), the most prominent and important standard of judicial review under corporate law.

The business judgement rule is to protect board members from frivolous accusations regarding their decision making for a company. The reason for this rule is to acknowledge that the daily operation of a business can be innately risky and controversial. Therefore, the board of directors should be allowed to make decisions without fear of being prosecuted. The business judgment rule assumes that it is unfair to expect those managing a company to make perfect decisions all the time. As long as the courts believe that the board of directors acted rationally in a particular situation, in negligence (or in some cases gross negligence) no further action will be taken against them. This rule protects the decision of the CEO (the corporate board of directors) from a fairness review unless a well-pleaded complaint provides sufficient evidence that the CEO (or the board) has breached its fiduciary duties, like deliberately moral hazard action. (Sharfman, 2017). The business judgment rule helps to guard a corporation's board of directors from frivolous allegations about the way it conducts business. The rule is a commonplace in common law countries and states that boards are given the assumption that they have acted with fiduciary standards of loyalty, prudence and care. Unless it is apparent that the board of directors has blatantly violated some major rule of conduct, the courts will not review or question its decisions or dealings (see Foss and Klein, 2018). This is assumed not to be the case with grossly negligent behavior, where the benefit of the doubt is almost given to the board members. While negligence is an accompaniment of decision making under uncertainty, a grossly negligent behavior remarks the blurred line to a blatantly deliberate action.

Figure 2: Moral hazard behavior in corporations

Managerial misbehavior and discretion „moral-hazard“			
illegitimate		illegal	
<i>deliberately</i>	<i>gross negligence</i>	<i>deliberately</i>	<i>gross negligence</i>
<ul style="list-style-type: none"> ▪ Self dealing ▪ Insufficient efforts ▪ Creative accounting techniques ▪ Manipulation of performance measures ▪ Excessive or insufficient risk taking ▪ ... 	<ul style="list-style-type: none"> ▪ Insufficient effort to various tasks ▪ Insufficient effort to the oversight of subordinates ▪ Pet projects ▪ Lobbying ▪ Excessive or insufficient risk taking ▪ ... 	<ul style="list-style-type: none"> ▪ fraud ▪ Insider trading ▪ theft ▪ corruption ▪ collusive behavior ▪ 	<ul style="list-style-type: none"> ▪ Creative accounting techniques ▪ ...

Source: own graph

The overall significance of adverse selection and moral hazard is largely understated by the meager number of observations depicted in table 2, which simply forms the ‘tip of the iceberg’. Recent corporate scandals have focused more on self-dealing, accounting manipulation, insider trading or fraud, which are easier to discover than others are. Prominent examples of moral hazard behavior in the literature are insufficient effort, extravagant investment or entrenchment strategies. Insufficient effort relates to the allocation of work time to various tasks. Managers may be reluctant to devote effort to the oversight of subordinates or find it unpleasant to cut costs by reallocating the workforce, switch to another supplier, or take a tougher stand in wage negotiation but instead cultivate relationships to policy makers, other top managers, visiting exhibitions and foreign affiliations, or cultivate contacts to celebrities and cultural events. Managers may also be engaged in extravagant investments like pet projects and empire building to the detriment of shareholders

by investing amounts of cash-flow into non-core industries (Jensen, 1986; Shleifer and Vishny, 1997).

It lies in the nature of managers that consumption-on-the job is strongly linked to the managers' position. In order to keep or secure their positions, managers pursue different entrenchment strategies to make them indispensable, make them good-looking (by creative accounting techniques), or to resist dismissals, hostile takeovers and defeat tender offers ex ante and ex post. Managers create and design complex cross-ownership structures (holding structures with double voting rights) which are protected by a golden share (like Volkswagen in Germany), lobby for a legal environment that limits shareholder activism or relocate the company towards states with limited shareholder activism, like Delaware in the US (Shleifer and Vishny, 1997; Tirole 2006).

These two types of modeling, hidden-information agency (adverse selection) and hidden-action agency (moral hazard) are covered by the essay of Hermalin and Weisbach (2017). He also highlights the strengths and weaknesses of these models, their sometimes contradictory predictions, and their relation to empirical work.

2.3 Dysfunctional Governance

The submerged part of the iceberg is the institutional response in terms of corporate governance (Tirole, 2006, p. 17), leading to controversies and *dysfunctional governance*. To overcome the adverse selection and moral hazard problems, corporate devices or mechanisms have been introduced and analyzed as arrangements that mitigate the conflicts of interests and the induced underinvestment problem. These arrangements or mechanisms constitute the definition of corporate governance as a set of mechanisms to mitigate the conflicts that corporations may face,

but are themselves prone to complementarity and substitutional effects, causing *dysfunctional governance* or corporate governance failures. Dysfunctional governance is caused by several circumstances like the lack of transparency, the endogeneity of managerial misbehavior, personal traits, and misalignment of incentives, among others. Corporate failures or dysfunctional corporate governance are as old as corporations or the organizational division of labor. Since then, control mechanisms, however imperfect, have long been in place, implying that actual misbehavior is the tip of the iceberg whose main element represents the averted ones (Tirole, 2006, p. 20).

3. The Lineage and Emergence of Corporate Governance

While research on corporate governance has followed various tracks in the past 100 years, the phenomenon exists at least since the first agglomerations several thousand years ago. The earliest surviving great work of literature, the Epic of Gilgamesh (ca. 2100 BC), or the ancient Greek philosopher Hesiod (ca. 700 BC) are describing corporate governance issues (Colombo et al. 2017). Since then, mechanisms to mitigate corporate governance issues are invented and used, like numbers and letters, to reduce the costs of adverse selection and moral hazard. Countless treatises have been written since then, analyzing and describing several mechanisms to solve and mitigate corporate governance issues (see Zingales, 2017). An impressive example is the *Allegory of Good and Bad Government* by Ambrogio Lorenzetti (1290-1348), in Siena's Palazzo Pubblico. With the emergence of the first corporate enterprises in the late 17th century, corporate governance issues have also become a widespread phenomenon with adverse effects. Adam Smith (1776), suggested that corporations are run by professional managers who own only small stakes, if any, of equity in their firms and are thus unaccountable to dispersed shareholders.

The first analytical research in corporate governance is the influential work of Berle and Means (1932), analyzing the adverse effects of the separation of ownership and control. This points to a narrow, but widely used, view of corporate governance, namely how to ensure that the interest of managers, who control the firm's assets, can be aligned with the interests of the owners of the firm. About 40 years later, Jensen and Meckling (1976) highlighted the existence of agency costs induced through the separation of ownership and control. Their work brought new insights into the financial structure of firms showing that neither the financial structure, i.e. debt or equity, is irrelevant nor that future cash flow can perfectly be discounted to the present.

With the Jensen and Meckling (1976) framework, the academic interest in corporate governance issues exploded, leading to a bulk of theoretical and empirical work. Within a short time period of about 25 years, corporate governance issues have been systematically analyzed and empirically approved, with implications for managers and policy makers. Famous surveys on corporate governance have been published at the end of this productive period of research, reflecting the different streams and conclusions drawn in corporate governance (Franks and Mayer, 2017).

Chief amongst these is the Shleifer and Vishny (1997) survey, which is still today one of the most cited and quoted articles in business and economics. They summarized the theoretical and empirical work and concluded that the main issue in corporate governance should be the protection of the shareholder's interest and the one and only objective is to maximize shareholder value. Williamson (1988) links his previous research on asset-specificity and the generation of quasi-rents in the focus of a firm's corporate structure and governance. He argues that firms differ from markets in the generation of quasi-rents and ex-post bargaining opportunism, which leads to relationship-specific underinvestment ex ante.

Zingales (1998) in his survey sharpens this point and argues that every stakeholder, not only the shareholder, who makes firm specific investments which are not perfectly governed by contracts or market forces, should be protected by corporate governance mechanisms. In particular, Zingales (1998) focusses on relationship specific investments in human capital in knowledge intensive corporations. A rather comprehensive view of corporate governance comes from Tirole (2001). He argues for a stakeholder view and criticizes the narrow shareholder value focus.

The existing discussion and views on corporate governance issues are mainly summarized and expressed by these articles, reaching a peak in the corporate governance literature. All the different strands of theory, either the principal agent or perfect contract theory, the transaction costs and property rights theory, and the less rigid approaches like the stakeholder value approach (Freeman, 1984, 1994) or the stewardship argument that directors are reluctant to behave opportunistically and are predisposed to act in the best interests of shareholders date back to this period.

Jensen (2001) opted to finish the stakeholder vs. shareholder debate, arguing for the latter since the lack of a clear measurement of stakeholder value would leave managers unaccountable for their actions. He therefore advocates enlightened value maximization, which is identical with shareholder value maximization. Since then, corporate governance has become a mainstream field in the humanities, beyond business, finance and economics, expressed by the development and implementation of corporate governance codes and laws in almost all countries worldwide.

4. Corporate Governance Theories

The theoretical literature on corporate governance can be divided into three parts. The first branch is based on neoclassical equilibrium theory and addresses managerial discretion as a function of

market incompleteness, where the corporation is treated as a black box. The second branch opens this black box and addresses corporate governance issues on the microeconomic or firm level. The third branch has evolved in reaction to the fact that neither market nor hierarchical solutions are sufficient to mitigate corporate governance problems. This branch is based on the consideration that corporate governance problems lead to welfare losses for the whole society and solutions should be designed beyond the individual firm level.

4.1 Microeconomic Market Theory

The first branch is the microeconomic textbook view of markets. Markets are sacrosanct and the first best solution is to solve the allocation of scarce resources efficiently, leading to a welfare optimum for both firms and consumers. The firm (the corporation) is still represented in purely technological terms, as a production function and is presided over by a manager who acts on behalf of the unanimous owners and maximizes profits or market value. Stigler (1958) argues that competitive pressure would determine the scale and scope of firms in the market place, and the economic selection process in the market eliminates managerial discretion. This approach is used to understand how managers respond to changes in prices and other variables and to predict the aggregate behavior of an industry. Even if the assumption of perfect competition is dropped, this branch of theory can be used to study strategic interactions between firms. Managerial discretion is either excluded by the underlying assumption that managers act in the owner's best interest, or by the competitive pressure of competitive markets.

4.2 The Theory of the Firm

However, corporate governance issues arise within organizations, “how the surplus that accumulated at the top of the organizational pyramid could be taken away from the sticky fingers of top management and given to the rightful owners, the dispersed shareholders” (Rajan and Zingales, 2000, p. 201 et sq.). This requires an opening of the hitherto black box of a ‘firm’. A set of theories have been developed, combined in what is known as ‘the Theory of the Firm’ (Hart, 2011). This corporate governance literature is concerned about a firms’ capital structure, transaction costs, incentives within the firm, the allocation of decision rights (authority) and the boundaries of the firm.

4.2.1 Transaction Cost Theory

Microeconomic textbook models abstract from a firms capital structure. Neglecting the capital was a major critical point until Modigliani and Miller (1958, 1963) provided remarkable results that show (under some conditions) a firm’s *capital structure* is indeed irrelevant. A substantial and convincing literature has been established since then, providing a clear picture of patterns of corporate governance in this line. Arrow and Debreu provide a general equilibrium model showing (under some conditions and assumptions) that financial claims are perfectly contractible and therefore are not affected by corporate governance problems like adverse selection or moral hazard. In the view of Arrow and Debreu, the value of a firm, equal to the sum of the values of the claims it issues, is thus equal to the value of the random return of the firm (Tirole, 2006, p. 1).

These models abstract from transaction costs, as introduced by Coase (1937) and refined by Williamson in the 1970s (1971, 1975) and colleagues (Klein et al. 1978). They made significant

progress on understanding the costs of using markets and why firms and markets may co-exist. Williamson criticized that the results from market theory only hold, if at all, when transactions and goods and services traded are rather standardized and could be verified without costs. Instead, he focused on situations where parties make relationship-specific investments which are worth more inside a relationship than outside (market) to achieve an ex post surplus, which exceeds the single gain of trade of each party outside. This surplus cannot be protected perfectly against ex post costly renegotiation and generates a hold-up problem. The parties will engage in opportunistic and wasteful behavior to improve their bargaining position and a considerable amount of surplus or market value of the firm may be lost ex post, and underinvestment ex ante. It is the verdict of Williamson (1971, 1975) to introduce the concept of relationship-specific investment in order to achieve profits beyond the market equilibria profits. He argues that above average profits firms have to invest in product differentiation to achieve profits beyond the equilibrium level, only achieved by relationship (firm)-specific investment. Such relationship-specific investments are made by employees when investing in firm specific human capital, suppliers, consumers, and investors in order to achieve a surplus beyond the opportunity costs, the market price of each investment.

This lead Rajan and Zingales (2000) to conclude that corporate governance issues arise within organizations, and not outside, and in particular in the form of how the surplus generated by firm-specific investment and accumulated at the top of the organizational pyramid could be taken away from top management and given to the rightful owners, i.e. all the parties who made firm-specific investments which are not perfectly protected by contracts or market forces (Zingales, 1998). This creates two important questions that should be answered: what are the most

relevant relationship-specific investments and how should these investments be protected against ex post opportunistic and wasteful behavior.

4.2.2 Agency and Perfect Contract Theory

Jensen and Meckling (1976) provide convincing answers to these two questions. First, they argue for the investors and in particular for the equity investor as the focal party. Second, they use the classic principal-agent idea to derive implications about the optimal capital structure. They follow Berle and Means (1932) and consider an owner-manager who initially owns 100 percent of a firm. At this point, the owner manager is indifferent to consume today and reduce the market value of the firm, or in a later period. He or she bears the full consequences of the decision. Now the firm has to raise capital, either by issuing equity or by borrowing. Jensen and Meckling (1976) show that issuing equity dilutes the manager's stake in the firm so he or she is no longer the only residual income claimant. The more equity shares issued, the higher the incentive for the manager to consume, and, assuming rational investors, the lower the expected value of the firm. Borrowing leaves the manager the only residual income claimant, but comes at its costs. At the same time the firm borrows too much, then debt will become risky and encourages the manager to 'gamble for resurrection'. The optimal mix of equity and debt trades off these effects. The analysis of Jensen and Meckling (1976) has become the workhorse for research in corporate governance. Jensen and Meckling (1976) identified the moral hazard behavior induced by the separation of ownership and control and the induced costs, the agency costs, defined as the sum of the monitoring expenditures by the principal, the bonding expenditures by the agents and the residual loss (Jensen and Meckling 1976).

To solve or mitigate this problem, a fruitful and promising literature has been developed; the standard principal-agent literature supposing that the owner, the principal, chooses the optimal incentive scheme for the manager, the agent. In the standard principal-agent theory (see Prendergast 1999 for an excellent survey), a risk neutral owner, the principal, offers a risk averse manager, the agent, a payment scheme including a fixed, f , and variable component, v , the latter as a function of firm performance P . It is assumed that firm performance P is a function of the managers' effort e , the manager's marginal productivity a (an increase of the manager's effort by one unit increases firm performance by a units), plus some random effect u with expected value 0 and variance σ^2 : $P = ae + u$. Obviously, the higher σ^2 , the more likely is that firm performance will experience large shocks. Positive shocks, 'windfall profits' (increase in firm profits without managers' effort, for example an increase in the firms' stock prices caused by decreasing interest rates by the FED) but also negative effects. Thus, firm performance is a biased measure or signal for the managers' effort e . This implies that the manager could always excuse her or himself that a bad performance P is caused by bad luck (and abnormal profits with his effort). The manager's compensation for running the firm, W , is a linear combination (contract) consisting a fixed payment f and a variable share v from the firms profit: $W = f + vP$, or $W = f + v(ae + u)$. Such a contract is also called a risk-sharing contract since the riskiness of the project σ^2 is shared among the owner and the manager.

Three different payment schemes are possible, only a fixed payment with $v=0$, a pure variable payment with $f = 0$, or something between. In the first case with only a fixed payment, the owner captures the whole risk and the manager is fully insured. This insurance comes at the cost of lowering the manager's incentives to work harder since it does not affect the marginal benefits effort; the manager is paid like a bureaucrat (see Hall and Liebman, 1998). In the second case,

where $f=0$, the managers covers the total risk and the owner is fully insured. The two corner solutions, with either $f=0$ or $v=0$, are rare events in real life contracts, in particular for managers. Labor contracts of the type $v=0$ are contracts where the employees are paid (like bureaucrats) on an hourly or weekly labor time. Labor contracts from the type $f=0$ are piece rate contracts (see Pendergast, 1999).² A contract with $v=0$ destroys the manager's incentives to work hard, while a contract with $f=0$ shifts too much risk toward the manager, leading to a gambling behavior or the selection of riskless projects (with lower expected firm profits). The third case is thus a linear combination with $0 < f < 1$ and $0 < v < 1$. The owners problem is to choose the specific compensation contract that maximizes expected firm profits, given the managers' effort. Under specific assumptions (like a LEN-utility function) and after some tedious algebra, the optimal contract is given by: $v = 1 / (1 + 2r\sigma^2)$, with r as the managers' degree of risk aversion. The higher ceteris paribus the managers' risk aversion (r) or the higher the projects' risk, the lower the variable share of income et vice versa. Since both the owner and the manager respectively choose their utility maximizing contract, the achieved payment scheme is self-enforcing, a Nash-equilibria, where no party has an incentive to deviate from the initial contract. This directly follows from the LEN-Model introduced by Holmström and Milgrom (1987), the most popular standard P-A model in corporate governance. This model offers several implications for managerial remuneration (see Edmonds et al. 2017).

Until today, the principal-agent theory constitutes the most important pillar and theoretical background analyzing corporate governance issues between insiders and outsiders and has been

² Entrepreneurs or owner-managers according the Jensen and Meckling (1976) owning 100% of the equity shares are similar to a contract where $f=0$ and $v=1$.

relevant in the debate on executive compensation. Refinements of the standard model are multi-agent models, multi-principal models, and multi-principal multi-agent models (see Bolton and Dewatripont, 2005). These approaches are subsumed as ‘perfect contract theory’ since the contracts designed are self-enforcing and second best solutions.

An important implication of the perfect contract theory in corporate governance is the ‘firm as a nexus of contract’ view (Fama, 1983; Fama and Jensen, 1983; Alchian and Demsetz, 1972). According to this theory, the nature of the firm is based on the organization of a collection of different contractual arrangements; the firm is a nexus of contracts. Perfect contracts are the central instrument able to motivate and coordinate insiders and outsiders. Such relations are essential to the firms and individuals with customers, employers, suppliers, or creditors are parties to this nexus of contracts. Firms exist because a transaction with a legal entity, the firm, lowers the transaction costs compared to market transactions among the parties. Assume there are n parties, then there are $n(n-1)/2$ individual contracts at work to motivate and coordinate on markets. Otherwise, the n parties could negotiate with a firm as a legal faction reduces the number to only n contracts. The theory of nexus of contracts does not identify the firm specifically from its parts but establishes its nature in regards to the relations between its collective parts. The ‘nexus of contract’ view of a firm shifts the focus again to the owner of the firm. With all stakeholders of a firm, perfect contracts could be designed, leaving no leeway for discretion or deviation. In such a contract, performance and consideration could be (sufficiently) specified and be enforced by a third party. Such contracts are loan agreements with banks, employment agreements, sales agreements or procurement contracts. The interests of all stakeholders could thus be protected by (perfect) contract, except one type of stakeholder, the equity investor or shareholder. Since future returns are not, as predicted in the Arrow-Debreu world, perfectly contractible, the share price could not be fixed ex

ante. This constitutes the shareholder as the 'primus inter pares' of all stakeholders. Thus, the objective of the firm and the main task of the manager is to maximize the shareholder value.

4.2.3 Property Rights and the Incomplete Contract Theory

The perfect contract and agency theory assumes that all parts of a contract could be sufficiently specified ex ante and enforced ex post. This may only hold for sufficiently standardized goods and services, where perfect contracts may work as a substitute for market transactions. Contracts are neither complete nor perfect and thus not all decisions that have to be made in a relationship will be fully specified in the initial contract (Grossman and Hart, 1986; Hart and Moore, 1990). The key question is, who makes the unspecified decisions? Who has the right to decide how the assets, tangible and intangible, should be used in circumstances not covered by the contract? The answer is the owner of the asset has the residual right of control. With the separation of ownership and control, it is still the owner of the assets who has the decision rights and he or she may allocate the decision rights in his or her best interest. A subsequent literature thus has emerged studying the allocation of decision rights and authority in firms (see Hart, 2011). The background in this literature is that ownership and property rights are protected by law and that legal control rights reside with the board of directors, which are typically elected by the owners. Consequently, any allocation of authority to someone inside an organization, like the CEO, is always temporary or provisional. The board of directors always has the right to take the decisions back at a moment's notice (Hart, 2011, p. 107). Authority and property rights have thus become a new and promising topic in the corporate governance debate beyond the standard principal-agent approach (see Hart and Moore, 2008; Hart and Holmström, 2010). In particular, other stakeholders like entrepreneurial founders or CEOs, employees, customers, suppliers, communities or governments,

having made firm-specific investments, may exert stronger claims than atomistic public shareholders have to shares of their firms' quasi-rents. Consistent with this, their contractual claims are often augmented by residual claims and liabilities (see Mehrotra and Morck, 2017). Hermalin and Weisbach (2017) provide a critical review and survey of aspects of formal and informal contracting particularly relevant to the study of corporate governance. Lehmann (2006) empirically tests the Grossman-Hart-Moore framework for investments in intangible assets as modelled by Brynjolfsson (1994) confirming that CEOs of entrepreneurial firms with asset specific investment tend to have significant larger equity shares with control rights and less stock-option contracts compared to the control group.

To conclude, the theoretical basis of corporate governance issues varies from microeconomic theory to what is nowadays subsumed as the 'theory of the firm', reflecting Coase (1937) that transaction costs exist inside and outside the firm. The importance of corporate governance as a field of research with immense implications for the society is reflected with the numerous Nobel prizes awarded for work in this area (see table 1).

Table 1: Nobel Laureates promoting research on corporate governance

Laureate	Year	Rationale
Kenneth Arrow	1972	contributions to general economic equilibrium theory
George Stigler	1982	functioning of markets and causes and effects of public regulation"
Gérard Debreu	1983	rigorous reformulation of the theory of general equilibrium
Franco Modigliani	1985	pioneering analyses of saving and of financial markets
Harry Markowitz, Merton Miller, William F. Sharpe	1990	pioneering work in the theory of financial economics
Ronald Coase	1991	clarification of the significance of transaction costs and property rights for the institutional structure and functioning of the economy
Robert C.Merton, Myron Scholes,	1997	new method to determine the value of derivatives (CAPM-Modell)
George Akerlof, Michael Spence, Joseph E. Stiglitz	2001	analyses of markets with asymmetric information
Oliver E. Williams	2009	analysis of economic governance, especially the boundaries of the firm
Eugene F. Fama, Lars Peter Hansen, Robert J. Shiller	2013	empirical analysis of asset prices
Jean Tirole	2014	analysis of market power and regulation
Oliver Hart, Bengt Holmström	2016	contributions to contract theory (Principal Agent, Property Rights)

Source: own selection, data from: www.nobelprize.org

4.3 Economics and Law

Countries have developed a variety of legal backgrounds (like the common law in the UK and US or the civil law in France), cultural aspects (like the dominance of the communist party in China), business forms (like family business and new ventures) or the dominance of large share ownership (like public or private shareholders, state ownership in China or pyramidal structures). The desire for transparency, accountability and to increase investor confidence motivates the development of corporate governance codes in a different way. Such codes and guidelines have been issued by a variety of bodies ranging from committees appointed by government departments, representatives from the investment community, employer representation, academics and professional bodies such as those representing directors or company secretaries (Mullin, 2004, p. 19). The development of the codes has often been driven by a financial scandal, corporate collapse, or other crisis. Prominent examples are the *Cadbury Report* (1992), following various financial scandals and collapse (BCCI, Maxwell) in the UK, the *Sarbanes-Oxley Act* (2002) in the US following directly from the financial scandals of ENRON and WorldCOM or the *Corporate Governance Codex* (2002) in Germany, as a consequence of the Holzmann insolvency and the various scandals on the Neuer Market (Audretsch and Lehmann, 2008). A fruitful and promising literature has been established in this field, starting with La Porta et al. (1997, 1998, 1999, 2000) linking economics and law in corporate governance (see Bartlett and Talley, 2017 for an overview). This field of research has since then become a major topic in corporate governance in general and for cross country studies in particular (see Paccos, 2010). Many questions in corporate governance still remain unanswered in this area. The recent debate on multinational corporations and tax

avoidance, business models based on cross-border platforms and network effects are just two examples for future research.

5. Mechanism in Corporate Governance

Corporate governance encompasses a set of mechanisms to attain a firm's goals and objectives by mitigating problems of adverse selection and moral hazard at the top of the organizational pyramid. While free-market economists, starting with Adam Smith (1776), relied on the markets to motivate and coordinate people's (and firms') activities, others argued for the contractual approach, and called for the emergence of institutions to coordinate and motivate people by internalizing the costs and benefits of their decisions. Zingales (1998, p. 497) claims that the word "governance" is synonymous with the exercise of authority, direction, and control and thus its use seems somewhat strange in the context of a free-market economy. According to the lineage and emergence of the theories in the corporate governance literature, the mechanisms could be separated into two parts: market mechanisms and institutional designs.

5.1 Market Mechanisms

Market forces and competition are assumed to play a crucial role in disciplining managers. If the managers of a firm waste or consume large amounts of resources the firm will be unable to compete and will at least go bankrupt. Competition is thus seen as a powerful source in disciplining managers and, in particular, avoiding managerial slack. Three different market mechanisms are identified and discussed in the literature, the product market, the market for corporate control, and the market for managers.

5.1.1 The Product Market

It has long been argued that competition in the *product market* acts as a (perfect) mechanism in corporate governance: competition increases the probability of liquidation and the manager works hard to avoid this. Poor performing firms will not survive, and the market will be taken over by efficient firms (Alchian, 1950; Stigler, 1958) and the poor performing managers will lose their jobs (Scherer, 1980, p. 38) and the amenities of consumption-on-the-job. If managers waste resources in ways such that a firm's products are of lower qualities when compared to similar products of competing firms or if they are produced at higher costs, then product market competition or "the economic grim reaper" swamps those firms out of the market. If markets are sufficiently competitive, through low barriers of entry and exit, new firms will either enter the market at lower costs or with higher quality, or incumbents will increase their supplies and market shares (Schmidt, 1997). In such a competitive market, the competitive selection process for inputs and outputs eliminates the adverse selection and moral hazard problem. Corporate governance problems would not be prevalent because markets will force managers to act in a firm's best interest. The product market competition serves as a Darwinian selection process by positively selecting efficient firms – as opposed to primarily serving as a mechanism that disciplines poor performing and opportunistic managers so that efficient firms grow and survive while others stagnate or exit the industry. Empirical research has focused on the interaction between firm size and technical efficiency, confirming that increased product market competition increases technical efficiency as a measure for managerial effort, but only up to a certain point and then decreases (Taymaz, 2005; Yang and Chen, 2009). Kahle and Stulz (2017) analyzed listed companies in the US within a 40 year period and confirm that the number of firms listed is decreasing and a few

firms are increasing, i.e. the less efficient firms are taken over by the more efficient ones. The empirical results that the product market is disciplining poorly operating firms are not convincing. Also critical voices received more interest, questioning the perfect market model as the sole and best workhorse in corporate governance. But should we throw out the baby with the bath water? If product markets are not sufficiently perfect to eliminate managerial discretion, the product market is not the relevant market for companies.

5.1.2 The Market for Corporate Control

Manne (1965) argues that even in the absence of perfect competition in the product markets, managerial discretion can be constrained by the pressure of the *market for corporate control*. A publicly listed company that is being run inefficiently represents an arbitrage opportunity for raiders (among others). Assuming sufficient efficient capital markets, raiders can accumulate the money to buy the relevant amount of shares within a short time period, replace the inefficiently operating management team, resell the shares and make money. Like in the product market model, the fear of losing the job and the associated benefits will discipline the managers to pursue the interest of the shareholders. Thus, the market for corporate control disciplines managers in two ways: ex ante, because managers are afraid of being taken over and ex post, by being replaced. Although the market for corporate control is seen as the most powerful mechanisms in disciplining managers (in particular in the Anglo-Saxon Countries), the empirical evidence is rather mixed (Andrade et al. 2001). First, takeover activities are observed in wages and shaped by changes or shocks altering the transaction costs of markets and within firms (legal reforms, technology, financial crises). Secondly, managers increase the costs of being taken over either ex ante before a takeover bid (staggered contracts, poison pills etc...) or ex interim, during the bid (golden

handshakes, white knight strategy, etc...). Thirdly, minority shareholders act as free-riders. Instead of selling their shares immediately to the acquiring firm, they behave in an opportunistic manner and expect an increase in share prices (Holmstrom, 1982). Finally, empirical evidence highlights that the targets of take-overs are not necessarily poorly performing companies but often efficiently operating companies. Being taken over is less seen as punishment or disciplining mechanisms for the management team but also a reward for their job. This holds in particular for new and entrepreneurial firms (Lehmann and Schwertdfeger, 2016; Lehmann et al. 2012; Bonardo et al. 2010).

5.1.3 The Market for Managers

Since neither the product markets nor the market for corporate control appear to be effective mechanisms to discipline managers, but market mechanisms are assumed to be the best to select and reward efficient firms and their management team, the pivotal point has to be altered. Following Fama (1980), only the *market for managers* disciplines managers and prevents them from opportunistic behavior. If markets are sufficiently efficient, the shareholder value reflects the unobservable quality and effort of the managers. Competition in the market for managers is twofold: external and internal. While the external market values the manager's effort and quality by observing the shareholders' (or a firm's) value and the manager competes with other managers for remuneration and contracts, the internal market is based on competition within a given top management team of the respective firm. The competition on both markets will prevent the managers from opportunistic behavior and thus induce them to invest the firm's resources and their efforts in the best way to increase firm value. The empirical evidence, however, is mixed. While

replacement of managers is almost always confirmed after takeovers, the causality problem still consists.

5.2 Institutional Mechanisms, Exit, and Voice

If markets are perfect in disciplining managers and mitigating managerial discretion, we should not observe other mechanisms at work in corporate governance other than market mechanisms. However, this is not true. According to Coase (1937), using the market is costly, in particular (a) discovering the characteristics of the goods and services traded and (b) negotiating a contract for each transaction, writing the contract, monitoring the contract and enforcing the contract. These costs can be avoided or mitigated inside the firm since authority replaces bargaining. Institutional mechanisms are arrangements that point out that the transaction costs of market mechanisms are prohibitively high so that the coordination of transactions occurs in alternative forms, like hierarchies. The existence of institutional mechanisms in corporate governance simply reveals that markets are imperfect and are associated with high transaction costs. Institutional mechanisms could be summarized as mechanisms that help lower the costs of monitoring and controlling firms and come along in two basic forms, “exit” and “voice”.

Hirschman (1970) introduced the basic distinction between exit and voice in order to contrast the behavior of organization members who, “either vote with their feet when discontented with the evolution of their organizations, or stay and try to improve things” (Tirole, 2006, p. 334). While market mechanisms focus on the value of the product or the firm in the market (the product market, the capital market, the market for corporate control or the market for managers), passive control aims at measuring the manager’s performance. The basic idea is that better information for the shareholders reduces the agency problem by reducing the incentive costs or the compensation

for performance. If managers receive performance based remuneration like direct ownership or stock options, their personal wealth depends directly on the underlying value of the firm in the stock market. If shareholders, in particular large shareholders like institutional shareholders, pension funds, or other block holders, receive additional informative signals, either from the markets, insiders of the firm or important shareholders and stakeholders, they may decide to divest when performance is poor or if envisaged future returns are lower than expected. This “exit” option therefore lowers the value of the shares and thus the recent and future earnings of the managers.

5.2.1 The Board of Directors

Institutional arrangements are manifold and the set is more open than complete. The major attention is dedicated to the *board of directors*. The residual control rights reside with the board of directors and thus boards are responsible to select the right CEOs to mitigate the adverse selection problem and then to design the employment contract, monitor the CEO and discipline the CEO in the case of misbehavior. The empirical and theoretical debates in the ‘board of directors’ literature are extensive. In a nutshell, academic research focuses on the endogeneity of board composition (single-tier/two-tier board; insider/outsider ratio; CEO duality; chummy colleagues from other companies; gender and minority representation; worker representation) and board size and the impact of board characteristics (board composition and size) on board activity (CEO remuneration, CEO dismissal, takeover activities, dividends policy, single/dual class votes, debt ratio, investment decisions) and firm performance (survival, financial performance) (see Adams (2017) and Hermalin and Weisbach (2003)).

5.2.2 CEO Compensation

A related topic is *CEO remuneration and compensation*. Based on agency arguments, this research is still the most profound and theoretically analyzed topic in corporate governance, with an extensive theoretical and empirical body of work (see Edmans et al. 2017 for a comprehensive survey). This literature is concerned with designing managerial compensation packages to align the manager's interests with those of the shareholders. Such packages include basic or cash compensation, long-term incentive plans such as stock options and restricted stock grants, benefits and perks, bonus programs, pension plans, and retirement pay (among others). CEO remuneration and compensation packages differ largely across countries, industries and firms. A bulk of empirical work has been done, estimating CEO remuneration on firm performance, with mixed results, while past performance seems to explain CEO compensation. This 'reverse causality' is explained by Bebchuk and Fried (2003), arguing that successful CEOs, as signaled by past performance, increase their bargaining power and opportunistically re-negotiate their contract. CEO compensation, albeit a topic in corporate governance research for decades, is a dynamic field. New financial innovations, the development of new codes and regulations, cultural and societal changes and cross-country differences make CEO remuneration and compensation a promising field for future research.

5.2.3 Managerial Ownership

Closely related with CEO compensation is the *managerial ownership*. One way to mitigate the costs caused by the separation of ownership and control is to align the interests of the managers with those of the shareholders via managerial ownership (Jensen and Meckling, 1976; Audretsch

and Lehmann, 2005; Bonardo et al., 2007; von Lilienfeld-Toal et al., 2014). A fruitful and promising literature has emerged that analyzes the relationship between managerial ownership and firm performance (where Himmelberg et al., 1999; Wruck, 1989; Morck et al. 1988 are the most cited). The empirical results are rather mixed, but indicate an inverse curvilinear relationship: firm value (performance) first increases with ownership but then leads to adverse effects (entrenchment effects, retaining managers from disciplinary actions by other shareholders, protection of hostile takeovers). The cited studies also reveal that the empirical results suffer from endogeneity problems and measurement problems like the percent range of managerial ownership (see Morck et al. 1988).

5.2.4 Large Shareholders

Firms from most of the world have *large shareholders*. Even in corporations in the US, which are often used as a counter example, the concentration of ownership increases in the last years (Kahle and Stulz, 2017). Dispersed ownership typically results in the free-rider problem to monitor the management since the cost of gathering information far exceeds the benefits of an increased value of their shares (Grossman and Hart, 1980; Admati, et al. 1994; Burkart, Gromb and Panunzi, 1997). Minority shareholders also suffer from exerting power to control the management, and may lack the specific human capital to evaluate managers' actions and strategies. Large shareholders mitigate these costs (Grossman and Hart, 1986; Shleifer and Vishny, 1986) for all shareholders. Besides the gains from economies of scale in monitoring the managers, they may receive additional benefits at the cost of minority shareholders, such as tunneling (Rajan, 1992), the trade-off between liquidity and control (Bolton and Von Thadden, 1998), or risk-taking incentives biased toward too much risk. Large shareholders identified and analyzed in the literature are, in particular, banks and

large creditors (Lehmann and Weigand, 2000; Lehmann and Neuberger, 2001; Dittmann, Maug and Schneider, 2010), families (Audretsch et al. 2013; Audretsch and Lehmann, 2013, Anderson and Reeb, 2003; Villalonga and Amit, 2006), or other companies. (Hayashi, 1997; Lehmann and Weigand, 2000; Shleifer and Vishny, 1986, 1997). In the present years a new type of large shareholder has gained increasing interest, the institutional shareholder, like public and private funds, and the activist investor.

5.2.5 Banks and Debt Holders

The role of *banks* and large creditors in governing firms is twofold: first, banks are seen as delegated monitors who exhibit specific human capital and expertise in monitoring and controlling managers, and secondly, act as large debt holders and are tough on managers after default (Dewatripont and Tirole, 1994). The empirical evidence however on the effects of banks in monitoring firms is mixed, reflecting the trade-off of the costs and benefits. As profit maximizing companies, banks pursue their own interest at the costs of minority shareholders (Lehmann and Weigand, 2000; Gorton and Schmid, 2000).

Debt is another instrument to discipline managers and reduce agency costs since it implies the transfer of control over the firms' assets from the manager to the creditor (Hart, 2001). Debt makes it credible that managers will not expand their empires too much. According to the free-cash flow hypotheses (Jensen, 1986), debt increases the probability of default and managers work hard to avoid it. Similar effects hold for leveraged buy outs (LBO) where managers purchase firms and they finance the purchase with debt. There is ample evidence that debt disciplines managers in large and public corporations up to the point where debt overhang forces managers to invest in projects that are too risky and other, similar excessive risk taking activities (see Hart, 2001).

Venture capitalists play a dominant role in governing new ventures and entrepreneurial firms (Bergemann and Hege, 1998; Berglöf, 1994; Audretsch and Lehmann, 2014; 2004). Like banks, venture capitalists are engaged in monitoring their firms (Block et al., 2017; 2018; Colombo and Minurti, 2017). However, they differ from banks by their concentrated equity positions, provided at several stages. At each stage, the firm is given just enough cash to reach the next stage with the venture capitalists also providing expertise and industry contacts that directly shape firm performance (Bergemann and Hege, 1998; Lehmann, 2005). Staging investments reduces agency costs and verifiability problems (Bergemann and Hege, 1998; Bottazzi and da Rin, 2002; Gompers, 1995). They also use the right to control future financing with preemptive rights to participate in new financing and decide over the exit strategies, by selling parts or all of their shares in an IPO to other investors, like pension funds or individual investors, or allowing for the entrepreneurial firm to be purchased by a larger company. See Cumming and MacIntosh (2003) and Levis and Vismara (2013) for an excellent overview.

5.2.6 *Family Firms*

Most of the firms worldwide are owned by *families* (see Mallin, 2004, chapter 5). A rich and fruitful literature has been established analyzing the particularly governance characteristics of family firms compared to other types of companies, and why and how they shape firm performance (Anderson and Reeb, 2003; Audretsch et al, 2013; Audretsch and Lehmann, 2011). Advantages of family firms are seen in lower agency costs since ownership and control are less separated and ‘within the family’. This leads to higher levels of trust and hence less monitoring costs. Other advantages are seen in their long-term orientation, their flat hierarchies that encourage efficient operations and development, and sustained relationships to key stakeholders like clients, suppliers

and employers (Audretsch et al. 2018). On the other hand, family firms are also associated with specific costs and misbehavior like nepotism, infighting, tunneling and the rather narrow market for successors (see Goergen, 2018).

5.2.7 Institutional Investors

In recent years, the rise of *institutional investors* like activist investments and hedge funds has transformed the corporate landscape, with most public corporations now having a substantial proportion of their shares held by a small number of institutional investors (Bebchuk et al. 2017). At the same time, these institutions are controlled by investment managers, which have their own agency problems and pursue different goals from that of the companies they are involved with. A different type of investment manager is the activist hedge fund manager (French, 2008). They are not subject, or at least less subject, to the regulations governing investment managers of mutual funds and therefore have considerably more freedom in the assets they own, their use of leverage and their compensation structures (Bebchuk et al. 2017, p. 104).

6. Substitutional and Complementary Effects of the Mechanisms

Companies do not operate in an isolated world, instead they have several product markets (multi-market competition) and show different ownership structures, composition of boards or large equity and debt shareholders. One of the most promising gaps in the corporate governance research, both for theorists and empiricists, is to analyze the interrelation of the mechanisms at work. Abstracting from other mechanisms or separating and isolating one mechanism may work for theorists, real life however confronts designers and decision makers in corporate governance with the interrelation of all variables and mechanisms, and how these variables are either complementary or not. What is rather well-known, in a normative way, is how the different mechanisms should eliminate managerial discretion – if analyzed as isolated mechanisms. Product market prices, board composition, share prices, the ownership structure, the capital structure, the intensity of performance pay, law enforcement, codes and rules, and aspects of culture are examples of such choice variables determining jointly the corporate governance mechanisms at work.

What is rather unknown is the interrelation between these mechanisms, i.e. whether they are substitutes or complements. Complementarity involves the interactions among changes in different variables in affecting corporate governance problems. All the mechanisms work together – and neither one could be isolated or ‘switched off and on’. Roberts (2004, p. 34/35) defines that two mechanisms are complements when doing (more of) one of them increases the returns to doing (more of) the other. And two mechanisms are substitutes when doing (more of) one of them decreases the returns to doing (more of) the other. In other words, the incremental or marginal return to one mechanism increases (decreases) in the level of any complementary (substitutional) variable (see Roberts, 2004, p. 34).

Following free-market theorists, corporate governance issues do not exist or, if at all, only in a short period. Even when managers behave opportunistically at the cost of the shareholders, perfect markets forces managers to maximize profits. Perfect markets are thus a close substitute for monitoring managers. Otherwise, perfect contracts may serve as a perfect substitute for imperfect markets. Consequently, institutional economists interpret institutional arrangements as complementary to imperfect market mechanisms, while (neoclassical) or liberal market economists argue contrarily. Since institutions are always imperfect and dysfunctional ('who monitors the monitor'), the market forces should be in the focus of interest.

Only a few mechanisms are analyzed regarding their complementary or substitutional effects on corporate governance efficiency. One example is the interrelation between product market and monitoring. Even if *markets* does not efficiently discipline poorly performing managers, they provide signals for the monitors, revealing the (hitherto unobserved) quality of the manager. Such signals are market shares, product prices or consumer satisfaction. The controlling *directors* could interpret this information as a signal of the managers' (unobserved) quality (see Holmstrom, 1982 and the information principle). The more signals are received by the monitors, the more efficient the governance of the managers. Both mechanisms however are also substitutes: the more efficient the product market to discipline managers, the lower are the agency and monitoring costs. Thus, *product market competition* and *board activities* are substitutes. What is known is that increased competition increases firm efficiency (measured by multiple production functions) and that highly concentrated markets tend to windfall profits and collusive behavior.

Other examples are monitoring and incentive payment schemes. If introducing performance pay gives stronger incentives for aligning the managers' interest towards those of the shareholders, then the value of monitoring to enforce the desired behavior directly is probably

lower at the margin, and the level and effort of monitoring should be reduced. Liquid and sufficiently efficient (Fama, 1983) stock markets could be a substitute for monitoring activities (Roe, 1996). The more precise the information, the better informed raiders are to exploit arbitrage opportunities and displace the poor performing management.

While evidence, both theoretically and empirically, is scarce in analyzing two corporate governance mechanisms at work, corporate governance issues are faced with multiple mechanisms. Each corporation is faced with legal, fiscal and regulatory obstacles, which differ almost across countries, states and regions.

A simple example reveals the complexity when n mechanisms introduced are at work, revealing complementarity or substitution relationships, increasing the number of potential relationships to $(n-1)/2$ possible two-dimensional interactions. These relationships among the mechanisms and underlying choice variables give structure, a pattern, to the problems of corporate governance designs. In particular, complementarity and substitution result in patterns, with all the complementary and substitutional choice variables and mechanisms tending to be at work together and at comparable levels. Detecting coherent patterns and their underlying relationships among choice variables and mechanisms is hitherto a black box and a challenge for future research, for theorists and empiricists. The efficiency (“doing the things right”) and effectiveness (“doing the right things”) of the corporate governance mechanisms, market based or institutional, are affected by their interrelationship. Lehmann et al. (2004) use a balanced panel set of 361 German corporations (1991 to 1996) and identify different governance mechanisms (like ownership shares, type of owner, capital structure (debt ratio), product market competition among other). They first apply a multi-input/multi-output approach to determine ‘efficiency scores’ and then a panel

regression with the efficiency scores as input variables. The results clearly show that firms with more efficient governance structures, homogenous patterns, also have higher profitabilities.

The substitutional and complementary relations among choice variables and mechanisms gives structure to the design of coherent corporate governance patterns. Two related but distinct patterns are the stakeholder and the shareholder system. Whether the relations among choice variables are either substitutive or complementary depends on the underlying coherent pattern. While in shareholder value societies (the Anglo-Saxon Countries) a competitive and sufficient market of corporate control and product markets are seen as a close substitute to monitoring activities (the desired outcome). That the poorly performing company is either taken over or swamped out of the market is contradictory to the objects and interests of relevant stakeholders beyond the shareholder. Lehmann et al. (2018) show, how such coherent patterns across countries, here the US and Germany, evolve over time and shape the landscape of firm structure and corporate governance.

Coherent corporate governance patterns give rise to systems effects, with the whole coherent pattern being more than the sum of the different parts or mechanisms. Complementarity and substitution means precisely that if the level of one of the activities is raised, like restricting excessive fixed payment, the impact of raising or reducing any of the other mechanisms is now greater than it would have been when the first variable was at a lower level. In coherent patterns, like the shareholder approach, it is quite possible that changing any one of the activities alone would worsen the desired performance, yet changing all together according their relationships would increase it substantially. The underlying logic of the coherence of patterns thus decreases performance when mechanisms working well in one pattern are implemented in another pattern without changing the other variables. Therefore, as long as different political and cultural systems

coexist, like in the Anglo-Saxon shareholder system, the stakeholder system in Continental Europe or the one in China, different coherent patterns are at work and differ. Identifying and analyzing the different coherent patterns and how and why they perform is an important challenge for future research.

7. Conflicting Coherent Concepts in the Corporate Governance Debate

The academic literature on corporate governance mainly focuses on at least two conflicting coherent concepts: the shareholder and the stakeholder approach (Franks and Mayer, 2017). This leads to an ongoing debate about whether a firm should only create value for the owners of a firm, its shareholders, or should managers also care about the interests of all stakeholders (Daily et al., 2003; Nyberg et al. 2010). The debate about the advantage of either the stake- or the shareholder value goes beyond an academic discussion (Charreaux and Desbrières, 2001). An active line of research, initiated by various analyses from La Porta et al. (1997, 1998, 1999, 2000), studied the relationship between countries' legal structures and corporate governance. Two legal traditions are identified, resulting in different coherent patterns and explaining large parts of the variance in corporate governance: The Common Law, which prevails in most English speaking countries, and the Civil Law with its three subcategories (French, German, Scandinavian). Both common law and civil law have spread through conquest, colonization, import, or imitation (see Tirole, 2006, p. 54), leading to an ongoing debate about the merits of common law systems versus the merits of civil law system. That corporate governance matters across different coherent patterns is evident, given the performance variations that exist between firms from different nations (Charreaux and Desbrières, 2001, p. 107).

With the discussions about stakeholders and shareholders in the management and organization literature (Freeman, 1984), a new literature on business ethics has emerged looking at how stakeholder theory should be applied to new ventures and entrepreneurial firms in order to manage social relationships with different stakeholders. Changes in society, as expressed by recent protest movements and political entrepreneurship and the emergence of groups like Occupy, Attac and others, are reshaping the way the next generation thinks about social value creation thus altering the patterns of corporate governance beyond pure shareholder value.

Within corporate governance theory, this conflict is considered in 'Multi-Principal', 'Multi-Agent' and 'Multi-Principal-Multi-Agent' models, representing the stakeholder approach without any emotion, but still less optimistic. While the shareholder 'Principal-Agent-Model' delivers, more-or-less, clear results (under some basic assumptions), the results of the diverse stakeholder-models generate multi equilibria models. The managerial expression of the multi-principal-multi-agent modelling is grounded in the 'balanced scorecard', a management tool introduced by Kaplan and Norton (1992), which takes the balancing of interest away from the managers. Interests of employees are considered and guaranteed by co-determination (see Frick and Lehmann, 2004) and a higher regulation level in the protection of the environment and consumers could be observed.

While most academics in the field of economics and finance strongly argue for the Anglo-Saxon System (Shleifer and Vishny, 1997), academics in the field of management are not convinced of a pure shareholder value society. The most prominent advocate of the shareholder value is Nobel Prize laureate Milton Friedman (1970), who argues for a free enterprise and private-property system. Stockholders, customers or employees, could separately spend their own money on particular actions, if they wish to do so. Further, he argues that in practice the doctrine of

responsibility to others than the shareholders interest is frequently a cloak for actions that are justified on other grounds rather than a reason for those actions (Friedman, 1970). Shareholder value maximization still constitutes something of a bright line, whereas stakeholder welfare maximization is an ill-defined charge to assign boards that gives self-interested insiders broader scope for private benefits extraction (see Mehrotra and Morck 2017 for an excellent survey). Mitchell and Cohen (2006) survey and discuss the academic literature dealing with either stakeholder or shareholder theory. They conclude that given strong incentives for individuals to minimize agency costs, the many competing alternatives and the shortcomings of the corporate form has survived the market test against potential alternatives, indicating a low susceptibility to strong stakeholder equilibrating forces, and a greater likelihood that a weak-equilibration characterization is most apt.

The recent developments in the US, the UK and the EU bring up these questions again. Each country now relies on his historical roots again, arguing either for more markets and a shareholder value (UK, US) or the stakeholder approach (EU) and leaves the doors wide open for future research. In this context more systematic work is needed to analyze and reflect the impact of stakeholder value in China, where both models seem to be strongly linked together: the capitalistic view of the shareholder approach has led to an enormous increase of new ventures, with billions of market shares and their founders having become billionaires (Alibaba, Tencent). Otherwise, the communist party strictly follows a plan to closely monitor society and companies.

Independent of the concept at work, the shareholder value, the stakeholder value or something between, it should be noticed that monitoring is limited: there exists no optimum or perfect concept in corporate governance. Active monitoring is limited by the heterogeneous utilities of shareholders associated with their stocks (small versus large shareholders, investor

activism versus long term investment, family owners versus non family owners) and the ‘who monitors the monitor’ problem. Even if the agency problem between the active monitor, the chairman of the supervisory board, and its beneficiaries could be resolved, as in the case of a large private owner, the active monitor does not necessarily internalize the welfare of other investors. This give rise to undermonitoring, collusive behavior with the top management, or self dealing and tunneling (see Tirole, 2006, p. 41/42).

8. Future Developments and Research Gaps in Corporate Governance

As we have seen, corporate governance is a well-established field with implications for management and politics. The fruitful and promising papers developed since the Jensen and Meckling (1976) revival of corporate governance issues built the structure and framework of corporate governance research today. Most issues in corporate governance with both the internal aspects of the corporation, such as internal control and board structure or managerial compensation, or external aspects, such as market mechanisms or a company’s relationship with shareholders and stakeholders, or aspects of regulation are introduced and broadly analyzed and discussed until the late 1990s. This raises the question whether academic research may lead to ‘something new under the sun’ and where the gaps in the academic research could be found.

The corporate governance approach as developed and described before is almost always based on the archetype of a public corporation with dispersed shareholders and listed on either the NYSE or the London Stock exchange. The approach taken so far only holds for a small amount of corporations, and the importance of these corporations is diminishing in the face of other types of companies operating in rather new industries and, in particular, being hosted in emerging countries like China or Russia. Recent trends in technology, globalization and social movements also alter

the relevance and issues in the field of corporate governance and opens new, fruitful and promising gaps in the literature. While the research questions remain the same, the scope and field of application varies.

8.1 Corporate Governance in Entrepreneurial Firms

Since the beginning of the 1990s, the business landscape all over the world has shifted from the large and public corporation towards new ventures, entrepreneurship and small and medium sized firms (Audretsch and Lehmann, 2009; 2013; 2014). Corporate governance in entrepreneurial firms has become a promising field, linking corporate governance mechanisms to the idiosyncratic characteristics of entrepreneurial firms:

- different sources and providers of equity, like business angels, venture capitalists, or crowdfunding,
- their role and representation in the board of new ventures and board dynamics over the life cycle,
- the different stages of new venture financing and the exit options like IPO, take-overs or failure,
- entrepreneurial team composition and remuneration
- the role of M&A to discipline poorly performing firms or to reward outstanding performers,
- adverse selection effects, leadership quality and performance in new venture creation.

Recent surveys within this promising field are Audretsch and Lehmann (2014) for an overview, Bertoni et al. (2013; 2014) summarizes aspects and recent developments in the governance of high-tech firms, Filatotchev and Allcock (2013) and Lehmann and Vismara (2019) focus on governance

mechanisms in IPO firms. A new and perhaps promising field are governance issues in ICOs (Initial Coin Offerings). These are public offerings based on block-chain technology and crypto currencies (see Huang et al. 2018; Block et al., 2018).

8.2. Corporate Governance in Family Firms

The dominant form of business around the world is the family owned firm, encompassing sole traders, partnerships, private companies or even public companies. They all have in common that family ownership is prevalent (La Porta et al. 1999). While a family is only one type of a large shareholder (Audretsch et al. 2014), corporate governance issues in family firms differ from other corporations offering a wide range of research questions:

- While academic literature has almost always focused on the positive role and effects of families as a juxtaposition to opportunistic managers, adverse effects like nepotism and infights are almost neglected in the literature,
- The life cycle of family firms and the governance structure may develop over time and in various stages,
- Tunneling,
- The pyramidal structures of family firms.

A collection of articles could be found in Audretsch and Lehmann (2011).

8.3 Corporate Governance in Russia and China

In recent years, Chinese and Russian companies have impressively entered the global business world. While the latter are usually busy in the oil and gas industry, Chinese companies have emerged as world market leaders in several industries. However, little is known about corporate

governance issues and mechanisms in China (see Naughton, 2017). Future research should focus on topics like:

- Board composition, independence and public ownership of Chinese companies
- Identifying the pyramidal linkages of companies and the government
- Identifying the different mechanisms of corporate governance in China (and Russia) and how they are linked to performance measures,
- Existing governance codes and law enforcement,
- Drivers of M&A activities,
- The performance of companies with institutional shareholders from China.

8.4 The Political Dimension of Public Corporations

The revenues of large and public corporations in the past years often rival those of national governments, leading to governance issues beyond the traditional context. In particular, the impact and manipulation activities of these corporations open new questions for academic research. Zingales (2017) provides a conclusive and convincing survey and argues towards a more political theory of the firm and corporate governance. Bebchuk, Fried and Walker (2002) briefly describes how managers of large companies gain their power and use it in their own interest. Several aspects are worthy of being analyzed more intensively, like campaign donations, lobbying, bribes, or even disrespecting or violating existing laws and regulations.

8.5 Corporate Social Responsibility, Compliance, and Business Ethics

Companies operate in a wider society, not within a defined corporate vacuum. Concepts like corporate social responsibility have been developed that consider the ethical, social, and

environmental performance of companies as well as their financial performance (albeit Milton Friedman argued that the only social responsibility of corporations is to maximize profit, Friedman, 1970). Kitzmueller and Shimshack (2012) offer a survey with implications for future research.

A new and promising strand in the corporate governance literature has been emerged in the last years, calling for more ethical and responsible actions in all economic activities including consumption, investing, governance and regulation (Boubaker et al., 2018a). In particular the climate change has entered the academic debate, arguing for a triple bottom line, an accounting framework with social, environmental and financial factors (Goergen et al., 2018). The triple bottom line has become a promising standard *modus operandi* for assessing the sustainability of financial markets, industries, institutions and corporations to cope with climate risk and corporate valuation (Boubaker et al., 2018b).

8.6 Institutional Investors

In recent years, institutional investors have entered the landscape, with most public corporations now having a substantial proportion of their shares held by a small number of institutional investors, like BlackRock, the world's largest institutional investor. At the same time, these institutions are controlled by investment managers, which have their own agency problems with their investors (Bebchuk, Cohen and Hirst, 2017). The role of institutional investors and (large) shareholder activism creates agency problems beyond corporate insiders and is a promising field, both for theorists and empiricists.

8.7 Heterogeneity and Gender Effects

Gender aspects are gaining increasing attention. While traditionalists often argue that business is a men's world, recent research highlights the positive impact of heterogeneity in teams and board composition. Future research should focus on gender effects in corporate governance, encompassing topics like board composition, selection of top managers, and remuneration, among others.

8.8 Personal Traits and the Effects of Genes

Managers and in particular CEOs are part of a specific group of individuals that differ in their characteristics from other people. Research has identified that much of the variance in empirical studies is explained by personality, in particular the 'Big Five' or OCEAN model (openness to experience, extraversion, agreeableness, and neuroticism) and that DNA affects pretty much of these characteristics (see Shane 2010). Interdisciplinary work combining personality of CEOs with standard variables like CEO selection, remuneration and performance would be a promising and fruitful research field in the future.

9. Conclusions and Recommendations for Further Reading

Corporate governance is fundamental to well-managed organizations and to ensuring that they operate efficiently. Corporate governance is concerned with both the internal aspects of organizations, such as internal control and structures, and the external aspects, such as the relationship with its relevant stakeholders and shareholders. Corporate governance is an interdisciplinary field, linking business, economics and finance to aspects of law, politics,

sociology and psychology (the latter two are excluded in this essay, albeit personal traits and social environment are strong predictors of CEO selection and performance). Corporate governance is a truly international topic, not just because a collapse in one country can have knock-on effects around the globe (as seen in the financial crises 2007), but also because of cross-border relationships and the different models at work. Corporate governance is not just a ‘for-profit approach’. Any kind of organization, from the individual family to a confederation of states, from the Catholic Church to criminal organizations, from the local soccer club to the FIFA, these are all concerned with corporate governance issues. Corporate governance is a field with roots that date back to the creation of the first teams thousands of years ago and is by no means a recent phenomenon. Corporate governance issues are first mentioned in written notices, chronicles and poems. Therefore corporate governance is one of the most exciting, fascinating, promising and future-oriented fields of research: ‘The rot always starts at the top’.

Many of the ‘hot issues’ of corporate governance are summarized in surveys and essays, which are essential reading. An indispensable ‘must read’ is the Jensen and Meckling (1976) paper. Jensen (1999) also delivers a collection of his most influential papers on corporate governance, including additional comments. Tirole (2006) provides an excellent overview of theoretical models and empirical results, constituting a standard textbook in corporate finance and governance. A recent update is provided by Goergen (2018), which is a primer and easy to read textbook. The *Handbook of the Economics of Corporate Governance*, edited by Hermalin and Weisbach (2017), is a collection of essays written by the most significant authors in corporate Governance, a standard and must-read when interested in the economics and financial aspects of corporate governance. *The Oxford Handbook of Corporate Governance*, edited by Wright, Siegel, Keasey, and Filatotchev (2013) links the traditional economic and financial side with business and

management. Their overview is less narrow and the chapters cover most of the aspects of corporate governance, like strategy, international business, economics, organizational behavior, entrepreneurship, business ethics, accounting, finance and law. In the 5th edition, Mallin (2004/2015) adopts an international approach to address significant issues of globalization and emerging markets. Audretsch and Lehmann (2014) provide an overview on corporate governance issues in entrepreneurial firms. Levis and Vismara (2013) dedicate their edited *Handbook on Research in IPOs* to new venture creation, start-ups and entrepreneurial finance. The chapters included provide an overview of the literature and identify the research gaps. An inexhaustible source of ideas and insights are provided by academic journals dedicated to corporate governance like *Corporate Governance: An International Review*, or *Annals of Corporate Governance*. The triple bottom as a promising standard modus operandi in corporate governance is intensively discussed in the edited volume offered by Boubaker, Cumming and Nguyen (2018b), *Research Handbook of Investing in the Triple Bottom Line. Finance, Society and the Environment*.

Finally, *Annals of Corporate Governance* (edited by D. Cumming and G. Wood), an up-to-date journal that brings together scholars from various disciplines in corporate governance and provides high-quality survey and tutorial monographs of the field.

Further Reading

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Links to Digital Materials

[ECGI \(European Corporate Governance Institute\)](#) is an international, scientific non-profit association providing a forum for debate and dialogue between academics, legislators and practitioners. They focus on major corporate governance issues, like codes, and produce plenty of working papers on topics in the economics, law and finance fields.

The *International Corporate Governance Society*, which publishes *Annals of Corporate Governance*, provides deep grounded information (<https://icgsociety.org/>).

Some scholars offer valuable information and content on recent topics in corporate governance, like Marc Goergen (<https://www.profmarcgoergen.com/>).

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Notes

¹ The terms corporation, firm and organization are used as substitutes in this essay, albeit they differ in their definition. The term 'corporation' (Latin 'corpus' meaning body, torso) is often used for a company or group of people authorized to act as a single entity and recognized as such in law. Commercial corporations can take many forms, including joint-stock companies, cooperatives, government-owned firms, statutory corporations, corporations sole, and many others. The definition of a firm (Italian: 'firma' meaning signature) is broader and a firm is circumscribed by its legal status and its economic activities (Hart, 2011, p. 102). Beyond the archetypical 'large public company', there are many other types of firms like sole proprietorships, family-owned enterprises, new ventures and start-ups, partnerships, cooperatives, mutual, nonprofits and for-profits among others. An organization (Greek: organon, meaning tool; tool kit) is an entity encompassing at least two individuals pursuing a collective goal in order to maximize one's own utility. Issues in corporate governance today are discussed in all types of organizations, where the achievement of collective goals conflicts with the achievement of individual goals.