AN ECONOMIC ANALYSIS OF THE PREVENTIVE ADMINISTRATION OF JUSTICE IN CIVIL LAW COUNTRIES

Im Auftrag der

Bundesnotarkammer
erstattetes Gutachten

von Rechtsanwalt Professor Dr. Emanuel V. Towfigh
unter Mitarbeit von Dr. Jens Frankenreiter, LL.M. (Harvard)

AN ECONOMIC ANALYSIS OF THE PREVENTIVE ADMINISTRATION OF JUSTICE IN CIVIL LAW COUNTRIES

Im Auftrag der

Bundesnotarkammer
erstattetes Gutachten

von Rechtsanwalt Professor Dr. Emanuel V. Towfigh
unter Mitarbeit von Dr. Jens Frankenreiter, LL.M. (Harvard)

Januar 2020

Abstract

This Expert Opinion examines the preventive administration of justice in civil law countries from an economic point of view. In many countries with a civil law tradition, the role of the judiciary is not confined to solving conflicts after they occur. Instead, courts and other government actors assist individuals in structuring their legal relationships in an attempt to help avoid future conflict and increase legal certainty. In some cases, the involvement of such government actors is mandatory. The focus of this Expert Opinion is whether any mandatory form of the preventive administration of justice must be regarded as inefficient "per se", because it prevents private parties from ordering their affairs in a free—and thereby—efficient manner. It shows that there are market failures that make it unlikely that a system relying exclusively on the market could produce the same quality of information in public registries that is guaranteed by preventive administration of justice in countries like Germany. Therefore, mandating the involvement of government actors in private contracting can be efficient. The Expert Opinion also briefly surveys the empirical literature related to the preventive administration of justice. It finds that, contrary to some claims in the literature, there is no conclusive evidence that preventive administration of justice is inefficient.

Table of Contents

EXECUTIVE SUMMARY

I. This Expert Opinion provides an economic assessment of preventive administration of justice as it exists in many civil law countries, among them in Germany. In these systems, government actors are involved in structuring the legal relationship between private actors. For example, German company law mandates that civil law notaries be involved in the foundation as well as a range of other transactions throughout the life of a corporation. These rules, for one, are meant to protect unsophisticated parties from the consequences of ill-informed decisions in the context of such transactions. At the same time, the involvement of government actors plays a critical role in producing the information that is made publicly available in company and land registers. These registers provide valuable information to parties of any future transaction that involve a given corporate entity or piece of land; in particular, it allows them to learn about any right that could affect the outcome of such a future transaction.

II. While only few contributions in law and economics have provided an in-depth assessment of elements of preventive administration of justice,

many observers in this tradition seem to regard these rules as inefficient impediments to private transactions. This view is not limited to academics writing in this tradition. An important example of policy reports taking a similar stance are the *Doing Business Reports* published by the World Bank, which openly advocate for the abolishment of any mandatory review of transactions leading to the establishment of a corporation by government actors. Those critical of rules mandating the involvement of government actors in private transactions seem to rely on two different types of arguments.

II.i The first type of argument is theoretical in nature. Starting from the assumption that private agents are rational actors who do not only act in line with their preferences, but are also able to accurately understand the consequences of their actions, they trust the market to lead to efficient outcomes. In other words, they presume that private actors are able to make the decisions necessary to structure their legal affairs in a way that maximizes their own utility, and that if left unchecked, a market will maximize the aggregate welfare of all actors involved. In this view, mandatory rules for private transactions are not only unnecessary to achieve beneficial outcomes; rather, because they make it impossible for at least some private actors to approach transactions in their favorite way, such rules may impose costs on private actors. In the context of the foundation of corporations, these costs prevent at least some actors from engaging in socially desirable economic activity.

II.ii The second argument builds on empirical investigations of the relationship between rules setting up requirements for starting a business, and real-world outcomes such as the number of business incorporations per year. A number of studies show that countries in which it takes longer to establish a business tend to fare worse on these outcome measures, a finding which is interpreted to show that simplifying entry regulation would bring about beneficial effects.

III. In principle, it seems possible to counter these arguments from at least three different points of view.

III.i First, one could argue that the welfarist normative framework relied

upon by the critics of the preventive administration of justice is ill suited to evaluate legal institutions. According to this line of reasoning, legal systems are not only tasked with increasing the total welfare of a society, but instead should also achieve other goals such as foster transparency and fairness as well as protect individuals against decisions they might later regret.

III.ii Second, staying within the normative framework relied upon by the critics of the preventive administration of justice, one could question the assumption that individuals generally act in a way that increases their utility. In fact, in recent decades the emerging field of Behavioral Economics has shown that individuals suffer from various systematic biases that cause behavior that is seen by many as inconsistent with the rational actor model. Without the assumption that market participants act generally in a rational manner, however, the market mechanism cannot be relied upon to produce efficient outcomes.

III.iii This Expert Opinion follows yet another, third approach. It shows that, even under standard assumptions commonly used in the economic analysis of law, institutions such as the preventive administration of justice can still lead to outcomes that are superior to legal systems that impose no constraints on private transactions. The fact that this Expert Opinion operates within the standard framework of law and economics does of course not imply that this framework is more adequate than any of the alternative approaches. Rather, it shows that, even if one were to adopt a welfarist framework and assume that agents generally act rationally, other systems do not produce outcomes that are superior to those achieved by the preventive administration of justice.

IV. The main reason for the potential of the preventive administration of justice to yield beneficial outcomes is that such a system has the potential to make available to the public (in particular, in the form of company and land registers) information about prior transactions that is valuable to any actor considering to contract with another actor who has previously engaged in another transaction the scope of which might affect the outcome of a later

transaction. Examples of such situations include the purchase of real estate for which conflicting rights might exist, and the purchase of shares in a corporation that might suffer from legal flaws.

It is important to note, however, that the fact that the preventive administration produces valuable information on its own is insufficient to justify the mandatory involvement of government actors in private transactions.

IV.i After all, if such information is valuable to anybody who voluntarily engages with the parties to the original transaction, it can be argued that these parties have an incentive to invest in producing similar high-quality information, for example by hiring experts to assess the legal implications of a transaction.

IV.ii Against this background, this Expert Opinion shows that there is a strong argument to be made that the information produced by the preventive administration of justice is of considerably higher quality than the information produced by a system in which transacting parties can effectuate similar transactions without the involvement of government actors. The reason for this is that the costs of a decision not to undergo a review of the kind mandated by the preventive administration of justice are partly borne by parties who never enter into contractual relationships with the parties of the original transaction. In other words, this situation gives rise to an externality which renders it unlikely that the decisions by party whether to undergo such a review lead to efficient results. Tellingly, in many legal systems that do not have a system akin to the preventive administration, a purchaser in the situations outlined above usually has to expend considerable resources on conducting a due diligence and obtaining insurance, while similar expenditures are usually unnecessary in systems that feature a preventive administration of justice.

V. Besides, this Expert Opinion documents that the available empirical evidence is insufficient to conclude that the preventive administration of justice in corporate law leads to worse economic outcomes than systems that do not require the involvement of government actors in the establishment of corporations.

VI. In sum, therefore, this Expert Opinion finds that there is no compelling reason to conclude that legal systems which include a preventive administration of justice are inferior to their counterparts which focus exclusively on adjudicating disputes after they arise. Any policy recommendation to abolish important elements of the preventive administration of justice in their entirety cannot be justified.

TECHNICAL SUMMARY

Civil law and common law countries differ on many dimensions, among them the role government institutions play in private contracting. While private actors in common law countries generally enjoy a high degree of freedom in how they want to arrange their contractual relationships with others, many countries from a civil law tradition have what this Expert Opinion defines as forms of a preventive administration of justice: in such systems, government actors assist individuals in structuring their legal relationships in an attempt to help avoid future conflict and increase legal certainty; in some cases, the involvement of such government actors is mandatory. This Expert Opinion examines from an economic point of view whether there are reasons to believe that one of these systems is preferable over the other.

1. Focus of the Analysis

1.1 While preventive administration of justice plays a role in various areas of the law in civil law countries, this Expert Opinion focuses on corporate law, and it uses the example of Germany to illustrate the workings of the preventive administration of justice. However, most of the insights gained from this analysis are

likely to be applicable to other jurisdictions as well.[1]

1.2 In line with most of the literature in (normative) law and economics, this examination uses a welfarist framework. This means that a policy is considered desirable if it is efficient, i.e. if the sum of the benefits accruing to all individuals affected by this policy minus the sum of the costs imposed on individuals exceeds that of all alternative policies. Besides, the analysis provided herein is based on a rational-actor model. Accordingly, we do not argue that the involvement of notaries is justified because it helps overcome biases and other deficiencies in their decision-making.[2]

2. Background of the Examination

2.1 In Germany, the preventive administration of justice falls primarily into the domain of the courts and the civil law notaries, public officials whose task it is to assist individuals and other private actors in the structuring of their legal relationships with others. Different from private providers of legal services, both these actors have to maintain strict neutrality in fulfilment of their tasks. Preventive administration of justice is usually not provided to private actors for free. Instead, for example, courts as well as civil law notaries in Germany charge a fixed fee for their services, which depends on various factors including the value of the transaction, and which can be substantial.[3]

2.2 Civil law notaries play an important role in all kind of corporate affairs in Germany, including in the establishment of new corporations as well as in most legal acts that bring about important changes to a corporation, where their involvement is mandated by the law. For example, they are involved in all major transactions throughout the lifespan of a *Gesellschaft mit beschränkter Haftung* (private limited company), and

[1] Section I.1.

[2] Section III.1.

[3] Sections II.1.i, II.1.iii.

they are responsible for coordinating all communications between private parties and the company register.

2.3 The fact that the establishment of new corporations in particular requires the assistance of a civil law notary is treated by some in the law and economics literature as a source of inefficiencies. Similarly, this is an important factor responsible for Germany's comparably low ranking in the "Starting a business" category in the Doing Business Reports published by the World Bank. However, the parts of the literature in law and economics which are critical of the preventive administration of justice as well as the Doing Business Reports almost exclusively focus on the cost and effort caused by the involvement of the civil law notary in the establishment of new corporations, and ignore any potential benefits from such a rule.[4]

3. Normative Framework

3.1 In fact, there are strong arguments to posit that preventive administration of corporate law produces a range of benefits for the parties to a contract as well as for the public at large: it generates evidence about the existence and scope of certain transactions that is made publicly available, and, because of the legal assessments involved, it reduces the probability that the public obtains misleading information.[5]

[4] Section II.2.

[5] Sections III.2.iii, IV.2.i(2).

3.2 However, from an economic point of view, these considerations on their own are insufficient to justify mandatory rules requiring the involvement of government agencies in private contracting. The reason for this is that such rules can only be justified if similar results cannot be achieved (or can only be achieved at a higher cost) in a system in which the involvement of government agencies is optional for parties to a transaction, or where market participants offer services which provide a substitute for the information and evidence which is produced through the mandatory involvement of government agencies. In other words, mandatory forms of the preventive administration of justice can only ever be considered efficient if it can be shown that there is a market failure that makes it impossible for parties to set up an equivalent system by way of contracting.[6]

4. Justifications for Rules Requiring the Involvement of Government Agencies in Private Transactions

4.1 Parts of the literature in law and economics in fact seem to assume that private actors are in principle always able to structure their contracting activities in an efficient way. If this were true, it would make sense to dismiss any mandatory forms of the preventive administration of justice as inefficient. However, the pervasiveness of institutions such as land registers and company registers suggests that there are at least some situations in which the market on its own is not able to provide the institutions needed to enable efficient transactions. Just like the preventive administration of justice, rules mandating the publication of certain transactions in public registers are in essence rules requiring private actors to involve government agencies in their transactions. Also, the same rationale that justifies mandatory publication requirements can also be relied upon to show that there

[6] Sections III.2.iii(1), III.2.iii(2).

are certain circumstances under which it can be efficient, for example, to mandate the involvement of civil law notaries in private transactions.[7]

4.2 It seems reasonable to assume that public registers are required to solve a particular market failure which is prevalent in impersonal exchange relations. This market failure is caused by the fact that it is impossible for private parties to create, by means of contracting, the institutional foundations needed to allow for efficient impersonal transactions while at the same time allowing for high levels of division of labor. In other words, at the core of this argument is the assumption that there is a fundamental tradeoff between transaction costs and agency costs, which cannot be solved by private actors on their own.[8]

4.2.1 To understand this tradeoff, consider first that, in order to protect principals in agency relationships from the consequences of certain adverse actions of their agents, it makes sense to sometimes limit the power of the agent to enter into transactions which run counter to the interest of the principal. In order to do so, one would have to allow principals and agents to agree in advance on precise conditions for when an agent can enter into a transaction which affects the interests of the principal. At the same time, in order to allow for efficient market transactions, it makes sense to design the legal system in a way that reduces transaction costs, including any costs related to uncertainty of a third party about the existence and nature of any previous transaction of an agent that might affect the outcomes of the transaction at hand. The most effective way to achieve this goal would be not to enforce any previous transaction between the agent and a principal that is not disclosed by the agent, even if that means ignoring the interests of the principal. From this description, it is immediately evident that some potential solutions to the problems of agency costs and

[7] Section IV.1.

[8] Section IV.1.i.

transaction costs are fundamentally at odds with each other.[9]

4.2.2 It is important to note that this tradeoff is fundamentally connected to the availability of information about the actions of the agent. If the principal was able to monitor the actions of the agent in subsequent transactions at no cost, she could step in to prevent the agent to enter into any unwanted transactions. If the third party was able to obtain and process a complete record of all previous transactions by the agent, she would be able to discern whether the nature of these transactions limited the power of the agent to enter into the transaction at hand. This insight also implies that this apparent dilemma can at least partly be solved by increasing the flow of information between parties to sequential transactions. Put very simply, this argument is akin to saying that it is overall cheaper to produce publicly available information about the first transaction at the moment that this transaction is executed, than it would be for every third party to recover this information for herself in preparation of a potential transaction with the agent.[10]

4.3 However, there are reasons to believe that it cannot be left to the principal and the agent to decide whether and how they want to provide the public with information about their transaction. Most importantly, a third parties' transaction costs will only be substantially reduced if information about all previous transactions affecting her interests is made public. If principals and agents are free to choose whether to publish details about their transactions, however, it seems reasonable to assume that some will decide against such publication. Then, even if a prospective third party finds that some information on previous transactions has been published, she has no way to know whether there are other transactions which affect the outcome of her own dealings with the agent. At the same time, the incentives of

[9] Section IV.1.i.

[10] Section IV.1.ii(1).

principals and agents to publish information about their transactions will be limited, because their decision to publish is going to have only a marginal effect on the transaction costs encountered by third parties who later contemplate a transaction with the agent. In other words, only a system of mandatory disclosure has the potential to solve this problem, because a decision not to disclose a transaction imposes a negative externality on other market participants who are involved in similar transactions.[11]

4.4 Many legal systems solve the tradeoff between agency costs and transaction costs by allowing parties to enter into agreements creating rights with *in rem* effect, legal positions which allow the principal to either lay claims against the third party or defend herself against a claim by the latter, while imposing relatively strict substantive and formal requirements for the creation, modification and transfer of such rights. Among the formal requirements are rules ensuring that information about such transactions is made available to the public. This mandatory disclosure of information limits the information costs of third parties in later transactions who want to inquire about the existence and scope of any prior agreements which could affect their rights, and government agencies like public registers play an important role in providing this kind of information about certain types of transactions.[12]

5. The Efficiency Rationale Behind the Preventive Administration of Justice

5.1 Considerations similar to those justifying the mandatory use of public registries in certain transactions also provide an important efficiency rationale for many important aspects of the preventive administration of justice in corporate law as it exists in Germany. More precisely, the preventive administration of justice provides third parties who are not a party to the transaction with highly reliable information about

[11] Section IV.1.ii(2).

[12] Section IV.1.iii.

rights with *in rem* effect which would be costly to acquire by the third party itself. The preventive administration of justice contributes to more useful information in at least three ways. First, for all or at least most transactions giving rise to *in rem* rights, it ensures that these transactions were in fact agreed upon by all parties who appear as signatories. Second, it also ensures that any transaction or corporate act in fact brings about the effects that are recorded in the company register. Finally, and related to the second point, the preventive administration of justice also provides a safeguard against the registration of acts that are invalid or can later be nullified because of problems relating to defects in their adoption.[13]

5.2 At first glance, it might seem possible to argue that, if the benefits of the preventive administration of justice in fact outweighed its costs, it would be unnecessary to mandate the use of these institutions. This is because the higher benefits would induce rational parties to corporate transactions and authors of other corporate acts to provide only high-quality information to corporate registers anyway, either by opting into using the preventive administration of justice, or by purchasing the services of private providers which essentially performed the same function. Note that it is not sufficient to debunk this argument by pointing to the fact that the parties bearing the costs of producing high-quality information (the principal and the agent) are different from the party bearing the costs of low-quality information (the third party), and that the latter is not at the table when the decision on whether to produce high-quality information is taken. The reason for this is that a third party should be willing to pay a higher price to interact with a business organization providing high-quality information about any *in rem* rights of interest to the third party, allowing the parties to the first transaction to more than recoup their investment in high-quality information.[14]

[13] Section IV.2.i.

[14] Section IV.2.i(3).

5.3 However, this argument wrongly assumes that all costs of a decision not to undergo a review of the kind mandated by the preventive administration of justice are borne by parties who at one point enter into contractual relationships with the parties who decide on the level of quality of the information. In other words, it overlooks an important externality caused by such a decision.[15]

5.3.1 The basic reason for this externality is that, if only some business organizations operating in a market opt to use the preventive administration of justice, a party willing to engage in a transaction with such a business organization does not know in advance the type of business organization she encounters. A party looking to rely on the protections against uncertain *in rem* rights provided by the preventive administration of justice first has to invest in information about whether all previous transactions were in fact concluded in front of a notary. If she finds that the preventive administration was not used for all transactions recorded, she has to consider whether the presence of individual recordations in which no civil law notary was involved threaten the validity of other transactions. In sum, the uncertainty about the nature of the business organization will likely cause substantial increases to all parties interacting with this kind of business organization.[16]

5.3.2 As a consequence, it seems reasonable to assume that only mandatory rules of the kind described above can achieve a substantial reduction in transaction costs related to uncertainty about the existence and scope of *in rem* rights.[17]

5.4 In sum, this theoretical analysis shows that there are indeed market failures that make it highly unlikely that a system relying exclusively on the market could produce the same quality of information in public registries that is guaranteed by the preventive administration of justice in countries like Germany. This implies

[15] Section IV.2.i(3).
[16] Section IV.2.i(3).
[17] Section IV.2.i(3).

that there are situations in which mandating the involvement of government actors in private contracting can be efficient. It is impossible to determine on the basis of a purely theoretical analysis, whether the preventive administration of justice or legal systems that rely exclusively on an ex-post review of the legality of transactions are superior.[18]

6. A Brief Survey of the Empirical Literature

6.1 As the theoretical analysis fails to produce conclusive evidence about the efficiency of the preventive administration of justice, this Expert Opinion also addresses the question whether there is empirical evidence available which would elucidate whether the benefits of the preventive administration of justice outweighs its costs.[19]

6.2 We survey two streams of literature. The first stream consists of cross-country studies investigating correlations between the time and effort needed to set up a limited liability company in a given jurisdiction, and real-world outcomes such as the number of business incorporations per year. This literature generally documents that higher costs as well as more and lengthier proceedings are correlated with worse real-world outcomes. Generally, researchers involved in these studies interpret these findings as evidence that simplifying entry regulation would bring about beneficial effects. However, there are various reasons why such research is unable to answer the question whether the preventive administration of justice, as it exists in countries such as Germany, has detrimental effects on the outcome variables used in this research.[20]

6.3 The second stream of literature investigates the consequences of a string of decisions by the European Court of Justice allowing entrepre-

[18] Sections IV.2.i(5); V. Note that it is beyond the scope of this Expert Opinion to examine whether the preventive administration of justice in Germany could be redesigned in a way that would allow it to bring about the same benefits at a lower cost.

[19] Section IV.2.ii. Note that a full review of the empirical literature is beyond the scope of this Expert Opinion.

[20] Section IV.2.ii(1).

neurs in all countries in the European Union to incorporate their companies in other jurisdictions. Early research documented that, following these decisions, a substantial number of companies operating in other member states were incorporated in the UK, which has comparably little entry regulation and in particular does not have a system comparable to the preventive administration of justice. This was interpreted by some as evidence that lower levels of entry regulation are desirable. However, there are again various reasons why this literature cannot be read as evidence showing that the preventive administration of justice produces inefficiencies. Most importantly, subsequent research focusing on companies operating in Germany and Austria found that the trend to switch to companies incorporated in the UK lasted for a short period of time only. These findings indicate that the vast majority of German and Austrian entrepreneurs, after gaining a better understanding of the relative costs and benefits of incorporating companies in either jurisdiction, came to the conclusion that any benefits of the UK system were not enough to justify the costs of incorporating there.[21]

6.4 In sum, contrary to some claims in the literature, we find no conclusive evidence that the preventive administration of justice is inefficient. By contrast, the existing empirical literature might allow for a more modest conclusion that points in the opposite direction: even if the costs of the preventive administration of justice are higher than its benefits, this difference must be relatively small. Otherwise, more entrepreneurs would have used the opportunity to establish companies in the UK not only in the years following the relevant decisions by the European Court of Justice, but also in the years since.[22]

[21] Section IV.2.ii(2).

[22] Section V.

I. INTRODUCTION

This Expert Opinion examines the preventive administration of justice in civil law countries from an economic point of view. Civil law and common law countries differ on many dimensions, among them the role government institutions play in private contracting. While private actors in common law countries generally enjoy a high degree of freedom in how they want to arrange their contractual relationships with others, many countries from a civil law tradition have what this Expert Opinion defines as forms of a preventive administration of justice: in such systems, government actors assist individuals in structuring their legal relationships in an attempt to help avoid future conflict and increase legal certainty; in some cases, the involvement of such government actors is mandatory. This Expert Opinion examines the question whether there are reasons to believe that one of these systems is preferable over the other.

1. Scope of this Expert Opinion

While the preventive administration of justice plays a role in various areas of the law in civil law countries, this Expert Opinion focuses on corporate law. Of course, there is no one model of the preventive administration of justice in corporate law, and the rules and institutions in different countries might vary widely. This Expert

Opinion uses Germany to illustrate the workings of the preventive administration of justice. However, most of the insights gained from this analysis are likely to be applicable to other jurisdictions as well.

In its analysis, this Expert Opinion puts a focus on those elements of the preventive administration of justice which impose mandatory requirements to the parties of certain transactions. Naturally, not all systems which fall under the definition of the preventive administration of justice above have such elements. However, the economic implications of such a system would be very different from a system with mandatory elements. The main reason for this is that, from the point of view of the economic analysis, one of the main concerns about mandatory rules is that they might impose costs on at least some parties which are not outweighed by their benefits. An opportunity to opt out of this system, by contrast, allows parties to avoid the costs of this system unless they perceive the benefits to be greater than these costs.[23] Of course, this does not mean that a voluntary system can never have any negative welfare effects. Rather, it seems possible that it wastes public funds in an inefficient manner, or that it distorts a market for the provision of certain legal services. However, these questions are different in nature from the question whether mandatory rules are inefficient because of their effects on the parties to a transaction, and it is beyond the scope of this Expert Opinion to cover these questions as well.

In line with most of the literature in (normative) law and economics, this examination uses a welfarist framework. This means that a policy is considered desirable if it is efficient, i.e. if the sum of the benefits accruing to all individuals affected by this policy minus the sum of the costs imposed on individuals exceeds that of all alternative policies. Besides, the analysis provided herein is based on a rational-actor model. Accordingly, we do not argue that the involvement of notaries is justified because it helps overcome biases and other deficiencies in their decision-making.

As part of its examination of economic implications of mandatory forms of the pre-

[23] See also Section III.2 below.

ventive administration of justice, this Expert Opinion addresses two questions in particular.

First, it asks whether any mandatory form of the preventive administration of justice must be regarded as inefficient "*per se*", because it prevents private parties from ordering their affairs in an efficient manner. The central insight behind this question is that, in order to show that mandatory forms of the preventive administration of justice can have positive welfare effects, it is insufficient to show that the preventive administration of justice produces something that is of value to the parties of a transaction, or to society as a whole. The economic analysis assumes that, as a matter of principle, rational parties are able to order their affairs in an efficient manner, and that such private ordering by way of contract usually also yields efficient results on a societal level. With respect to the preventive administration of justice, this implies that any efficiency-enhancing services which form part of the preventive administration of justice could also be provided by private service providers. And even if this was not possible, *prima facie* there would be no reason to make the use of these services mandatory. As a result, unless there are reasons that the benefits achieved through making the use of the preventive administration of justice mandatory cannot be brought about in a system relying on the voluntary use of such services and/or private service providers, mandatory forms of the preventive administration of justice can never be regarded as efficient.[24]

Therefore, instead of focusing on assessing the costs and benefits of any specific features of the preventive administration of justice, this Expert Opinion first and foremost addresses the question whether there are any market failures that would prevent an alternative system from reproducing any features of the preventive administration of justice which are considered beneficial by private parties. While the analysis concludes that there are in fact such market failures, and that it would therefore be misleading to dismiss the preventive administration of justice as inefficient solely on the basis that it does not allow parties to opt out, it should be noted that this in itself is no evidence that the preventive administration of justice in

[24] See also Section III.2.iii below.

Germany is efficient. Rather, the preventive administration of justice seems to cause both benefits and costs, and it is arguably impossible to determine on the basis of a purely theoretical analysis whether the total benefits of such a system outweigh its costs. Similarly, it is beyond the scope of this Expert Opinion to examine whether the preventive administration of justice in Germany could be redesigned in a way that would allow it to bring about the same benefits at a lower cost.

Second, this Expert Opinion briefly surveys the empirical literature in order to determine whether there is evidence available which would elucidate whether the benefits of the preventive administration of justice outweighs its costs.[25] Such empirical evidence, in principle, could come in two forms: on the one hand, the evidence could show whether the preventive administration of justice causes economies to perform better or worse than others; on the other hand, there could be evidence whether entrepreneurs prefer to incorporate in a system with or without a preventive administration of justice. As part of the analysis, this Expert Opinion also discusses the implications of the World Bank Doing Business Reports, which in their section on starting a business provide and evaluate data on entry regulation in numerous jurisdictions.

2. Outline of this Expert Opinion

This Expert Opinion is divided into three main parts, which are contained in Sections II-IV. Section II describes the factual background against which the analysis is set. It consists of two subsections. Section II.1 describes the preventive administration of justice in civil law countries in general and in Germany in particular. It provides some details on civil law notaries, and it describes the role that these actors play in corporate law in Germany. Section II.2 provides an overview on the law and economics literature on the preventive administration of justice and describes the data and findings in the World Bank Doing Business Reports in some more detail.

Section III lays out the normative framework used in this analysis. In particular, it describes why an examination of the preventive administration of justice from an

[25] A full review of the empirical literature is beyond the scope of this Expert Opinion.

economic point of view cannot just compare the costs and benefits from such a system. Instead, it shows that mandatory forms of the preventive administration of justice in particular can only be justified in case of a so-called market failure.

Section IV constitutes the core of this examination. It is divided into three subsections which deserve to be mentioned separately. Section IV.1 looks for an explanation why most jurisdictions around the world require parties to transactions to register their transactions with public registers. Following Benito Arruñada, we claim that these rules are important building blocks in enabling impersonal exchange while, at the same time, maintaining a high level of division of labor. Section IV.2.i applies this reasoning to the preventive administration of justice in corporate law in Germany. We claim that the same reasons that justify the mandatory use of public registers could also be invoked to justify the preventive administration of justice. The last subsection, Section IV.2.ii, surveys the empirical literature.

II. FACTUAL BACKGROUND

Civil law and common law countries differ on many dimensions, among them the role government institutions play in private contracting. In common law countries, parties enjoy a high degree of freedom in how they want to arrange their contractual relationships with others. This is somewhat different in many civil law countries, where certain types of transactions require the involvement of government institutions, often in the form of civil law notaries.

As we will describe in more detail below, the law and economics literature appears to understand rules requiring the involvement of civil law notaries in private contacting mainly as a source of inefficiencies. This understanding seems to be related to a general tendency in law and economics to be wary of the effects of mandatory rules, a tendency rooted in the belief that private parties can generally achieve an efficient ordering of their affairs by way of private contracting. Besides, one might speculate whether the reluctance towards institutions like civil law notaries is at least partly caused by the fact that many authors active in law and economics hail from common law countries, in which the role of notaries is very different, and which do generally not

have institutions comparable to the preventive administration of justice in civil law countries.

1. The Preventive Administration of Justice

i. General Considerations

While there is no single definition of the preventive administration of justice that would be universally accepted, this Expert Opinion, in line with most commentators in Germany,[26] defines the preventive administration of justice as any activity of a government actor that, by assisting individuals in structuring their legal relationships, helps avoid future conflict and increase legal certainty. In many civil countries, preventive administration of justice can be considered a "second pillar" of the legal system. While the traditional function of courts is to adjudicate disputes that have arisen between parties (*ex post*), the preventive administration of justice approach increases legal certainty by way of verifying the identity of parties to a transaction, as well as other facts, and providing an independent and oftentimes binding assessment of the legal consequences of a transaction at the time of its execution (*ex ante*).

There are various kinds of government actors that might be involved in the preventive administration of justice. In Germany, for example, the preventive administration of justice falls primarily into the domain of two different institutions: First, the responsibilities of courts extend beyond deciding disputes, and insofar as courts are involved in structuring the private relationship of individuals before a dispute arises, these activities are considered to be part of the preventive administration of justice. Examples of such activities include the maintenance of public registries, the appointment of conservators and guardians for disabled persons or minors, and other affairs.[27] Second, civil law notaries, whose most important task it is to assist individuals and other private entities in the preparation and execution of transactions and other legal acts, play an important role in the preventive administration of justice in Germany.

The fact that the preventive administration of justice is provided by government

[26] See only Nicola Preuss, Zivilrechtspflege durch externe Funktionsträger (2005), at 77-78.

[27] In Germany, these activities of courts together constitute the so-called freiwillige Gerichtsbarkeit (non-contentious jurisdiction).

actors implies that, these actors are under an obligation not to further the interests of one specific party. In fact, both court officials and civil law notaries are required by the law to remain neutral and objective, and this neutrality requirement applies even if a civil law notary is hired at the instigation of one party to assist them in a legal transaction.[28]

In the context of this Expert Opinion, it is important to note that parties in many cases are not free to choose whether they want to rely on the assistance of the various providers of the preventive administration of justice. For example, as will be described in more detail in Section iv below, parties to certain corporate transactions in Germany are not free to choose whether they want to be assisted by a civil law notary. Instead, the involvement of a notary often is a requirement for the transaction to be recognized as valid by the legal system. Most importantly, parties are not free to hire a private provider of services instead of the government agent acting as the provider of the preventive administration of justice.

It should also be noted that the preventive administration of justice is usually not provided to private actors for free. Instead, for example, courts as well as civil law notaries in Germany charge statutory fees for their services,[29] which depend on various factors including the value of an act or transaction. In combination with the fact that the preventive administration of justice is sometimes mandated by the law, this implies that certain transactions and other legal acts (among them, as we will describe in more detail in Section iv below, the foundation of a German limited liability corporation) can only be undertaken if the party is able to pay the required fees.

ii. Public Registries and Preventive Administration of Justice

The fact that, in systems prescribing preventive administration of justice, certain transactions have to be carried out under the auspices of government actors also has implications for the role of public registries in these jurisdictions. In civil law countries, the law oftentimes posits the presumption that rights which have been recorded in public registers as a result of

[28] See Section 14(1)2 of the Federal Notarial Code.

[29] For German notaries, see Section 17(1) of the Federal Notarial Code.

transactions following preventive administration of justice procedures are legally valid.[30] Similarly, the law in civil law countries provides far-reaching protections for third parties who rely on such information. For example, in Germany, a purchaser of real estate who relies on the information recorded in a land register will usually obtain full and indefeasible title to the land unless she had positive knowledge of a conflicting right,[31] rendering at times costly title insurance and legal due diligence on the part of the buyer largely unnecessary.

iii. The Role of Civil Law Notaries in Germany

As mentioned before, this Expert Opinion focuses on the role of the preventive administration of justice in private transactions, using corporate law in Germany as the primary example. Different from other areas of the preventive administration of justice, civil law notaries are the primary providers of the preventive administration of justice in this area. Therefore, it seems reasonable to describe their role in some more detail.

German notaries (like civil law notaries in many other civil law countries) are public officials[32] who enjoy a special status: They are usually fully trained legal professionals, they are appointed by the state and they are subject to disciplinary control like other public officials. At the same time, there are entrepreneurial elements to their work: Different from judges and other officials, notaries have to finance the operations of their office themselves. What is more, they have a right to a share of the fees from any transactions or legal acts in which they were involved. Notaries are assigned a specific district by the state; as a matter of principle, they can only exercise their office in this district.[33] However, this rule does not bar them from serving clients established elsewhere, as long as these clients are willing to travel to the notary's district.

As a matter of principle, parties can request that a notary records any kind of

[30] See, for example, Section 891 of the German Civil Code.

[31] Section 892 of the German Civil Code.

[32] See Section 1 of the Federal Notarial Code.

[33] Section 10, 10a of the Federal Notarial Code.

contract and any other legal act undertaken in Germany. A notary generally has no right to deny her services even if the fees do not cover the costs of her services.[34]

While notaries can therefore get involved in all kind of legal transactions, there are certain transactions for which their involvement is mandated by the law. Examples can be found in numerous areas of the law. They include prenuptial agreements,[35] contracts of inheritance,[36] and any legal acts which subsequently have to be entered into the land or company register. All these transactions often require complex agreements that entail substantial financial implications and long-term effects.

The involvement of a notary can take one of two main forms. In case of a *Beurkundung* (notarial recording) of a transaction, it is the duty of the notary to produce a written deed of the transaction. This deed is read aloud to the parties or their representatives, who have to be present in the notary's offices and, in case of representatives, have to present proper evidence of their power of representation. Subsequently, the parties or their representatives sign the deed in the presence of the notary. Such a deed is considered full evidence of the transaction by German courts in case of a dispute about the transaction concluded in front of the notary.[37]

Compared to the notarial recording, the second form is much simpler: A *Beglaubigung* (attestation of signature) just requires that the contract or act is produced in written form and signed by the party or parties in the presence of the notary, who verifies the identity of the signee(s).

While both forms of notarial involvement give rise to fees, a notarial recording is more expensive than an attestation of signatures.

[34] Section 15 of the Federal Notarial Code.

[35] Section 1410 of the German Civil Code.

[36] Section 2276 of the German Civil Code.

[37] Section 415 of the German Civil Procedure Code.

iv. Specifically: The Preventive Administration of Justice in Corporate Law in Germany

This Expert Opinion focuses on the preventive administration of justice in corporate law in Germany. Civil law notaries play an important role in all kind of corporate affairs in Germany, including in the establishment of new corporations as well as in most legal acts that bring about important changes to a corporation. There are various corporate forms available to entrepreneurs willing to establish a company, and the rules governing the involvement of notaries in transactions relating to these companies vary to some degree. For the sake of brevity, we focus here on the *Gesellschaft mit beschränkter Haftung (GmbH)* (private limited company), which is also referenced by the Doing Business Reports.[38]

Notaries are involved in all major transactions throughout the lifespan of a GmbH. The initial articles of incorporation have to be recorded by the notary,[39] which also takes care of applying for registration of the company with the company register after verifying that certain additional conditions[40] have been met. Later in the life of a company, any changes to its articles of association have to be recorded by the notary,[41] including the issuance of new capital.[42] As the transfer of shares in a GmbH also requires a notarial recording,[43] there is in principle no way to change the ownership in a GmbH without assistance of a notary.

It is not only changes to the articles of association and changes to the ownership structure which require the involvement of notaries. The same applies, for example, to any contract which includes an obligation to transfer shares.[44] The notary therefore serves as the one-stop-shop for

[38] See below Section II.2. As a general matter, it is not required to involve notaries to the same extent in setting up and running a general partnership or limited partnership. By contrast, there are many transactions and legal acts related to Aktiengesellschaften (public corporations) which require the involvement of notaries.

[39] Section 2(1)1 of the Law on the Limited Liability Corporation.

[40] Among other things, the notary verifies that the necessary amount of share capital has been paid in before the company is registered with the company register.

[41] Section 53(2)1 of the Law on the Limited Liability Corporation.

[42] See Section 55(1) of the Law on the Limited Liability Corporation.

[43] Section 15(3) of the Law on the Limited Liability Corporation.

[44] Section 15(4) of the Law on the Limited Liability Corporation.

any issues arising with establishing and modifying a GmbH.

The fact that notaries are the primary provider of the preventive administration of justice in corporate law does of course not mean that courts do not play any role in this area. Rather, insofar as transactions have to be registered in a company register, courts are involved in their capacity as the entities response for maintaining these registers. Different from company registers in other jurisdiction, courts play a rather active role. In particular, they are charged with verifying that the conditions for entering certain kinds of information into the company register are met. This includes, inter alia, a verification that all parties to a transaction or every person appearing as the actor of a corporate act was duly represented.

Note that, while many transactions that require notarial recordation are also subsequently entered into the company register (e.g., the company register contains a copy of the articles of association of limited liability corporations, which need to be updated in case of a change), there are also certain transactions and legal acts that only need to be registered in the company register. One example of such an act is the appointment of a new director of the corporation, or the dismissal of one of the existing directors. In such a case, any application to change the company register requires an attestation of signature by a notary.[45] As a result of these rules, there are no cases in which parties can request changes in the company register without the assistance of a notary.

In fact, the role of notaries in communications between the parties and the company registers is even bigger than that. Usually, all interactions with the company register are handled by the notary, who assumes responsibility for gathering the necessary documentation to effectuate an entry in the register. This allows the parties to save the effort that would be required in communicating with more than one government actor. In other words, notaries in these cases provide a one-stop-shop solution to parties, who would in the absence of a notary have to communicate directly with the courts.

[45] Section 12(1) of the Commercial Code.

v. Implications of the Liberalization of Corporate Law in Europe

Traditionally, any person intending to set up a company doing business in Germany had to choose a corporate form among the various alternatives available under German law.[46] This also implied that anybody looking to start a corporation had to rely on the service of a notary in setting up the company, and notaries also had to be involved in any later transaction for which their involvement was mandated by the law.[47]

This state of affairs changed as a consequence of a series of decisions by the European Court of Justice, which created an obligation for EU member states to allow corporations established in other member states to operate in their territory, and to apply to them the corporate law of the jurisdiction in which they were established.[48]

Since then, German entrepreneurs are de facto free to choose to incorporate their business organizations elsewhere.[49] This also implies that, although the involvement of notaries is still mandatory in many transactions involving corporations established under German law, entrepreneurs can to a large extent evade this obligation by setting up a corporation in another jurisdiction within the European Union.

[46] This was a consequence of the German conflict of laws rules in corporate law. Germany traditionally followed the so-called seat-of-management rule, which implied that any corporation which had business operations in Germany only was to be treated like a German corporation. As companies established in other jurisdictions usually did not satisfy the German requirements for the establishment of a corporation, they were treated as general partnerships by the courts.

[47] See Section II.1.iv above.

[48] European Court of Justice, Case C-212/97 Centros Ltd v. Erhvervs- og Selskabsstyrelsen [1999] ECR I-1459; Case C-208/00 Überseering BV v Nordic Construction Company Baumanagement GmbH [2002] ECR I-9919; Case C-167/01 Kamer van Koophandel en Fabrieken voor Amsterdam v Inspire Art Ltd [2003] ECR I-10155.

[49] A number of empirical studies have documented the degree to which German entrepreneurs have made use of this opportunity. Marco Becht, Colin Mayer and Hannes Wagner, European Company and Financial Law Review, 14 Journal of Corporate Finance 241 (2008); Wolf-Georg Ringe, Corporate Mobility in the European Union – a Flash in the Pan? An empirical study on the success of lawmaking and regulatory competition, 10 European Company and Financial Law Review 230 (2013).

2. The Treatment of the Preventive Administration of Justice in the Law and Economics Literature and the World Bank Doing Business Reports

i. The Law and Economics Literature

As a matter of principle, the law and economics literature is skeptical of mandatory rules. As stated before, this stance seems to be rooted in the belief that private parties can generally achieve an efficient ordering of their affairs by way of private contracting. In corporate law, this position has led some to argue against any form of mandatory rules.[50]

One of the most explicit treatments of civil law notaries in the law and economics literature can be found in a stream of literature kickstarted by a seminal contribution by Simeon Djankov and others.[51] Most of this literature uses cross-country datasets to analyze whether heavier regulation of entry is associated with real-world outcomes such as more or less entrepreneurial activity. In these analyses, rules requiring the involvement of civil law notaries in the foundation of companies are generally treated as part of the regulation which increases the burden of regulation on entrepreneurs, as they lead to both higher costs and longer times needed until a corporation can be found.

Generally, this literature finds that higher costs as well as more and lengthier proceedings are correlated with worse real-world outcomes, which is interpreted as evidence that it would be efficient to decrease the regulatory requirements entrepreneurs face when starting a company. The conclusion in this literature generally seems to be that the preventive administration of justice is inefficient at least insofar as it imposes burdens on entrepreneurs willing to start a company.

In recent years, Benito Arruñada in particular has attempted to counter this litera-

[50] See, e.g., Frank Easterbrook and Daniel Fischel, The Economic Structure of Corporate Law (1996).

[51] Simeon Djankov et al, The Regulation of Entry, 117 The Quarterly Journal of Economics 1 (2002). For an overview of research conducted until 2009, see Simeon Djankov, The Regulation of Entry: A Survey, 24 The World Bank Research Observer 184 (2009).

ture by explaining the involvement of government agencies in private contracting as a way to enable impersonal exchange.[52]

ii. The World Bank Doing Business Reports

The World Bank Doing Business Reports[53] were created as part of the same scholarly effort that also led to the publication of Djankov et al. (2002).[54] The publication makes data on business regulations in large numbers of jurisdictions available to researchers and the public on an annual basis. Data are provided in 11 categories, among them the category "Starting a Business". Besides data, the publication reports, for each country, a score and a ranking in each category, and calculates an overall "easy of doing business ranking".

Given the connection between the emergence of the doing business reports and the publication of Djankov et al (2002), it is not surprising that the Doing Business Reports generally favor less over more regulation. For example, the scores and rankings for the Starting a business category as well as a number of other categories are calculated solely on the time, effort and costs (including, in the case of Starting a business, paid-in mandatory capital) required to complete the administrative procedure(s) needed to achieve a certain goal, and countries are considered to have more "efficiency and quality of the business environment"[55] the fewer, quicker, and cheaper the proceedings are.[56] Also, countries are lauded for introducing "simplified preregistration and registration formalities".[57]

[52] Benito Arruñada, Institutional Foundations of Impersonal Exchange, 2012; Benito Arruñada Institutional Support of the Firm: A Theory of Business Registries, 2 Journal of Legal Analysis 525 (2010); Benito Arruñada, Property Titling and Conveyancing, Chapter 12 in: Research Handbook on the Economics of Property Law (Kenneth Ayotte and Henry Smith, eds., 2011).

[53] Available at https://www.doingbusiness.org/ (last accessed August 9, 2019).

[54] Simeon Djankov, The Doing Business Project: How It Started, 30 Journal of Economic Perspectives 247 (2016).

[55] World Bank, Doing Business 2019 – Training for Reform, available at https://www.worldbank.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2019-report_web-version.pdf (last accessed August 9, 2019) (2019), at 3.

[56] Note, however, that the scores in other categories also include measures for the quality of regulation. See World Bank, Doing Business 2019 – Training for Reform, available at https://www.worldbank.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2019-report_web-version.pdf (last accessed August 9, 2019) (2019), at 23.

[57] World Bank, Doing Business 2019 – Training for Reform, available at https://www.worldbank.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2019-report_web-version.pdf (last accessed August 9, 2019) (2019), at 17.

While Germany performs relatively well in the overall ranking,[58] it underperforms in the "Starting a business" category.[59] This outcome can at least partly be explained by the rules of the preventive administration of justice in Germany. Four different measures contribute to the score in the "Starting a business" category: the number of procedures needed to set up a company, the time required, the costs involved, and the paid-in minimum capital. Germany performs below the average of OECD high income countries on all dimensions except the second one. The comparably high costs are a direct function of the fact that the involvement of the civil law notary: In the sample calculation used in the report, the estimated costs for the involvement of the notary amount to more than EUR 2,200.[60]

It should be noted that the assessments in the report are based on the assumption that entrepreneurs use a GmbH as the corporate form. This assumption has a major effect on the ranking, because it is the sole reason why Germany scores comparably low on the paid-in minimum capital requirement dimension. While the GmbH was the only private limited liability company structure available in Germany until a couple of years ago, entrepreneurs now de facto can opt to use one among a number of alternative corporate structures which allow them to found a company with a substantially lower amount of paid-in capital. First, since 2008 it is possible to establish a version of the *GmbH* (called *Unternehmensgesellschaft* or *UG*) with a share capital of only EUR 1. Second, as described in Section 1.v above, since the decisions of the European Court of Justice in *Centros*, *Überseering* and *Inspire Art*,[61] entrepreneurs are de facto free to establish a corporation in another European jurisdiction should they wish to do so.

[58] In 2019, Germany was ranked number 24 in the world. World Bank, Doing Business 2019 – Training for Reform, available at https://www.worldbank.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2019-report_web-version.pdf (last accessed August 9, 2019) (2019), at 5.

[59] In 2019, Germany was ranked number 114 in the world in this category. World Bank, Doing Business 2019 – Training for Reform, available at https://www.worldbank.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2019-report_web-version.pdf (last accessed August 9, 2019) (2019), at 173.

[60] World Bank, Doing Business 2019, Economy Profile Germany, available at https://www.doingbusiness.org/content/dam/doingBusiness/country/g/germany/DEU.pdf (last accessed August10, 2019) (2019), at 7-8.

[61] European Court of Justice, Case C-212/97 Centros Ltd v. Erhvervs- og Selskabsstyrelsen [1999] ECR I-1459; Case C-208/00 Überseering BV v Nordic Construction Company Baumanagement GmbH [2002] ECR I-9919; Case C-167/01 Kamer van Koophandel en Fabrieken voor Amsterdam v Inspire Art Ltd [2003] ECR I-10155.

Furthermore, the Doing Business Reports do not take into account that the involvement of notaries and the requirements of preventive administrative justice in the process of starting a business reduce the steps necessary: They act as one-stop-shops and thus reduce the numbers of procedures necessary to set up a company.

III. NORMATIVE FRAMEWORK

This Expert Opinion attempts to answer whether the skepticism that parts of the literature in law and economics display towards the preventive administration of justice is warranted. In order to attain this, the Expert Opinion stays within the normative framework usually relied upon by law and economics. This implies that we analyze the preventive administration from an economic point of view, or in other words, that we use a welfarist framework in our analysis.

1. General Remarks

Under a welfarist framework, a policy is considered desirable if it is efficient, i.e. if the sum of the benefits accruing to all individuals affected by this policy minus the sum of the costs imposed on individuals exceeds that of all alternative policies. By contrast, the economic analysis does not strive to achieve outcomes that are considered “just” or “fair”. Rather, it assumes that, if the overall resources available to the members of a society grow over time, all its members will profit, even if some of them might at some point appear to lose.

The focus that the economic analysis puts on efficiency also implies that it is mostly concerned with predicting the behavior of

individuals under alternative policies.[62] The reason for this is that the sum of resources available in a society can only be changed over time, while any policy which changes the current distribution of goods is, at least insofar as it does not influence future behavior, efficiency-neutral.

Such predictions require a simplified model of the behavior of individuals in reaction to different circumstances. In theoretical economics, predictions are usually based on the rational-actor model. This implies, first, that economists commonly assume that individuals are driven by a desire to maximize their own utility. Second, the model also presupposes that individuals are able to understand the consequences of their actions (or at least are able to understand if they do not understand these consequences) and choose whichever option is best for them in any given circumstance.[63]

This Expert Opinion will also use the rational-actor model as the basis for its analysis. Accordingly, we do not argue that the involvement of notaries is justified because it helps overcome biases and other deficiencies in their decision-making. This does not imply that we believe that the rational-actor model is an accurate description of reality. In fact, the behavioral economics movement has shown that, in many cases, the rational-actor model is empirically wrong.[64] Also, it seems well possible that there are at least some cases in which deficiencies in the decision-making of individuals cause the outcome of private contracting to be suboptimal, and that these results could be corrected by means of the involvement of a notary.[65] However, we believe it is worth asking whether it is possible to identify, even on the basis of the rational actor model, factors that speak in favor of a system like the preventive administration of justice.

The adoption of an economic point of view also implies that the analysis in this Expert Opinion often has to abstract away

62 See Emanuel Towfigh, The economic paradigm, Chapter 2 in: Economic methods for lawyers (Emanuel Towfigh and Niels Petersen, eds., 2017), at 28.

63 Emanuel Towfigh, The economic paradigm, Chapter 2 in: Economic methods for lawyers (Emanuel Towfigh and Niels Petersen, eds., 2017), at 21-25.

64 See Emanuel Towfigh, The economic paradigm, Chapter 2 in: Economic methods for lawyers (Emanuel Towfigh and Niels Petersen, eds., 2017), at 25-28.

65 See also Rolf Knieper, Eine ökonomische Analyse des Notariats, 2010, at 31.

from concrete legal classifications of certain institutions. For example, this analysis defines as a contractual relationship all relationships into which two or more parties enter voluntarily, irrespective of whether, from a legal point of view, a contract is concluded.

2. Assessing the Economic Implications of the Preventive Administration of Justice

As is clear from the above, an economic analysis of the preventive administration of justice must establish whether the total benefits created by such a system outweigh its costs. By contrast, it ignores other considerations, most importantly the question of whether such regulation has certain distributional consequences, or whether it leads to results which can be considered "fair". Such an assessment can be based either on theoretical considerations or on empirical investigations, or on a combination of both methods.

This Expert Opinion focuses primarily on comparing the costs and benefits of the preventive administration of justice on a theoretical basis. In practice, this means that the preventive administration of justice has to be compared with alternative institutional arrangements, most importantly with a state of the world in which the government does not impose any binding rules on private contracting. The reason for this is that the economic analysis assumes that, in principle, rational parties can bring about any efficient institutional arrangement by way of contracting. Therefore, unless it is shown that certain beneficial results cannot be achieved in a system based on free interactions between private parties, government interventions are seen exclusively as a source of inefficiencies.

i. The Difference Between Voluntary and Mandatory Forms of the Preventive Administration of Justice

From an economic point of view, it is useful to distinguish between those forms of the preventive administration of justice which parties are free to use, and those which include rules mandating the involvement of government agencies in private contracting.[66] Most importantly, if parties are free to opt into or out of the

[66] This distinction mirrors the different treatment of mandatory rules and dispositive law in the economic analysis of corporate law. See Frank Easterbrook and Daniel Fischel, The Economic Structure of Corporate Law, 1991, Chapter 1.

preventive administration of justice without having to face any negative consequences, the fact that parties rely on these institutions alone provides evidence that the benefits outweigh the costs to the parties at least in some instances.[67] The same is not true for those regimes which mandate the involvement of government agencies in some circumstances. Therefore, the economic analysis of both types of institutions poses questions that are fundamentally different in nature.

In distinguishing between both types of rules, it is irrelevant what the exact sanction for a failure to comply with the requirements set by the preventive administration of justice is. In fact, such sanctions could take various forms. Maybe the most important sanction for a failure to comply with such a requirement is the unenforceability of the entire contract or of a subset of obligations. But it seems also possible that the mandatory character of such a requirement stems from the power of a government agency to fine the parties to a transaction for their failure to comply with it. What matters, however, is whether the sanctions are effectively inducing parties to comply with the formal requirements established by the preventive administration of justice.[68] Otherwise, it makes more sense to treat such a system as an example of a voluntary regime of the preventive administration of justice, although as one in which the transaction costs are higher than they would otherwise be.

This Expert Opinion focuses primarily on mandatory forms of the preventive administration of justice. This does not imply that voluntary forms of the preventive administration of justice do not raise questions that could be interesting to analyze from an economic point of view. However, the implications of a mandatory regime are potentially much more severe, as such a regime potentially puts a burden

[67] See also Rolf Knieper, Eine ökonomische Analyse des Notariats, 2010, at 30. Of course, this does not necessarily mean that the benefits on the societal level outweigh the costs. The reason for this is that the institutions providing the preventive administration of justice might be operating at a loss.

[68] There can be various reasons why sanctions are not successful at making parties comply with such requirements. For example, it seems possible that fines are set too low to effectively induce parties to comply. This phenomenon is also potentially relevant if the sanction is the invalidity of a contract. In particular in cases in which the nonenforcement of an agreement would affect the interests of third parties, courts might create exceptions to the unenforceability of obligations. For a historic example of the latter phenomenon, see Benito Arruñada, Institutional Support of the Firm: A Theory of Business Registries, 2 Journal of Legal Analysis 525 (2010), at 562-565.

not only on taxpayers and potential providers of competing services, but on all private parties which want to engage in certain kinds of transactions. This is also reflected in the fact that the criticism voiced in the economic literature against the preventive administration of justice is almost exclusively concerned with mandatory rules.

ii. Mandatory Forms of the Preventive Administration of Justice as Formal Requirements for Private Transactions

From the perspective of the parties to transactions, mandatory forms of the preventive administration of justice constitute rules mandating the involvement of government agencies in private contracting. These forms of the preventive administration of justice can therefore also be understood as a set of (mandatory) formal requirements for certain types of contracts.

Mandatory formal requirements are similar to mandatory substantive rules in that they apply to all parties to certain transactions even if both parties are willing to deviate from these rules. Different from mandatory substantive rules, mandatory formal requirements do not impose any limitations on the kind of agreements that can be concluded, or on the nature and scope of the obligations contained in such an agreement. Rather, they require parties to transactions to produce certain kinds of information about the transactions. The same can be said about mandatory forms of the preventive administration of justice: As will be discussed in more detail later,[69] the fact that a certain type of agreement is concluded in the presence of a civil law notary produces certain kinds of information about the transaction. At the same time, the requirement that a certain type of agreement is concluded in the presence of a civil law notary does in principle not affect the scope of the obligations that can be legally imposed on a contracting party.[70] Civil law notaries are bound not to notarize any agreement that is in violation of substantive rules. But such an agreement would not be legally binding anyway.

Within the set of formal requirements that jurisdictions can impose on private transactions, the preventive administration of justice seems to be most closely related to

[69] See below Section IV.2.i(2).

[70] See also Rolf Knieper, Eine ökonomische Analyse des Notariats, 2010, at 29-30.

other formalities which require that parties to a transaction involve government agencies in the transaction. This feature is not shared by all formal requirements. For example, requirements such as the requirement of the written form can be met by the parties acting on their own. At the same time, almost all jurisdictions seem to know at least some formal requirements which require the involvement of government agencies in transactions. Maybe the most important example of such requirements are rules concerning land and corporate registries. Even in common law jurisdictions, it is obligatory for parties to register certain types of transactions with these registries.

Because of these similarities between the mandatory aspects of the preventive administration of justice and other formal requirements mandating the involvement of government agencies in private transactions, it makes sense to analyze the preventive administration of justice as one case of the latter category of rules.

iii. Market Failure as a Precondition for Mandatory Rules Requiring the Involvement of Government Agencies in Private Contracting

Just like any other body of mandatory law, mandatory rules requiring the involvement of government agencies in private contracting carry with them certain costs for the parties to a transaction. Most importantly, parties have to invest time and effort in obtaining approval from government agencies.[71] Besides, such rules might imply additional social costs: Insofar as they are not operating at a profit, the state has to fund institutions.

On the other hand, it seems reasonable to assume that the involvement of government agencies in private contracting produces a range of benefits for the parties to a contract as well as for the public at large.

From an economic perspective, the first important benefit of institutions like notaries and public registries is that they make information on the existence or scope of certain agreements publicly available. As will be described in detail in Section IV.1.i

[71] See also Rolf Knieper, Eine ökonomische Analyse des Notariats, 2010, at 30.

below, this information allows third parties, who later enter into transactions with one or both of the parties to the original contract, to obtain information which potentially affects the legal status of their own transaction at relatively low costs. Importantly, some registration processes involve not only a mere recordation of the declarations of the parties, but also some form of legal assessment of the transaction. If this is the case, the process also provides the parties (as well as others) with information on the legality and enforceability of the underlying contracts. This information is also valuable, as it reduces uncertainty about the chances of a party to succeed in a court case involving the legality of said transactions.[72]

Another important benefit of these institutions is that they generate evidence about these transactions. The availability of such evidence, for one, lowers certain kinds of transaction costs for the parties to such transactions. The possibility that a neutral government official can testify before a court about the actions of parties in transactions in which the government official was involved decreases the chances of a future judgment being based on wrong facts, leading to a decrease in the uncertainty about whether a certain contract can be enforced. Besides, third parties whose rights are affected by the transaction might also be able to use this evidence to proof or disprove the existence of a certain agreement. This is particularly true in systems that grant protections to any party relying on the information contained in a public register.

However, from an economic point of view, these considerations on their own are not yet sufficient to justify mandatory rules requiring the involvement of government agencies in private contracting. As will be shown below, such rules can be justified if similar results cannot be achieved (or can only be achieved at a higher cost) in a system in which the involvement of government agencies is optional for parties to a transaction, or where market participants offer services which provide a substitute for the information and evidence which is produced through the mandatory involvement of government agencies.

[72] See also, Jens Bormann and Nicola Hoischen, Ökonomische Aspekte notarieller Tätigkeiten im Grundstücksrecht, 16 Rheinische Notar-Zeitschrift 456 (2016) (discussing the preventive administration of justice in real estate transactions in Germany).

(1) COMPARISONS WITH MARKET-BASED SOLUTIONS AS THE BENCHMARK

As a matter of principle, the economic analysis of law views government action, and in particular the imposition of mandatory rules on contracting parties, with suspicion. One important reason for this is that it assumes that rational parties, in principle, can by way of contracting bring about not only the most desirable allocation of goods, but also the most favorable institutional arrangements. In other words, if certain institutional arrangements have beneficial effects, parties will voluntarily choose to implement such arrangements.

With regard to the involvement of government agencies in private contracting, this argument plays out as follows: If the production of evidence about transactions or the production of information about the enforceability of certain contracts was always beneficial, parties would in principle have an incentive to arrange for this information to be produced voluntarily. This could be done, for example, by paying a service provider specializing in the production of such information. Also, there would be no reason to set up mandatory rules about the involvement of government institutions. If the benefits outweighed the costs, parties would choose to use public notaries or registries anyway.

As a result, it seems reasonable to assume that a system of preventive administration of justice which mandates the involvement of government agencies in certain types of transactions is not the only way by which some or most of the beneficial effects described above can be achieved. Because of this insight, it would be misleading to evaluate the costs and benefits of the preventive administration of justice without taking into account alternative institutional arrangements which could replace this system in the absence of mandatory rules about the involvement of government agencies. Therefore, this analysis cannot limit itself to asking whether the benefits of the preventive administration of justice outweigh its costs. Instead, it has to ask whether the difference between the benefits and costs of the preventive administration of justice exceed the difference

between the benefits and costs of alternative institutional arrangements.[73]

(2) POTENTIAL DOWNSIDES OF MANDATORY REGULATION

The economic analysis does not only assume that parties can usually achieve beneficial results by way of contracting. It also maintains that government agencies are not equally able to provide market participants with an institutional arrangement that is an ideal fit for any individual transaction. This is particularly true if government agencies rely on mandatory rules.

The most important reason for this is that the economic analysis assumes that government agencies usually lack the information needed to determine the ideal institutional setup. Different from market participants, government agencies can oftentimes not rely on the price mechanism to understand how much value market participants ascribe to the services offered by the government agencies.[74] This problem is of course especially prevalent if the use of certain services is mandated by the law.

Besides, mandatory rules are seen as inferior to contractual solutions because they impose the same requirements on all transactions. However, it seems possible that the production of information described above is beneficial for some transactions, while the benefits do not outweigh the costs for others. In a voluntary regime, market participants could choose, for each individual transaction, whether they would want to make use of government institutions, whether they would prefer to engage private actors to produce the relevant information, or whether would prefer not to produce any information at all.

(3) PRELIMINARY RESULTS

Against this background, it seems reasonable to assume that the benefits of mandatory forms of the preventive administration of justice can only outweigh their costs if they provide remedies to a so-called market failure. In other words, because the economic analysis in principle

[73] One alternative way to conceptualize this would be to think of the hypothetical surplus that could be achieved through an alternative institutional arrangement as opportunity costs of the preventive administration of justice.

[74] See generally Friedrich Hayek, The Use of Knowledge in Society, 35 American Economic Review 519 (1945).

puts a lot of trust in private contracting, rules mandating the involvement of government agencies in private contracting can only be justified if one can show that certain beneficial results of such rules cannot be achieved by way of private contracting.

iv. A Taxonomy of Market Failures

What are these situations in which contracting cannot be expected to lead to efficient outcomes? As described in Section iii(1) above, the economic analysis assumes that it is in principle in both parties' interest to design contractual relations in a way that maximizes the total benefits that both parties obtain from a transaction. The reason for this is that any surplus generated by means of an efficiently designed transaction can be divided between both parties. Figuratively speaking, if the "size of the pie" increases, both parties are going to be able to get "a bigger slice" of the pie. Of course, this claim hinges on the assumption that all parties fully understand the implications of a transaction. In such a situation, no party has an incentive to forgo the efficient contract design in favor of an inefficient one even if the less efficient contract design favors the interest of this party. The reason for this is that the other party will understand the implications of this contract design as well and will therefore lower the price she is willing to pay to participate in the transaction. As a result, both parties are worse off than under the efficient contract design.

This reasoning also implies that there are three important categories of situations in which market transactions cannot be expected to yield beneficial outcomes. These situations are commonly referred to as "market failures". There is general agreement that, government intervention, for example by means of establishing mandatory rules for transactions, can be beneficial and therefore justified in these situations.

The first category of cases, commonly referred to as "information asymmetries," consists of cases where one party cannot obtain information on all facts that are relevant for the purpose of the transaction. If this is the case, and if certain additional conditions are met, one cannot assume that contracts maximize the interests of both parties. The second category comprises cases in which a transaction affects the interests of others who are not party to the transaction. In case of such "externalities," rational actors involved in the transaction have no incentive not to further their own goals at the expense of these third parties, even if the total costs

of their actions exceed the total benefits. Closely related to the problem of externalities is the problem of public goods, in which the benefits of an action are shared by many or all members of a society. In such a case, the problem is that rational actors will usually undertake fewer such actions than would be desirable from a social perspective. Cases in the third category exhibit features of what is commonly called the natural monopoly problem. A natural monopoly can occur in markets which are characterized by high upfront investment costs and comparably low marginal costs. In such a case, it might be efficient to have only one seller of goods or services in a market; also, an incumbent provider which has sunk the costs required to enter the market will usually be able to credibly threaten to undercut an entrant, thereby making it unprofitable for the latter to enter the market.

In the following, we will discuss information asymmetries and externalities in some more detail.

(1) INFORMATION ASYMMETRIES

As stated above, information asymmetries are situations in which parties to a transaction differ in the amount of information they receive about facts which are relevant to the goal of the transaction. Such situations can lead to a market failure if parties are unable to obtain the entire potential benefit from a transaction. There are different kinds of information asymmetries, depending on the nature of the information that is unavailable to the parties.

The first kind of information asymmetry occurs if one party is unable to obtain all information needed to establish the benefits it will derive from the transaction. This information can pertain to the contractual design, to the quality of a good offer, or to characteristics about the other contracting party. If the party knows that not all transactions are equally beneficial to its interests, and also understands the limits of its information, it will not be willing to offer the same price to participate in the transaction than it would otherwise be willing to pay. In such a situation, it might become unprofitable for the other party to offer to conclude an optimal transaction. The reason for this is that the first party will not reward high-quality transactions with a higher willingness to pay. The fact that the first party knows that its reduced willingness to pay will make it unprofitable for its counterpart to offer high-quality solutions will further drive down its willingness to pay, because it increases the chances that a transaction offered in the market will later turn out to

be a low-quality transaction. This can lead to a situation in which only transactions of the lowest quality are offered in the marketplace. This problem is commonly known as the "market for lemons" problem, as it was first described by the U.S.-American economist George Akerloff in the context of the market for used cars.[75]

This problem description also has a number of implications which help us understand the circumstances under which such an information problem is likely to be solved by the market, and therefore does not require government intervention. First note that, in many cases, it will be possible for the first party to solve the information problem by investing in more or better information. For example, the party can pay a provider of expert knowledge to help it understand the quality of a transaction offered. This will be rational if the increased benefits from a high-quality transaction outweigh the costs of obtaining this information. Second, it is important to understand that it is generally not only the first party who has an interest in solving the information problem. The reason for this is that both parties might profit from sharing the increased benefits from a high-quality transaction. This means that the offering party can invest in "signaling devices" which convey information that the contract offered is of high quality. For example, a party can invest in obtaining some kind of certificate attesting that the transaction is of high quality. This can be a successful strategy if the entity issuing the certificate is a repeat player with an acquired reputation for only certifying transactions that are in fact of high quality.

In principle, there exists a second type of information asymmetry which afflicts contractual relationships. This information asymmetry, commonly referred to as "moral hazard", occurs when parties engage in a longer contractual relationship in which one party has the possibility to influence the interests of the other party, but the second party lacks the information needed to detect (and potentially) sanction strategic behavior by the first party. This problem is essentially the same as the principal-agent problem described below in Section IV.1.i(1), so we will not describe it in detail here. Note, however, that there are few instances in

[75] George Akerloff, The Market for "Lemons": Quality Uncertainty and the Market Mechanism, 84 The Quarterly Journal of Economics 488 (1970).

which government intervention is able to solve moral hazard issues. The reason for this is that, if the information problem is limited to moral hazard, parties have an incentive to design their contractual relationship in a way that minimizes the costs of moral hazard. Of course, there might be situations in which one party lacks the information to determine whether a contractual setup is well suited to deal with moral hazard issues. But it makes more sense to treat this problem as a special case of the market for lemons problem described above.

Note that the economic analysis is much more reluctant to recognize a third category of cases that could be seen as information asymmetries that require government intervention: The mere fact that one party understands the transaction better than its counterpart is generally not treated as a market failure. There are two main reasons for this cautious approach towards such imbalances. First, as mentioned before, the economic analysis ignores whether institutional arrangements lead to "fair" outcomes. Therefore, in the view of the economic analysis, the mere fact that one party obtains a bigger share of the pie than another party cannot justify an intervention. The second reason follows from the description of the "market for lemons" problem. If a party understands that the other party has superior knowledge about the transaction, it will adjust its willingness to pay accordingly. As a result, both parties will share the costs of such a "simple" information asymmetry, and both parties will have an interest in overcoming it. In such a case, in principle, government intervention is not needed. This is different only if the first party does not only know less about the transaction than the second party, but also does not know that it knows less, and therefore acts against its own interest in entering into the transaction. But even then, a government intervention would require the intervening actor (be it a court or a regulatory agency) to understand the interests of the "naïve" party better than itself. For these reasons, large parts of the law and economics literature view interventions based on this rationale with a lot of suspicion.

(2) EXTERNALITIES

In the context of transactions, externalities refer to consequences caused by a transaction which incurred by third parties who are themselves not party to the transaction. These consequences can be positive or negative. In the case of positive consequences, externalities result in too

few transactions being executed. This situation is closely related to the public goods problem mentioned above, and we will not deal with it in more detail. In the case of negative externalities, which are the focus of this section, transactions are executed that cause more harm than benefit on the societal level and should therefore be avoided.

All kinds of negative consequences accruing to third parties can form the basis for negative externalities. As will be discussed in more detail below, in the context of rules mandating the involvement of government agencies in private contracting, we are primarily concerned about increases in transaction costs caused to third parties who are later considering whether to enter into a transaction.

However, it is important to stress that not all parties who are not a party to the original contract and who suffer disadvantages from certain features of the original contract can be considered third parties in the above sense. Importantly, anybody who incurs costs caused by features of the original contract because she later engages in a contractual relationship with one or both parties to the original contract, is excluded from this group. In the context of rules mandating the involvement of government agencies in corporate law, a negative externality cannot be based on the claim that a corporation's contractual creditors, or those who are later acquiring shares in a corporation, suffer disadvantages as a result of a specific feature of the company's articles of association.

The reason for this narrow definition of externalities is again related to the reasoning provided in the context of the "market for lemons" problem above. Third parties who voluntarily engage with a corporation or with a party to an original contract and whose interests would be affected by a particular feature of the original contract can adjust their valuation of this interaction and take into account potential disadvantages. Therefore, they will usually be only willing to interact with the corporation/party at a higher price than otherwise (or pay a lower price for any good or service acquired). This, in turn, creates an incentive for the parties to an original transaction to design the contract so that it maximizes the benefits not only for both of them, but also for all future parties who

they expect to interact with and whose interests could be affected by features of the contract.[76]

Only insofar as it is impossible for the parties to an original contract to convey information about the quality of a contract, or insofar as parties are "naïve" (in the sense that they do not understand the potential downsides they are suffering from a contract) does a market failure exist. However, the questions raised by these cases are in principle not different from those raised by the other examples of information asymmetry in Section (1) above. Therefore, it makes sense to treat them as examples of information asymmetries, and not as examples of externalities.

[76] For this reason, the economic analysis of corporate law usually assumes that European-style mandatory creditor protection is not required to protect contractual creditors from being taken advantage of. By contrast, a number of adherents of the economic analysis of corporate law argue in favor of allowing involuntary creditors of corporations to hold a corporation's shareholders responsible for its debts.

IV. ECONOMIC IMPLICATIONS OF THE PREVENTIVE ADMINISTRATION OF JUSTICE

1. General Considerations

As described in Section III.2.ii, the preventive administration of justice can be viewed as one example of a broader set of institutions requiring the involvement of government agencies in private contracting. While the preventive administration of justice is mostly confined to countries with a civil law tradition, other institutions such as land and corporate registries are much more widespread. For the same reasons as described in Section III.2.iii above, in order for mandatory registration requirements to be regarded as efficient, they need to solve a market failure. The pervasiveness of these requirements in transactions such as the transfer of land ownership and the foundation of corporations suggests that the market on its own is not able to provide the institutions needed to enable efficient transactions in these areas.

Indeed, as Benito Arruñada has shown, these institutions are required to solve a particular market failure which is prevalent in impersonal exchange relations. This market failure is caused by the fact that it is impossible for private parties to create, by means of contracting, the institutional foundations needed to allow for efficient impersonal transactions while at

the same time allowing for high levels of division of labor.

Our central claim in Section 2 below is that the considerations which justify mandatory registration requirements can also be relied on to justify certain mandatory aspects of the preventive administration of justice. Before addressing this question, we revisit in some detail the argument put forward by Benito Arruñada.

i. The Tradeoff Between Transaction Costs and Agency Costs

At the core of this argument is the assumption that any economy that wants to reap the benefits of impersonal exchange and the division of labor has to solve a fundamental tradeoff between transaction costs and agency costs. In the words of Benito Arruñada:

[L]egal systems face hard choices, as rights on assets are needed for both the security of owners and impersonal exchange. But these two goals conflict because they entail protecting, respectively, current owners and acquirers, leaving the other party unprotected.[77]

(1) AGENCY COSTS

On the one hand, societies have an interest in establishing institutions which allow market actors to rely on a high level of division of labor. Division of labor is generally regarded as increasing welfare in society. This argument does not only support specialization in the production of goods and the provision of services, it also supports a separation of the roles of investors on the one hand and entrepreneurs and managers on the other.

The division of labor oftentimes entails the establishment of principal-agent relationships. Principal-agency relationships are all relationships in which one actor (the "agent") can affect the interests of another actor (the "principal"). Naturally, not all (contractual) relationships in an economy based on the division of labor are principal-agent relationships. Maybe the most important example of the latter type of relationship are simple exchange contracts. But examples of principal-

[77] Benito Arruñada, Institutional Foundations of Impersonal Exchange, 2012, at 11.

agent relationships abound in modern economies. For example, investors, irrespective of whether they are property owners, shareholders or creditors, are oftentimes involved in principal-agent relationship in which they are acting as the principals, and the lessees, managers and debtors are acting as the agents.

Agency relationships are the source of a specific type of costs, the so-called "agency costs". Agency costs are rooted in the fundamental problem that, in almost every agency relationship, the interests of the principal and the agent diverge. In many cases, the total benefits of the relationship would be maximized if the agent acted in accordance with the interest of the principal. Almost always, because the agent will be able to extract private profits by acting in a way that is at odds with the interests of the principal,[78] it is impossible for the agent to commit to doing exactly that.

One important category of actions by agents which can harm investors consists of entering into contracts with third parties which affect the interests of principals. Such contracts can take various forms.[79] The agent can enter into an obligation on behalf of the principal, or transfer ownership in an asset in which the principal holds an interest.

While, in principle, it is possible for the principal and the agent to decrease agency costs by investing in monitoring and bonding, these solutions provide only partial solutions to the problem of agency costs. In many cases, it will make sense for the principal to reduce agency costs by monitoring an agent at least to a certain extent, which allows the principal to reward the agent for behavior which is in line with her own preferences. Also, it is possible for the agent to reduce the agency costs (and thus increase the value of the agency relationship to the principal, who might be willing to share these benefits with the agent) by investing in bonding devices meant to realign the incentives of the agent with those of the principal. However, both monitoring and bonding are costly. This does not only mean

[78] Note that this does not necessarily implies that the agent tries to divert the funds of the principal to himself. It is sufficient if the agent does not invest the optimal effort in a certain task.

[79] This phenomenon is not limited to a specific area of the law. As Benito Arruñada shows, it is particularly prevalent in property, agency and corporate law. Benito Arruñada, Institutional Foundations of Impersonal Exchange, 2012.

that it would often be inefficient to invest enough in monitoring and bonding to reduce (residual) agency costs to zero.[80] It also means that it is reasonable to regard monitoring and bonding costs as part of the agency costs.

The existence of agency costs implies that market participants might rely less on the processes based on the division of labor than would be desirable if these costs could be reduced. In other words, agency costs might cause potentially efficiency-enhancing opportunities to be ignored. Therefore, it could be beneficial for the law to provide principals and agents with solutions which allow them to reduce agency costs.[81]

Insofar as agency costs are due to the power of the agent to enter into transactions which affect the principal, it seems possible to effectively reduce agency costs by limiting the power of the agent to enter into transactions which run counter to the interest of the principal. Note, however, that it would not make sense to just generally limit the power of agents to affect the interests of principals. The beneficial effects of the division of labor in many cases hinge on the power of the agent to act for the principal, and therefore on the potential to affect their interests.[82] But it seems possible to allow principals and agents to agree in advance on precise conditions for when an agent can enter into a transaction which affects the interests of the principal. This solution would allow each principal to choose, for each agent, the optimal level of independence granted to the agent.

However, for this solution to take full effect, the legal system has to allow the principal to revert transactions and nullify obligations which were entered into by an agent exceeding his powers as defined in the agreement between the principal and the agent. This is of minor concern if the agent can indemnify the principal for all harms caused by transactions in excess of the rules set out in this agreement. In this

[80] In fact, it would be rational to invest in monitoring and bonding as long as the marginal reduction in residual agency costs caused by spending 1 additional Euro on monitoring or bonding exceeds 1 Euro.

[81] The discussion on corporate governance is in essence an example of a discussion about the possibilities of the legal system to reduce agency costs in a specific kind of agency relationship (that between the shareholders of a corporation and its managers).

[82] Maybe the best example of an agent which needs to be able to decide on behalf of the principal with some flexibility is provided by the manager of a corporation. See Coase.

case, it would be sufficient for the principal to reclaim his losses from the agent.[83] In some cases, however, agents will be judgment-proof. Then, unless the principal can escape the consequences of the transaction, any restrictions on the power of the agent to enter into such transactions will be of limited effect.

(2) TRANSACTION COSTS

On the other hand, society also has an interest in reducing transaction costs for market transactions. The main reason for this is that contracting will usually allow a (more) efficient allocation of goods, and will allow parties to reap surplus from trading. However, it seems reasonable to assume that many transactions that would in principle be beneficial cannot come about because of what is called "transaction costs". Transaction costs are any costs associated with contracting, including the cost of finding a contractual partner, obtaining information about her, negotiating and writing the contract, and finally enforcing the agreement.

In the context of this Expert Opinion, we are mostly concerned with any costs related to the uncertainty of one party about the existence and nature of any previous transaction of the other party that might affect the outcomes of the transaction at hand. Such a situation can be thought of as an example of an information asymmetry as introduced in Section III.2.iv(1) above.[84] In keeping with the terminology introduced in the previous Section, we will call the contracting party which was also party to a previous transaction the "agent", the other party to the previous transaction the "principal", and the party interested in entering into a subsequent transaction the "third party".

There are various examples of previous transactions that might have effects as described above. For example, the contractual relationship between an employer and an employee might affect the power of the employee to enter into certain kinds of transactions with third parties on behalf of the employer. The contractual relationship between the owner of real estate and her lenders might affect

[83] In this case, if the principal can ex post determine whether an agent acted within the confines of the agreement and enforce the damage claim, the agent would not have an incentive to violate the internal agreement in the first place. Note that

[84] Of course, for the reasons described in section III.2.iv(1) above, this does not necessarily mean that this uncertainty constitutes a market failure which requires the government to intervene.

whether she has the power to transfer ownership in the land to a third party. And the transaction leading to the establishment of a business association might affect whether those acting on behalf of the business association can enter into a contractual relationship which allows the other contracting party to go after the owners of the business if the amount of the claim exceeds the assets held by the business association itself.

The fact that the agent's previous transactions might affect the benefits the third party can derive from a certain transaction does of course not mean that the third party is at the mercy of the agent to disclose any such previous transaction. Rather, she can react to this potential problem in two ways. She can either invest in obtaining information about the existence and nature of such relationships. Or she can adjust her expectations about the benefits from the transaction, which implies a lower willingness to pay or a higher price she will demand for goods or services offered.

These possible reactions have a number of implications. First, the possibility to factor in any potential negative consequence from previous transactions under certain circumstances creates an incentive for the agent to provide credible evidence about the existence and nature of previous transactions. In other words, in many cases both parties have an interest in reducing the information asymmetry that exists between them.

Second, all these possible reactions, including any actions on the part of the agent, come at a cost. For example, it will be often costly for a third party to obtain information about previous transactions by the agent. It will also be costly for the agent to provide credible evidence about the existence and scope of the previous transaction, primarily because she might have an incentive to cheat. Lastly, if the transaction fails because of the adjustment in the willingness to pay, while it would have in fact been beneficial to both the agent and the third party, the parties bear the costs of not being able to reap the profits from this transaction. Usually, the decision how to react to such a situation will depend on the relative size of these costs: if the benefits from a transaction outweigh the costs of obtaining the required information or providing credible evidence, the parties will opt for one of the latter options. If the benefits from the transaction are comparably small, it will likely fail. Such a failure could potentially even result in a "market for lemons" situations, in which it never makes sense to

structure previous transactions with an eye on the interests of third parties, because they will not be able to differentiate between such "high quality" offerings and others offerings, and will therefore not be willing to pay more to engage in them. Irrespective of whether this happens, this situation will result in fewer than optimal transactions on the societal level, which in turn implies a welfare loss.

At first glance, it might seem possible to solve this problem by holding an agent liable for not disclosing any information about previous transactions that could affect the outcome from the contract for the other party. If the agent can indemnify the third party for all losses incurred as a result of the existence of undisclosed transactions that affect the third party's interests, this in fact is a viable strategy. Because the agent (who is in possession of the information about the transaction) bears all costs, she has an incentive to only enter into transactions which are beneficial to both parties. As a result, the third party in principle has no incentive to invest in any information in addition to what is disclosed by the agent. Just like in the context of holding an agent liable for any damage caused to the principal by subsequently entering into a disadvantageous transaction,[85] this solution will however fail if the agent is judgment-proof. In this case, the only way to eliminate transaction costs related to the uncertainty of the third party about the existence and nature of any previous transaction would be not to enforce any previous transaction that is not disclosed by the agent, even if that means ignoring the interests of the principal.

(3) AGENCY COSTS AND TRANSACTION COSTS AS TRANSACTION COSTS IN SEQUENTIAL TRANSACTIONS

In principle, both agency costs and transaction costs can be understood as a problem of transaction costs in sequential transactions.[86] The principal and the agent first enter into a transaction, followed by a second transaction between the agent and the third party.

Of course, not all sequential transactions entail such a tradeoff between agency and transaction costs. For this, the first transaction has to implement some form of a principal-agent relationship between the

[85] See section IV.1.i(1) above.

[86] Benito Arruñada, Institutional Foundations of Impersonal Exchange, 2012, at 26-29.

principal and the agent. Also, the transaction between the agent and the third party must have the potential to affect the interests of the principal. For many sequential transactions, this will not be the case. This is true even if these sequential transactions concern the same asset. For example, if the principal first sells his full interest in an asset to the agent, who at a later point in time transfers ownership in this asset to a third party, this will not be the case.

Also, it is important to note that a particular transaction can be both a transaction between an agent and a third party, the outcome of which depends on features of a previous interaction between the agent and a principal, and at the same time a transaction establishing a principal-agent relationship between the agent and the third party which will potentially affect future transactions of either the agent or the third party.

Note also that one transaction can establish more than one principal-agent relationship. Many contracts which stipulate a long-term collaboration between two parties will open up ways for one party to affect the interests of the other party, while at the same time also opening up ways for the other party to affect the interests of the first party. In principle, a tradeoff between agency costs and transaction costs can occur in future transactions of either of those parties with a third party.

(4) STRATEGIC BEHAVIOR ON THE PART OF THE PRINCIPAL

The tradeoff between agency costs and transaction costs is made worse by the fact that any solution that involves protecting the rights of the principal potentially encourages strategic behavior on the part of the principal.

The reason for this is that the principal will often have different incentives ex ante and ex post. Ex ante, a principal who has a claim to the profits achieved by the agent will want the agent to be able to enter into transactions belonging to the agent's range of activities. As an example, the owner of a business organization will usually have an interest that her manager is able to obtain cheap credit from a bank. For this, the principal might want a third party to believe that the agent can act without any constraints from their principal-agent relationship. In the example cited above, is seems possible that the business organization would be able to obtain cheaper credit if the creditor thought that the owner was liable for the debts of the business organization, or that

certain assets of the principal are really held by the business organization.

Ex post, the principal will oftentimes have an interest in enforcing strict limits to the powers of the agent to enter into such transactions. This is particularly true if a certain transaction turns out badly, or if the general conditions of the collaboration worsen. In our example above, imagine that the business organization has not been working profitably, and that at one point its assets do not suffice to cover its debts. In this case, the owner of the business organization will want to enforce a rule of limited liability and insist that assets are owned by her, and not by the business organization.

ii. The Role of Private and Public Information

(1) THE IMPORTANCE OF PRIVATE INFORMATION

From the description above, it is immediately evident that some potential solutions to the problems of agency costs and transaction costs are fundamentally at odds with each other.[87] As described above, from the perspective of minimizing transaction costs, it would be best to ignore any limits of an agent's power to contract and confer rights in assets stemming from the relationship between the agent and his principal. This solution would avoid most transaction costs (either the costs of obtaining information, or opportunity costs related to unrealized transactions) related to uncertainty about the existence and extent of such rights. From the perspective of minimizing agency costs, however, ignoring such limits would greatly increase the potential consequences of hazardous behavior by the agent *vis-à-vis* the investor. This would imply an increase in agency costs related to the power of the agent to enter into transactions which bind the principal (either the cost of monitoring the agent, or opportunity costs of not making use of agents in a situation where it would be beneficial to do so). In order to mitigate such agency costs, the courts would have to enforce agreements between the principal and the agent limiting the power of the agent to enter into such transactions.

Naturally, the reasons why any solution focusing on one of these problems only

[87] See also Benito Arruñada, Institutional Foundations of Impersonal Exchange, 2012, at 38.

makes the other problem worse is that, in sequential transactions of the type described above, both the principal and the third party lack access to information about some of the actions of the agent. If the principal was able to monitor the actions of the agent in subsequent transactions at no cost, she could step in to prevent the agent to enter into any unwanted transactions. Then, the first solution sketched out above would not threaten the interests of the principal. If the third party was able to obtain and process a complete record of all previous transactions by the agent, she would be able to discern whether the nature of these transactions limited the power of the agent to enter into the transaction at hand.[88] Then, she could adjust her expectations accordingly, making it unnecessary to protect her by ignoring any limits of an agent's power to contract and confer rights.

(2) MANDATORY PRODUCTION OF PUBLIC INFORMATION AS A REMEDY

This insight also implies that the problem of transaction costs in sequential transactions can at least partly be solved by increasing the flow of information between parties to sequential transactions. More precisely, it seems possible to make information about those features of transactions establishing a principal-agent relationship which potentially affect future transactions between the agent and third parties available to all potential third parties, thereby reducing these parties' transaction costs.[89] In order for this solution to be effective, it has to achieve two different goals. First, it has to allow a prospective third party to obtain information about all previous transactions at low cost. Second, it has to provide a prospective third party with evidence that she can use in court in case of a dispute between the principal and the third party about the existence and nature of the principal's rights *vis-à-vis* the third party.

[88] Benito Arruñada, Institutional Foundations of Impersonal Exchange, 2012, at 34-35.

[89] In principle, one could also think about mitigating this problem by providing the principal with information about transactions between an agent and a third party which affects the interest of the principal in an attempt to allow her to step in. However, this solution comes very closely to involving the principal in all future transactions, stripping the parties of much of the benefits of specialization and the division of labor which justify principal-agent relationships in the first place.

Put very simply, this argument is akin to saying that it is overall cheaper to produce publicly available information about the first transaction at the moment that this transaction is executed, than it would be for every third party to recover this information for herself in preparation of a potential transaction with the agent. However, this argument could not on its own justify mandatory publication requirements, though it already indicates that mandatory publication requirements are beneficial. The reason for this is that, as described before,[90] both the principal and the agent in principle have an incentive to make it as attractive as possible for third parties to contract with the agent. Therefore, if the upfront publication of information would reduce the costs of all actors involved more than it would cost the principal to make the information public, rational actors would opt for publication anyway.

However, there are reasons to believe that it cannot be left to the principal and the agent to decide whether and how they want to provide the public with information about their transaction. Most importantly, a third parties' transaction costs will only be substantially reduced if information about all previous transactions affecting her interests is made public. If principals and agents are free to choose whether to publish details about their transactions, however, it seems reasonable to assume that some will decide against such publication. One reason for such behavior might be the potential for strategic behavior as described above in Section i(4). Then, even if a prospective third party finds that some information on previous transactions has been published, she has no way to know whether there are other transactions which affect the outcome of her own dealings with the agent. At the same time, the incentives of principals and agents to publish information about their transactions will be limited, because their decision to publish is going to have only a marginal effect on the transaction costs encountered by third parties who later contemplate a transaction with the agent.

More formally, the reason why only a system of mandatory disclosure has the potential to solve this problem is that a decision not to disclose a transaction imposes a negative externality on other market

[90] See above Section III.2.iv(1).

participants who are involved in similar transactions.[91] The source of the externality is the uncertainty that any undisclosed transaction injects into the market. If some transactions between principals and agents remain hidden, no third party can be sure that she is not going to be affected by such an undisclosed transaction. An alternative way to frame this problem is to characterize the information in a register as a public good.[92]

It is important to stress that this argument does not depend on the assumption that third parties are not able to adjust their valuation of their interaction with the agent to the possibility of undisclosed transactions. Instead, the core of this argument is that decisions not to disclose certain transactions negatively affects all market participants irrespective of whether they interact with the parties to the original transaction. Because of the lack of contractual relations between the principal, the agent and some of the affected third parties, the principal and the agent will not bear all the costs of a decision not to disclose the existence and contents of an agreement. Therefore, a system of voluntary disclosure will create too little incentives to disclose transactions.

iii. The Role of Government Agencies in Producing Public Information about Rights with In Rem Effect

Many legal systems solve the tradeoff between agency costs and transaction costs by allowing parties to enter into agreements creating rights with *in rem* effect, legal positions which allow the principal to either lay claims against the third party or defend herself against a claim by the latter, while imposing relatively strict substantive and formal requirements for the creation, modification and transfer of such rights. Among the formal requirements are rules ensuring that information about such transactions is made available to the public.[93] As described above, this mandatory disclosure of information limits the information costs of third parties in later transactions who want to inquire about the existence and scope of any prior agreements which could affect their

[91] For an analogous argument regarding the need to restrict the set of possible contractual agreements in property law, see Merrill and Henry Smith, Optimal Standardization in the Law of Property: The Numerus Clausus Principle, 110 The Yale Law Journal 1 (2000).

[92] Benito Arruñada Institutional Support of the Firm: A Theory of Business Registries, 2 Journal of Legal Analysis 525 (2010), at 555.

[93] See also Benito Arruñada, Institutional Foundations of Impersonal Exchange, 2012, at 39-41.

rights. Government agencies like public registries play an important role in providing this kind of information about certain types of transactions.

(1) RIGHTS WITH *IN REM* EFFECT

Following Benito Arruñada, we adopt a broad definition of rights with *in rem* effect. As described above, we consider rights with *in rem* effect to comprise all legal positions which allow the principal to either lay claims against the third party or defend herself against a claim by the latter. This definition includes a number of legal positions which are usually not considered property rights or even rights in the legal literature. For example, the rule of limited liability in corporate law constitutes a right with in rem effect under this definition. The same is true for an agreed limitation of an agent's power of representation which allows the principal to refuse compliance with contractual obligations entered into by the agent on behalf of the principal.[94]

Defined this way, rights with *in rem* effect are a widespread phenomenon, and it seems safe to assume that almost all jurisdictions know at least some forms of rights with *in rem* effect. Yet, compared with other contractual rights, such rights appear still to be the exception. In fact, most contracts primarily create obligations for the parties themselves. In the case of sequential transactions as described above, such rights with *in personam* effect are all rights which exclusively apply between the principal and the agent on the one side and the agent and the third party on the other side.

(2) MITIGATING TRANSACTION COSTS THROUGH SUBSTANTIVE AND PROCEDURAL REQUIREMENTS FOR *IN REM* RIGHTS

(a) GENERAL REMARKS

As should be clear from Section i above, while the existence of *in rem* rights protects the interests of the principal, it also entails an increase in the transaction costs in all those transactions in which the scope of rights acquired by a third party could be affected by such rights. A third party interested in an asset in which others could potentially hold *in rem* rights is

[94] The reason for this broad definition is that our argument is based on a functional perspective which needs to abstract away from doctrinal principles.

essentially left with two options: To the extent that it is possible to obtain information about the existence of such rights, she can invest in obtaining such information. Alternatively, she will face the possibility of acquiring an encumbered asset. Both options imply an increase in transaction costs, the former because it requires the acquirer to invest in information, the latter because it lowers the expected value of the asset. It is important to note again that this increase in transaction costs is not limited to those transactions in which *in rem* rights indeed prevent an acquirer from obtaining the full scope of rights specified in the transaction. In fact, the fact that the mere possibility of the existence of such a right is a source of transactions costs is an important reason why the creation and structuring of *in rem* rights cannot be left to private contracting, but instead requires government intervention in the form of mandatory rules.

Legal systems react to the problem of transaction costs caused by the existence of rights with *in rem* effects by imposing relatively strict substantive and formal requirements for the creation, modification and transfer of such rights. From an economic perspective, the most important feature of these rules is that they decrease the costs for a third party to obtain information about the existence and scope of rights with *in rem* effect.

The substantive rules governing *in rem* rights are usually much stricter than substantive rules governing *in personam* rights. For example, parties are usually not free to invent new forms of rights with *in rem* effects. Instead, they have to choose from a set of rights known in the respective jurisdiction which can only be modified up to a certain extent to match the parties' needs. As Merrill and Smith show in the context of property rights, the reduction of information costs is a central goal of such rules.[95]

From the perspective of the economic analysis, the primary function of formal rules governing *in rem* rights is the production of publicly available information about such rights. The requirement to make some information public achieves two interrelated goals at the same time. For one, it allows a third party interested

[95] Merrill and Henry Smith, Optimal Standardization in the Law of Property: The Numerus Clausus Principle, 110 The Yale Law Journal 1 (2000).

in engaging with the agent to obtain information about whether a transaction which could potentially affect her future rights occurred or not. Second, it allows parties other than the parties to the original transaction (most importantly, the third party in a later transaction) to produce evidence about the original transaction.

The exact requirements for the production of information vary by jurisdiction and by type of asset involved. For some types of *in rem* right, this information emerges more as a byproduct of other requirements governing the establishment, modification or transfer of such rights. For example, under German law, a change in ownership in personal property requires a change in possession. Different from agreements, which can be kept a secret between parties, such a change in possession is much more likely to be witnessed by others. This makes it possible for a third party both to inquire about changes in property that might have occurred, and to find potential witnesses who can testify about such changes in court. Note, however, that laws requiring only such indirect forms of information disclosure come with a substantial downside. Information like that might be produced inadvertently, or a third party might not learn about accurate information despite substantial efforts. In either of these cases, the law has to decide whether to favor the interests of the principal over those of the third party or vice versa. As a result, it is impossible for such rules to achieve a reduction in both agency costs and transaction costs comparable to that achieved through more explicit rules of information disclosure.[96]

(b) THE ROLE OF PUBLIC REGISTRIES IN PARTICULAR

For other types of transactions, the law stipulates that information about rights with *in rem* effect has to be made available in a public registry. Examples of such registries are land registries and commercial or company registries which are common in many countries. From an economic point of view, the most important goal of

[96] In fact, different jurisdictions vary in the extent to which they protect a third party who acquired personal property from an agent acting against the interests of the principal. Irrespective of the solution adopted by a jurisdiction, however, such a rule will always impose either substantial agency costs on the principal, who must be afraid of losing an asset due to the actions of the agent, substantial transaction costs on the third party, who must be afraid of not acquiring an unencumbered interest in the asset at hand, or both.

these rules is the production of reliable information about certain types of private contracts which can be obtained by third parties at low cost.

Note that not all rules mandating registration of a transaction with a public register impose the same kind of obligation on parties to a transaction. Most importantly, some registration requirements only demand that a transaction is forwarded to the register which then makes it accessible to the public. Following Benito Arruñada, such rules can be described as "recordation" requirements.[97] Other rules demand that a transaction is reviewed by a public official before being entered into the registry. Benito Arruñada calls this type of rule "registration" requirements.[98] The preventive administration of justice in corporate law in Germany falls into the latter category, and Section 2 below analyzes in detail the differences between those categories of rules from an economic point of view.

Irrespective of the institutional details, public registries seem to be very well suited to achieve the goals of information production outlined above. This is true both with regard to the need of potential third parties to find relevant information affecting the outcome of a transaction with the agent, and for the need of third parties to obtain evidence about previous transactions in which they were not involved.

The first reason why registration and recordation requirements involving public registries are well suited to solve the tradeoff described above is relatively simple: Third parties willing to engage in a transaction with an agent can obtain exhaustive information about the existence and scope of *in rem* rights by filing requests with one or a limited number of registries. In particular, this implies that it is relatively cheap for the third party to learn with certainty about the nonexistence of certain transactions which could potentially affect her interests. This substantially reduces the third party's transaction costs as compared to other requirements of publicity which rely exclusively on the observability of certain actions by others. The reason for this is that it will often be relatively hard for the third

[97] Benito Arruñada, Institutional Foundations of Impersonal Exchange, 2012, at 11.

[98] Benito Arruñada, Institutional Foundations of Impersonal Exchange, 2012, at 11.

party to identify all potential witnesses of such a transaction.

Secondly, public registries offer a way for third parties to obtain reliable evidence about previous transactions in which they were not involved. This again reduces transactions costs as compared to alternative requirements of publicity. On the one hand, it will usually be relatively straightforward to a third party to judge the quality of evidence that can be obtained from a public register. By contrast, if a third party were to rely on other evidence such as witness statements, she would have to first assess the credibility of such witnesses. On the other hand, it might be hard for the third party to obtain reliable evidence because all potential witnesses are in some way associated with the principal.

The last reason why public registries outperform other modes of information production is that recordation and registration requirements force the parties to a transaction to either make parts of the contract itself public, or to explicitly announce their intent to create certain *in rem* rights. This is different from other requirements of publicity such as a change in possession. Such requirements rely on observing certain actions (such as a change in possession) which are commonly associated with certain transactions (such as a change in ownership), but not the agreement itself. A recordation or registration requirement implies a much lower risk of producing ambiguous information, and also allows the principal to explicitly state the nature and the scope of *in rem* rights.

(c) THE INABILITY OF MARKET SOLUTIONS TO SUBSTITUTE FOR PUBLIC REGISTRIES

Still, the reasons outlined above do not on their own justify the mandatory involvement of government agencies in private contracting. The reason for this is related to the considerations described in Section III.2.iii(1) above: In order to assess the costs and benefits of mandatory rules, it is necessary to analyze whether participants in the market would be able to establish institutions who fulfil the same functions by way of contracting. Only if market solutions can be shown to lead to less than optimal results is it possible to argue that government intervention can be justified from an economic point of view.

In Section ii(2) above, we argue that the information needed to overcome the

tradeoff between agency costs and transaction costs in impersonal transactions cannot be produced without a rule mandating information disclosure. Here, we show that this result can also not be achieved by a rule mandating the disclosure of information in a register, but gives the principal the freedom to choose among different providers of registration services, some of which are private actors.

At first glance, it might seem possible to argue that private actors who are competing in a market for registrations are in a bad position to guarantee the neutrality needed for third parties to rely on information provided by such actors. The reason for this is that such actors might have an incentive to favor the interests of the principal over those of the third party. Third parties, however, do not only require accurate information about *in rem* rights, but also need to be able to prove the scope of such rights in case of a dispute between the principal and the third party.

However, this argument overlooks that third parties can take into account the quality of the evidence provided by such a registration service provider when deciding whether to transact with the agent. One can therefore argue that principals have an incentive to choose not a provider which maximizes the benefits of the principal at the cost of third parties, but a provider of registration services the offerings of which maximize the overall benefits of all parties involved in a chain of subsequent transactions.[99]

We consider another argument to be more convincing: There are various reasons to believe that registries function best if there is only one or a small number of registries with which transactions can be filed. Under these circumstances, a market-based solution leads to outcomes that are inferior to a solution involving a more active role of the government. Under these circumstances, public registries are a sensible response to the requirements sketched out above.

The first reason why multiple providers of registration services might negatively affect welfare is that the costs of information that a third party has to incur in preparation of a transaction with an agent

[99] These two opposing arguments mirror the different standpoints in the debate about the normative desirability of regulatory competition in corporate law.

will be increasing with the number of registration service providers active in the marketplace. The reason for this is that a third party will often be interested in obtaining a complete picture about previous transactions which could affect the outcome of the transaction. If such previous transactions could have been filed with various registers, she needs to check with all of them.

The second reason is that a market for registration services might exhibit features of a natural monopoly, depending on the exact rules governing the registration of transactions. Particularly in case of a mere recordation requirement, it seems reasonable to assume that most of the costs involved in establishing a registration service are related to the buildup of the infrastructure. Once the infrastructure is established, it is relatively cheap to record, publish and transmit to inquiring third parties information about a transaction. This means that it could be socially wasteful for multiple providers to erect this infrastructure, and that it could be possible for an incumbent provider to scare off potential entrants by threatening to undercut them and make any attempt to enter the market unprofitable.

Under these circumstances, it seems reasonable that any workable solution requires a heavy amount of involvement on the part of the government, either as the sole provider of registration services itself, or as the regulator in a tightly regulated market for such services. Given these alternatives, there is no reason to believe that any other institutional arrangement would produce outcomes which are of superior or even just equal quality when compared to those of registries are administered by government agencies.

2. The Preventive Administration of Justice in Corporate Law in Germany

The preceding section has shown that almost all developed countries maintain a set of institutions the function of which it is to provide publicly available information about transactions which affect the interests of third parties not involved in these transactions. Thereby, these institutions allow market participants to make use of high levels of division of labor and impersonal exchange which would be impossible absent such institutions. One of the most important examples of these institutions are company registers, which today exist in every major economy as well as many developing countries.

Company registers around the world share a number of important features. One feature, however, seems particularly important in the context of the present analysis: at least for some transactions, their use is mandatory almost everywhere. As we argue in Section 1.iii(2)(c) above, this is because actors involved in such transactions do not face the right incentives to make information about these transactions public even in the absence of a rule mandating disclosure. The reason for these misaligned incentives can be described as an externality problem: The (negative) consequences of a decision not to disclose such information is borne by all market participants irrespective of whether they enter into contractual relations with the parties to the original transactions, while these parties bear the full cost of disclosure.

However, there are also important differences between these institutions in different countries. One crucial difference concerns the question whether the registry does more than just record contracts or declarations of parties about transactions. In many countries following the civil law tradition, among them Germany, parties cannot just file any document with the land or commercial registries. In Germany, as described in detail in Section II.1 above, such transactions can only be concluded in the presence of a civil law notary, who is the sole contact and charged with warning parties about any adverse consequences, ensuring that the parties' intentions are reflected in the agreement, in particular that the agreement achieves the intended legal effects, and ensuring that the agreement conforms with the law. Additionally, company registers are maintained by the courts, which also verify the legality of any agreement before executing changes to the companies register.

In other countries, most notably in many of those following the common law tradition, an institution comparable to that of the civil law notary does not exist, and publication requirements in many cases do not extend beyond a mere recordation of transactions. This implies that transactions such as the foundation of a corporation are entered into the companies register without a prior legal review by a public official, adding costs when legal certainty is sought by third parties.

As described in Section II.2, a considerable stream of literature in law and economics perceives rules mandating the involvement of government actors in private transactions as inefficient. In other

words, adherents of this view see no efficiency rationale for mandatory forms of the preventive administration of justice. Instead, they argue that the costs associated with such a procedure constitute an unnecessary burden on market participants.[100]

Other commentators disagree. They argue, first, that the involvement of a civil law notary can help solve information asymmetries between the parties to a transaction, ensuring that contractual agreements align with the preferences of both parties. Second, they argue that the preventive administration of justice in corporate law contributes to providing third parties with information they need in their transactions with a corporation. On this basis, they argue in favor of a mandatory involvement of civil law notaries in particularly important transactions.[101]

Here, we argue that considerations similar to those justifying the mandatory use of public registries in certain transactions also provide an important efficiency rationale for many important aspects of the preventive administration of justice in corporate law as it exists in Germany. More precisely, the preventive administration of justice provides third parties who are not a party to the transaction with highly reliable information about rights with *in rem* effect which would be costly to acquire by the third party itself. Crucially, it cannot be argued that such information about transactions can be (and would be, if efficient) provided to the public by voluntary acts of the parties to the transaction, because the incentives to produce such information are ill aligned. The most important reason for this is that, just like with the decision whether to disclose such information at all, the costs of lower-quality information are borne by all market participants who interact with certain types of corporations irrespective of whether they interact with any single corporation, while the costs of providing the public with high-quality information are borne exclusively by those involved in this corporation.

i. Theoretical Considerations

As mentioned above, we argue that, from an economic point of view, the preventive administration of justice is best understood as an instrument to produce high-

[100] See, e.g., Simeon Djankov et al, The Regulation of Entry, 117 The Quarterly Journal of Economics 1 (2002).

[101] Rolf Knieper, Eine ökonomische Analyse des Notariats, 2010, at 30.

quality information about certain transactions which are of interest to third parties not involved in these transactions, and which cannot be provided by the market on its own. We do not mean to discount the possibility that the preventive administration of justice can also lead to better agreements between the parties to a transaction.[102] However, it seems at least unclear whether this reasoning can justify the preventive administration of law from an economic point of view. Therefore, we focus on the first aspect.

(1) *IN REM* RIGHTS IN CORPORATE LAW AND SIMILAR CONSTELLATIONS

The reason why the preventive administration of justice plays a crucial role in providing third parties with information about corporations is fundamentally related to the fact that a number of features of corporations can be understood as rights with *in rem* effect as described in Section 1.iii(1) above.[103] Here, we describe the most important examples of such *in rem* rights. Note, however, that this description is not meant to be exhaustive. It seems reasonable to assume that there are other examples of *in rem* rights in corporate law. Also, there might exist numerous other situations in which the value of a transaction for a third party depends on features of corporate contracts in which it did not partake. While such situations might not fit within the description of *in rem* rights in sequential transactions, they can be expected to pose similar kinds of problems.

(a) LIMITED LIABILITY

In order to explain why limited liability (and its counterpart, "affirmative asset partitioning"[104]) in particular can be understood as rights with *in rem* effect, it is first important to note that the economic analysis does not understand corporations as entities with their own preferences and rights. Instead, it conceives of corporations exclusively as "nexuses of contracts", legal tools which facilitate the

[102] See Rolf Knieper, Eine ökonomische Analyse des Notariats, 2010, at 30.

[103] See also Benito Arruñada and Carlos Manzanares, The Trade-off between Ex Ante and Ex Post Transaction Costs: Evidence from Legal Opinions, 13 Berkeley Business Law Journal 2017 (2016), at 219-220.

[104] Henry Hansmann and Reinier Kraakman, The Essential Role of Organizational Law, 110 Yale Law Journal 387 (2000). Affirmative asset partitioning refers to the priority corporate creditors enjoy in accessing a corporations' assets to satisfy outstanding claims, in particular vis-à-vis the shareholders' private creditors. See below Section IV.2.i(1)(b).

coordination between the various stakeholders of the corporation.[105] From an economic point of view, a corporation does not own or owe anything. Instead, its assets are jointly owned by its shareholders and creditors who can access these assets according to certain rules (which are partly established by corporate law). Similarly, its debts are regarded as liabilities of its shareholders, creditors, and potentially also managers.

Against this background, limited liability can be regarded as a rule imposing binding limits on the power of the corporation's managers to enter into transactions on behalf of the corporation's shareholders. Using the terminology introduced in Section 1.i(1) above, the managers are acting as the agents of the shareholders, who are the principals in this scenario. These limits are established during the foundation of the business organization as well as in later changes to its foundational documents in what are essentially transactions between the shareholders of the corporation and its managers. Later transactions take place between the managers (acting as agents of the shareholders) and third parties, here mostly in the shape of corporate creditors. Limited liability implies that the manager-agents can only enter into transactions affecting the interests of the shareholder-principals insofar as the latter have brought in assets to the corporation.

Because of this *in rem* effect, any third party interacting with a business organization (in particular potential creditors considering whether to extend money to it) has an interest in knowing the rules governing the allocation of assets between the corporation and its shareholders. As these rules were established by transactions in which it did not take part, it is dependent on obtaining reliable information about these transactions before entering into a contract.

(b) AFFIRMATIVE ASSET PARTITIONING

Affirmative asset partitioning similarly governs the allocation of assets between the corporation and its shareholders. However, different from limited liability, it mostly serves the interests of the corporate shareholders who can access the assets of the corporation with priority over

[105] Michael Jensen and William Meckling, Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure, 3 Journal of Financial Economics 304.

both the shareholders and the shareholders' personal creditors. In the framework developed above, affirmative asset partitioning is best understood as a rule imposing binding limits on the power of shareholders (acting as agents[106]) to enter into transactions affecting the rights of corporate creditors (the principals in this scenario). In other words, affirmative asset partitioning grants corporate creditors a right with *in rem* effect against the use of corporate funds as collateral for private obligations of its shareholders.

Other than most examples of *in rem* rights described above, affirmative asset partitioning is relevant for third parties entering into a contract with a business organization not because it grants others who have previously contracted with the business organization a right to lay claims against the third party or defend herself against a claim by the latter. Rather, affirmative asset partitioning grants such rights to the third party herself, but only to the extent that a previous transaction in which she did not take part (the foundation of the business organization as well as in later changes to its foundational documents) lays the basis for the emergence of such rights. Therefore, just as for a third party who might be affected by *in rem* rights of others, a party's valuation of such a later transaction will crucially depend on features of this previous transaction.

(c) RIGHTS OF NEW SHAREHOLDERS

Maybe the most important example, however, is the acquisition of shares in an existing corporation by new shareholders. The rights and duties following from such shares will to a large degree depend on previous transactions between shareholders and between the shareholders and other stakeholders. At the same time, these rights and duties have *in rem* effect because they apply to the new shareholder irrespective of whether she assented to them at the time she acquired the shares. This is certainly true in a transaction in which existing shares are transferred to a new shareholder, where even the existence of the shares might be in dispute. To a lesser extent, however, this will also be true for shares created in a capital increase. A new shareholder taking over these shares is bound by the articles of association and previous corporate acts irrespective of whether she was aware of

[106] Of course, shareholders, although acting as agents, could also use further agents such as the managers of a company.

them at the time of the acquisition of the shares.

Note also that the transaction leading to her joining the company will usually not involve all principals which potentially are the beneficiaries of rights with *in rem* effect. This is most obvious for a transfer of existing shares; however, according to German law, a purchase of new shares does also not require a contract between (all) existing shareholders and the new shareholder.[107]

(2) INFORMATION PRODUCTION BY MEANS OF THE PREVENTIVE ADMINISTRATION OF JUSTICE

In the previous Section, we have shown that there are many examples of rights with *in rem* effect in corporate law. As a result, third parties entering into transactions involving business organizations in many cases have an interest in learning about previous transactions between the (existing) shareholders and managers of the organizations which could affect the outcome of their own transaction. In almost every jurisdiction, third parties can do so by consulting the company register in which (all or at least most) transactions giving rise to rights with *in rem* effect must be registered. Here, we argue that the preventive administration of justice effectively increases the quality of information available in company registers in a way that is valuable to third parties.

The most important reason why the preventive administration of justice can generate value for third parties is that such third parties are usually not so much interested in information about whether a certain transaction was executed and filed with the company register; instead, they are interested in learning about the existence and scope of *in rem* rights.[108] If company registers do not contain more than mere recordations of transactions and other corporate acts, third parties will have to invest considerable effort in determining the legal implications of the recorded acts, and in ruling out potential threats to the acts' validity. Potentially, if a question is of interest to multiple independent third parties, each party will have

[107] See Section 55 of the Law on the Limited Liability Corporation.

[108] See also Rolf Knieper, Eine ökonomische Analyse des Notariats, 2010, at 37.

to invest the costs of processing this information, leading to a wasteful multiplication of efforts.[109]

The preventive administration of justice contributes to more useful information in at least three ways. First, for all or at least most transactions giving rise to *in rem* rights, it ensures that these transactions were in fact agreed upon by all parties who appear as signatories. Similarly, it ensures that other corporate acts were performed by the persons who are named as the authors of the act. The reason for this is that such transactions and acts are executed in front of a civil law notary, whose recordings are treated as full evidence of the recorded acts.

Second, it also ensures that any transaction or corporate act in fact bring about the effects that are recorded in the company register. The German company register does not contain copies of most corporate transactions and acts; instead, information about the company that is relevant for third parties is published in the form of a trade register excerpt. In order to update this trade register excerpt, both the civil law notary recording a transaction or corporate act and the court maintaining the company register verify whether a transaction or corporate act lead to a change in the legal relationships documented in the trade register excerpt. Only if this is the case is the change entered into the company register.

Third, and related to the second point, the preventive administration of justice also provides a safeguard against the registration of acts that are invalid or can later be nullified because of problems relating to defects in their adoption. For one, both the civil law notary and the court maintaining the corporate registry perform independent reviews of the act and reject any invalid provisions. This includes a check that every person and entity who has to ascent to the act or transaction participated in its adoption, either in person or through an agent with a proper power of representation. She is also tasked with explaining the consequences of a transaction or act to the parties, mitigating the risk of a defect of consent. Besides, even if a mistake goes undetected, it usually does not affect the effectiveness of an act once

[109] See also Section IV.1.ii(2) above.

it has been entered into the company register.

Note that all these features increase the value of the information provided by the German company register for third parties.[110] Contrary to what one might believe, this is also true for the features that guarantee the validity of any acts entered into the company register. A naïve observer could argue that a third party would be indifferent *vis-à-vis* the effectiveness of any rights with *in rem* effect entered into the company register, because she would only profit from a later nullification of such a right. However, such an argument mistakenly ignores that any uncertainty about the validity of such rights still affects the value the contract has for the third party. For example, a transaction might appear like a worthwhile opportunity precisely because all parties presume that some of the acts recorded in the company registry are invalid. Then, the third party potentially has an incentive to invest in more information about whether these entries are in fact irrelevant. Furthermore, such an argument ignores that, as the example of affirmative asset partitioning shows, it is in some cases the third party who has an interest in the validity of previous transactions.

In sum, these provisions substantially reduce the transaction costs for parties who plan to enter into a transaction involving a business organization despite not having been involved with this business organization before, especially compared to systems without reliable public registers.

(3) INCENTIVES TO PRODUCE HIGH-QUALITY INFORMATION ABSENT MANDATORY RULES

Although we argue in the previous section that the preventive administration of justice has considerable positive effects, this argument on its own is not sufficient to justify the numerous rules mandating the involvement of civil law notaries in private contracting. As we show in Section III.2.iii above, mandatory rules can only ever be considered efficient if the same benefits cannot be produced by either the market or a system relying on a voluntary use of state institutions.

[110] See also Rolf Knieper, Eine ökonomische Analyse des Notariats, 2010, at 52-53.

At first glance, it might seem possible to argue that, if the benefits of the preventive administration of justice in fact outweighed its costs, it would be unnecessary to mandate the use of these institutions. This is because the higher benefits would induce rational parties to corporate transactions and authors of other corporate acts to provide only high-quality information to corporate registers anyway, either by opting into using the preventive administration of justice, or by purchasing the services of private providers which essentially performed the same function. In line with our previous arguments about general justifications of rules mandating the production of public information,[111] it is not sufficient to debunk this argument by pointing to the fact that the parties bearing the costs of producing high-quality information (the principal and the agent) are different from the party bearing the costs of low-quality information (the third party), and that the latter is not at the table when the decision on whether to produce high-quality information is taken. The reason for this is that a third party should be willing to pay a higher price to interact with a business organization providing high-quality information about any *in rem* rights of interest to the third party, allowing the parties to the first transaction to more than recoup their investment in high-quality information.

However, this argument wrongly assumes that all costs of a decision not to undergo a review of the kind mandated by the preventive administration of justice are borne by parties who at one point enter into contractual relationships with the parties who decide on the level of quality of the information. In other words, it overlooks an important externality caused by such a decision. As a result, mandatory rules of the kind described above can achieve a substantial reduction in transaction costs related to uncertainty about the existence and scope of *in rem* rights.

The basic reason for this externality is that, if only some business organizations operating in a market opt to use the preventive administration of justice, a party willing to engage in a transaction with such a business organization does not know in advance the type of business or-

[111] Section IV.1.ii(2). See also Section III.2.iv(1).

ganization she encounters. A party looking to rely on the protections against uncertain *in rem* rights provided by the preventive administration of justice first has to invest in information about whether all previous transactions were in fact concluded in front of a notary. If she finds that the preventive administration was not used for all transactions recorded, she has to consider whether the presence of individual recordations in which no civil law notary was involved threaten the validity of other transactions. In sum, the uncertainty about the nature of the business organization will likely cause substantial increases to all parties interacting with this kind of business organization. This situation could potentially even result in a "market of lemons" problem, i.e. it could lead to a situation where no parties to corporate transactions or other authors of corporate acts to make use of the preventive administration of justice.[112]

(4) RESPONSES TO POTENTIAL OBJECTIONS

In short, the argument laid out above states that only mandatory rules requiring the involvement of government agencies in private contracting can guarantee a high quality of information available in public registers. Here, we preemptively reply to two objections that might be raised against this argument.

(a) THE POTENTIAL OF PRIVATE ACTORS TO PROVIDE HIGH-QUALITY INFORMATION

First, it seems possible to argue that there are alternatives to the preventive administration of justice for creating a system aimed at safeguarding the high quality of information in the company register, in particular that such a system could be established without a mandatory involvement of civil law notaries. In fact, one could assume that the task performed by

[112] See also Section III.2.iv(1) above. To understand how this problem could play out, consider that, as a consequence of the above, it might become less attractive for parties to corporate transactions or other authors of corporate acts to make use of the preventive administration of justice or similar systems. After all, the transaction costs third parties face in determining the nature of any business organization they encounter reduce the reduction in transaction costs which we argue is the major benefit of the preventive administration of justice. This could reduce the willingness of third parties to pay higher prices to interact with business organizations for which "high quality" is available. If this development in fact induces some parties to decide against using public notaries, this could in turn again increase the transaction costs of third parties even more and result in a vicious cycle at the end of which no parties to corporate transactions or other authors of corporate acts to make use of the preventive administration of justice or similar systems.

civil law notaries could also be rendered by private service providers, which would have an incentive to build a reputation for producing high-quality information. One might even argue that a market for notary services can be expected to yield better services at lower costs as compared to a system in which notarization is the sole domain of government agents.

Note that this argument is different from arguing that it is unnecessary to have a system like the preventive administration of justice in the first place. This argument, which we address in Section(3) above, states that parties should be free to choose whether they want to have their transactions or corporate acts approved by any provider of services similar to those rendered by civil law notaries. Here, we consider an alternative proposal that mandates the use of some form of notary services, but allows the parties to a transaction to choose between different providers of such services, with civil law notaries being just one among many service providers in a market for notary services.

Ultimately, we consider this argument to be unpersuasive at least insofar as it claims that a market for notarization services always leads to better outcomes than the preventive administration of justice as it exists, for example, in Germany. There are at least two reasons for this. First and maybe most important, as Merrill and Smith have argued for private providers of property rights regimes, „identifying to which private system a [transaction] belongs would entail processing costs of its own."[113] Right now, every third party interacting with a German *Gesellschaft mit beschränkter Haftung* knows that the foundational transaction was executed in the presence of a German notary. This would be different in a system in which more than one private provider of services is active in the market.

Second, a system aimed at guaranteeing a high quality of information through the reputation of these private service providers would require a considerable amount of legal intervention to work.[114] Most importantly, the government would need to protect the marks attached to contracts

[113] Thomas Merrill and Henry Smith, Optimal Standardization in the Law of Property: The Numerus Clausus Principle, 110 The Yale Law Journal 1 (2000), at 50.

[114] See also Thomas Merrill and Henry Smith, Optimal Standardization in the Law of Property: The Numerus Clausus Principle, 110 The Yale Law Journal 1 (2000), at 50.

certifying that a transaction was notarized by a certain provider. If the government fails to do so, third parties need to invest considerable time and effort in making sure that the mark was indeed issued by the agency appearing as the issuer.

(b) THE POTENTIAL OF STRONGER PROTECTIONS FOR ACQUIRERS

It might be argued that the preventive administration of justice is unnecessary because similar effects could be achieved by holding principals and agents responsible for ambiguous or misleading information in company registers. In fact, as it stands, the law in Germany generally protects third parties relying on the contents of the company register even if an entry is the consequence of a faulty transaction.[115] One could think that such a system would incentivize principals and agents to only enter correct and unambiguous information into the company register.

Yet this argument overlooks that, absent a system like the preventive administration of justice, such rules would greatly increase agency costs for anyone whose interests could be affected by a transaction in which a third party relies on information in the company register.

The most important reason for this is that there would be no independent review of recordations before they are entered into the company register. Most importantly, this implies that it cannot be ensured that transactions recorded in the company register were agreed upon by all parties who appear as signatories, nor that other corporate acts were performed by the persons who appear as the authors of the act. Besides, there is a risk that transactions or corporate acts are not accurately recorded in the company register.

To the extent that principals are nevertheless held responsible for any misleading information in the company register, such information could lead to a situation where their rights with *in rem* effect become unenforceable. Therefore, in order to avoid this outcome, principals would have to invest considerable resources in monitoring the company register to make sure that there is no such wrong information. As a result, such a rule would be much less effective in reducing agency

[115] See, for example, Section 15(3) of the German Commercial Code.

costs as compared to the preventive administration of justice.

To the extent that principals are only held responsible for any misleading information insofar as they contributed to its publication, third parties cannot rely on the information provided by the company register. As a result, the reduction in transaction costs would be minor at best, and certainly not as effective as the one provided by the preventive administration of justice.

(5) PRELIMINARY RESULTS

The preceding analysis has shown that the preventive administration of justice in corporate law in Germany serves as an instrument to produce valuable information in sequential transactions that cannot be provided by a scheme built on voluntary information disclosure by the parties to such a transaction. Though our argument does not prove that the preventive administration of justice outperforms systems based on a mere recordation of corporate acts and transactions. After all, as described in Section III.2.iii above, the preventive administration of justice also produces costs, and it is not self-evident that the benefits described in this Section are sufficient to make up for those. However, in light of the argument presented above, it certainly seems wrong to dismiss the preventive administration of justice as inefficient solely on the basis that it increases the costs of certain transactions by mandating the involvement of government actors in these transactions.

ii. Empirical Evidence

There are two main streams of empirical literature which in principle seem well positioned to produce evidence about the relative costs and benefits of the preventive administration of justice. As we will describe in more detail below, none of these literatures provide conclusive evidence that the preventive administration of justice is less efficient than alternative systems. However, one stream of literature seems to allow for a modest conclusion in the other direction: If the preventive administration of justice causes any inefficiencies at all, these inefficiencies are not big enough that they would make it worthwhile for all but a small number of entrepreneurs to incorporate their businesses in another jurisdiction.

(1) THE IMPACT OF REGULATING ENTRY

The first stream of literature, following a seminal contribution by Simeon Djankov

and others,[116] use large cross-country datasets to investigate correlations between the time and effort needed to set up a limited liability company in a given jurisdiction, and real-world outcomes such as the number of business incorporations per year. This literature documents that higher costs as well as more and lengthier proceedings are correlated with worse real-world outcomes. Generally, researchers involved in these studies interpret these findings as evidence that simplifying entry regulation would bring about beneficial effects.[117]

However, there are various reasons why such research is unable to answer the question whether the preventive administration of justice, as it exists in countries such as Germany, has detrimental effects on the outcome variables used in this research. It goes beyond the scope of this Expert Opinion to revisit this literature in detail, and we will only list two of the most important concerns.

First, the methodology used in these studies is generally not well suited to answer questions about the impact of entry regulation on real-world outcomes. The most important reason for this is that countries that differ in their regulation of entry might also differ in other regards. Therefore, it is impossible to infer from a finding that countries with more entry regulation on average score lower on the outcome variable that entry regulation is causally connected to these outcomes, i.e. that countries with high levels of entry regulation would score better if they reformed their entry regulation. By contrast, it is well possible that the real reason why these countries perform worse are other characteristics which, although they are correlated with high levels of entry regulation, would not be affected by such a reform.[118]

Second, even if such research was able to generate credible estimates for the causal effect of entry regulation, it is important to note that such a result would merely indicate that countries *on average* would

[116] Simeon Djankov et al, The Regulation of Entry, 117 The Quarterly Journal of Economics 1 (2002).

[117] See, e.g., Simeon Djankov, The Regulation of Entry: A Survey, 24 The World Bank Research Observer 184 (2009).

[118] See Holger Spamann, Empirical Comparative Law, 11 Annual Review of Law and Social Science 131. This limitation of so-called observational studies (i.e., studies that rely on data in which the variables of interest were not administered by the researcher) in research investigating causal questions is well known in the econometric literature. See only Joshua Angrist and Jörn-Steffen Pischke, Mostly Harmless Econometrics: An Empiricist's Companion, 2009.

profit from less entry regulation.[119] By contrast, such a result would not imply that this effect would be the same for all countries in the dataset, nor that all reforms simplifying entry would be equally effective. There are various reasons why starting a business can be more burdensome in one country than another, and the existence of a system like the preventive administration of justice is just one among many potential factors that can result in increased costs and a longer duration of starting a business. As Timothy Besley noted in a review of the Doing Business Reports:

Some of the specific items in the Doing Business rankings are more about government efficiency than about the merits of regulation. For example, it is difficult to argue that it is an important regulatory goal to impose especially long time delays or high costs for those who want to start a new firm, or register commercial property, or engage in international trade, or get a construction permit.[120]

It seems absolutely plausible that less entry regulation leads to positive outcomes insofar as heavy entry regulation is a measure of government inefficiencies. Also, if there are enough countries in the dataset that feature such inefficiencies, it could well be that a negative correlation between entry regulation and entrepreneurial activity can come about as the result of such inefficiencies. Importantly, such a result can come about even if countries with a system akin to the preventive administration of justice on average perform better than countries without such a system. Therefore, it is also possible that, even if most reforms aimed at simplifying entry indeed led to welfare gains, some reforms would have the opposite effect.[121]

(2) THE IMPACT OF THE LIBERALIZATION OF COMPANY LAW IN EUROPE

A different stream of literature investigates the consequences of a string of decisions by the European Court of Justice allowing entrepreneurs in all countries in the European Union to incorporate their

[119] Technically, the reason why this research only attempts to establish average treatment effects is that it would otherwise be impossible to generate (precise) estimates for such effects.

[120] Timothy Besley, Law Regulation, and the Business Climate: The Nature and Influence of the World Bank Doing Business Project, 29 Journal of Economic Perspectives 99 (2015), at 115-116.

[121] See also Benito Arruñada, Pitfalls to avoid when measuring institutions: Is Doing Business damaging business?, 35 Journal of Comparative Economics 729 (2007), at 734-735.

companies in other jurisdictions. Early research documented that, following these decisions, a substantial number of companies operating in other member states were incorporated in the UK, which has comparably little entry regulation and in particular does not have a system comparable to the preventive administration of justice.[122] This was interpreted by some as evidence that lower levels of entry regulation are desirable.[123]

However, there are again at least two reasons why this literature cannot be read as evidence showing that the preventive administration of justice produces inefficiencies. First, the statistical analyses in Becht et al (2008) failed to provide evidence that high setup costs were responsible for the decisions by entrepreneurs to incorporate in the UK. Instead, the analysis suggests that this effect was mainly driven by minimum capital requirements, which are different from the preventive administration of justice in corporate law.[124]

Second, subsequent research focusing on companies operating in Germany and Austria found that the trend to switch to companies incorporated in the UK lasted for a short period of time only. Even before Germany changed its company law to allow for incorporations of companies with lower minimum capital, the numbers of foreign incorporations from Germany had dropped substantially. A similar trend can be observed for entrepreneurs in Austria.[125]

These findings indicate that the vast majority of German and Austrian entrepreneurs, after gaining a better understanding of the relative costs and benefits of incorporating companies in either jurisdiction, came to the conclusion that any benefits of the UK system were not enough to

[122] Marco Becht et al, Where do firms incorporate? Deregulation and the cost of entry, 14 Journal of Corporate Finance 241 (2008).

[123] Marco Becht et al, Where do firms incorporate? Deregulation and the cost of entry, 14 Journal of Corporate Finance 241 (2008), at 255; Simeon Djankov, The Regulation of Entry: A Survey, 24 The World Bank Research Observer 184 (2009), at 193.

[124] Marco Becht et al, Where do firms incorporate? Deregulation and the cost of entry, 14 Journal of Corporate Finance 241 (2008), at 252.

[125] Wolf-Georg Ringe, Corporate Mobility in the European Union – a Flash in the Pan? An empirical study on the success of lawmaking and regulatory competition, 10 European Company and Financial Law Review 230 (2013).

justify the costs of incorporating there.[126] This allows for a modest conclusion regarding the costs and benefits of the preventive administration of justice: even if the costs of the preventive administration of justice outweigh its benefits, this difference must be relatively small. Otherwise, more entrepreneurs would have used the opportunity to establish companies in the UK not only in the years following the relevant decisions by the European Court of Justice, but also in the years since.

[126] Note that it might be more costly for an entrepreneur from Germany or Austria to incorporate a company in UK than it is for an entrepreneur from the UK. One reason is that the entrepreneur needs a business address in the UK. Another reason are translation costs. Therefore, it seems possible that Austrian and German entrepreneurs would prefer a UK-style corporate law at home, although they are not willing to incur the costs of incorporating in the UK.

V. CONCLUSION

This Expert Opinion examines the merits of various claims about the efficiency of mandatory forms of the preventive administration of justice in civil law countries, which require individuals and other private actors to seek the assistance of government actors in structuring their legal relationships in an attempt to help avoid future conflict and increase legal certainty.

The existing law and economics literature as well as related policy reports such as the Doing Business Reports published by the World Bank tend to treat such institutions as inefficient because of the costs that they impose on the parties of private transactions. Besides, a number of empirical studies comparing the economic characteristics of countries with stronger regulations surrounding the establishment of a company with those that impose fewer regulations are often cited as evidence of the inferiority of systems incorporating preventive administration of justice. By contrast, this Expert Opinion shows that preventive administration of justice, in particular when it is used to validate the information published in public registers, produces beneficial effects that can provide an important economic justification for such a system. It also documents that the available empirical evidence is insufficient to support the claim

that preventive administration of justice impedes economic activity. Therefore, it is arguably impossible to determine from an economic point of view whether legal systems that rely on preventive administration of justice are inferior to those that rely exclusively on an ex-post adjudication of disputes.

This Expert Opinion focuses on the question whether any mandatory preventive administration of justice must be regarded as inefficient "*per se*" because it prevents private parties from ordering their affairs in an efficient manner. The economic analysis assumes that, as a matter of principle, rational parties are able to order their affairs in an efficient manner, and that such private ordering by way of contract usually also yields efficient results on a societal level. With respect to the preventive administration of justice, this implies that any efficiency-enhancing services which form part of the preventive administration of justice could also be provided by private service providers. As a result, unless there is evidence of any market failure that would prevent an alternative system from reproducing any features of the preventive administration of justice which are considered beneficial by private parties, mandatory forms of the preventive administration of justice could never be regarded as efficient.

We find that there are indeed market failures that make it highly unlikely that a system relying exclusively on the market could produce the same quality of information in public registers that is guaranteed by the preventive administration of justice in countries like Germany. In other words, preventive administration of justice gives rise to important benefits that have so far largely been ignored in the literature. This finding provides a strong economic justification for maintaining a system like the preventive administration of justice: Because of the benefits described above, it is arguably impossible to determine on a purely theoretical basis that the costs of the preventive administration outweigh its benefits, or that economic theory supports the abolishment of the preventive administration of justice in its entirety.

Because of the impossibility to determine theoretically whether legal systems that rely on preventive administration of justice are inferior to those systems that follow a different approach, this Expert Opinion also addresses the question whether there is empirical evidence that would elucidate whether the benefits of the preventive administration of justice outweighs its costs. Such empirical evidence, in principle, could come in two forms: on the one hand, the evidence

could show that the preventive administration of justice causes economies to perform better or worse than others; on the other hand, there could be evidence that entrepreneurs prefer to incorporate in a system with or without a preventive administration of justice. As part of the analysis, this Expert Opinion also discusses the implications of the World Bank Doing Business Reports, which in their section on starting a business provide and evaluate data on entry regulation in numerous jurisdictions.

The result of this analysis is that, contrary to some claims in the literature, there is no conclusive evidence that the preventive administration of justice is inefficient. By contrast, the available evidence provides some support for the conclusion that if the costs of the preventive administration of justice are higher than its benefits, this difference must be relatively small.

In sum, therefore, this Expert Opinion finds that there is no compelling reason to conclude that legal systems which include a preventive administration of justice are inferior to their counterparts which focus exclusively on adjudicating disputes after they arise. The challenges for preventive administration of justice addressed in this expert opinion do by no means justify the policy recommendation to abolish the preventive administration of justice in their entirety.

***