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“I think it would be more efficient if you left the company”

The Belgian Shareholders Dispute Settling Regime and Efficient Breach of Contract through Decisions of the Shareholders and the Courts

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Abstract

Corporations are built upon the cooperation between shareholders. However, especially in closely held corporations, relations can deteriorate and disputes can arise, threatening the functioning of the company.

In this case, the Belgian Corporations and Associations code allows shareholders to petition the court to exclude a co-shareholder or to withdraw as a shareholder themselves, against the payment of a fair price. This introduces a liability-rule protection of the ownership of shares, allowing for a breach of contract between shareholders.

This thesis analyses the decisions of shareholders within this legal framework through a model, based on two parameters set by the Courts (price and validity of the claim). Through this model, this paper aims to assess under which circumstances this breach of contract is efficient, and which information is available to the Courts to make decisions.

Foreword

In this brief foreword, I would like to thank all the people that helped to shape the EMLE experience that I am grateful to have lived in the last year. From the snowy nights in Hamburg, over the rainy bridges of Rotterdam, to the shade of *platanes* in Aix, it was a blessing.

Special thanks go out to my supervisor professor Belleflamme and professor Garello, who both in a pinch raised the right questions and comments to create a more accurate first model on pricing, as well as friends and family who provided useful feedback in endless discussions on the topic.

Authorship declaration:

> I hereby declare and confirm that this thesis is entirely the result of my own work except where otherwise indicated. I acknowledge the supervision and guidance I have received from my supervisor and within the EMLE programme in general. This thesis is not used as part of any other examination and has not yet been published.
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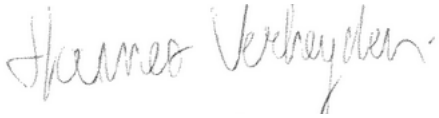
> Hannes Verheyden 11 August 2024



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I. Introduction

1. An Introduction to the Topic

The global economy as we know it is built on individuals combining their resources in corporations to achieve results that far surpass the sum of the contributions of their constituent founders. Cooperation through corporations allows entrepreneurs to bring their ideas into economic reality, both providing them with financing opportunities and shielding them from excessive risk. Where the board of directors or other executive bodies carry out the actual management of a corporation, such organs are generally appointed by the general assembly of shareholders, deciding on the direction that the corporation will take. The cooperation between shareholders, therefore, is the cornerstone upon which any corporation is built.

However, shareholders (either human or legal entities) and the relationships between them are subject to change. This is equally true for the corporation in which they have invested together, and where difficult and complex decisions must be made with a certain majority between shareholders. The idea of cooperation that led parties to invest together and create a company, can deteriorate to a point where the corporation becomes paralyzed or directionless due to the underlying disputes between shareholders.

To resolve these issues, economic and corporate codes or statutes typically include different dispute settlement regimes by which these issues can be resolved.[1] This thesis focuses on the Belgian dispute settlement regime, with which the author is most familiar. The Belgian Code of Corporations and Associations (hereinafter: "CAC"), allows for shareholders to resolve adequately severe issues by excluding other shareholders, or for themselves to withdraw from the corporation through binding decision by the Courts.

In essence, this dispute settlement regime leads to a breach of the agreement between the shareholders establishing the corporation, and, therefore, a breach of contract. The dispute settlement regime allows for this breach of cooperation by infringing on the property rights a shareholder has about his shares, by instituting a liability rule. The question this thesis will address is whether this Court-sanctioned breach of contract will be efficient, and in which way the Courts can *ex ante* influence this by setting precedents.

2. Research Question

The research question addressed in this thesis will be:

> "*Does the Belgian Shareholders Dispute Settlement Regime allow for an efficient breach of the* partnership *between shareholders through Court intervention?*"

[1] *E.g.* New York Business Corporation Law Section 1118 (New York), Article L.223-27 Code de Commerce (France), GmbH-Gesetz section 34 and 29 (Germany), Companies Act articles 360 and 124 (Japan).

This question will be investigated by first analysing the legal framework, before diving into the economic machinations behind it and modelling the Shareholders and Courts choices to assess whether an efficient outcome is always reached.

3. Delimitation of the Topic and Illustration

The main topic consists of an efficiency analysis of the dispute settlement regime under Belgian law. Other legal concepts - such as shareholders' agreements and dissolution procedures - will be introduced where they are relevant in interpreting the main topic within the larger legal framework.

To be able to translate the law into economic models, a sober setup will be analysed, consisting of a medium-sized business with two shareholders, each holding 50% of the shares without any one shareholder having a decisive vote. The main issue within the company will be that the General Assembly is unable to agree on important decisions. However, it should be noted that other factual matters could lead to the application of the regime, such as a majority shareholder abusing his majority to the cost of a minority shareholder.

Lastly, the focus on this thesis will be on a typical small, closely held friends or family business. These usually have a limited amount of shareholders, and the director is oftentimes one of the shareholders themselves.[2]

[2] (Moll, 2005), p889 e.f.

An illustration of a real-life situation where the regime will be applied can further clarify the focus of this thesis:

> A brother and sister open a brewery under a Private Limited Company, each holding 50 of the 100 shares in the corporation, with the goal of producing sustainable beer in the old tradition of wild fermentation. Trusting each other, no shareholders' agreements have been signed containing any provisions on deadlocks or dispute resolution.
>
> After a few years, the brother wants to adopt more commercial brewing practices, believing this will be more profitable. The sister, however, wants to keep tradition alive and does not agree with her brother's proposal to change what she feels is the corporation's identity. Slowly but steadily resentment starts to grow as the two grow further apart in their goals, and at Christmas that year they have a big argument leading them to not speak with each other anymore. Decisions on the appointment of management face a deadlock and no decisions can be made within the general assembly. Being stubborn, both hold on to their share in the company and refuse to cooperate to appoint management, leaving the restaurant leaderless.

Seeing that cooperation is no longer possible and not wanting the company to suffer any further under a stalemate, the sister proposes to buy out her brother. Unfortunately, they cannot reach an agreement on the transfer of the shares. As a last resort, the sister initiates Court proceedings and requests the Court to decide on a forceful transfer of her brother's shares.

The aim of this thesis is to analyse whether the decision of the Court always leads to a more efficient outcome or if the breach of contract can sometimes be inefficient, through the decisions of shareholders.

II. Description of the Legal Framework

To understand the different decisions made regarding the exclusion or withdrawal from a corporation, a good understanding of the legal regime is crucial. In this first chapter, a preliminary examination of the current legal rules will be conducted before further delving into the economic realities posed by the rules of the game.

This thesis focuses specifically on the dispute settlement regime as incorporated in the Belgian Code on Companies and Associations, in articles 2:60 to 2:69. Although the Code entered into force quite recently, on the first of January 2020, the dispute settlement regime is largely identical to the earlier regime, with some changes concerning procedure and, more importantly, the valuation of the shares of the company. Furthermore, jurisprudence by the higher Courts such as the *Cour de Cassation* and the Courts of Appeal adds important interpretation to these rules.

Firstly, the field of application of the dispute settlement regime will briefly be discussed under (1). Under 2.i and 2.ii, the procedure will be described in more detail. This can concretely be described in two sequential steps and decisions by the Court; namely on the validity of the dispute settlement itself (2.i), and on the valuation of the shares that will be transferred in the process (2.ii).

1. Application *Ratione Materiae*

Firstly, and as already described briefly under I.3, article 2:60, the regime is applicable to the standard corporate forms in Belgium, namely the Public Limited Companies (*naamloze vennootschap – societé anonyme)* and Private Limited Companies (*besloten*

vennootschap – srl). Shareholders in these types of companies can exercise the rights of exclusion and withdrawal, further described *infra*. Interestingly, even shareholders with a partial ownership – say, voting rights – can theoretically institute proceedings.[3] With regard to withdrawal, any shareholder can institute proceedings to withdraw from the company. For an exclusion claim however, a *de minimis* ownership, representation of voting rights, or rights to the profit of a combined 30% must be achieved by the claimants for the claim to be admissible.[4]

2. Summary of the Settlement Dispute Regime

Once a claimant or group of claimants has achieved the criteria mentioned above, they can institute summary proceedings before the president of the Commercial Court, which means the procedure will be held more efficiently and faster than before the regular Court.[5] This streamlined procedure, together with the recently expanded authority of the president to also tackle related issues, allows for a more efficient handling of the case. In the same sense, the corporation itself is obliged to join the proceedings as a party, to allow for a complete solution in the shareholders' dispute.

The claimant can either opt for exclusion or withdrawal, briefly summarized below:

- **Exclusion**: In an exclusion procedure, the claiming party requests the Court to force the defendant to sell their shares to the claimant. If the request is granted,

[3] Article 2:61, 1° CAC.
[4] Article 2:63 CAC.
[5] Article 2:62 CAC.

the claiming party will receive the defendants' shares, and must pay the defendant a price determined by the Court.[6]

- **Withdrawal**: In a withdrawal procedure, the claiming party requests the Court to force the defendant to buy the shares of the claimant, against a Court-determined price.

The two options aim to eliminate the conflict between shareholders by forcing the defendant to leave or allowing the claimant to leave – a relatively drastic solution to the issue. This constitutes a last resort solution.

These mirroring procedures follow the same blueprint and concretely consist out of two sequential steps and decisions by the Court; namely on the validity of the dispute settlement itself (II.2.i), and on the valuation of the shares that will be transferred in the process (ii).

i. Validity of the Exclusion or Withdrawal

Articles 2:63 (exclusion) and 2:68 (withdrawal) CAC provide that shareholders can initiate the judicial dispute settlement procedure based on "*valid reasons*".

The interpretation of what constitutes a valid reason is a first parameter by which the Courts can exercise their discretion within the law, and therefore directly influence the efficiency of the dispute settlement regime. If the threshold is set to low, beneficial

[6] Article 2:63 CAC a.f.

partnerships could be too easily broken apart for personal gain. When set too high, on the other hand, dysfunctional general assemblies will stay together even though it would be better for the shareholders to part ways. In other words, the threshold should be set to allow for an efficient breach of contract, while safeguarding the strength of contracts enough that individuals can still rely on a certain level of certainty when entering into agreement and becoming a shareholder in the first place.

In practice, the Courts interpret the valid reasons threshold *prima facie* quite in line with the ideas mentioned above. A side note to this is the information issue that arises when Courts must make decisions, especially in summary proceedings as discussed *in casu*, where a relatively fast decision is expected. The cost of gathering information usually has a diminishing marginal rate of return, and the question rises in what detail the Courts can and have to assess the circumstances of the case (*infra III.5*). In this regard, an intuition-based approach on whether the dispute between shareholders is sufficiently severe to warrant a forced transfer of shares, might be quite effective.

Jurisprudence on the qualification of "*valid reasons*" seems to be quite varied and is usually decided *in concreto*. Nevertheless, the main guidelines seem to be uniform. Firstly, the valid reasons must be attributable to the defendant, which in practice means that the majority shareholder is often the one infringing on the minority's rights.[7] Furthermore, valid reasons do not have to consist out of an actual *fault* by the defendant, but rather at minimum the creation of a situation which cannot be expected to be

[7] Commercial Court Ghent, 28 December 2011, ECLI:BE:ORGNT:2011:JUG.20111228.1 .

tenable for the claiming party.[8] The dispute settlement regime should therefore not be seen as a sanction, but rather a conflict-solving mechanism, hence the payment of a 'fair' price for the transferred shares (*infra*).

Moreover, in the senate discussions on the passing of the CAC, it was discussed that the valid reasons must have economic effects on the functioning of the corporation, even if the cause is private disagreement between the parties.[9]

The jurisprudence indicates therefore that a claim will generally be granted if there are sufficiently severe indications that the functioning of the corporation is at stake, or if it cannot reasonably be expected for the situation to continue. In this sense, a marginally strict application of the law is applied by the Courts, who require adequately *valid reasons* to grant a claim.

ii. Valuation of the Shares

Once the Court has decided to exclude or withdraw one of the shareholders based on the *valid reasons* as described above, a second decision must be made: the determination of the price of the transferred shares.

Principally, this valuation takes place by measuring the value of the corporation at the date of the transfer of the shares. If this were to lead to an "unfair" result, the Courts

[8] Memorials of the General Attorney before the Cassation Court, 16 March 2009, ECLI:BE:CASS:2009:CONC.20090316.2.
[9] *Id.*

have the possibility to adjust the price.[10] A common way to adjust the price of the shares, is to value them at a different date, usually placed before the events that created the *valid reasons* for the break-up to happen.[11] This originally was a jurisprudence-based rule, but has been formally included in the legislation in the meantime.

This discretion of the Court to adjust the price only is applied when a normal valuation would otherwise lead to perverse results and is therefore an exception. Usually, the Court appoints an expert to determine the value of the corporation. This expert takes into account the sector of the corporation to be examined, and usually applies an aggregate of regular valuation methods[12]:

- Discounted Cash Flow;
- Adjusted Net Assets;
- Liquidation value;
- Comparison with other enterprises;
- EBITDA or Revenue Multiples.

The price is therefore usually fixed, and consequently also determinable by the parties before initiating a procedure. The expected value of the price will therefore *ex ante* influence shareholders' decision making. From a social efficiency perspective, the price of the shares is merely a transferral of money. However, as it affects the shareholders

[10] Article 2:67 and 2:69 CAC.
[11] Cour de Cassation 15 March 2015.
[12] Institut des Réviseurs d'Entreprises (Belgium), *methodes d'évaluation*, (https://www.ibr-ire.be/fr/notre-profession/secteurs-dintervention/pme/plateforme-evaluation-d-entreprises/m-thodes-d-valuation (11/06/2024)).

initiatives, it can be an important parameter in incentivizing shareholders to behave in the interest of social welfare.

III. Economic Analysis

Under chapter II, the legal framework on the dispute settlement regime has been described. In the following chapter, these rules will be assessed from an economic standpoint.

Firstly, under title III.1, the nature of the dispute settlement regime will be discussed, as it forms an exception to the usual property rights a shareholder has regarding their shares. Given that the regime entitles another individual to infringe upon the property of their co-shareholders, the regime introduces a liability rule. This exception could be efficient, for example, to avoid hold-up problems. However, it will be argued that externalities, transaction costs and social welfare are more relevant in this context.

To asses this, first, a definition of an efficient breach will be determined by setting different parameters under III.2. Determining the actual value of these parameters, however, could pose an issue to the Courts from an information perspective.

Therefore, the decisions of the shareholders will be modelled to analyse whether these provide further information to the Courts. First, with regard to price-setting by the Courts (III.3.i) and second, by their decision on the validity of the claim (III.3.ii). By using their discretion under the law to decide on these two parameters the Courts can try to set precedents inducing shareholders to only institute proceedings if they are socially

efficient (III.4). However, although this analysis provides some information on the underlying parameters necessary to make these decisions, certain values remain to be researched by the Court, leading to the Courts deciding on possibly inefficient claims due to unclear information (III.5).

1. The Dispute Settlement Regime as a Liability Rule

Firstly, the nature of the dispute settlement regime as a liability rule will be discussed. As described under II.2, the dispute settlement regime allows one shareholder to force a transaction of property rights upon the other shareholder. Whereas the ownership of shares usually is protected by property rules,[13] this special exception in the Corporate Code infringes upon the property rights of shareholders by instituting a liability rule. Given that transaction costs are *a priori* rather limited, the choice for a liability rule must be examined.

i. Property and Liability Rules

Guido Calabresi and A. Douglas Melamed described the differences between certain rules in their 1972 paper on "*Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*" (Calabresi & Melamed, 1972), namely property rules, liability rules and inalienability.[14]

[13] *E.g.* in the Belgian Civil Code.
[14] Inalienability won't be discussed further as it is less relevant to the topic at hand.

Where a *property rule* entails that one has full decision authority regarding their property, that cannot be infringed upon,[15] a *liability rule* is defined as follows:

> "*Whenever someone may destroy the initial entitlement if he is willing to pay an objectively determined value for it, an entitlement is protected by a liability rule.*"[16]

Following this distinction, the dispute settlement regime analysed in this paper can be described as a *liability rule*, distinguished from *property rules* by the fact that one shareholder can force the other shareholder to hand over their property rights to their shares, under the payment of a transfer price. Ownership of things is generally defended by property rules.[17] In this sense, the forced exclusion or withdrawal can be seen as an exception.

The choice between either a property rule or a liability rule depends *i.a.* on the transaction costs involved with a possible transaction between the relevant parties.[18]

When transaction costs are low, a property rule is best suited to tackle the issue.[19] An advantage of property rules is that they allow for Coasean bargaining:

> "*In contrast, the right to an injunction gives the parties a clear position from which to bargain. In the course of bargaining, they may establish the value of the*

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[15] (Kaplow & Shavell, Property Rules Versus Liability Rules: An Economic Analysis, 1996), p715 and p774.
[16] (Calabresi & Melamed, 1972), p1092.
[17] (Kaplow & Shavell, Property Rules Versus Liability Rules: An Economic Analysis, 1996), p716.
[18] (Calabresi & Melamed, 1972), p1089 ; (Cooter & Ulen, 2016), p100.
[19] (Cooter & Ulen, 2016), p86.

damage themselves. Thus, the traditional argument concludes that the injunctive remedy is more efficient than damages when the parties can bargain with each other."[20]

Coasean bargaining allows for the Parties to determine for themselves the values of their respective positions, and bargain accordingly.[21] In this context, a property rule is more efficient than a liability rule if Coasean bargaining is possible:

"When transaction costs obstruct bargaining, creating efficient incentives by awarding damages requires the Court to measure the harm correctly. If the Court mismeasures the harm, damages will be set too high or too low, which will distort the injurer's incentives. Alternatively, when transaction costs obstruct bargaining, creating efficient incentives requires the Court to know which party values the right the most in order to decide between an injunction and no injunction."[22]

To avoid the burden of correctly assessing the harm (or even risking an inefficient decision based on insufficient information), the Courts should apply a property rule if transaction costs are sufficiently low. Later in this paper, this information issue will be discussed in more detail, as it might provide a barrier for the Courts to efficiently apply the law (*infra III.5*).

[20] *Id.*
[21] (Coase, 1960)
[22] (Cooter & Ulen, 2016), p101.

ii. Coasean Bargaining between Shareholders

As the dispute settlement rule nevertheless institutes a liability rule, the question arises whether this can be explained by the difficulty of bargaining between the parties involved.

Famously, the Coase Theorem states that two distinct conditions must be met to allow for Coasean bargaining, namely low transaction costs and well-defined property rights.[23] Firstly, property rights with regard to the shares are legally required to be noted in the company register and are therefore well-defined, which is even a prerequisite to institute proceedings (*supra II.1II.1*).[24]

Moreover, transaction costs between parties in a shareholder's dispute seem to be rather low, analysing the different steps of the transaction:[25]

I. Search and information costs are limited. As shareholders in a relatively small corporation, the parties know each other well and, most often, have worked together for years. Moreover, as a shareholder one generally has a good view on the value of the corporation and on the intimate information of its workings. If, for example because of the dispute, this information is hidden by the other party (who might, for example, be appointed as director)[26], legal remedies are included in the corporate code to gain access to the relevant information.[27]

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[23] (Coase, 1960)
[24] Article 2:63 CAC.
[25] (Cooter & Ulen, 2016), p88.
[26] (Moll, 2005)
[27] Article 3:103 CAC

II. Bargaining costs can be assumed to be limited as well. The parties have cooperated in the past, and no significant extraordinary costs can be assumed to be necessary to negotiate between the two parties. A notable exception in the circumstances of a dispute, however, could be the behaviour of shareholders who out of spite or pride could refuse to bargain. This could increase the transaction costs severely.

III. Enforcement costs are also limited, as the negotiations concern the transfer of property rights, which subsequently can easily be enforced. There is no need for monitoring or other follow-up measures, as the proposed transaction is essentially a one-time sale.

Even when the number of parties increases within reasonable bounds, these transaction costs can be assumed not to reach an amount that could substantially limit the possibility of bargaining assuming all parties remain rational. If the dispute is adequately severe, behavioural barriers could prevent the parties from bargaining constructively, which already indicates a first legitimation for a liability rule.

Moreover, instituting Court procedures, which then is the alternative to private bargaining, is itself not without costs either. For completeness, it should also be added that even though the situation is not static but rather sequential (*infra, III.3.ii*), this has

no influence on the transaction costs, as the parties are already familiar at the start of the "game", being the first disagreement.[28]

As Coasean bargaining is theoretically possible, and a property rule is *a priori* more efficient, why is the dispute settlement regime instituted as a liability rule?

iii. Other possible Justifications of the Liability Regime

The heightened transaction costs due to personal emotions inhibiting rational bargaining already provide an explanation why a liability rule is introduced. In this sense, the law lowers transaction costs by forcing the other shareholder to come to a (court-mandated) solution.

However, the difficulty of negotiation could also be explained as a heightened value (due to pride for example) for one of the shareholders to keep their shares. This then would not be a sufficient justification to introduce a liability rule, as everyone should in principle be entitled to value their property how they want to.

Another possible cause for introducing a liability rule, could be from a more distributive, "fairness-oriented" viewpoint, whereby society deems it unfair that one shareholder can block negotiations based on his personal and possibly irrational valuation of their shares.[29]

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[28] Therefore, a situation as was described in the case Spur Industries v. Del E. Webb Development and where a so-called "rule 4" solution was prescribed, is not present in shareholders' disputes.

[29] It is argued that distributive effects could often explain the development for a liability rule by (Calabresi & Melamed, 1972), p1110.

Nevertheless, economic arguments can be proposed to support the liability-based protection *in casu.* Firstly, and as discussed above, transaction costs could have risen dramatically due to the very human behaviours shareholders could exhibit when in a fierce dispute (such as a refusal to talk at all with the other shareholder).

Several other possibilities seem to support the introduction of the forced transaction presented by the dispute settlement regime, namely hold-up problems and externalities:

a. Hold-Up

One argument could be that the efficiency gains should be situated even before the corporation is created. At this moment, the shareholders must decide if they want to enter into an agreement with their prospective co-shareholders.

Without the dispute settlement regime, which allows them to one-sidedly exit a co-dependency with the other shareholders, they would not risk entering the agreement in the first place. The law thereby gives possible shareholders the confidence to enter a corporation, as they can rely on to exit their position and avoids a classic *hold-up* problem.

However, several other corporate legal instruments address this issue as well, diminishing the necessity of the exclusion and withdrawal mechanisms:

- First, the shareholders have a possibility to agree on exiting and exclusion methods in detail through a shareholder's agreement.[30] The dispute settlement regime is, by law, trumped by any agreements made between the shareholders, and the Courts must consider any agreements closed by the shareholders.
- Moreover, unless otherwise agreed upon in shareholders' agreements, all shares in both a Public and Private Limited Company are freely tradable. This means that any shareholder can freely sell their shares to a third party, even though this might be more challenging on the more illiquid market for closely held corporations.[31]

Therefore, shareholders usually possess exit possibilities, which can be detailed in a shareholders' agreement beforehand. The free transferability of shares is useful but not sufficient protection for shareholders.[32]

However, the law is non-mandatory and shareholders agreements will be enforced by the judge presiding over the proceedings.[33] Due to these combined mechanisms, a hold-up problem is unlikely to occur, as any party with trust issues could amend these through contracting *ex ante*.

[30] Article 2:66, 2:67 and 2:69 CAC
[31] (Thompson, 2011), p372. ; (Kraakman & Al., 2016), p88.
[32] (Kraakman & Al., 2016), p88.
[33] Confirmed by the Cour the Cassation as recently as 27 June 2024 ; *E.g*. 2:66 CAC: "*When the Court orders the exclusion, it ensures that those statutory and contractual limitations are respected.*" ; (Geens & Verhoest, 1998), p371.

b. Externalities

However, to assess the social efficiency of the regime, another element must be considered outside of the shareholders' relationship. Whereas Coasean Bargaining allows for mutually beneficial agreements between the contracting parties, it does not include (non-internalised) externalities.

The externalities to be considered can be decisive in deciding whether a transfer of shares is efficient, as the procedure can only be started when cooperation is failing and the company is suffering under this (*supra II.2.i*). Some examples:

- Employment and social benefits;[34]
- Benefits of produced goods and services;
- Taxes paid;
- Innovation;[35]
- …

It is therefore not desirable from a societal perspective to let productive corporations suffer under the disagreement between two or more shareholders. This could severely limit their positive contributions to society. As share value is dependent on the performance of a corporation, shareholders do have an incentive to act in the benefit of the company.[36] However, the arising of a dispute that results in a deadlock indicates that

[34] (Porter & Kramer, 2006)
[35] (Milgrom & Roberts, 1990)
[36] (Kraakman & Al., 2016), p13.

in such a case personal and differing views and incentives prohibit productive cooperation.

In order to avoid this, the liability rule imposed by the law enables shareholders to break deadlock, though only under certain circumstances (*valid reasons*) and against a certain set price (for the transferred shares). An exclusion or withdrawal can avoid negative external effects by solving the dispute between shareholders, such as paralysis or even bankruptcy of the company. These situations could even lead to negative externalities, such as procedure costs for society, unpaid bills, unpaid taxes,… .

Even though the introduction of a liability regime could, therefore, provide more efficient outcomes, the question remains whether this is always the case. This will be discussed in the following chapters.

2. Defining an "Efficient Breach"

In the previous title, it was discussed that the dispute settlement regime is an exception to the usually absolute property rights of shareholders, by introducing a liability rule in case of internal disagreement. A potential explanation for this deviation could be that the externalities accessory to the shareholders' disputes are important and that Coasean Bargaining does not account for this. Another possibility is that shareholders refuse to bargain with each other – out of pride, mistrust, spite, … – raising the transaction costs.

To assess whether the law leads to an efficient outcome with the inclusion of externalities, a definition of efficiency first needs to be determined.

i. Kaldor-Hicks efficiency

The efficiency standard applied will be Kaldor Hicks efficiency, as the aim of this paper is to research whether the law leads to a overall, socially beneficial outcome. If the transaction is socially beneficial, briefly summarized, the overall potential gains could theoretically compensate for the potential losses of the transaction.[37]

In this, it deviates from the standard of Pareto-efficiency, under which the transaction would only be seen as an efficient Pareto-improvement if none of the parties would be worse off afterwards.[38] In the circumstances at hand, applying Pareto-efficiency as a standard could often result in a Pareto-inefficient outcome, as one of the shareholders could be worse off – even if overall welfare increases. As the focus lies on overall welfare and externalities, Kaldor Hicks efficiency will be used as a standard.

ii. Relevant Parameters

The next step in the analysis is defining the transaction's relevant parameters. Following this, an equation representing an efficient transaction will be constructed.

a. The shareholders' utility from participation in the corporation

First, what will *i.a.* determine the actions of the Players is how much they value their participation as shareholders in the company. This value will be determined by how much a shareholder values their participation at any given moment. This entails their

[37] (Zerbe, 2001), p5.
[38] *Id.* ; (Cooter & Ulen, 2016), p14 ; (Pindyck & Rubinfield, 2018), p616.

current utility as well as their appreciation of future ownership and expected utility, which is personal.[39]

The utility of the ownership of shares in a company for the shareholders is highly personal and can depend on a multitude of factors. This utility not only depends on the market value of the shares but can also depend on the level of control in the company, non-monetary physical benefits, personal pride, attachment to the company, and other not easily quantifiable values. Negative utility should be accounted for too, such as time and effort spent, and for example stress from the dispute that has arisen. The personal utility can be, therefore, irrational for others, but nonetheless constitutes real utility that must be taken into account.

Moreover, this is not a static variable, as the shareholders' perspectives are constantly changing. Cooperation between shareholders can be subject to personal quarrels or differences in points of view on the company, (greatly) diminishing the functioning of the underlying corporation and the respective valuation of the participation by the respective shareholders.

In the following chapters, the individual values of shareholders A and B will be defined as "**a**" and "**b**" respectively.

[39] (Kahneman & Tversky, 1979), p286-287.

b. Changes in utility through benefits of a successful claim

The resolution of the conflict through the settlement procedure presumably will have positive effects on the corporation, allowing it to function once again more fluently and letting important decisions in the general assembly be made. Therefore, the value of staying in the corporation (**a** or **b** respectively) will rise for the party that remains, and most probably gains further control over the company.

The expected added benefit of the departure of the other shareholder for the shareholder who acquires the shares will be described as "**β**". This value represents the change in parameter **a** or **b**. Most importantly this represents two things:

- The value of the control gained over the company, but also lost cooperation with the leaving shareholder;
- The economic value of the transferred shares (split between voting rights and economic rights).

Especially the benefits of control can be very advantageous for the shareholder holding the control over the corporation.[40] However, as the focus falls on generally closely held corporations where control is less dispersed in the first place, the transferred share value can still be of importance as well.[41]

The gained benefits for the shareholder that is leaving the corporation, next to the price (**P**) they receive, are represented by the loss of their utility **a** or **b**, as these included both

[40] (Kraakman & Al., 2016), p79 ; (Dyck & Zingales, 2004)
[41] (Moll, 2005), p890.

positive and negative effects. As such, the gaining of free time, the possibility to re-invest their now liquid assets, etc… are accounted for in the model.

c. External effects

Moreover, not only the shareholders will be affected by a successful exclusion or withdrawal. Given the improved functioning of the company and its economic effects, for example by increasing production and employment, externalities ensue outside of the relationship between the shareholders. In this paper, the externalities will be assessed as the gains (or losses) that come with solving the dispute, *i.e.* the avoidance of the effects of the dispute (such as deadlock or bankruptcy).

These externalities, effects on social wealth other than that of the shareholders, will be described as "**E**". The improved productivity also increases the value of the shares of the remaining shareholder, which, however, is already described under **β**.

The externalities consist *inter alia* of the possibility of the corporation to keep their employees, possible innovations that arise within the company and more generally, all positive and negative externalities that are brought forth by the corporation due to the added manageability after the removal of a dissenting shareholder.

They are interpreted with the situation during the dispute as benchmark, in which the functioning of the corporation is obstructed. As such, the externalities will generally be positive. Nevertheless, negative effects could arise from losing one of the shareholders (such as lost experience and cooperation benefits).

d. The price of the transferred shares

A fourth parameter will be the price of the shares, to which the letter "**P**" will be assigned. The price is determined by the procedure as described *supra* under II.2.ii. Assumed to be a relatively determinable parameter by both the Courts and the Shareholders, the price can play an important role in shaping the shareholders incentives.

e. Costs

A last relevant parameter would be the costs of the procedure, both for the shareholders (lawyers and Courts' fees) and for society (Court costs). Given the scope of this thesis however, costs will not be considered, as they could be described as modification of the price to be paid or received for the shares **P**, even if they are dependent on the length of the procedure.

iii. A model for an efficient transaction

Having defined the expected efficiency standard and relevant parameters regarding a shareholders' dispute, an equation can be constructed to define under which circumstances an exclusion or withdrawal procedure could lead to an efficient outcome if successful.

A claim is socially efficient if the sum of all utilities and benefits after the requested transaction is higher than the sum of utilities and benefits before the transaction, expressed as follows using the parameters defined earlier:

$$\mathbf{a + \beta + E > a + b}$$

Equation 1

This equation reflects that the change in ownership is efficient if the value of staying for A (**a**), together with the benefit A attains by receiving control (**β**) and external benefits (**E**) are larger than the status quo existing out of the utility of the shareholders (**a** + **b**). Whereas price is important in the decision-making by the shareholders, from a social-efficiency perspective it is only a transfer of wealth without any influence on the total social wealth.

In theory, this equation is sufficiently simple to apply in a real-life Court situation, essentially asking the Courts to make a cost-benefit analysis of the requested judgement on exclusion or withdrawal. The Courts, when judging a case, would have to apply this equation and grant every claim for which it holds true to make the law efficient.

However, the difficulty for the Court will be to determine the value of the relevant parameters to be able to make a sound judgment and set correct precedents.[42]

As the shareholders have more knowledge on the company, they are better placed to assess the different values of these parameters, especially regarding their own personal

[42] (Calabresi & Melamed, 1972), p1107.

utility from holding their shares (**a** and **b**). This information will however not necessarily be clearly presented, as both shareholders will have an incentive to misrepresent certain figures to gain a personal advantage and can lie on their respective valuations.[43]

However, the Courts could possibly gain information on certain parameters through the decision-making process of the shareholders within the procedure. To analyse this information available to the Courts, the decisions of the shareholders will be modelled in accordance with the set parameters in the next title.

3. Modelling shareholders decisions

Shareholders make decisions based on the information available to them, on the corporation, their own utilities and possibly externalities of the company. Therefore, in this title, the aim will be to model the decision-making process of the respective Shareholders or Parties through a game-theoretical approach. The following step will be to research if the Courts can learn information based on these decisions and apply it to assess the efficiency of the requested transactions.

Keeping to the scope of this thesis and its length; a basic set-up will be analysed, consisting of two shareholders (hereinafter also designated as *Players A and B*), each holding half of the shares, resulting in a deadlock in the general assembly where voting is assumed to be majority-based.

[43] (Calabresi & Melamed, 1972), p1108.

Player A will represent the first mover in the game, *ie.* the party that initiates Court proceedings and files for either exclusion or withdrawal. A third option is that a party wants to maintain the *status quo*, which will be named "*stay/fight*". In the event that A files for exclusion or withdrawal, and B accepts this (or *vice versa*), this acceptance will be interpreted as a voluntary withdrawal and therefore as a combination of (*exclude ; withdraw*) or (*withdraw ; exclude*).

As the Courts have two respective choices to make, namely on the price and on the validity of the claim, both will be analysed separately with regard to how they influence the decisions of shareholders, and what information can be gathered from their decisions.

For the sake of oversight, the following table summarises the applied parameters:

Value of the shares	**a** or **b**	Price	**P**
Control Benefits	**β**	Externalities	**E**
Chance of success	**p(e)** or **p(w)**		

i. Price as the only incentive

First, the following simplified model is constructed to describe the pay-offs for the Players if the Courts always grant the claim of Player A, and they only have discretion on deciding the price **P**. As the claim of A is presumed granted, player B cannot opt to maintain the *status quo*. Regarding the parameters as described *supra*, the chance of success of the suit is therefore 100% in this scenario (**p(e) = 1 or p(w) = 1**).

The payoffs of the Players can be described by the following table:

Table 1

Player A's decision	*Payoffs (A ; B)*
Stay/fight	a ; b
Exclude	a – P + β ; P
Withdraw	P ; b – P + β

The incentives for the Players in this simplified model can be described as follows:

- A will <u>exclude</u> if **a – P + β > a**, which can be simplified to **β > P**, and if **a – P + β > b** or otherwise stated if **a + β > 2P**.

  In other words, Player A will opt to exclude Player B if the benefits they receive from having total control over the corporation outweigh the price they will have to pay Player B for the transferred shares.

- A will <u>withdraw</u> if **P > a**.

  This entails that Player A will opt for withdrawal if the price they will receive for their shares outweighs the utility of keeping their shares.

- If both **β > P** and **P > a** are true, both options are more interesting for Player A than the status quo. They will then opt for the choice that pays off better, which depends on the following constraints:

- If **a > 2P – β**, exclusion will be preferred;
- If **a < 2P – β**, withdrawal will be preferred.

The incentives for Player B, if they were to move first, are the same, although naturally changing **a** and **b**.

This first model already allows for an interesting analysis of the possible efficiency of the regime with interference by the Courts. Even though the decision on the validity of the claims has been omitted in this model, the price proves to be an influential factor in the decision-making process of the Players. Therefore, by setting a price-setting precedent, Courts could incentivize Players to only sue for exclusion or withdrawal if this is socially efficient.

The formula used in this paper to describe an efficient outcome is: **a + β + E > a + b** (see *supra* III.2). This can be simplified to **β + E > b** or **β > b – E**. In other words, the outcome will be efficient if the total benefits from the procedure outweigh the utility Player B have by holding their shares. However, **β** is the only factor from this equation relevant for Player A**.** How can the Court influence Player A's decisions to let them align with social efficiency? The answer could be Price, which in this scenario is set by the Court.

To align the incentives of Player A with a socially efficient outcome, these equations can be combined. A new constraint has to be set by the Courts with regard to the price to create an *ex ante* incentive for Player A to only initiate a procedure when it is socially efficient.

This is relevant in the current scenario as it is assumed that the Court can only decide on the price, not whether to grant the claim. Even though **P** is not relevant for the social outcome, it is what provides the incentives to the decisions of Player A. Therefore, the Court can set the price **P** high or low enough to align A's incentives with social welfare concerns, and incentivize him only to sue when efficient.

For exclusion, this would entail the Courts determining **P > b – E** and setting a precedent as such, creating a new incentive/constraint for Player A:

$$\begin{cases} \beta > P \\ P > b - E \end{cases} \rightarrow \quad \beta > b - E$$

As important is that the price is not too high (which occurs if **P > β**), as not to discourage Player A to exclude when it is efficient. If these constraints are to be expected by Player A, they will only exclude when the outcome also is socially efficient.

Regarding withdrawal, introducing the new constraint **P < β + E**, allows for efficient outcomes:

$$\begin{cases} a < P \\ P < \beta + E \end{cases} \rightarrow \quad \beta + E > a$$

It is therefore equally important that the price **P** is high enough to incentivize Player A to withdraw when efficient (**a < P**).

To incentivize Player A to only opt for a procedure if this is socially efficient, according to this first simplified model, the Courts must set a precedent in price-setting where:

- In case of exclusion, the price to be paid by the excluder A is higher than the utility of Player B in keeping their shares, minus the externalities that a transfer of shares would result in. At the same time, the price **P** should not be higher than **β**, to avoid not excluding when it is efficient. If the price cannot be set between these two boundaries, the exclusion won't be efficient.

  This entails, for example, that the Courts could set a precedent where the price of the shares is lowered significantly if the transfer of shares would result in avoiding the bankruptcy of the corporation and thereby retaining economic value brought by a corporation that can function again. If on the other hand the input of Player B in the corporation is significant and it can be expected that their departure will result in negative externalities, this will lead in a higher price that will be only paid by A if their benefits outweigh these externalities.

- In case of withdrawal, the price received by the withdrawer A is lower than the benefits for Player B for getting control plus the externalities that a transfer of shares would result in. On the other side, the price has to be high enough to

incentivize A to initiate the proceedings, outweighing his *status quo*. Again, if **P** can't be determined within these constraints, the transaction wont be efficient.

This incentivizes Player A to internalise the externalities and benefits for Player B in his decision-making process. For example, Player A will only opt to withdraw if the price outweighs his current status, but also only if this sufficiently high price is outweighed by Player B's benefits and externalities.

By setting these precedents in pricing, the Courts can already create an *ex ante* incentive for Shareholders to only initiate proceedings when this is socially beneficial.

ii. The Courts' Decision on Validity of the Claims as a Variable

However, as described *supra* under II.2.ii, the Courts' discretion in determining the share price is rather limited. Therefore, their main instrument remains their decision on the validity of the claim, and the determination and precedent-setting of what constitutes "*valid reasons*" to warrant an exclusion or withdrawal.

Moreover, the second mover Player B can also initiate a counterclaim, consisting of either (i) fighting for the *status quo*, (ii) accepting the exclusion/withdrawal, or (iii) countersue for exclusion/withdrawal.

To include this in the model, from the standpoint of the Players, the chance of success of the claim will be introduced as **p(e)** or **p(w)**, multiplied by the payoffs that would result if the (counter)claim is granted by the Court. The payoffs included if the (counter)claim of the Players will be multiplied by **(1 – p(e)** or **1 – p(w))**. In the event both Parties claim

the same (*withdraw – withdraw* or *exclude – exclude*), p(e) or p(w) is a successful claim by A, whereas (1 – p(e) or 1 – p(w)) represents a successful counterclaim.

In practice, the Court has a third possibility, namely rejecting both claims, however this option in practice is seldomly used and will not be included in the payoff table below (although it will be discussed in more detail *infra* under III.4)

This results in the following pay-off table:

Player A \ B	*Stay-fight*	*Exclude*	*Withdraw*
Stay-fight	a ; b	p(e) . P + (1 – p(e)) a ; p(e) (b – P+ β) + (1-p(e) b	p(w) . (a – P + β) + (1 - p(w)) a ; p(w) P + (1 – p(w)) b
Exclude	p(e) (a – P + β) + (1-p(e)) a ; p(e) P + (1 – p(e)) b	p(e) (a – P + β(a)) + (1-p(e)) P ; (1-p(e)) (b – P + β(b)) + p(e) P	a – P + β ; P
Withdraw	p(w) P + (1-p(w)) a ; p(w) (b – P + E) + (1 – p(w)) b	P ; b – P + β	p(w) P + (1 – p(w)) (a – P + β(a)) ; (1 – p(w)) P + p(w) (b – P + β(b))[44]

Table 2

Furthermore, as Player A will move first, and Player B can react with a counter claim, the game is not static but sequential.[45] After both Players have presented their respective claims (exclude/stay/withdraw), the Court has the final say in the procedure, deciding on granting either Player A's initial claim, Player B's counterclaim, or to not grant any claim at all. Graphically, the decision tree can be presented as follows:

[44] A side note to a withdraw – withdraw scenario is the possibility of liquidation, as further described *infra* under III.4

[45] (Pindyck & Rubinfield, 2018), p517.

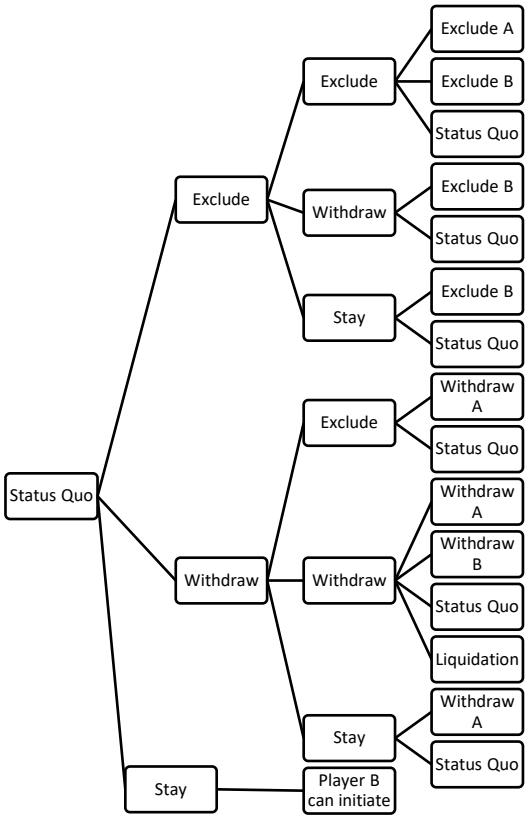

Table 3 *Player A's decision → Player B's Decision → The Court's Decision*

If Player A opts to "Stay" Player B has the possibility to *exclude – stay – withdraw* as well, and A has equal response possibilities, and, again the Court decides as last.

Analysing this game structure through backwards induction can provide insights in the decision-making process of the Shareholders. The decision of the Courts is inherently *ex post*, in that it will be determined by the claims set by the Players.

However, through jurisprudential precedent, Parties can try to predict which decision will be made by the Courts and adjust their claims accordingly knowing how the Courts would react if a certain claim were brought. If this precedent is in line with social

efficiency, concretely granting efficient claims and rejecting inefficient claims, an *ex ante* effect will be created where Shareholders consider efficiency when making their claims.

4. The choice of the Courts

The Court, by deciding to grant either Player A or Player B, must decide between two possible pay-off tables (and compare these to each other and the status quo).

The chances of succeeding, as presented in Table 2 by (**p(e)** and **p(w)**), are decided by the Courts. From the Courts perspective, this is either 0 (declining the claim or granting the counterclaim) or 1 (granting the claim or declining the counterclaim). For the shareholders/Players, the situation is not black nor white as precedent is not a perfect indicator, which will however be discussed under III.5.

When the claim of Player A is granted (and **p(e) = 1** or **p(w) = 1**), the payoffs present themselves as follows:

Player A \ B	*Stay-fight*	*Exclude*	*Withdraw*
Stay-fight	a ; b	a ; b	a ; b
Exclude	a + β – P ; P	a + β – P ; P	a + β – P ; P
Withdraw	P ; b + β – P	P ; b + β – P	P ; b + β – P

The payoffs in the case of a successful counterclaim (and **p(e) = 0** or **p(w) = 0**) are mirrored, and as follows:

Player A \ B	*Stay-fight*	*Exclude*	*Withdraw*
Stay-fight	a ; b	P ; b + β – P	a + β – P ; P

Exclude	a ; b	P ; b + β – P	a + β – P ; P
Withdraw	a ; b	P ; b + β – P	a + β – P ; P

From an economic perspective, the Courts should set the chance of success of the claims of the parties (p(e) or p(w)) based on what is economically most efficient, either granting (**p(e) = 1** or **p(w) = 1**) or rejecting (**p(e) = 0** or **p(w) = 0**) the claim.

As proposed under 2III.2, the formula to be used by the Courts is **a + β + E > a + b**, stating that the claim of one of the parties should be granted only if the benefits for the shareholder who remains and society (externalities) are larger than the lost personal value of the leaving party.

As the Courts decide last (see Table 3), if they apply this equation consistently, they can *ex ante* influence the decisions of the Players. A clear precedent where efficiency always can be the prime goal of the Courts, induces Players to take decisions based on the knowledge that the Court will pick the efficient option. In this way, the Players themselves would pre-emptively take socially efficient decisions.

If this were to be perfectly true, and assuming Parties bear non-significant legal costs, no counterclaims would exist, as claims would only be instituted if it were clear to the Parties that the Court would grant their claim based on efficiency considerations. However, counterclaims are instituted in Court, indicating that Parties perceive the situation and/or the Courts plausible decision differently. In a scenario with conflicting claims, questions of efficiency and information asymmetry arise.

Therefore, in the following title the different scenarios will be discussed, considering the sequential process described under Table 3, and assuming the Players try to consider their perception of the possible decision of the Court. A second assumption is that the Courts only apply efficiency goals in their decision making, which is not the case as described under II.2.i.

a. Stay - Stay

Both Players opting to *stay* and not to initiate a procedure, results in the continuation of the *status quo*. This outcome will ensue if the Players themselves, or the Courts as perceived by the Players, assume that **β + E ≤ b**, or, in other words, if the personal and social benefits of excluding or withdrawing do not outweigh the value of the "other Player" staying in the company and this is assumed by all Parties.

A *stay – stay* scenario therefore indicates a probably efficient outcome, as neither of the Parties initiate a procedure, either because they do not stand to benefit from this personally, or because they assume the Courts would not grant their claims as they supposedly are inefficient. The possibility still stands that cooperation is less efficient than one of the Parties leaving, but the Courts can naturally not intervene unless requested to. As this thesis focusses on whether the application of the law leads to an efficient outcome, and a *stay – stay* scenario means the procedure hasn't been initiated, it will not be addressed further.

b. Exclude – Withdraw

An *exclude – withdraw* scenario entails a situation where one Party excludes the other, and the other accepts this. This indicates a principal agreement on the exclusion or withdrawal itself, but disagreement on the price, as Coasean Bargaining before proceeding was unsuccessful. Player A or B might assume to get a better price in Court than the one that was presented during earlier negotiations. This indicates that there could be a different perception about the price **P** on behalf of both Parties.

As the price is assumed to be reasonably determinable before starting a procedure, other behavioural obstructions to bargaining might have interfered, and the Court can act as an objective and neutral decider on the price of the shares, making the outcome more acceptable for both Parties. In this sense, the Court provides a neutral place to discuss the settlement and thereby lowering transaction costs.

Given the framework as described under II.2.i, the Courts will generally grant the uncontested claim of Player A since Player B agrees with this, without any regard for social welfare. The price of the transferred shares is merely a transfer a wealth and does not influence the overall welfare. Therefore, at first sight, it is unsure whether the socially more efficient outcome is reached.

Nevertheless, the Courts should still consider efficiency, even if there is agreement between the Players. By including externalities, it might still be socially inefficient to grant the claim of withdrawal or exclusion. The added value of the partnership between the two Players could theoretically outweigh the benefits after a split. However, since Parties assumably only initiate proceedings in the case of serious mistrust that

incapacitates the corporation, the question is if this outcome is plausible in any real cases.

Applying the model, the initiation of the exclusion by Player A indicates that:

- $\mathbf{a - P + \beta > P \Leftrightarrow a + \beta > 2P \Leftrightarrow \frac{a+\beta}{2} > P}$
- $\mathbf{a - P + \beta > a \Leftrightarrow \beta > P}$

The acceptance of the claim by Player B indicates to the Courts that:

- $\mathbf{P > b}$
- $\mathbf{P > b - P + \beta'}$[46]

Combining this information, the following equation ensues:

- $\mathbf{\frac{a+\beta}{2} > b}$ or $\mathbf{a + \beta > 2b}$ and $\mathbf{\beta > b}$

And, considering the equation discussed *supra*, this information provides insight on the efficiency of the outcome, whether $\mathbf{\beta + E > b}$ holds.

Through the decisions of the Players, the Courts can assess that the personal benefits and utility of Player A already outweigh the participation of the excluded Player at least by a factor of 2. This means that the Court only must analyse the expected externalities. As soon as these are positive, which will generally be the case, an efficient breach will

[46] With β' indicating that the personal control benefits for Player B could differ from those of Player A.

ensue. Even if externalities are negative, an efficient breach is still possible as long as they are offset by an increase of personal benefits for A.

c. Withdraw – Exclude

Mirroring an *exclude – withdraw* scenario, a *withdraw – exclude* scenario will generally also lead to a net positive increase in social welfare. From the Players decisions the following information can be deducted:

- **P > a**
- **β > P**
- **b – P + β > P ⇔ b + β > 2P ⇔** $\frac{b+\beta}{2}$ **> P**

Following the same analysis as described for a *withdraw – exclude* scenario above, unless the externalities are sufficiently negative, the granting of the claim (as also requested by both Parties) will lead to a socially efficient outcome.

d. Exclude – Fight

Whereas both Parties agreed on the validity of the procedure in the first two scenarios described *supra*, an *exclude – fight* scenario entails that Player A sues to exclude, and Player B introduces a counterclaim by requesting the Court to maintain the *status quo*. In this situation, Coasean Bargaining failed and Player B could not be convinced by the price offered by A, rather valuing their personal utility from holding the shares higher.

Disagreement between the Players means they assess the parameters at hand differently, as well as how they think the Court will judge.

Even though Player B is possibly not fully reimbursed for his loss of utility, the addition of externalities in the equation economically justifies the granting of the claim if the social welfare increases. To achieve an efficient outcome, it is essential that the Courts asses the different parameters and base their decision by weighing the different factors.

Mathematically, the information available through the decisions of the Players can be described as follows:

- Player A feels that **a + β – P > a**, or simplified that **β > P** and **a + β – P > P ⇔ a + β > 2P**
- Player B feels that **b > P** and that **b > b – P + β' ⇔ P > β'**
- Assuming **P ≥ 0**;
- As Coasean bargaining failed, it is also known that probably **β < b** (otherwise A would have paid a price **β > P > b**).

Further information can be found by assuming that efficiency is reached (**β + E > b**), in which case **β + E > P**. This means that if efficiency is reached, the benefits **β + E** will always be larger than the price:

β + E > b → β + E > P

b > P

Based on this, it can be concluded inversely that if the benefits for Player A and the externalities combined are lower than the price, the transaction won't be efficient. Knowing through A's choices that **β > P**, this means that **E** can seemingly be negative, but not more than the difference between **β** and **P**.

Are these the strictest constraints to be found under which circumstances is it efficient to exclude, applying the formula **a + β + E > a + b**?

Unlike the previous scenarios, the decisions of the Players don't provide the Courts with a lot of information to assess the parameters from the efficiency equation **β + E > b**.

The externalities however must be positive, and large enough to overbridge the difference between Player B's lost utility **b** and the control gains of A, **β**. Through the information of the decisions of the Players it is known that **β < b**, which means that if externalities are not large enough and not positive, there will be an efficiency loss. Lastly, if **β + E < P**, the transaction won't be efficient and has to be dismissed.

Player B assumes the Court will value (or can be convinced to value) that **β + E < b**, and that the claim is not efficient. Player A, on the other hand, assumes and will try to demonstrate that **β + E > b**, and therefore that the externalities will be large enough to validate his claim.

Apart from this information, the Court will have to assess an objective value of these parameters to make an efficient decision. The information to make this decision can prove difficult to be gathered.

e. Exclude – Exclude

In an *exclude - exclude* scenario both Parties value their participation in the company (**a** and **b**) highly and presume that excluding the other Party will lead to benefits that are worth more than the price they will have to pay for the transferred shares.

This means, from the Players perspective that:

- Player A feels that **a + β – P > a** and **a + β – P > P**
- Player B feels that **b + β' – P > b** and **b + β' – P > P**

Referencing the *exclude – fight* analysis *supra*, it is already established that an exclusion will result in a net increase if **E > b – β** or, since Player B institutes a counterclaim as well, **E' > a – β'**, whereby the externality gains must be sufficiently high.

The question that remains if both Players opt for excluding the other, which one should be granted the claim.

The jurisprudential precedent is that whoever created the dispute gets excluded. Economically however, the Court should compare between **β + E – b** and **β' + E' – a** and assess which would yield the highest results.

An interesting mechanic to consider as a solution could be bidding, thereby discovering if **β + a – P** or **β' + b – P** is highest. This would however still not provide enough information to chart the social welfare effects as externalities **E** or **E'** are omitted. Given that most externalities would exist out of value created by the continuation of the company, they could be largely the same regardless of which shareholder retains control.

f. Withdraw – Fight

In a *withdraw – fight* scenario, Player A wants to leave the corporation and receive a price for their shares, whereas Player B wants Player A to stay, and does not want to pay the price for the shares of A.

This can be described as follows:

- Player A feels that **P > a** ;
- Player B feels that **b > b + β – P** or **P > β** ;
- Assuming **P ≥ 0** and **γ ≥ 0**;
- As Coasean Bargaining failed: **β < a**.

Applying **β + E > a** does not lead to any new mathematical constraints providing further information. However, analysing when a claim is inefficient does provide new information, if **β + E < a**:

β + E < a → β + E < P

P > a

This means that, if the transaction is inefficient, the benefits **β** and externalities **E** combined are always lower than the price. Inversely, if the benefits **β** and externalities **E** combined are not lower than the price **P**, the transaction will be efficient. This does not rule out however that if **β + E < P**, the transaction is still efficient.

Therefore the Players decisions do provide some insight:

- If **β + E** ≥ **P**, then the transaction will be efficient;
- **B < P**, therefore externalities **E** have to be positive and sufficiently high to bridge the gap between **β** and **P**;
- **β < a**, which indicates similarly that for **β + E > a**, externalities **E** must be positive and sufficiently high to bridge the gap between **β** and **a**. As **P > a**, the difference between **P** and **β** will be smaller than the difference between **a** and **β**.

Following this, externalities will have to outweigh the lost utility **a**, considering a lower benefit for Player B, **β**.

Other than this, the Courts cannot gain any further information on the relevant parameters through the decisions of the Players, and instead will have to rely on their biased pleadings and evidence to try to make a sufficiently informed decision leading to an efficient outcome.

g. Withdraw – Withdraw

Lastly, in a *withdraw – withdraw scenario*, both Players value the expected price of their shares higher than their current participation. Although they could sell their shares to any third party, they expect to obtain a higher price through the procedure or couldn't find a buyer.

As both Parties want to withdraw, it can be concluded that:

- **P > a** and **P > b**;
- **β < P** and **β' < P**

The question by the Courts is first, as described under the *withdraw – fight* scenario, if **β + E > a** and **β' + E' > b**. If this is the case, the next question is if **β + E > β' + E'** or **β + E < β' + E'**.

A first option for the Courts would be to grant the withdrawal to the Party that contributes the least in the company, assuming this will provide higher externalities. This however would also create a perverse effect inducing Parties to contribute the least possible when a Court procedure is a possibility.

If the cooperation between the two parties was valuable, retaining the *status quo* and forcing the parties to work together could also be more efficient. A sufficiently stringent interpretation of the "*valid reasons*" standard in the law could filter those instances where a cooperation is still possibly more productive than a separation.

However, when both Parties want to withdraw from the corporation, another legal mechanism becomes a possibility, namely the **dissolution** if requested by one of the shareholders.[47] Loss of *affectio societatis* from all invested Shareholders can lead to the liquidation of the corporation by selling off the assets of the company (possibly in *going concern*) and using the proceeds to pay off debt. The remaining surplus is divided amongst shareholders *pro rata*.[48]

However, jurisprudence and precedent indicate that this is not always preferred, and that the shareholder showing the most signs to preserve the corporation will be awarded the shares.[49] The reasoning behind this is, paraphrased from a judgement of the Court of Appeal of Ghent, that it "*wouldn't be socially desirable to dissolve a company that has a future and is a source of employment*".[50] This precedent already set by the Courts indicates that, indeed, externalities provided by the corporation are considered as a basis for decision making.

[47] Articles 2:70 a.f. CAC
[48] If there are insufficient assets to cover debts, bankruptcy-proceedings are instituted, so that this option will not be opted for by the Players if such would be the case.
[49] Ghent, 28 December 2011, ECLI:BE:ORGNT:2011:JUG.20111228.1. ; Ghent 25 juni 2007, NjW 2008, 33.
[50] (paraphrased from Dutch).

Given the third option of dissolution, the Court must take into account four possibilities and opt for the socially most efficient one given the social welfare it will result in:

- Status Quo (a + b);
- Withdraw A (b + β + E)
- Withdraw B (a + β' + E')
- Dissolution and Liquidation (liquidated assets + E'')[51]

Whereas jurisprudence seems to be aligned with these efficiency considerations, the choice between either withdrawing A or B is based on who was the 'cause' of the valid reasons leading to the withdrawal. Therefore, not necessarily the most efficient outcome will be reached. Furthermore, only limited and biased information provided by the Parties is available to the Courts.

5. Information Issues

Following the analysis of Players decisions *supra*, it becomes clear that only limited information can be gathered regarding the different parameters necessary to reach an efficient outcome through the Courts.

When the case comes before the Courts and the Parties principally agree on the exclusion or withdrawal, it can be argued that the outcome will most likely be efficient as long as the externalities are positive or even not too negative (III.4.b and III.4.c)

[51] With (') indicating different benefits depending on which Party leaves the company.

When a counterclaim is instituted by Player B however, difficulties arise in determining whether a claim is efficient. In these circumstances, the Courts must rely on the Parties presentation in the Courts about the value of the different parameters in play.

i. A Summary of Available Information Through Player Decision-making

Nevertheless, following the model some insights can be inferred in case of a disputed claim:

If an exclusion is objected against, an indication of **β** and **b** can be deduced (III.4.d). The Courts must assess whether the externalities are positive sufficiently high to offset the lost utility **b**, knowing that the benefits for Player A are smaller than Player B's lost shareholders utility. Exactly defining these parameters, however, could prove costly and inefficient in its own right.

Following the analysis in III.4.d, a first comparison can be made by the Courts to the price instead of the utility of Player B, which is easier to determine and thereby alleviates information costs. In this sense, the Courts know that if the control benefits for Player A and externalities together are lower than the price, the transfer is inefficient and should be rejected. If this is not the case, further research is needed.

When both Parties opt to exclude, an additional question will be which shareholder values their participation the most, and which one would benefit the company the most, to decide which is the most efficient (III.4.e). This information also must be gathered through biased pleadings by the Parties.

In an objected withdrawal scenario, externalities will have to outweigh the lost utility **a**, considering a lower benefit for Player B, **β** (III.4.g). Again, externalities prove to be a decisive factor that must be assessed by the Courts together with the other factors **β** and **a**.

However, given the model described under III.4.g, the Court knows that if the control benefits for Player B and the externalities are higher than the price, the transaction will be efficient. As price is more easily defined, this can again alleviate decision making by the Courts.

Lastly, when both Parties want to withdraw, even more options have be assessed because of the increased toolbox of the Courts (III.4.g). After assessing if one of the withdrawals is efficient in the first place, a possible second decision must be made to choose which one can withdraw, or even if a dissolution might be more efficient.

Allowing the Courts more discretion to set the price of transferred shares could provide more information, following the findings under III.3.i. However, this goes against the "*fair price*" precedent set in current jurisprudence and prescribed by law (*supra II.2.ii*).

ii. Information Asymmetry between Shareholders and the Courts

The actors best placed to assess the variety of parameters in play are the shareholders themselves, who are much closer to the corporation than the judge. Oftentimes, they have worked for years in the specific sector. Moreover, they know or should know the status, inner workings and prospects of the corporation and have corporate legal instruments at their disposal to gain information if this were not to be the case.

The Courts on the other hand can only rely on the information provided by the shareholders during the procedure. This information can be assumed to be biased, as any Player will argue in their best interests.[52] Especially when counterclaims are introduced, information can be contradicting, and it can prove difficult for Courts to assess the available evidence, which is crucial to establish an efficient procedure.[53]

Moreover, externalities, or the avoidance of negative externalities, are a substantial factor in deciding whether a requested transaction leads to an increase in social welfare. Unfortunately, these are difficult to calculate objectively, as they are partly yet to manifest. Nevertheless, some assumptions could be made based on the size of the company and the number of employees. Players can be incentivized to misrepresent this information to convince the Court to follow their arguments, further obscuring the numbers.

Lastly, the model described *supra* did not include costs. Gaining information has a cost as well, which will deduce from overall welfare and must be kept within reasonable bounds.[54] Experts in procedures usually cost a non-significant amount often depending on the size of the company and usually paid for by the Parties, but nevertheless a loss. Procedure costs for the state also increase depending on how detailed the Court will

[52] (Calabresi & Melamed, 1972), p1108.
[53] (Cooter & Ulen, 2016), p101. ; (Kaplow & Shavell, Property Rules Versus Liability Rules: An Economic Analysis, 1996), p725-726 (on tort law specifically, but nevertheless relevant)
[54] (Stigler, 1961), although on the search costs in a buyer – seller scenario, demonstrates clearly the cost/benefit analysis that must be made by a Court with regard to conducting further research.

assess the available information. Lastly, broader societal costs could be incurred as possibly inefficient precedents are based on incomplete information.[55]

Nevertheless, through the analysis of the shareholders' decisions, some insights can be gained.

6. Other Notes

Lastly, some small remarks can be made about other issues that haven't been addressed in this paper that can influence the efficiency of a court procedure.

First, Public Choice and Behavioural insights on the decision making of judges and Courts can highlight additional issues that might arise during proceedings, through which inefficiencies are created.

Likewise, irrationality and other behavioural issues on the shareholders can influence the way a procedure is handled.[56] Solvency issues could for example prevent shareholders from taking the necessary steps for exclusion, even though in theory it would lead to efficiency gains. The field is broad and open for further research.

[55] (Kaplow, The value of accuracy in adjudication: an economic analysis., 1994), p309.
[56] (Kahneman & Tversky, 1979)

IV. Conclusion

By introducing a liability rule in corporate shareholders dispute settlement, the Belgian Code on Corporations and Associations deviates from the usual property rules protecting a shareholder's participation in a company. The law allows for breaches of the cooperation between shareholders to take place, possibly to allow the Courts to include externalities in the decision and to allow for socially efficient breaches of contract, as well as lowering transaction costs that have arisen due to the dispute.

However, the Courts have only limited and biased information provided by the Parties to make their decisions. Analysing the Players' decisions allows the Courts to gain some insights regarding the different values attributed by the Players to different parameters, such as how much they value their participation, how much they gain from gaining control, oftentimes compared against the price of the shares. Nevertheless, this information is still quite limited and coarse, allowing the shareholders to argue in their favour and provide subjective information to the Court. The Court on the other hand is not best placed to fully assess the different factors in play.

Although the dispute settlement regime therefore definitely allows to break deadlocks that otherwise would have severe negative externalities (such as bankruptcy and unemployment), the Courts have an important yet difficult role to play. Nevertheless, an analysis of jurisprudence indicates that efficiency usually is considered by the Courts, al be it indirectly, by taking into account externalities (II.2.i).

In this sense, the dispute settlement regime can lead to efficient outcomes, but due to information asymmetry and different perceptions of both Players and Courts, inefficient outcomes could still arise.

Breaking up is a very personal affair, but it is up to the Courts to ensure that it only happens when its efficient as well.

V. Bibliography

Articles and books:

Calabresi, G., & Melamed, A. D. (1972, April Vol. 85, No. 6). Property Rules, Liability Rules, and Inalienability: One View of the Cathedral. *Harvard Law Review*, pp. 1089-1128.

Coase, R. H. (1960, October). The Problem of Social Cost. *Journal of Law and Economics, Vol. 3*, pp. 1-44.

Cooter, R., & Ulen, T. (2016). Law and Economics (sixth edition). *Berkeley Law Books*, p. 555.

Dyck, A., & Zingales, L. (2004). Private Benefits of Control: An International Comparison. *Journal of Finance, 59*, pp. 537-551.

Geens, K., & Verhoest, T. (1998). Développements récents dans la matière des procédures de sorties prévues par les articles 190ter et 190quater des lois coordonnées. *RPS* , pp. 372 - 379.

Kahneman, D., & Tversky, A. (1979, March). Prospect Theory: An Analysis of Decision under Risk. *Econometrica, Vol. 47, No. 2.*, pp. 263-292.

Kaplow, L. (1994). The value of accuracy in adjudication: an economic analysis. *Journal of Legal Studies 23(1 Part 2)*, pp. 307-402.

Kaplow, L., & Shavell, S. (1996). Property Rules Versus Liability Rules: An Economic Analysis. *Harvard Law Review, 109(4)*, pp. 713-790.

Kraakman, R., & Al. (2016). *The Anatomy of Corporate Law: A Comparative and Functional Approach.* Oxford: Oxford University Press.

Milgrom, P., & Roberts, J. (1990). The Economics of Modern Manufacturing: Technology, Strategy, and Organization. *American Economic Review, 80(3)*, pp. 511-528.

Moll, D. K. (2005). Minority oppression & (and) the limited liability company:. *Wake Forest Law Review, 40(3)*, pp. 883-976.

Pindyck, R., & Rubinfield, D. (2018). *Microeconomics, ninth ed.* Harlow (UK): Pearson Education Limited.

Porter, M., & Kramer, M. (2006). Strategy and Society: The Link Between Competitive Advantage and Corporate Social Responsibility. *Harvard Business Review, 84(12)*, pp. 78-92.

Stigler, G. (1961, June). The Economics of Information. *The Journal of Political Economy, Vol. 69, Issue 3*, pp. 213-225.

Thompson, R. B. (2011). Allocating the Roles for Contracts and Judges in the Closely Held. *33 W. NEW ENG. L. REV.*, pp. 369 - 404.

Zerbe, R. O. (2001). *Economic Efficiency in Law and Economics.* Cheltenham (UK): Edward Elgar Publishing Limited.

Jurisprudence:

Cour de Cassation, 15 March 2015.

Cour de Cassation, 27 June 2024.

Ghent (Court of Appeals) 25 juni 2007, NjW 2008, 33.

Commercial Court Ghent, 28 December 2011, ECLI:BE:ORGNT:2011:JUG.20111228.1