Insider guarantees in corporate finance
An economic analysis of Dutch, US and German law
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CHAPTER 1
Research method: comparative law & economics

1 Introduction

This thesis is focused on the research question:

\[ \text{How should opportunistic use of the guarantee relationship in the context of corporate finance be regulated?} \]

This book uses a method of comparative law and economics. Using economic insights, the rules to compare within US, German and Dutch law will be identified. After description of the individual legal systems, these systems will be compared and evaluated using economic insights.

The disciplines of comparative law and law and economics have, despite their close proximity, not often been combined.\(^41\) The methods of comparative law and economic analysis of law can however complement each other.\(^42\) This chapter will defend the choice for a method of comparative law and economics, starting from an explanation of the functional method of comparison and the possibilities and limits of deploying this method. As will become clear, the functional method of comparative law can not only be complemented with insights borrowed from the discipline of law and economics, but the results of such a combined method can also in turn relativize and refine insights from law and economics.

It should, at the outset, also be noted that this thesis is not a call for more focus on efficiency goals in designing laws. The focus of law-making should not only be on efficiency, but also on other, arguably sometimes much more important, values. In fact, this thesis aims to show that the efficiency claims for guarantees in corporate finance are often doubtful, thus paving the way for regulation of the guarantee relationship with a focus on other values, which regulation would previously too easily be viewed as ‘inefficient’.

After explaining and defending the choice for a method of comparative law and economics, the choice for micro-economics, more specifically transaction cost economics with a focus on opportunism will be discussed.

\(^{41}\) Michaels, 2009, p. 199.
\(^{42}\) See also Faust, 2006, p. 863.
2 Comparative law & economics

2.1 Functionalist comparison and its limits

Comparative law has become almost synonymous to the functional method of comparison. Functionalism was famously defended by Zweigert & Kötz as ‘[t]he basic methodological principle of all comparative law’. What the functional method actually entails remains rather unclear from their work. More generally there is a lot of confusion around the functional method. As Michaels explains, though functionalism has (too) many different meanings, functionalist comparatists can generally agree on some elements. The first is that functionalist comparative law focuses on effects of legal rules, not on the rules and their (doctrinal) structures themselves. It would however be a mistake to think that conceptual legal thinking does not matter to functionalists, indeed, in order to understand the function of rules one needs to understand the concepts used to frame the rule. Secondly, functional comparison takes a problem (or: clash of interests) that exists to the same extent in different places as the element to be compared, or tertium comparationis. Such an element is needed to be able to compare systematically. Comparison needs to be done in terms of something. One can for example compare apples and oranges in terms of weight, or in terms of sugar content. That element of comparison can be provided by a function to society. This function can be the influence of rules on a problem or tension that exists universally (or at least across the legal systems to be compared). One can then compare how each system deals with the problem.

In short, functionalists can probably generally agree on the importance of effects of (alternative) sets of legal rules on certain problems. The functionalist method however does not tell us how these effects should be discovered, nor how to define a more or less universal problem. Moreover, the functional method does not provide tools for evaluating the results of the comparison. This is where law and economics comes to the forefront.

Comparative law as a discipline, and the functional method of comparison, do typically not provide the tools to evaluate whether a certain rule is desirable in terms of how beneficial the rule is to society, compared to alternatives. The fact that a comparatist finds differences in dealing with a problem, does not tell him or her which of the alternative ways of dealing with the problem is most beneficial to society. Naturally however, a comparatist will probably feel inclined to state which solution is better and which is worse. One way of dealing with this is to

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43 Zweigert and Kötz, 1998, p. 34.
44 Attempts to even develop a somewhat coherent method are rare Maurice Adams and Bomhoff, 2012, p. 1; (Michaels, 2006, p. 362); Reimann, 2002; An exception is arguably Michaels, 2006.
45 (Michaels, 2006, p. 342).
48 Of course, one can question whether a certain problem is not contingent on the society in which it occurs, or in other words, one can question the universality of such problems, Michaels, 2006, pp. 367–377. This is something the researcher should be aware of. One solution is to compare relatively similar societies, another is to differentiate between levels of analysis, Michaels, 2006, p. 368. The more specific a problem is described, the less likely that it is universal, and vice versa, Michaels, 2006, p. 368. Thus, by adjusting the level of abstractness of the problem, universal ground can be found.
49 See also Oderkerk, 2015, p. 596.
51 See also de Geest and van den Bergh, 2004; Faust, 2006, pp. 848; 856.
resist this temptation and just list similarities and differences with some additional explanation. However, the comparison may thus not feel complete and may lack direct possibilities for application of the insights gained. Comparatists therefore often do come up with some kind of evaluation, often based on intuition, common sense or some combination of theoretical underpinnings.

Using insights from law and economics, these flaws of comparative law in performing the tasks of functional explanation and evaluation can be addressed.\textsuperscript{52} That is not to say economic analysis is in any way superior to any other analysis. There is much more to law than economics. Other perspectives may be just as valuable. But economic analysis can provide powerful tools for comparative legal analysis.\textsuperscript{53} The insights gained in this way can at least surpass the common sense-inspired insights often found in comparative law scholarship. The next paragraphs will discuss how economic analysis of law can perform these tasks and why economic analysis is considered valuable particularly in the context of the subject of this thesis. The downsides and pitfalls in using this approach will also be considered.

Particularly in the field of this research the choice for economic analysis to define the problem that will be used as \textit{tertium comparationis} is defendable. The tensions between actors in this field are strongly economic in their nature. Economic analysis of these tensions can thus provide a good, though of course incomplete, understanding of these tensions.

### 2.2 The economic perspective on law

Looking at law from an economic perspective essentially means using economic insights when analyzing and commenting on legal rules and their application.\textsuperscript{54} Economic analysis of law has gained considerable ground in the last few decades, particularly in the US but also, and increasingly so, in Europe. Law and economics (L&E), as the discipline of economic analysis of law is called, provides a method for understanding and evaluating law through its economic effects on society.\textsuperscript{55} By drawing on economic theories, such as price theory, and empirical findings, economists can evaluate the costs of legal rules, account for the way in which people respond to current laws, and predict how they are likely to respond to legal changes. Economic analysis can thus provide us with an evaluation of the effects of legal rules on two important policy values: efficiency and distribution.\textsuperscript{56} By drawing on economic theory, economic analysis can provide insights into the effects of various legal rules that often surpass the ‘common sense’ arguments found in legal analysis.\textsuperscript{57} It is, in this light, easy to both understand and appreciate the spectacular success of L&E as a discipline.

Two major theoretical contributions to the legal debate can be ascribed to law and economics. The first is law and economics as a set of methods that can quantify the consequences of a certain rule or proposal, the second is law and economics as a normative theory. For analytical purposes, the process of decision-making on a proposal for a new or altered rule can be divided

\textsuperscript{52} de Geest and van den Bergh, 2004.
\textsuperscript{53} See also Wagner-von Papp, 2015, p. 28.
\textsuperscript{54} Mackaay 2013, p. 5.
\textsuperscript{55} See also Miceli 2004, pp.1–2.
\textsuperscript{56} See also Cooter & Ulen 2013, p.4.
\textsuperscript{57} Mackaay 2012, p.5.
into three topics: proposals, consequences and ideals. To understand this distinction, consider the example of adopting a law on taxing pollution. The government considers introducing higher taxes on the activities of electricity companies in order to induce the companies to start operating in a more environmentally friendly manner. The proposals are the alternative (sets of) rules that the government is considering. The consequences are the economic consequences of these alternative sets of rules, and the ideals are the ideals the authority wants to pursue by adopting new rules, in this case inducing electricity companies to start operating in a more environmentally friendly manner. Law and economics can both give insight in the economic consequences of the alternative sets of rules (positive law and economics), and partly inspire policymakers to opt for the most efficient outcome (normative law and economics).

The use of positive law and economics is generally considered to be less controversial than normative law and economics. In the normative approach, the idea is that policymakers should strive to reach the economically most efficient outcomes. These two ways in which law and economics can inform policymaking in the area of law will be discussed below in relation to comparative law and to the subject matter of this book, the guarantee relationship.

### 2.3 Using law and economics to define a problem and to measure the effects of rules

To functionally compare legal rules, the effects of the rules need to be known. Functional comparison does not look at the rules as such, but at their functional relation to certain problems. Of course, the use of data, now strongly advocated by a growing movement referred to as Empirical Legal Scholarship, first comes to mind to be used to this end. However, data is not always available and even if it is, the conclusions that can be drawn from the data are often too specific to allow claims on the overall effects of a set of legal rules on behavior, while we need to be able to make such claims in order to compare functionally. Economic analysis offers models for explaining how humans react to certain incentives, thus offers models for discovering the effects of alternative sets of rules.

In taking an economic approach on the guarantee relationship and the rules on the guarantee relationship, the aim is in the first place to outline the underlying costs and benefits to both the parties involved and the outsiders. By using the methods of law and economics, consequences of alternative sets of legal rules can be identified. To illustrate this with an example unrelated to the guarantee relationship, economic analysis can for example predict the real social burden of the tax rule. Take for example an electricity company. The market for electricity is not perfect. Economic analysis of this particular market may show that, through its monopoly position, the electricity company is able to almost fully pass on a higher tax burden to consumers, without having to operate in a more environmentally friendly manner, even though this particular tax has the goal of changing the behavior of the electricity company. In this example, law and economics offers insight in the economic consequences of the alternative sets of rules, but these insights need to be complemented with information on the legal rules involved in order to compare functionally.

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60 See extensively Oderkerk, 2015.
61 See for example Heise, 2011.
62 Compare Faust, 2006; This does not mean that Empirical Legal Scholarship is not valuable in this context. In as far as data is available, the models offered by economics can be tested and refined, or discarded.
63 Compare Mackaay 2012, pp.6–8.
economics analysis can inform decision-making to eventually reach a policy goal that is not necessarily inspired by economics itself: reducing pollution. Law and economics is used as a consequentialist theory, focusing on the consequences of legal rules.\textsuperscript{64} The tools of law and economics can be used by people with any moral or political agenda, be it communist or libertarian. The branch of economics used here is positive law and economics: economic models are used to give insight in behavior, not to set the desired goals of rules.\textsuperscript{65}

As explained in paragraph 2.1 above, if the goal is to functionally compare the influence of legal rules on a certain (more or less universal) problem, the problem needs to be defined. Economics will be used to define this problem that will serve as the \textit{tertium comparationis} that is at the core of functional comparison.\textsuperscript{66} It somewhat depends on the choice of the problem whether economics is the right tool. If one would for example pick the problem that some people have a tendency to kill other people, a problem that is undeniably almost universal, economic analysis may not be the best choice to define the problem. However, the tensions within the problem in the field of this book, the guarantee relationship, are much more economic in nature. The results of economic analysis may thus explain why people or businesses use the guarantee relationship, and which problems arise as a result of it.\textsuperscript{67} More importantly however, policy makers and academics often already rely on economic insights in the context of regulation of the guarantee relationship. Therefore, using economic analysis as the tool to select the objects to compare will likely lead to insights that are valuable to that debate, even without claiming that reliance on economics is essential in this context. After defining the problem, the comparatist can start selecting the rules that offer solutions to the problem.\textsuperscript{68}

Use of the fairly agnostic tools of positive law and economics is often criticized for its alleged overreliance on rational choice theory. The rational choice model is built on the assumption that individuals maximize their own utility by making the choices that are the best given their individual preferences. However, empirical behavioral sciences have thoroughly demonstrated that individuals are often not able to make rational choices.\textsuperscript{69} This critique is arguably not so much a problem for the use of law and economics, but for the use of the rational choice model in its simplest form. Scholars in L&E have refined the rational choice model to incorporate insights from behavioral sciences, resulting in a branch of research often referred to as \textit{behavioral law and economics}.\textsuperscript{70} The flaws of the rational choice model are however still to be taken seriously.

Theoretical economic analysis relies heavily on assumptions of how humans behave. Although those assumptions are arguably constantly refined, the fact that assumptions are central to the models means one should be cautious in jumping to policy recommendations without warning.\textsuperscript{71} However, the fact that economic analysis relies on assumptions is also one of its stronger features, especially in relation to comparative legal scholarship. As noted above, comparatists too often rely on common sense, intuition or reasons or assumptions that remain covert. The transparency of economic reasoning and the underlying data, as flawed as it may be, allows for constructive criticism that can eventually refine the insights. Even outspoken critics of

\textsuperscript{64} See also Georgakopoulos 2005, p.3.
\textsuperscript{65} Faust, 2006, p. 841.
\textsuperscript{66} Compare Faust, 2006, p. 856.
\textsuperscript{67} Compare Miceli 2004, p.3.
\textsuperscript{68} Faust, 2006, p. 856.
\textsuperscript{69} See on the emergence of behavioral economics Heukelom 2009; see in general on systemic errors of individuals Kahneman et al. 1982; see for an overview of law and behavioral economics Zamir & Teichman 2014.
\textsuperscript{70} See for example Cooter & Ulen 2013, pp.50–51; Zamir and Teichman, 2014.
\textsuperscript{71} Wagner-von Papp, 2015, p. 22.
comparative law and economics often acknowledge this as the main strength of economic reasoning in legal debates.\textsuperscript{72}

This thesis approaches the rational choice assumption as problematic. The rational choice model, refined with some behavioral insights, is still very much central to mainstream economic reasoning, which is in turn often used to justify legal rules (or the absence of legal rules). As explained in the introduction to this thesis, the aim is to develop a more comprehensive framework for analyzing the guarantee relationship, whilst using mainstream theory. The contribution of this thesis is therefore not a critique on the use of mainstream economic theory, though such a critique may very well be warranted and valid.

2.4 Using law and economics to evaluate results of the comparison

The economic analysis to be performed in chapters 2 and 3 is not only aimed at framing the problem and understanding the consequences of the guarantee relationship, but is also used as a yardstick to assess which rules are, using this yardstick, best able to support efficient functions of the guarantee while suppressing inefficient effects. Law and economics provides the yardstick for evaluation that comparative law itself lacks.

Although the methods of law and economics can also be used for goals that do not necessarily include increasing welfare, the normative message of law and economics is inescapably that law should be designed to increase welfare.\textsuperscript{73} Law and economics provides the scholar with the evaluative concept of efficiency. In this sense, deploying a method of law and economics may lead to criticism on the desirability of the ideals an authority had in mind.\textsuperscript{74} The normative concept of efficiency is based on satisfaction of social preferences. The rule that satisfies preferences to the greatest extent is the most efficient rule. The most efficient rule is, to the practitioner of normative law and economics, the best rule. The latter statement is often criticized from the perspective of other moral theories that claim that there are other, better ways to establish ideals than to look at social preferences.

The use by law and economics of the evaluative concept of efficiency has been criticized extensively, especially by scholars relying on moral philosophy. A project is thought to be ‘efficient’ if it maximizes utility for the greatest number, thus maximizing welfare.\textsuperscript{75} The utilitarian idea of maximizing utility for the greatest number seems both simple and desirable but has its limitations. First of all, measuring utility is empirically difficult, which makes it highly impractical to work with as a measure.\textsuperscript{76} Measuring ‘utility’ or ‘value’ is often performed by

\begin{itemize}
\item \textsuperscript{72} See for example Wagner-von Papp, 2015, p. 28.
\item \textsuperscript{73} Georgakopoulos 2005, p.21.
\item \textsuperscript{74} Compare Mackaay 2013, p.13ff.
\item \textsuperscript{75} What is meant by utility? Economists use utility in two different ways: (1) utility in economic terms, as in how highly a person values a thing in terms of money and; (2) utility in the broader, philosophical sense, as in how much happiness or ‘good’ it brings to a person (Posner 2011, p.15). When speaking of utility, it is also important to recognize the difference between utility (in economic terms) and value. Value can be used to denote the value a good has on the market, something that often differs from the value an individual would assign to the good himself. Consider the following example. A owns a book and would sell it for 20; B does not own the book but would buy it for 30. Assume the market price for the book is 31. Suppose A agrees with B to sell him the book for 25. Does this transaction improve utility for both parties? Yes: both A and B gain 5 in utility and no one loses, even though the book is sold below its value on the market.
\item \textsuperscript{76} Vilfredo Pareto made the now famous argument for using a preference ranking for assessing utility rather than measuring
\end{itemize}
relying on price theory. The idea is that the price that people are willing to pay for certain goods or services in the market reflects the utility of that good or service. It is however highly questionable whether prices in the market indeed reflect utility. Financial services and lawyers can for example be very pricy, but the actual contribution to society in terms of overall utility of such services can be questionable. That people are still willing to pay large sums for such services can easily be explained by the fact that such services can for example be used to extract rents from others. A second problem with utilitarianism is that maximizing utility for the greatest number disregards distribution. This disregard leads, in the view of many, to obvious moral wrongs.

A widely used notion of efficiency was proposed by Kaldor and Hicks. Their notion assesses utility with a preference ranking. The Kaldor-Hicks standard deems a rule or proposal desirable if it is (theoretically) possible for the people who benefit from the rule to fully compensate those that are disadvantaged by it whilst keeping some of the profits themselves. The Kaldor-Hicks standard is often referred to as the potential Pareto standard because a Pareto situation would be achieved if the winners would indeed compensate the losers. Because the losers do not have to be compensated to reach the standard, this notion of efficiency does not suffer from the problem of under-inclusiveness. The standard’s normative value, however, is highly contested as it suffers from the problem Pareto tried to avoid: that maximizing utility for the greatest number disregards distribution between people. Unlike the Pareto standard, projects that fit the Kaldor-Hicks standard can disadvantage certain people. This problem is magnified by the fact that the Kaldor-Hicks standard is biased towards wealthy people. This is because wealthy people are generally likely to be willing to give up much more for something than poor people are, simply because they own more. Therefore, when testing the utility something brings to wealthy people, it is likely to be overvalued, at least from the viewpoint of conventional morality. Note that this effect reinforces itself if the test is applied over a longer stretch of time. Thus, the Kaldor-Hicks test can be said to favor wealthy people: what is efficient depends on the preferences of people, which in turn depends on the distribution of wealth. Consequently, the use of Kaldor-Hicks efficiency as a normative concept can be flawed.

The fact that economic analysis, in aiming at overall welfare by improving efficiency, disregards certain moral values has been widely criticized from the perspective of moral philosophy, arguing that overall welfare is not a morally sound notion. Some say such criticism suffers from

the utils something brings to a person (Aspers 2001). If we concern ourselves with the utility a certain rule brings to a person, the assessment of the utility is reduced to establishing whether that person would prefer the situation with the rule to the situation without the rule. Applying this to the book example would mean that, this time around we admit it is difficult to establish that A values the book at 25. However, we may be able to establish that A would rather have 25 than the book and that B, in turn, would rather have the book than 25.

77 See extensively Mazzucato, 2018.
78 Pareto defines an ‘efficient improvement’ as a change, such as a new rule, that benefits at least one person whilst not putting anyone at a disadvantage. Although various objections to the ethical desirability of this Pareto standard exist (Adler & Posner 2006, p.19), the main problem for the purpose of this book is that it is impractical to work with because of its under-inclusiveness. The criterion is likely to fit very few, if any, legal rules or proposals that seem desirable from the viewpoint of conventional morality (Zerbe Jr. 2001, p.3). Because of its under-inclusiveness, this notion suffers from its strong bias towards the status quo (compare Scitovszky 1941), whilst at the same time fails to provide a normative theory for preserving the status quo.
80 compare Scitovszky 1941.
weaknesses, for example by claiming that the notion of overall welfare does account for moral values, be it through preference satisfaction. Moral values inform preferences. Secondly, the argument goes, moral philosophy would be wrong in stating that overall welfare is not a morally sound notion, as it is a factual notion rather than a moral one.\textsuperscript{83} Moral philosophy, in turn, often tries to push forward universalist notions that may or may not restrict the factual notion of welfare maximization. The law and economics scholar would see such objections by moral philosophers as preferences of those moral philosophers, and if shared by many others, as preferences of those others.\textsuperscript{84} Though of course not value-free, \textit{efficiency}, in the eyes of many economists, does not strongly promote its own values like many philosophical approaches to law do, but provides a flexible evaluative notion which can be used to improve the law to, ultimately, serve society.\textsuperscript{85} That view should be relativized somewhat. Economic analysis obviously pushes its own values, such as rational choice and efficiency. As a result, economic analysis has to be modest in its claims.

Two remarks can be made in defense of using efficiency as a yardstick in this research. Firstly, as already touched upon above, the choice for efficiency as a yardstick is defendable particularly in this field of research: the guarantee relationship in corporate finance. The tensions between actors in this field are strongly economic in their nature. Using efficiency as a yardstick is hardly controversial in this particular field. Secondly, this research focuses on opportunistic use in relation to the guarantee relationship, as will be discussed below. The focus thus lies on the externalities, the value extraction that can be created by using the guarantee relationship. Regulating such externalities is hardly controversial, even if \textit{efficiency} as a yardstick is controversial.

In short, according to those who criticize the use of \textit{efficiency} as an appropriate yardstick, law has many more goals than welfare maximization, such as defending moral values and promoting social justice. Economic analysis should be modest in its normative claims.\textsuperscript{86} The debate on how important efficiency is to law will not be pursued to its full extent. Economists will have to appeal to a generally accepted goal, such as maximizing the value of output given the current distribution of wealth, without defending that goal.\textsuperscript{87} This thesis is even more modest in its approach. Efficiency is not defended here as in any way superior to other yardsticks such as moral theory. The use of \textit{efficiency} as a yardstick in the field of the guarantee relationship in corporate finance is however an obvious choice given the strongly economic nature of the tensions involved in this field. Moreover, this research mostly focuses on externalities and how to curb externalities and value extraction, which is, even if efficiency as a yardstick in general is viewed as problematic, still hardly problematic.

\textsuperscript{83} Georgakopoulos 2005, p.33.
\textsuperscript{84} Kaplow and Shavell, 2006; Georgakopoulos 2005, p.33.
\textsuperscript{86} Zerbe Jr. 2001, p.15; Mackaay 2012, pp.15–17.
\textsuperscript{87} Posner 2011, p.20.
2.5 Influence of comparative law on law and economics

A few words should be said here on the possible influence of comparative law on insights borrowed from law and economics. The paragraphs above concentrated on the way in which the gaps in the functional method of comparative law can be redressed by using insights borrowed from law and economics. The relationship however does not just work in this single direction.

Law and economics as a discipline is especially influential in the United States. As a result, much of the analysis is based on American law. The rhetoric of law and economics can make it seem like the insights rendered apply universally, while they may actually be strongly context-dependent. A comparative law and economic analysis can counter these problems, thus leading to more refined insights.88

What is efficient partly depends on the social and legal framework in which humans operate and is thus often highly context-dependent.89 The evolution of a legal system is often considered to be strongly path dependent.90 A rule that may render efficient outcomes in one system, could render inefficient outcomes in a different social context. A comparative law and economics analysis can unveil this. The claim to universality sometimes found in economics, is thus rejected by comparative law and economics.91 One could therefore say that comparative law and economics not only borrows insights from economics, but can at the same time criticize those insights. As Mattei puts it:

"Law and economics elaborates its theories on institutional backgrounds that either are abstract natural law models or postulate without criticism the modern institutional background of the US. (...) Comparative law may supply economic analysis with a reservoir of institutional alternatives, which are not merely theoretical but actually tested by legal history. Moreover, it offers a more global perspective on different legal structures and on the evolution of these structures, which may shed new light on-and challenge at the same time - certain previously undisputed assumptions of traditional law and economics."92

The comparative analysis could of course show that certain insights do just as well apply in a different institutional background, which would reinforce the insights. In both instances, comparative law can improve insights borrowed from law and economics. As Faust concludes:

"[T]he great benefit comparative law offers to the economic analysis of law is that it brings economic analysis down from the clear, blue skies of economic theory to the varied and complex conditions on earth."

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89 Caterina, 2006, p. 164.
91 Caterina, 2006, p. 165.
2.6 Limits of this research

Obviously, apart from the advantages discussed above, an approach of comparative law and economics also has to make sacrifices elsewhere and has some pitfalls and limitations that deserve attention. Wagner-von Papp extensively discusses possible problems with the discipline of comparative law and economics. While some humbleness and acknowledgement of limits of one’s research is indeed applaudable, some of the pitfalls he mentions are overstated and do not sufficiently take account of the benefits of this combined approach.

The pitfalls discussed by Wagner-von Papp can, in as far as is relevant here, be summarized as follows. Not every good economist is also a good comparatist, and vice versa. Secondly, both are time-consuming and thus hard to combine. Thirdly the ‘richness’ of comparative law and the ‘abstractness’ of economic models is hard to combine. And lastly, combining the approaches would make the research vulnerable to existing criticism on each respective discipline.

The first two of these points, time and specialization, are of course valid criticisms that will apply to any interdisciplinary research. This book must be understood as a thesis of legal scholarship that uses insights rendered by law and economics, which use of law and economics is seen as complementary to the comparative research, for the reasons discussed in this chapter. It should, however, not be forgotten that specialization itself also has its pitfalls. The scholar that only does economics or only law can easily miss the necessary overview because of path dependency in a certain field of research.

The other pitfalls are less convincing. Of course, combining the ‘richness’ of comparative law and the ‘abstractness’ of economic models may not be easy, but to stress this too strongly underestimates the goal of combining the two. As discussed above, functionalist comparative legal research ideally needs some other discipline to perform the tasks of defining a problem, measuring or predicting the effects of legal rules and evaluating the outcomes of comparison. The abstractness of economic models allows for the researcher to perform these tasks, and as discussed, this combination at the same time makes economic analysis less abstract.

The criticism that combining the approaches would make the research vulnerable to criticism against each discipline, should also be relativized. Again, as discussed, gaps in the functional method of comparison actually stress the need for law and economics. Thus, it is the other way around: law and economics is employed to fill gaps in the functional method, which makes the comparative legal research more robust instead of less.

Moreover, the fact that many are strongly opposed to law and economics, should actually support a method of comparative law and economics. As Mattei extensively discusses, comparative law and economics challenges many previously undisputed assumptions of law and economics. Comparative law and economics can influence economic insights in that it can show the relativity, embeddedness, home-country biases and over-simplicity of much economic research. Those opposed to law and economics and its hegemony (especially in the United

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94 Wagner-von Papp, 2015, pp. 10–11.
95 Although it could be held that there is no gap in the functional method because the functional method does not promise to perform these tasks. However, even if such criticism is accepted, the point remains that, to employ the functional method, one needs another method both to define a problem and to evaluate the outcome of a comparison.
96 Mattei, 1997, p. 28.
States) should thus be more open to the approach of comparative law and economics. Wagner-von Papp also admits this:

“[t]he main virtue of comparative law & economics seems to me to be that it can help to remedy the deficiency of too many law & economic models that lack empirical testing”\(^{98}\)

### 2.7 Summary

This book uses the method of comparative law and economics, using economic insights to redress gaps in the functional method of comparison. The functional method of comparative law itself does not provide the tools to define a problem that the comparatist wants to take as the tertium comparationis, neither does it provide a method for measuring or predicting the effects of legal rules on this problem, nor does it provide a way to systematically evaluate the results of comparison. Where functional comparatists often resort to common sense or intuition to perform these tasks, this research resorts to economic analysis.

Economic analysis is often criticized. The choice for using economic analysis is made exactly because claims made from an economic perspective are often, even viewed from within economic analysis, doubtful. Because efficiency claims are plentiful and often over-simplistic, this research offers a detailed analysis, which includes questioning those claims. Efficiency is not defended here as in any way superior to other yardsticks such as moral theory. The choice for efficiency as a yardstick is however obvious particularly in this field of research: the guarantee relationship in corporate finance, in which field much of the tensions and dynamics are economic in nature. By focusing on opportunism and the externalities created by opportunism, the aim of this thesis is to serve as a critique from within mainstream economic theory, without claiming the superiority of mainstream economic theory over other approaches. Moreover, economic insights may, apart from supporting the comparative analysis, themselves be refined by being applied in the specific contexts of the legal systems studied.

### 3 ECONOMICS: MICRO-ECONOMICS WITH FOCUS ON OPPORTUNISM

This book uses a method of comparative law and economics. Using economic insights, the problems in relation to the guarantee relationship in corporate finance will be identified. The insights will be rendered from the perspective of micro-economics,\(^{99}\) and within micro-economics a specific focus on Transaction Cost Economics (TCE). TCE has been particularly

\(^{98}\) Wagner-von Papp, 2015, p. 28.

\(^{99}\) The study of micro-economics looks at the behavior of individuals and small institutions in relation to scarce goods. It studies markets, with topics such as the price mechanism on these markets, price elasticity, and the influence of demand and supply. In contrast, macro-economics deals with the performance of an economy as a whole, rather than looking at behavior on the individual level. The study of macro-economics for example studies topics such as the Gross Domestic Product (GDP), unemployment rates, monetary and fiscal policy, and the influence of such mechanisms on each other. The focus in defining the problem in the guarantee relationship will be on micro-economics. Macro-economic effects and influences are not discussed extensively.
influential in the analysis of legal rules.\textsuperscript{100} This chapter will justify the focus on the concept of opportunism in TCE in analyzing the guarantee relationship. Opportunistic behavior can be understood as self-interest seeking with guile.\textsuperscript{101} As will be explained, Transaction Cost Economics, and particularly the notion of opportunism, can explain and expose the dynamics in relation to the guarantee relationship in corporate finance.

### 3.1 Transaction Cost economics and bounded rationality

In the last half a century or so a broad divide has emerged between neoclassical microeconomics and TCE. The novelty of the transaction cost literature, as opposed to neoclassical micro-economic theory, is that it takes transactions as the units of analysis as opposed to being preoccupied with pricing of commodities (the goods or services to be transferred). Transaction cost literature focuses on the friction that occurs when a transaction is concluded under different governance structures. Whereas legal rules are often not explicitly discussed in neoclassical micro-economics,\textsuperscript{102} transaction cost analysis shows that legal rules can be an important factor in the efficient allocation of rights.\textsuperscript{103}

The starting point of any account of TCE is the seminal work of Ronald Coase, more specifically, his article *The Problem of Social Cost*.\textsuperscript{104} The central idea put forward in this article has become known as the Coase Theorem, which holds that, given successful and costless bargaining, the legal allocation of rights does not matter to efficiency.\textsuperscript{105} The assumption of successful and costless bargaining has proven to be the most significant contribution of Coase to the academic debate, laying the foundations for the economic analysis of law. The costs are often high. The transfer of the good from A to B involves what Coase called transaction costs. These could include costs involved in A and B finding each other, those incurred in bargaining and drafting the contract, and the costs incurred in enforcing the contract. On the other hand, having and enforcing a certain legal rule may also come at a cost, compared to having no rule or another rule. An abundance of literature on questions around transaction costs has emerged since The Problem of Social Cost.

\textsuperscript{100} Schäfer and Ott, 2004, p. 7.
\textsuperscript{101} Williamson, 1993, p. 97.
\textsuperscript{102} Schäfer and Ott, 2004, p. 7.
\textsuperscript{103} Schäfer and Ott, 2004, p. 7.
\textsuperscript{104} Coase 1960.
\textsuperscript{105} See also Cooter & Ulen 2013, p.84; A simple example can explain this idea. Suppose A finds a good, one that does not belong to anyone, on B’s land. Assume that A values the good at 30 and B at 50. Assume the legal rule governing the situation is that the person that finds a good is the legal owner. Simple bargaining theory tells us that by successful bargaining, both A and B can improve their position, thus improving efficiency (see further on bargaining Cooter & Ulen 2013, p.74 ff.). If A and B meet in the middle and agree on a price of 40, both will ‘earn’ 10 (if the transaction costs are disregarded). The insight the Coase Theorem offers is that, in the context of efficiency, it does not matter whether the legal rule in this case makes A the owner of the good he found, or B, in the absence of transaction costs. This will become clear when both scenarios are considered in full. If the legal rule makes A the legal owner, value is directly created by the legal rule, as B is now directly the legal owner, valuing the good at 50. In both cases, we end up with the scenario that the good is in the hands of B, who values it at 50. The legal rule does not matter for creating this efficient result, given the costs involved in both scenarios are the same.
In an earlier article, Coase famously asked the question why some economic activity is directed by market forces, whereas other activity is directed by a chain of command with firms.\textsuperscript{106} Should an industrial baker, for example, also farm his own grain and own the grain mill, or should he buy flour on the market? Coase's answer was that firms respond to high transaction costs on the market. If for example transaction costs for contracting on the purchase of flour are high, it might be better to own the mill. With flour it is probably often the other way around, because flour is a product that can be well-defined in a simple contract. Such well-defined tasks can easily be put on the market. More complex tasks that are harder to define in contracts, may be better performed within the firm.

Transaction cost literature differs from neoclassical economics in its view of human nature. Neoclassical economics takes the \textit{homo economicus} that rationally maximizes his utility as a starting point.\textsuperscript{107} Transaction cost literature takes a more realistic approach to human behavior by focusing on the friction that occurs when transactions take place. Part of this friction can be ascribed to bounded rationality, a term used to point to the limits of the analytical skills of humans and limits in the ability of humans to co-operate. Simon, who originally coined the term, explains the condition of bounded rationality as follows:

"The capacity of the human mind for formulating and solving complex problems is very small compared with the size of the problems whose solution is required for objectively rational behavior in the real world".\textsuperscript{108}

Because of these limits, humans are often unable to deal with all of life's complexities. For example, contracts concluded to facilitate transactions are necessarily incomplete due to the limited rational abilities of humans.\textsuperscript{109} Exactly what costs are incurred by bounded rationality and how these costs can be kept as low as possible are the main questions transaction cost economics strives to address.\textsuperscript{110}

### 3.2 Trust and opportunism

Oliver E. Williamson has made a convincing effort in shifting the focus of traditional transaction costs economics from the costs associated with bounded rationality, to the costs associated with the opportunistic behavior of economic actors.\textsuperscript{111} If rational agents were not given to opportunism, actors would be able to rely on their counterparties' promises and the incompleteness of contracts would not be a serious problem.\textsuperscript{112} Williamson shows that complex forms of contracting, hierarchies and governance structures can only usefully be understood if we keep the opportunistic nature of the actors involved in mind. Mackaay has defined opportunistic behavior as follows:

"(...) a party to a potential or existing relationship acts opportunistically where it seeks, by stealth or by force, to change to its advantage and to the detriment of the other party or

\begin{flushright}
\textsuperscript{106} Coase, 1937.
\textsuperscript{107} compare Williamson 1996, p.6.
\textsuperscript{108} Simon 1957, p.198, emphasis omitted.
\textsuperscript{109} Williamson 1996, p.9.
\textsuperscript{110} Williamson 1996, p.12; 37.
\textsuperscript{111} Williamson 1993.
\textsuperscript{112} Williamson 1981, p.554.
\end{flushright}
parties the division of the relationship’s joint gains that each party could normally look forward to at the time when the relationship was set up. It tries, in other words, to get “more than its (fair) share,” an undue advantage, as determined by “parties’ agreement, contractual norms, or conventional morality.”

The term opportunism and its focus on the motivational complexity of humans can be better understood if contrasted to simple self-interest seeking. Simple self-interest seeking is associated with neoclassical economics. Neoclassical man pursues his own interests, if necessary at the cost of others’ interests. However, neoclassical man does so openly. He reveals his position if enquired upon, gives accurate statements, follows the rules and can be kept to his promises.

Because of this behavioral assumption, neoclassical economics can concern itself with scale economics, not having to focus on frictions that occur because people do not keep their promises, do not abide by the rules and do not fully disclose all relevant information.

Opportunism, however, can be defined as self-interest seeking with guile. As Williamson explains opportunism:

“(…) [T]he failure to tell the truth, the whole truth and nothing but the truth is implicated by opportunism. The possibilities that economic agents will lie, cheat and steal are admitted. The possibility that an economic agent will conform to the letter but violate the spirit of an agreement is admitted. The possibilities that economic agents will deliberately induce breach of contract and will engage in other forms of strategic behavior are admitted.”

Even though Williamson seems to assume that opportunistic behavior is not always present and may even be the exception, economists have more and more accepted that markets are harmful (as well as helpful) in providing a platform in which every chance for any profit out of the ordinary will be taken up. Every weakness that we as humans have in our design, or the legal system for that matter in its design, is likely to be taken advantage of by someone.

Whether a counterparty will act opportunistically is often difficult to identify before (‘ex ante’) a transaction. Therefore, ex ante screening devices and ex post safeguards are necessary to protect against opportunism. Consider the example of an ideal society in which transactions are highly based on trust. The implication of opportunism is not that such a society is impossible, but that it is very fragile to exploitation by opportunistic agents if it lacks devices to disincentive or penalize opportunistic intruders.

The imminent danger of opportunistic behavior drives transaction costs up. Because of opportunism, naïve contracting that assumes that economic agents will reliably fulfill their promises is not always feasible. On the other hand, comprehensive ex ante contracting is not feasible either, because of both bounded rationality and opportunism. Williamson thus shows that complex forms of contracting, hierarchies and governance structures can only usefully be

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113 Mackaay 2012, p.117.
114 Williamson 1985, p.47 ff.
115 Williamson 1985, p.49.
117 See for example extensively the recent (popular) economic work of Akerlof and Shiller, 2015.
118 Williamson 1985, p.64.
119 Williamson 1985, p.65.
120 Williamson 1996, p.57.
understood if we keep the opportunistic nature of the actors involved in mind. The lesson to be learnt is, according to Williamson:

“Transactions that are subject to ex post opportunism will benefit if appropriate safeguards can be devised ex ante. Rather than reply to opportunism in kind, therefore, the wise prince is one who seeks both to give and to receive "credible commitments." Incentives may be realigned, and/or superior governance structures within which to organize transactions may be devised.”

Opportunism is especially problematic because it creates externalities. An externality is a negative welfare effect unwillingly incurred by one party, inflicted by another, whilst this welfare effect is not compensated through the price system. By acting opportunistically, a party obtains a benefit by creating an externality for another party.

### 3.3 The difficulty of policing opportunism with contract law rules

A debtor-creditor relationship is often haunted by a combination of opportunism and bounded rationality. Because of bounded rationality, contracts are inevitably incomplete. The creditor is at the mercy of the debtor. The latter may for example try and exploit incompleteness of the contract or incompleteness in monitoring or enforcement of the contract to his advantage by forcing the creditor to renegotiate the terms of the contract, either directly or effectively by forcing the creditor to accept opportunistic shortcomings. Non-contractual relationships, such as those between stakeholders in a corporation or those between neighbors, can similarly suffer from the combination of bounded rationality and opportunism.

Opportunistic behavior is difficult to police with legal rules. A rule forbidding opportunistic conduct in for example the contractual setting would be difficult to enforce, as the question which behavior qualifies as opportunistic is a question that is often difficult to answer from a legal perspective. Williamson defines opportunism as self-interest seeking with guile. He does not, however, extensively develop when self-interest is accompanied by guile. He is not concerned with which behavior is not or should not be allowed as a legal matter. As explained above, he is concerned with the behavioral assumption of opportunism as an explanatory device within transaction cost economics. For him, the question is not whether certain behavior does or does not qualify as self-interest seeking with guile. Instead, he argues that we should assume that it is possible or even likely that people will act opportunistically, that we should understand governance structures as devices to deal with opportunism and that we must limit the room for opportunistic behavior in order to reduce transaction costs. Or as he puts it:

_Taken together, the overall import of bounded rationality and opportunism for transaction cost economics is this: organize transactions so as to economize on_
bounded rationality while simultaneously safeguarding the transactions in question against the hazards of opportunism.\textsuperscript{125}

To police opportunism with legal rules, we would need a definition of guile. Which measure of strategic behavior should the law allow in order to economize on transaction costs? As Macneil points out, self-interest maximization is, in principle, not problematic in a capitalist society.\textsuperscript{126} Quite the reverse: the principle of self-interest maximisation is at the core of the capitalist model.\textsuperscript{127} Williamson indeed accepts this. As explained above, neoclassical economics assumes humans to be self-interest seeking in its simple form. Neoclassical man pursues his own interest openly. He reveals his position if enquired upon, gives accurate statements, follows the rules and can be kept to his promises. The problematic point from the viewpoint of transaction cost economics is not self-interest seeking, but guile.

In contract law theory, some writers have tried to define opportunistic behavior. The recurring theme in this literature is that the opportunist misuses the contract, while such misuse is hard to prove or control either ex ante or ex post. Cohen defines opportunism in the contractual context as "any contractual conduct by one party contrary to the other party's reasonable expectations based on the parties' agreement, contractual norms, or conventional morality."\textsuperscript{128} Macneil in turn defines opportunism as: "[s]elf-interest seeking contrary to the principles of the relation in which it occurs."\textsuperscript{129} Mackaay uses a similar definition.\textsuperscript{130} All three authors take as a standard what parties could normally look forward to: with reference to something more than just the contract, such as principles or conventional morality.

Cohen, Mackaay and Macneil use their definition in relation to contract law. What a party ‘could normally look forward to’ should, according to Mackaay, be determined by the parties’ agreement, contractual norms and conventional morality. If we were to define opportunism in the context of the legal domain, it might be defined as irregular or surprising behavior, using or evading the law to the advantage of the opportunist in such a way that is not intended by the law, whilst avoiding legal devices in place to deter such behavior.\textsuperscript{131} In other words, the opportunist takes advantage of loopholes in the law or loopholes in the enforcement of the law. Therefore, opportunistic behavior often is not considered ostentatiously unlawful. Sometimes on the other hand, opportunistic behavior clearly is unlawful, but is simply too hard or costly to control. Whether it is actually lawful often depends on ex post decision-making powers of the courts. It has in this context been argued that opportunism is controlled by open norms in the law.\textsuperscript{132} However, open norms can also be exploited by opportunists.

Defining which behavior is opportunistic and should thus be policed with legal rules, is an indeterminate undertaking. That is exactly the point Williamson makes. Contract law rules often use open norms to police for opportunistic behavior. The content of such open norms is by definition indeterminate and can in turn be exploited by opportunists.

\textsuperscript{125}Williamson 1996, p.48.  
\textsuperscript{126}Macneil 1981, p.1023.  
\textsuperscript{127}Friedman 1970.  
\textsuperscript{128}Cohen 1992, p.957.  
\textsuperscript{129}Macneil 1981, p.1024.  
\textsuperscript{130}Mackaay 2012, p.117.  
\textsuperscript{131}Compare Ayotte and Hansmann, 2013, p. 25  
\textsuperscript{132}Mackaay 2012.
Therefore, complex governance structures are devised to deal with opportunism. Much of the
body of corporate law rules can be understood as creating and regulating such governance
structures. Thus, much of corporate law can be understood with reference to opportunism, or as
Kraakman et al put it:

"Most of corporate law can be understood as responding to three principal sources of
opportunism that are endemic to such organization: conflicts between managers and
shareholders, conflicts between controlling and non-controlling shareholders, and conflicts
between shareholders and the corporation’s other contractual counterparties, including
particularly creditors and employees. All three of these generic conflicts may usefully be
characterized as what economists call “agency problems.”"

In short, opportunism is not easily policed with legal rules that aim to single out opportunist
behavior in a debtor-creditor relationship. To curb opportunism at its roots, the incentive
structure should be addressed by elaborate governance designs. Law does of course play an
important role in shaping and regulating such governance designs. As we shall see below, the
guarantee relationship may act as such a governance structure, but in turn also creates openings
for opportunism.134

3.4 Transaction Cost Economics and the guarantee relationship

The guarantee relationship, especially one involving an insider as guarantor, can usefully be
understood as a governance structure aimed at curbing opportunistic behavior in the underlying
relationship. As with any governance structure, this may lead to efficient results, but can also
have its downsides. No governance device is perfect.135 This thesis studies the guarantee
relationship as a governance structure, from the Transaction Cost perspective. When is this
governance structure fruitful and when is it not? What are the side-effects of this governance
structure?

Indeed, some of the existing literature assumes the function of the insider guarantee relationship
to be a governance device to curb opportunistic behavior of both the debtor and the insider
guarantor, whereas other literature shows the guarantee relationship entails room for
opportunistic behavior towards weak debtors or guarantors and more complex forms of
opportunistic behavior towards parties outside the guarantee relationship.136 As Mann puts it:

“all of those mechanisms [including the guarantee relationship, AJ] (...) can be analyzed
most clearly by reference to a single theme, the bond-like transaction described in Oliver
Williamson’s seminal paper on the use of hostages in relational contracting”138

The discussion of opportunism above has shown that curbing opportunism can be essential from
an economic perspective, as opportunism is value destroying. Moreover, general open norms are

133 Compare Kraakman et al., 2017, pp. 2–3.
134 Compare Mann, 1999.
135 Compare Hart and Grossman, 1986, p. 693: “We will argue that, if one party gets rights of control, then this diminishes
the rights of the other party to have control. To the extent that there are benefits of control, there will always be potential
costs associated with removing control (i.e., ownership) from those who manage productive activities”.
137 See for example Squire, 2011; Mackaay and Parent, 2013.
138 Mann, 1999, p. 2228; see also Baird, 1994a, p. 2263.
often unable to control opportunism, which presses the importance of well-structured governance systems.\textsuperscript{139} Indeed, much of the body of corporate law rules can be understood with reference to opportunism.\textsuperscript{140} In as far as the guarantee relationship would indeed be able to act as a governance device to curb opportunism, the analysis of opportunism above shows this would positively influence efficiency.

However, complex opportunities for opportunism in using the guarantee relationship, often in combination with limited liability, may undo this gain.\textsuperscript{141} The guarantee relationship could be used to the detriment of weak guarantors. Not only weak guarantors are however at risk. The guarantee relationship can also be used to act opportunistically towards and create externalities for outsiders to the relationship. Especially the latter point has not been researched comprehensively. In order to address the central theme of this book, how legal systems should regulate guarantees in corporate finance, such a comprehensive picture of the guarantee as a governance structure is necessary. Thus, the focus is both on how the guarantee relationship is able to curb opportunistic behavior, as well as on the guarantee relationship as a vehicle for opportunistic behavior.

3.5 Summary

In this paragraph, the choice of a transaction cost approach to the guarantee relationship has been explained. The insider guarantee relationship has been identified in economic literature as a device (or: governance structure) to curb opportunistic behavior. However, no governance device is perfect. At the same time, the guarantee relationship may be used instrumentally in complex forms of opportunistic behavior. By using the concept of opportunism, this thesis focuses both on the efficiency gains of guarantees and on the externalities that guarantees in corporate finance can create.

4 Conclusion

This thesis is focused on the research question:

\textit{How should opportunistic use of the guarantee relationship in the context of corporate finance be regulated?}

To answer that question, this book uses a method of \textit{comparative law and economics}. Using economic insights, the objects to compare within US, German and Dutch law will be identified. After a description of the individual systems and comparison, the results will also be evaluated using economic insights.

This chapter has defended the use of a method of comparative law and economics. The functional method of comparative law itself does not provide the tools to define a problem that

\textsuperscript{139} See also Mann, 1999, pp. 2226–2227.
\textsuperscript{140} Kraakman \textit{et al.}, 2017.
\textsuperscript{141} Compare also Freedman, 2000, p. 338.
the comparatist wants to take as the tertium comparationis, neither does it provide a method for measuring or predicting the effects of legal rule on this problem, nor does it provide a way to systematically evaluate the results of comparison. Where functional comparatists often resort to common sense or intuition to perform these tasks, this book chooses to let these tasks be performed by economic analysis.

Economic analysis is often criticized. The choice for using economic analysis is made exactly because claims made from an economic perspective are often, even viewed from within economic analysis, doubtful. Because efficiency claims are plentiful and often over-simplistic, this research offers a detailed analysis, including questioning those claims. The choice for efficiency as a yardstick is however defensible particularly in this field of research: the guarantee relationship in corporate finance, in which field much of the tensions and dynamics are economic in nature. By focusing on opportunism and the externalities created by opportunism, the aim of this thesis is to serve as a critique from within mainstream economic theory, without claiming the superiority of mainstream economic theory over other approaches. Moreover, economic insights may, apart from supporting the comparative analysis, themselves be refined by being applied in the specific contexts of the legal systems studied.

Within economic theory, this thesis focuses on transaction cost economics and particularly on opportunism. The insider guarantee relationship has been identified in economic literature as a device (or: governance structure) to curb opportunistic behavior. However, no governance device is perfect. At the same time, the guarantee relationship may be used instrumentally in complex forms of opportunistic behavior. In order to address the central theme of this book, how legal systems should regulate insider guarantees, a comprehensive picture of the guarantee as a governance structure is necessary.