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„Economic Perspective of Whistleblowing"

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Abstract (English)

This master thesis examines the economic perspective of whistleblowing and is implicitly divided into a theoretical and an applied part. First, the concept of whistleblowing is analyzed with respect to different types of costs, thereby using well-known law and economic figures which are able to reduce these costs to a minimum. It is shown that the wrongdoer in a whistleblowing case can be best described as the cheapest cost avoider, being able to minimize primary costs. Moreover, since this person does not disclose its wrongdoing activity, the whistleblower is identified as the cheapest briber. The whistleblower is able to overcome the sometimes prohibitively high transaction costs. By eliminating the barrier of information asymmetry between the authorities and the offender, the whistleblower minimizes the tertiary costs such as investigation and administration costs.

Second, this master thesis conducts a law and economic analysis of the current European and Austrian whistleblowing legislation, by focusing on the incentives and current status of protection of whistleblowers. Thereby legal rules are confronted with some economically useful criteria developed by earlier literature. It concludes that most of the legal rules both in Europe and Austria cannot meet the requirements for an economically sound whistleblowing law. Lawmakers should first implement a common whistleblower protection standard in order to strengthen the uniform protection across the EU member countries, and second seek to offer economically useful incentives for the sake of preventing harmful wrongdoings such as economic crimes and corruption. However, the European institutions lack of political will to further improve whistleblower protection.

Abstract (German)

Die vorliegende Masterarbeit untersucht das Phänomen von Whistleblowing aus ökonomischer Sicht. Der theoretische Teil der Arbeit charakterisiert zunächst mittels rechtsökonomischer Figuren und Instrumente den Prozess, welcher sich hinter Whistleblowing verbirgt. Dabei kann zum einen festgehalten werden, dass zwischen dem Täter des Fehlverhaltens und dem sog. *cheapest cost avoider* in den meisten Whistleblowing-Fällen eine Personalunion besteht. Diese Person könnte die primären Kosten minimieren, wobei sie es aus Rationalitätsgründen unterlässt. Zum anderen kann der Whistleblower die oft unüberwindbare Informationsasymmetrie zwischen den Behörden und dem Täter beseitigen, indem er einen (anonymen) Hinweis gibt. Dadurch können die tertiären Kosten, wie beispielsweise Ermittlungs- und Administrativkosten, erheblich gesenkt und der Whistleblower aus rechtsökonomischer Perspektive als sog. *cheapest briber* charakterisiert werden.

Der angewandte Teil dieser Masterarbeit zieht die derzeitige Rechtslage betreffend den Schutz von Whistleblowern in Europa und in Österreich als Untersuchungsgegenstand für eine ökonomische Analyse des Rechts heran. Dabei zeigt sich, dass die uneinheitlichen gesetzlichen Regelungen ökonomische Anforderungen nicht zufriedenstellend erfüllen, da der Schutz einige Schwachstellen aufweist und positive Anreize für Whistleblower in den meisten Fällen gar nicht erst vorgesehen sind.

Zusammenfassend wird sowohl den europäischen Institutionen als auch dem österreichischen Gesetzgeber empfohlen, den Schutz von Whistleblowern einerseits zu stärken und zu vereinheitlichen, und andererseits den Hinweisgebern stärkere kompensatorische und finanzielle Anreize zu bieten.

1. Introduction

The concept of whistleblowing does not play an important role for most of us in our daily life. Often individuals even do not know what the phrase of “blowing the whistle” exactly means and believe that it is not worth discussing the phenomenon. However, this simple and perhaps naïve approach is terribly wrong, as this present master thesis shows. Regarding recent international developments of investigating crimes such as fraud, corruption, or other economic crimes, the state’s prosecution’s success in detecting a crime often heavily depends on the disclosure of necessary information by an informant, a leaker, a whistleblower.

There are countless examples of whistleblower cases from the last decades, among them very well-known to the public. Edward Snowden is nowadays the most known whistleblower, mostly because he now faces espionage charges (Roberts 2015). At the beginning of April 2016, approximately 11.5 million documents (“Panama Papers”) were leaked by an anonymous source, thereby disclosing highly sensitive information about 214.000 offshore companies and their ethically questionable secretly managing the estates of the world’s rich and famous (Obermaier et al. 2016). Another example would be “LuxLeaks” where the whistleblower Antoine Deltour disclosed documents, showing that Luxembourg has been playing a major role in tax evasion practices of multinational companies saving millions in taxes (Bowers 2014).

The term ‘whistleblower’ is more than simply a label for an important witness of a wrongful activity. It is rather a word for a person whose invaluable contribution consists of reporting highly sensitive information about one particular person’s harmful, undesirable and/or illegal activity to a third party, in order to prevent further damages. If we can find a way to better understand how this process - from gathering of information to the disclosure and to the post-reporting phase - is formed and triggered, our society as a whole is able to benefit. This master thesis aims to explain the institution of whistleblowing from an economic perspective. Thus, it is at first necessary to describe the scientific importance of an economic whistleblowing analysis.

1.1. Scientific Importance of a Whistleblowing Analysis

Business crimes, such as fraud or corruption, hurt the economy, either in a purely economic and monetary sense or in a non-economic and social way. On the one hand, although corruption is considered to be a crime without a specific victim, there is in fact a large group of people suffering from it, often the population as a whole.

According to Sutherland (2012, p. 2), corruption negatively affects the decision process of public institutions and can therefore lead to a misallocation of resources. In addition, there are other undesired consequences such as cost increases of goods and services, the promotion of unproductive investments, and a decline in the infrastructure quality. Moreover, corruption reduces efficiency and increases inequality, which together is estimated to cost at least 5% of global gross domestic product, as a report of the OECD (2014) states.

On the other hand, public confidence in government and in society might decrease as a result of an undesirably high level of criminal activities. Furthermore, corruption negatively affects daily economic activities and transactions when poor people are excluded from public services, and poverty is being perpetuated because of the negative effect on income equality (OECD 2014).

In order to detect criminal activities and prevent the society from further damages, the state's prosecution has to find the right piece of information in the first place. The asymmetrically distributed information between the infringing party and the government might force the prosecutor to apply a relatively high level of search effort. This lack of information can also be described as a barrier which can only be overcome at high transaction costs, as long as no whistleblower is involved.

However, it is imaginable that there are situations where transaction costs are even *prohibitively* high. Namely when authorities are limited by the feasibility constraint of staff or money, and their greatest effort could not detect ongoing crimes. In this case, the authority can be considered as "paralyzed" and therefore remains uninformed. This circumstance could in turn lead to a certain degree of comfort or laziness of the authorities' clerks, them being aware of the fact that some crimes are simply not detectable without an information disclosure by an informed party. Therefore, this could also increase transaction costs.

Having in mind the desire from an economic and welfare perspective of keeping the level of criminal activity low, it would therefore be useful to introduce either an institution, a technique, or a person, which or who could possibly eliminate or at least reduce the information asymmetry. If a person has specific knowledge about an ongoing criminal or wrongful activity, she could report it to a preliminary institution, which in turn tries to stop the infringing activity. First, this would avert further damage, and second, it would thereby substantially decrease the transaction costs for the prosecution.

What has been described up to this point could easily be achieved by the so-called whistleblower. Such a person can be extremely valuable for the prosecution in the first place and for the welfare of our society.

If we could learn more about the identity, the motives, and the decision process of a whistleblower; if we were able to model the concept of whistleblowing from an economic perspective; and if we could understand how law can be designed in a way that aligns with the prior findings, then we would contribute to the knowledge base and scientific progress of law and economics. Thus, the scientific relevance of this present master thesis is evident. At this point, it follows a brief summary of the **current state of research** related to whistleblowing.

Whistleblowing as an important concept for modern society and its various aspects has often been described and examined in scientific literature. In the business ethics field, Vandekerkchove and Langenberg (2012) for instance examine the risks of organizing courage and its link to ethics in organizations through the example of whistleblowing. Vandekerkchove and Tsahuridu (2010) analyze in another article the rights and duties of whistleblowing from an ethical perspective, thereby taking a justice and benevolence point of view.

Andrade (2015) also approaches the concept of whistleblowing from an ethical point of view, exploring the ethical dilemma of conflicting loyalties of whistleblowers to either the employer or her state. Moreover, Hartman et al. (2009) provide arguments for the international purposes of whistleblowing legislation, focusing on a cross-cultural analysis of internal policy settings corporations should implement. On a microeconomic level, Kaptein (2009) examines how ethical culture of organizations can influence the behavior of employees, when it comes to decide whether they blow the whistle.

Since whistleblowing is mainly a legal concept, the majority of the associated scientific literature stems from law. Bowden (2006), for example, carries out a comparison of legislations and the belonging administrative whistleblowing processes within each of Australia's states. A similar analysis is carried out by Saha (2008) for the United Kingdom, and by Clark (2012) for the United States of America.

Cherry (2004) examines the effectivity of the iconic Sarbanes-Oxley Act and its implications for employment law, whereas Lewis et al. (2011) fundamentally analyze the conflicting area of whistleblowing and democratic values. All these papers have in common that they have legal whistleblowing norms as a foundation of the analysis and examine

their position within the jurisdiction and the effectivity of law, essentially for every serious analysis of whistleblowing.

Another analytical approach towards whistleblowing is for example the paper of Arce (2009), in which a game-theoretic model is designed in order to explain the ethical decision process of a whistleblower and the moral role conflict between individual and organizational values.

Furthermore, Givati (2015) contributes to the game theory literature with a model which examines both the optimal size of whistleblower rewards, as well as the optimal decision process between employing (more) police officers and rewarding whistleblowers. The author comes to the conclusion that the relationship between the personal costs of a whistleblower and the optimal reward is non-monotonic.

1.2. Research Interest

As this literature overview shows, whistleblowing researchers mainly stem from a legal, business economic, cultural, or ethical scientific field. Thus, their approaches mostly focus on key questions related to their research area. At the most, economically interesting questions are tangibly discussed by these working papers and articles. There is rather a lack of a precise analysis of the economic characteristics of whistleblowing and of the behavior and incentives of whistleblowers, using economic instruments in a law and economic framework.

However, as already motivated above, whistleblowing is a valuable concept for our society, but can only then serve for an increase of welfare, if legal norms are constructed thoughtfully. A weak whistleblowing legislation will not lead to stronger incentives for potential whistleblowers. Therefore, it is eminently important to understand the mechanism of the infringing party and the whistleblower from an economic perspective. While incentivizing whistleblowers to report wrongdoings should be one of the main aims of the legislative authorities, they also ought to consider that the level of abusing the instrument of whistleblowing is kept at a minimum, as reports out of revenge for example decrease society's welfare. Thus, it is necessary to work out some guidelines how whistleblowing law should be designed. This has yet not been elaborated extensively.

Filling this research gap was the main motivation of the present master thesis. Its aim is to contribute an economic concept for the field of whistleblowing, which can then be used or taken into account in difficult situations and legislations processes around the world. This should help to understand how legislative entities should model their laws, having in mind

the incentives and cost benefit decision of a potential informant or whistleblower. Thus, this master thesis could indirectly assist in increasing the welfare of the population.

The stated research gap and the necessary overdue examination of the economic perspective of whistleblowing together lead to the following research questions of this master thesis:

How can whistleblowing be characterized from a law and economic perspective? How strong are the incentives for whistleblowing in Europe, especially in Austria?

The main focus of this work is to identify the characteristics of whistleblowing, comparing and assigning them to the key findings of the law and economics literature, especially to Guido Calabresi's contribution in form of articles and books to the cost differentiation and the goals of tort law. Calabresi (1975) has developed a sound theory of tort and accident law, explaining who should – from an economic perspective – be liable, if a damage occurs. Or as Michelman (1971, p. 648) puts it, "Calabresi's concepts direct our attention to the implicit questions and answers concerning human behavior, economic impact, and political values." Since Calabresi (1975, p. 14) has some basic requirements for the design of accident and tort law, this master thesis uses these to examine whether current whistleblowing law could be improved or not.

Finally, the author wants to meet the following demands towards his master thesis. In the end, an interested reader should then have experienced a knowledge growth about the characterization of whistleblowing from a new, economic, perspective. Although whistleblowing is an interdisciplinary research field, the reader should understand why economics can help to understand the following three key points. First, the striking importance of whistleblowing for society's welfare. Second, how the legal framework enhances informants to blow the whistle, and why in some cases these persons do not disclose information. And third, how and why the current whistleblowing law in Europe, especially in Austria, can be improved. The following section explains the method which is used throughout this master thesis.

1.3. Methodology

The famous economist Gary Becker once stated, "what most distinguishes economics as a discipline from other disciplines in the social sciences is not its subject matter but its approach" (Pacces and Visscher 2011, p. 1). Interpreting this quote, the economic discipline is rather defined by its method, and not necessarily by its underlying subject (Pacces and Visscher 2011, p. 1). As this master thesis can be categorized into the

scientific field of law and economics, this idea forms the foundation of the thesis' contribution.

As Kerkmeester (2000, p. 383) points out, it is hard to fit legal economists in a particular school because they follow "a pragmatic and eclectic approach". De Geest (1994, p. 459ff) adds to this view that an economic analysis of law uses various elements of different disciplines, such that it could be called "integrated paradigm".

As Pacces and Visscher (2011, p. 1) point out, economic analyses of law operate at two distinct levels. On the one hand, one individual is in the focus of the analysis and one tries to explain how and why the person behaves the observed way. The underlying theory is the ordinary economic theory of utility maximization. On the other hand, "the economic approach is the goals which are attributed to the legal system" (Pacces and Visscher 2011, p. 1). In this sense, the method of law and economics is based on Pareto welfare economics.

The underlying assumptions of the economic analysis of law shall be briefly summarized. At first, the examination uses the rational choice approach, meaning that people act rationally and therefore maximize their expected utility by paying attention to their preferences. Moreover, preferences are assumed to be transitive and the principle of methodological individualism is applied. (Pacces and Visscher 2011, p.2).

As Becker (1976) describes, rational choice theory assumes the existence of markets, always trying to approach an equilibrium point. In order to refine the assumptions of law and economics, Ulen (2000) argues that legal rules often imply its own prices, so-called implicit prices which can influence the behavior of a person. Therefore "rational choice allows generalizing statements regarding the likely effects of (…) legal rules" (Pacces 2011, pp .2f).

As in many scientific disciplines, an economic analysis of law can either be positive or normative; both will be applied in this thesis. However, these two different analysis approaches often cannot be separated because an assumption of the positive analysis might already contain an implicit normative statement (Pacces 2011, p. 4). The aim of a normative statement is the welfare maximization of the society or "efficiency".

Moreover, scholars in law and economics have to cope with a fundamental modification of type of reasoning, since statements leave still empty space for further interpretation. Georgakopoulos (2005, p.12) points out that lawmaking and interpretation therefore mostly focus on what law *should* be. Thus, the level of uncertainty could remain high. A normative

conclusion cannot be considered as true or false, in contrary to positive, descriptive statements. In that sense, normative conclusions “are not truth valued” and legal economists are forced to produce desirability instead of truth (Georgakopoulos (2005, p.12).

Implicitly, Kaldor-Hicks-efficiency, based on Pareto welfare economics, is used as a normative guideline for evaluating legal frameworks, changes of it, and the assessment of alternative policies (Pacces 2011, p. 5). In order to economically justify whistleblowing, for example, the benefits of the society from stopping the disclosed wrongdoing have to outweigh the wrongdoer’s loss of utility gain. The latter can also be described as opportunity costs which have to be compensated in order to meet the Kaldor-Hicks-efficiency criterion.

It is eminently important to introduce Kaldor-Hicks-efficiency to law and economics as well as to this master thesis, since it is the key to understand how incentives for whistleblowers could work and are socially desirable. It also provides an opportunity for evaluating single whistleblower cases in a legal and economic framework. Moreover, it could be the starting point for further analysis of a whistleblower’s decision process using a cost-benefit-analysis.

In this master thesis there will be firstly performed a positive law and economics analysis of the concept of whistleblowing. In a second step, there will be an economic analysis of current European whistleblowing legislation as well as of the current, most important whistleblowing norms in Austria. As these analyses should show the political, societal and economic relevance of whistleblowing, and since the applied examination is rather practical, normative statements will also be made. All in all, “law and economics should provide policy recommendations on the basis of predictions on how people will respond to (legal) incentives” (Pacces 2011, p. 14).

1.4. Thesis Structure

The previous sections show the importance and motivation of a law and economic examination of whistleblowing by first identifying a research gap, then arguing the society’s need for further investigation of this topic, and by finally coming to the research questions of this master thesis. *Section 1.3.* explains the underlying research method.

Describing and summarizing the most significant characteristics of whistleblowing, *chapter 2* provides well-balanced information in order to bring the interested, but with whistleblowing inexperienced, reader to a certain level of know-how. *Section 2.1.* explains

the basic principles and great variety of whistleblowing, such as the problems encountered with defining whistleblowing (*subsection 2.1.1.*), the types and forms of whistleblowing (*2.1.2.* and *2.1.4.*), as well as easily overlooked topics such as NGO's role (*2.1.3.*) or privacy aspects (*2.1.5.*) of whistleblowing. In contrast to the quite general attitude of the first section, typical economic elements are inherent in the following sections. Apparently this is the case, when first the distinction between whistleblowing and the "Kronzeugen" rule is not only analyzed with legal, but also economic instruments (*2.2.*), and second the economic costs and benefits of whistleblowing are highlighted (*2.3.*).

In the following, *chapter 3* is rather structured as the theoretical contribution of this master thesis. *Section 3.1.* builds the foundation of the following sections by introducing specific types of costs of law and economics. Then, the typical law and economic figures of the cheapest cost avoider (*3.2.*) and the cheapest briber (*3.3.*) are defined and their underlying decision behavior regarding whistleblowing analyzed. Conclusively, *section 3.4.* presents an economic idea of how to optimally incentivize and protect whistleblowers, which is eminently important for the following chapters.

Reflecting a more empirical approach, *chapter 4* and *5* both analyze current whistleblowing laws respectively whistleblower protection standards in Europe and Austria. Whereas *section 4.1.* describes the whistleblowing provisions in the USA as pioneering models for incentivizing whistleblowers, *section 4.2.* serves as brief overview of the recent whistleblowing regulation developments in Europe. It is followed by an economic analysis of law of the current missing uniform standards in Europe (*4.3.*) and some critique and policy recommendations from an economic perspective (*4.4.*).

Chapter 5 analyzes the Austrian whistleblowing regulation within a similar structure, although *section 5.1.* promptly identifies the current whistleblowing provisions on a national level. In addition, *section 5.2.* shows the priority level of Austrian parliamentary groups for further improving upon whistleblower protection. Finally, the Austrian legal rules are confronted with the economic idea from *section 3.4.*, thereby elaborating some policy recommendations from an economic perspective, which are presented in *section 5.3*.

Finally, *chapter 6* provides a conclusion of this master thesis and will briefly recapitalize the most prominent results and also address further interesting research topics, being beyond the scope of this master thesis.

2. Characteristics of Whistleblowing

This chapter aims to explain the variety and characteristics of whistleblowing. Since whistleblowing is becoming more and more important in our society, the types of and possibilities for whistleblowing are in the meantime diverse. Therefore, it is useful to first define what whistleblowing both generally and within the framework of this master thesis means, as many definitions exist, varying in their breadth and with their scientific field. Afterwards, it follows a conceptual distinction to the German and Austrian legal institute of the “Kronzeugenregelung”. Appropriate for the rather introducing character of this chapter, it will also be shown how important whistleblowing is for the economy and what benefits will be derived from a sound and effective legal whistleblower protection.

To begin with, *section 2.1.* gives a brief overview over the history and origin of whistleblowing. At first, it might be helpful to focus on the genuine meaning of whistleblowing. As it always deals with disclosing a secret piece of information about a certain wrongdoing to a broad group of people in their interest, it is easily imaginable that the existence of this kind of reporting is independent from technological progress, social change and demographic developments.

Depending on the narrowness of the whistleblowing’s definition, it is rather an ever existing phenomenon rooted in human beings within a social group since institutions have been founded. One of the first whistleblowing cases dates back into the 16th century, although the term ‘whistleblowing’ have not existed at that time. In 1515, Bartolomé de las Casas then fought for the rights of the native population within a Spanish slave plantation in the New World (Hanke, 1951). It was followed by manifold other cases throughout all regions in the world.

The term ‘whistleblowing’ itself has its origin around 1950, when it was probably first used among monitors or referees on schoolyards or playing fields (Jubb, 1999). The importance of whistleblowing has been growing steadily, since the number of (business and social) organizations also increased due to positive economic development.

2.1. Variety of Whistleblowing

In order to become aware of the enormous diversity of whistleblowing, the following subsections will give an overview about legal, ethical and economic definitions of whistleblowing. Some of them are very broad and rather serve as an aggregate term, some of them are very narrow and can only be used in a certain context. The types of

whistleblowing, including their advantages and effects on the organization, will be explored. At the end of this section, the most important transmission channels for potential whistleblowers are summarized and also checked for their privacy robustness.

2.1.1. Definition of Whistleblowing

The term whistleblowing comes from the phrase ‘blowing the whistle’, which was firstly used by the author P.G. Wodehouse in 1934 and then 20 years later again by the writer Raymond Chandler. It is not explicitly clear, how this constellation of words was enriched with the now well-known meaning. However, most of the literature refers ‘blowing the whistle’ to a “policeman blowing his whistle to stop an illegal activity” or to a “referee using a whistle to call a foul” (Wilton, 2007). The author also indicates that the term ‘whistleblower’ itself has appeared first in a news journal in 1958.

Beginning a content-related analysis of whistleblowing, the following factors form the core of its definition. Without a harmful, infringing, or criminal activity of a person, whistleblowing cannot exist and obtains no meaning. In addition, this activity must become directly observable at some time point for a third party, or be at least indirectly retraceable by noticing its consequences.

Already slightly less obvious is the idea that whistleblowing always deals with an information flow; At first from the infringing party to the potential whistleblower (either intentional or unintentional) and then from the becoming whistleblower to a third person or institution as a deliberate act of disclosing information to an authority.

However, it is often not clear which sort of information has to be transmitted such that it can be classified as whistleblowing. Depending on the type of professional approach, there will be different answers to the question: Which situational and content-related constellation turns a simple information flow into a whistleblowing disclosure? A legal explanation might provide different reasons and definitions of whistleblowing than an ethical or cultural approach.

The core of an ethical whistleblowing definition builds a “practice of publicizing wrongs that are harmful to, and therefore matters of, public interest” (Jubb 1999, p. 77). Jubb (1999, p. 77) also argues that whistleblowing must not be interchanged with informing as the broader category. Whistleblowing is rather a “type of informing which entails disclosure, accusation and dissent” (Jubb 1999, p. 91).

The problematic and difficult task of precisely defining the term of “whistleblowing” can be illustrated by the general definition of Jubb (1999, p. 83):

> *“Whistleblowing is a deliberate non-obligatory act of disclosure, which gets onto public record and is made by a person who has or had privileged access to data or information of an organisation, about non-trivial illegality or other wrongdoing whether actual, suspected or anticipated which implicates and is under the control of that organisation, to an external entity having potential to rectify the wrongdoing.”*

This definition implicitly describes the six main elements of a whistleblowing process, consisting of first an action, an outcome, an actor, a subject, a target and lastly a recipient (Jubb 1999, p.83). The whistleblower definition by the Council of Europe (2014, p. 6) follows this interpretation, as it defines a whistleblower as person “who reports or discloses information on a threat or harm to the public interest in the context of their work-based relationship, whether it be in the public or private sector.”

According to Clark (2012, p. 1), a whistleblower is a person who “discloses alleged wrongdoing or a danger to someone else in an effort to rectify or address the wrongdoing.” This definition leaves enough space for interpretation, which wrongdoings are actually meant. Although the author specifies that not only criminal activities but also violations of “less serious legal norms” come into question (Clark 2012, p. 2).

The necessity of a clear and comprehensive definition of whistleblowing is shown by a note of the United Nations (2011, p. 2), which suggests to include “reporting wrongdoing through internal mechanisms, external oversight mechanism or in some cases to the media.” Moreover, it takes into account whether a person refuses to participate in an unlawful activity, provides testimony in judicial proceedings and cooperates with an audit or investigation (UN 2011, p. 2).

The most important definitions of whistleblowing are summarized by Halim, Haryanto and Manansang (2013). A rather narrow labor and organizational economics oriented definition, which is mainly limited to full time working employees, suggests that

> “*whistleblowing is a disclosure by organization members who are either still active or already work full time regarding the behavior is illegal or immoral, or other unlawful practices committed by members of the organization who are able to perform corrective action*” (Halim et al. 2013, p. 4).

Some authors stress that for being a whistleblower in a strict sense, the informant has to disclose the information consciously and must not be motivated by a possible benefit after the report (Halim et al. 2013, p. 4). From an economic view, this restriction of pure altruism has to be considered carefully, as the assumption of the homo oeconomicus implies that a potential whistleblower maximizes his utility, often incentivized through benefits.

A rather pragmatic and straight-forward approach towards a definition of whistleblowing is used by Transparency International (2010, p. 2), namely that "whistleblowing is the disclosure of information about perceived wrongdoing in an organization, or the risk thereof, to individuals or entities believed to be able to effect action."

On the one hand, this master thesis does not use one specific definition of whistleblowing from above, since an economic analysis of law needs enough space for interpretation and evaluation of whistleblower protection rules and whistleblower incentives. As the case arises, there will be explained which type or definition of whistleblowing is meant. In this sense, the whistleblowing definition throughout this thesis varies in its depth and breadth.

On the other hand, there are many similarities between the above mentioned definition which can in turn be advantageous for further analysis. The focus is always on a specific wrongdoing, either immoral or illegal, thereby harming public interests. In contrast to some definitions, this master thesis does not restrict whistleblowing to disclosure in good will intention, as especially ethical papers argue. It rather includes also cases, where the informant wants to discredit another person out of personal and emotional reasons. Exactly this form of intrinsic motivation for reporting a wrongdoing can be extremely valuable for economic analysis, since a certain size or form of benefits for potential whistleblowers might represent a socially undesirable incentive.

2.1.2. Internal versus External Whistleblowing

The scientific literature mainly distinguishes two types of whistleblowing, namely internal and external whistleblowing. When a potential whistleblower notices or gathers delicate information about an illegal wrongdoing and finally decides to take some action and report it, she often has yet to decide to which recipient she discloses information. This in turn depends whether within the organization a reporting system is provided.

In the latter case, the whistleblower only has the possibility to report it to an institution outside the organization such as the state's prosecution or the media. In some cases, there is the possibility to leak information by reporting it to a non-governmental organization

(NGO) which then could further investigate the wrongdoing before publishing it (Siriachenko 2014, p. 27).

To begin with, **internal** whistleblowing is defined by the disclosure of information to a "person, or group of persons, who are deemed part of the organization" (Andrade 2015, p. 322). The conceptual boundary between internal and external disclosure is often difficult, since itself depends on the boundaries of the organization. Therefore, it is argued by some authors that a categorical classification is often not possible (Andrade 2015, p. 322).

External whistleblowing is defined as the opposite, namely reporting to non-organizational persons or institutions. On the one hand, most authors agree that external whistleblowing is more effective with respect to initiating a renewal process within the organization in order to stop the wrongdoing (Andrade 2014, p. 322). On the other hand, external whistleblowers are more often victims of retaliation (Andrade 2015, p. 323).

Vandekerckhove and Commers (2004, p. 226) argue that only an external disclosure can be regarded as whistleblowing in the "strict sense", as an internal disclosure would be a first institutionalized attempt to attribute attention to an ongoing wrongdoing. This opinion is supported by the fact that the important element of dissent is missing. Reporting some wrongdoing by a colleague internally expresses at least a concern, but not necessarily a disagreement (Andrade 2015, p. 323).

Several empirical studies have found a negative effect of internal whistleblowing measures on the number of external whistleblowing activities (Hassink, De Vries and Bollen 2007, p. 30). The same result is achieved through an empirical analysis by Guthrie and Taylor (2015). The authors also find that anti-retaliation measures, combined with building trust between employer and employee, are more effective in promoting internal whistleblowing than monetary incentives (p. 25f).

Dworkin and Baucus (1998) find in an empirical analysis that external whistleblowers facing retaliation have less tenure in the organization, a greater base of evidence of wrongdoing and "experience more extensive retaliation than internal whistleblowers" (p. 1296). In addition, they come to the conclusion that managers postpone their decision to fire the whistleblower because of a perhaps greater evidence base, but try to silence them when they are external whistleblowers.

All in all, the differentiation between internal and external whistleblowing is for legal economists interesting as these types found on different disciplinary systems as frameworks, since colleagues are punished or the organization's reputation suffers.

2.1.3. NGOs as Intermediary Gatekeeper Institution

Lastly, the role of Non-Governmental Organizations (NGO) in relation to external whistleblowing shall be briefly analyzed. In the past, most of the developed countries with (weak) whistleblower legislation tailored its whistleblower protection on so-called insiders within organizations, who had to disclose their gathered information about a specific wrongdoing *publicly* in order to have a legal claim for being protected against retaliation. Thus, the psychological and moral barrier to overcome was supposed to be rather high. However, in the United States of America, the Dodd-Frank Act fundamentally reduced this obstacle in favor of potential whistleblowers and most of the countries followed their lead (see *Chapter 4*).

The Dodd-Frank Act brought the following two major changes. First, financial incentives, paid through the Investor Protection Fund, for whistleblowers have been increased significantly. Second, it gives a whistleblower the possibility to remain anonymous "prior to the payment of the award" (Funk 2010, p. 2). At first glance, despite more attractive incentives for whistleblower through financial payments, the mentioned amendment does not seem to have a major impact on the "detection rate" of reporting a wrongdoing. However, by guaranteeing anonymity to the disclosing person, a new important possibility of whistleblowing was created. For example, a person, who would not have reported an illegal action under the legal duty of revealing her identity, is on the one hand now encouraged to report a specific perception without having to fear personal retaliation.

On the other hand, and in the author's personal opinion much more important, remaining anonymous creates the possibility of indicating the wrongdoing to another third party and simultaneously reaping all the benefits from whistleblower awards and protection. Therefore, for example, a specialized NGO as an expert in the field might play a crucial role in defending public's interest by gathering information and taking action against the wrongdoing.

Whereas the former definition of whistleblower in the United States only meant insiders who were deemed to be part of the company, the new definition now also includes so-called "analysts". According to *globalwhistleblower.org* (2016), an information website by the renowned US law firm *Kohn, Kohn and Colapinto*, "the 'analyst' can take information from a variety of sources, including a whistleblower, and file the rewards claim." Thus, either an employee or a representative of a NGO "devoted to anti-corruption or other public interest missions" could file a corruption case, for instance. The following subsection provides a summary of the most important reporting channels, whistleblowers can use.

2.1.4. Reporting Channels

A necessary condition for blowing the whistle for either the state or an organization is to provide an appropriate reporting channel, through which the whistleblower is able to disclose her information. Generally, there exists a variety of transmission channels in order to communicate a certain wrongdoing to an appropriate authority. To begin with, the so-called “ethics hotlines” is the most common way of communication channels (Calderón-Cuadrado 2009, p. 199). Calderón-Cuadrado (2009, p. 201) defines them as “intra-organizational formal systems, different from hierarchy, which allow employees to present allegations of wrongdoing and ethical dilemmas, as well as to report ethical concerns.”

Provided that adequate legal rules are imposed, ethics hotlines are a renowned instrument in order to reduce unethical behavior. A major advantage of ethics hotlines is the trust of employees in it. In 2006, a survey came to the result that 53 percent of the employees surveyed felt comfortable reporting misconduct to ethics hotlines, while only 18 percent stated that they distrust them (Calderón-Cuadrado 2009, p. 200)

However, some experts criticize that ethics hotlines are inefficient and costly. All in all, ethics hotlines as an effective tool for reporting wrongdoing have been existing for a long time, although their importance differs among different countries, regions and companies, “depending on cultural, social or political traditions” (ibid, p. 200).

According to Gao (2015, p. 3), perceived personal cost for the whistleblower will be higher, when reported personally to the wrongdoer’s supervisor or to an authority willing to investigate, detect or terminate the ongoing process. Therefore, anonymous reporting of a wrongdoing tends to be preferred by the whistleblower.

However, “there is no detailed guideline about how to administer an anonymous reporting channel” (Gao 2015, p. 4). Although most of the companies with ethics hotlines within their organization delegate this task to their audit or human resource department, some companies also outsource their telephone hotlines. If a third party administrates, protection of anonymity might be perceived as stronger.

Nevertheless, as more and more online services are emerging, there are also whistleblowing websites used. The user has then the opportunity to anonymously report a wrongdoing. For example, on 20th March 2013, the Office of Prosecution for Economic Crime and Corruption in Austria has launched a whistleblowing platform as a website (WKStA 2016).

Within the first year being online, 1201 reports were made and only 6 percent of all reports were categorized as completely use- and pointless, which can be regarded as success (Transparency International – Austrian Chapter 2014, p. 16). Moreover, the Financial Market Authority provides a similar website for reports of economic crimes.

According to the instructions on the websites, there can be made reports regarding the following areas: corruption, economic crime, social fraud, accounting fraud, capital market crimes and money laundering. In order to report an observed wrongdoing, the system sets up a “secured postbox”, protected by a pseudonym and password. Furthermore, the website states that “the anonymity of your report is maintained using encryption and other special security procedures” (WKStA 2016). In the following, the authorities can communicate with the anonymous whistleblower.

In Austria, there is additionally the so-called SPOC (Single Point of Contact) for Corruption and Abuse of Authority, administered by the Federal Ministry of the Interior of the Republic of Austria. Federal employees have thereby the opportunity of reporting “suspicious circumstances” concerning criminal offences listed and described in its tasks (BAK 2016). However, although there seems to be a possibility to report anonymously, whistleblowers are strongly encouraged to deposit a contact, since potential whistleblowers can choose between different communication channels such as telephone, fax, email and mail.

2.1.5. Privacy Aspects

Despite the continuously raising concern about and increasing importance of remaining anonymous after blowing the whistle, some governments in recent cases have made efforts in revealing the whistleblower’s identity (cf. Bowers 2014). This fact has initiated a rather new development of using encryption methods and “anonymous content sharing software” in order to report without leaving behind identity traces. An example for a highly accessible anonymity network, which is often used by whistleblowers (amongst other forms of sensible data transmissions of journalists, businesses, etc.) in all regions of the world, is the software *Tor* (Mittal et al. 2001, p. 1).

Regarding the privacy aspect, Cherry (2012, p. 19-20) points out an interesting thought on the importance of anonymity for whistleblowers. In fact, the desire for anonymity might not be so great for a so-called *virtual whistleblower*. Virtual whistleblowers are for example employees, who are blogging in the Internet in their leisure time, observe an abuse and then decide to report it on their own blog (Cherry 2012, p. 18). However, “no state whistleblower laws protect bloggers (yet)” (Cherry 2012, p. 19). While some bloggers

therefore seek a way to anonymously disclose their sensitive information, “others may want to be more public with their whistleblowing, hoping that the open nature of the Internet will protect them from retaliation rather than relying on legal doctrines to provide that safety net” (Cherry 2012, p. 20).

Furthermore, websites and online platforms such as WikiLeaks promise whistleblowers to disclose information without revealing someone’s identity. However, most advanced countries in the Western world have strongly increased their efforts in improving network surveillance and Internet protocol data retention (Roth et al. 2013, p. 1). As the authors add, the mere usage of anonymizing software or accessing a whistleblowing website through an encrypted SSL (Secure Sockets Layer) channel might increase the possibility of being in the focus of investigations and repercussions. According to Roth et al. (2013, p. 2), this increased level of tracking activity might have a chilling effect on potential whistleblowers.

2.2. Conceptual Distinction to “Kronzeuge”

Whereas the previous section has shown the various aspects of whistleblowing, this section refers to a legal institute named “Kronzeugenregelung”, which constitutes a substitute to whistleblowing. Although “to turn King’s/Queen’s evidence” might sound as a proper English translation, the “Kronzeugenregelung” is in this exact form limited to the European continental law as opposed to common law. As there is no exact, appropriate English translation for it (Schönhofer 2012, p. 18), the original German term will be used throughout this thesis.

As the term “Kronzeuge” indicates, a “Kronzeuge” is a witness who is – on the basis of his characteristics in the criminal case – of great importance for the prosecution. He or she is in a special position. To be more precise, a “Kronzeuge” is not an isolated institution within criminal proceedings, it rather combines two important figures, namely the confessing perpetrator and an informant (Schönhofer 2012, p. 17).

Contrary to public belief and to general usage of the term, the “Kronzeuge” might be the most important witness in a case because he *is* actively involved as at least an accomplice. He or she then confesses her or his own criminal offence, while also testifying against his or her accomplices. In turn, he or she can expect a verdict changed in his or her favor. The possibilities range from impunity from prosecution to a strongly mitigated sentence (Schönhofer 2012, p. 18).

The introduction and implementation of the “Kronzeugen” institution was an important development for the legal system in Austria. There are in principle two different types of “Kronzeugen” rules in Austria, namely a so-called small one and a great one. The great “Kronzeugen” rule means total impunity, either through renunciation of prosecution or through desisting from conviction by court. However, only the latter legal possibility is available in Austria (Schönhofer 2012, p. 27).

On the other hand, the small “Kronzeugen” rule takes the Anglo-American legal system as a role-model and sets an incentive for an accomplice to disclose (for the prosecution) useful information about the criminal case. In turn, the “Kronzeuge” can expect an extraordinary reduction of penalties. In most cases, the lower bound of a specific extent of punishment is lowered in favor of the informant (Schönhofer 2012, p. 32).

In 1997, Austria implemented a small “Kronzeugen” rule within the criminal code (§ 41a StGB, BGBl. I Nr. 154/2015). However, this rule remained dead letter (Schönhofer 2012, p. 9). In 2006, a great “Kronzeugen” rule was implemented within competition law (§ 11 Abs 3-6 WettbG, BGBl. I Nr. 144/2015). Due to its generous terms for the “Kronzeugen”, this legal rule was meant to be a success in Austrian legal history. Finally, a great “Kronzeugen” rule was part of a greater amendment of the criminal law’s code of procedure (§ 209a stop, BGBl. I Nr. 65/2016) in 2011 (Schönhofer 2012, p. 10).

Finally, coming to the core of this section, the “Kronzeugen” institute is also an interesting research subject from an *economic* perspective, namely because of the following two aspects.

First, the implementation of the legal “Kronzeugen” rule allowed the prosecution to detect cases of misconduct which otherwise would have been very difficult to be detected, especially in the competition area. Schönhofer (2012, p. 28) argues that the economy enormously suffers through violations against competition law such as price-fixing arrangements, arrangements about sales quota or the arranged division of markets. Since EU Law provides severe sanctions for such arrangements, most of them remain secret. Thus, indicating information disclosed to the authorities is crucial, similar to the importance of whistleblowers, and can prevent the economy from costs and damages.

Second, a “Kronzeuge” could be economically described as substitute to a whistleblower. Both figures have delicate information, both reveal important information to the authorities, both figures are able to stop a certain wrongdoing through their action, and both persons can benefit to some extent from reporting, depending on the design of legal rules. Despite

this variety of commonalities between a “Kronzeuge” and a whistleblower, there is one crucial characteristic distinguishing them. That is the responsibility for the criminal activity.

The aim of keeping a criminal activity secret (or at least to remain uncaught as a perpetrator) as top priority is inherent for most types of crimes. However, in a situation where the circumstances of and the consequences from the criminal act lead to an uninvolved third party’s perception of the crime, space for whistleblowing possibilities by the observer emerges. In such a case, the potential whistleblower as an innocent observer can be opposed to the offending person who might – depending on the legal framework – act as “Kronzeuge” and voluntarily declare himself.

Therefore, the two institutions whistleblowing and “Kronzeugen” rule are close substitutes, since the prosecution generally can expect both parties to disclose the important piece of information. Economists might be reminded of a repeated game under incomplete information with two players, where the set of action consists of either report or not report the wrongdoing and with unknown or difficult to calculate pay-offs (compare Ting 2008).

If the described scenario changes to a situation, where the criminal act remains secret and can only be known by the perpetrators, the theoretical relationship between a “Kronzeuge” and a whistleblower collapses as there is no third party anymore who can act as whistleblower. However, in cases with more than one perpetrator, the distribution of importance shifts completely towards the potential “Kronzeuge”. If a “Kronzeugen” rule is legally implemented and its incentives are modelled attractive enough, then each person of the group of perpetrators has the chance to declare itself as offender in order to mitigate its own punishment.

Again, from a game theoretic perspective it could be described as a dynamic game, since the first informant can expect the highest pay-off (i.e. reduction of disutility from the sanction), whereas for the following reports the pay-off is diminishing (gradually). Therefore, lawmakers have the opportunity to implement a “Kronzeugen” rule in order to increase the detection rate of criminal activities.

A recent example that a “Kronzeugen” rule can be an incentive for an offending party is the revealed cartel of European truck makers such as MAN, Volvo/Renault, Daimler and others with a joint market share of nearly 90 percent. According to Farrell (2016), “MAN, owned by Volkswagen, came forward to reveal the existence of the cartel and avoided a fine of about 1.2 billion Euros.”

Following up this specific example and further investigating the conceptual distinction between “Kronzeugen” and whistleblowers, one could ask, “Is it possible that these both figures coincide in a personal union?” Or must these institutions be strictly separated?

To start a brief thought experiment, it is imaginable that a board member and chief executive officer of the MAN group has been well aware of the fact that price collusion has been taking place, although he himself did not play an active role in managing the collusion and communicating with the cartel. If he then decides to report it to the authorities as individual, is it then possible to describe this manager as whistleblower? Or does the fact of being deemed (as hierarchically important) part of the organization suffice in order to exclude it? How narrow must the organizational circle be for attributing the characteristic of a “Kronzeuge” to the informant?

Without daring to give a legal opinion, the author of this thesis presents the following subjective assessment from a law and economics perspective. It might be possible that in such a case the informant acts as whistleblower, but nevertheless the “Kronzeugen” rule is applied because of the informant’s close relationship to the decision-makers and hierarchical position within the organization. The final decision of the authorities is not uniquely determinable, since the “Kronzeugen” rule in this case overlaps with whistleblowing and creates a grey area. Despite this uncertainty in this direction, it is however obvious that a typical “Kronzeuge”, who is a perpetrator and guilty of the crime, cannot be regarded as simple whistleblower. With other words, a whistleblowing case might implicate the “Kronzeugen” rule, but it is not necessary. Its relationship is not equivalent. In both scenarios described above, the “Kronzeuge” is an important substitute to a whistleblower. In some cases, it is the only possibility for the prosecution to detect a crime.

2.3. Economic Importance and Potential Disadvantages of Whistleblowing

As already mentioned above, whistleblowing is an important institution for detecting and ending criminal activities, contributing to justice, preventing the public interest from damages and therefore increasing society’s welfare. Whistleblowing can be advantageous in various ways – either directly through frustrating the utility gain of a minority in favor of higher utility gain by at least one party (implicitly comparing all benefits to the loss of utility of the offender in a Kaldor-Hicks-Test); Or indirectly through positive effects from deterrent effects on potential offenders.

Due to the complexity of this topic, the reader should always keep in mind the recipient of an advantage or disadvantage. What is beneficial for the whistleblower and for public interest might be disadvantageous for the offender or other involved parties such as its employer or its organization. However, since most of the benefits and costs are not measurable or at least very difficult to estimate in monetary units, it often remains unclear what the message of a comparison is. Thus, the following summary of various costs and benefits of whistleblowing should be understood as separate examination respectively individual approach without a holistic classification about their size.

A significant majority of authors agree on the economic and societal importance of whistleblowing for an economy, most often because of its linkages to the prevention of serious and costly economic crimes such as corruption. From an analytical point of view, benefits from whistleblowing can both be examined on a microeconomic as well as on a macroeconomic level. However, there are also more differentiated views on the beneficiary characteristics of whistleblowing, thereby emphasizing the economic and non-economic costs and disadvantages, mostly on a microeconomic level.

2.3.1. Macroeconomic Costs and Benefits

To begin with a macroeconomic view of costs and benefits from whistleblowing, it is useful to remember the increasingly important role of whistleblowing in the recent decades. As Dworkin (2007, p. 1779) points out, whistleblowing becomes more and more important in a globalized world, which is mostly due to ever more complex and disparate organizations. Thus, the law enforcement is often dependent on the contribution of insiders with information about wrongdoing, since it would be otherwise hard to detect.

On a macroeconomic level, whistleblowing is of “paramount importance” for the prevention of and therefore in the fight against economic crime (Alexander 2004, p. 1). In order to strengthen the instrument “whistleblowing”, many advanced countries implemented mandatory trainings for employees in bank, insurances and other financial institutes, in addition to external reviews of accounts. These should help to raise awareness for changes in behavioral patterns of colleagues as well as for identifying formal indicators of fraud and money laundering (Alexander 2004, p. 2).

The reporting and prevention of corruption is one of the major contribution of whistleblowing to the economy. The authors Call et al. (2016, p. 32) for example estimate for the United States that whistleblower involvement increases firm penalties by additional 77 million Dollars. Furthermore, the study finds that employees are fined 39 million Dollars

more and are sentenced to prison terms that are roughly 22 months longer when whistleblowers were present. The authors thereby conclude that “whistleblowers have enabled regulators to successfully obtain $16.86 billion in additional judgments against firms and employees that would not have been obtained without whistleblower assistance” (Call et al. 2016, p. 32).

Furthermore, there exist also non-economic, societal benefits, such as more effective law enforcement due to a higher detection rate through whistleblower. In addition, the potential presence of whistleblower may discourage subsequent violations. Gonzalez (2010, p. 13) argues that all benefits coming from the “right kind” of whistleblowing, thus without discrediting a person, can be regarded as “public good”. Further, the Council of Europe (2014, p. 5) expresses the positive contribution of whistleblowing to “strengthening transparency and democratic accountability” in addition to the general value in deterring and preventing wrongdoing.

Contributing to the list of disadvantages, whistleblowers increase the informational input authorities have to cope with. This may have a negative effect on the workload of regulators for investigating the wrongdoing, since regulatory proceedings will take longer than without whistleblower involvement. An estimated 85 percent of whistleblower reports are categorized as frivolous or were not pursued by the prosecution, “indicating there are additional costs of encouraging whistleblowers” (Call et al. 2016, p. 33). Moreover, when bounty systems offer monetary incentives, these may lead to irritating litigation (Gonzalez 2010, p. 13).

2.3.2. Microeconomic Costs and Benefits

Whereas the benefits from whistleblowing on both the macroeconomic and microeconomic level are often obvious, Ting (2008) presumes a negative impact on the employees’ level of effort in the presence of legal whistleblower protection. This is assumed to hurt the business’ ability to succeed in the course of time. The author for example chooses a game theoretic approach and argues that whistleblower protection is only then desirable for lawmakers, if the preferences of a manager are of a specific form. Only if the manager is “inclined toward rejecting projects” (Ting 2008, p. 1), it is ensured that the costs of lower employee effort do not exceed the informational benefits from whistleblowing.

Furthermore, organizations with misconduct and a whistleblower in their rows must fear serious damages such as “fines, compensations, higher insurance premiums, damaged

reputations, regulatory investigations, mistrust in institutions, lost jobs, and even lost lives" (Hüttl and Léderer 2013, p. 283).

Besides the positive and negative microeconomic effects from whistleblowing on the organization and the offender, there obviously exist costs and benefits for the potential whistleblower. The decision of blowing the whistle "involves a number of sequential steps" (Keil et al. 2010, p. 790), such as recognizing and assessing the wrongdoing and afterwards deciding if the person is itself responsible for reporting it. The expected costs and benefits strongly enter into the decision process of the potential whistleblower which is explained in more detail in *subsection 3.3.2*. Nevertheless, few of them should be briefly mentioned here.

If compensation payments are legally provided for the whistleblower, these attribute a major share of the individual benefits. In the United States, for instance, they range from 10 to 30 percent of "monetary sanctions over 1 million dollars stemming from investigations facilitated by whistleblowers' information, documentation, or cooperation" (Call 2016, p. 1). However, in the most cases an individual whistleblower must face "severe economic, physical, emotional, and spiritual toll" on the whistleblower (Gonzalez 2010, p. 13).

After showing the manifold advantages and few disadvantages of whistleblowing on different levels and from various perspectives in *chapter 2*, the following chapter examines appropriate law and economic theory and relates it to whistleblowing.

3. Law and Economic Conceptualization of Whistleblowing

This chapter forms the theoretical part of this present master thesis. It aims to conceptualize whistleblowing from a law and economic perspective by first examining the main characteristics of whistleblowing, and then assigning them to typical law and economic phenomena, figures and types of costs.

The analysis itself mainly bases on several articles and books regarding the economic analysis of tort law by Guido Calabresi (1975) who can be regarded as a pioneer and almost scientific icon in law and economics, specifically in analyzing accident and tort law. Definitions, important ideas and characteristics built on the diverse literature of Calabresi are, as a matter of course, markedly quoted. However, as law and economic literature has never been dealing with this specific topic and what this chapter aims to explain, the author

of this thesis also presents his personal ideas. If normative statements are made, they are after few logical steps always justified by objective, scientific results.

To begin with an economic analysis of whistleblowing, an examination of externalities from a certain wrongdoing seems at first glance useful. Nuisance, legally defined as “a condition or activity which unduly interferes with the use or enjoyment of land” (Swanson and Kontoleon 1999, p. 380), has also an economic interpretation. Nuisance is a possible outcome of externalities, namely “when the choices of independent agents impact upon the outcomes affecting others” (Swanson and Kontoleon 1999, p. 380). When a criminal act happens, negative external effects are most often present, since there exists at least one discriminated individual or collective, such as public interest as unspecific victim. Thus, the wrongdoing has a negative, unproductive impact on an uninvolved third party, and the level of activity can be described as undesirably high (Schmidtchen, Helstroffer and Koboldt 2015, p. 2f). Subsequently, internalization through restraining the offender either by price instruments or legal boundaries seems worth to examine. However, reporting does not enhance welfare as the price for the offender is not updated ex ante and whistleblowing is not a certain consequence.

On the one hand, the Pareto criterion could be useful for examining whether whistleblowing is able to increase society’s welfare. However, since the Pareto criterion is very strict in that sense that for an improvement to fulfill the Pareto criterion, nobody has to be worse off than before. From an economic point of view, the offender and its utility gain from the wrongdoing must not be excluded. As a consequence, whistleblowing most likely cannot meet the Pareto criterion – in contrast, consider a seldom offending person who is indifferent between committing a crime or not.

The economic analysis is enriched with explanatory power, if we loosen the Pareto criterion and use the less stringent Kaldor-Hicks-test as introduced in *section 1.3*. The aim and benchmark for whistleblowing is to only *justifiably* report a wrongdoing and thereby denouncing the offender. This is in fact difficult to determine, as this chapter shows. The main problem is distinguishing justified from unjustified reporting and thereby assessing the motivation of disclosing the piece of information. On the other hand, from an economic perspective the utility gain from a criminal act also has to be considered in a Kaldor-Hicks efficiency test. The perpetrator ex ante expects a personal benefit and utility increase, exploiting the advantages of asymmetric distributed information, unless a whistleblower perceives the wrongdoing.

3.1. Cost Differentiation in Law and Economics

In order to carry out a thoughtful analysis, there has to be a precise definition of the relevant costs. In economics, many types of costs are available and can be used for different kinds of examination, depending on the research specialization. Transaction costs, opportunity costs, direct and indirect costs, labor unit costs, etc. are only few examples for the diversity of costs in economics. However, in the scientific field of law and economics, there is rather a distinction between three main types of costs. As an advantage, these costs simplify the analysis because they are rather broad and aggregated categories.

The foundation of this analysis presumes that our society does not seek to avoid damages at any cost, as some benefits of an infringing activity to the infringing party might be overall greater than the sum of damages (Calabresi 1975, p. 23). Moreover, Calabresi (1975, p. 20) states that the general deterrence or market-based approach will not be the best model to avoid damages, rather the collective method is preferred, because “it enables consideration of nonmoney costs which the market cannot deal with”.

One goal of designing a law is that it should ensure justice. However, as Calabresi (1975, p. 25) points out, justice is rather a constraint than an achievable aim, as there is no absolute “just” system. There always will be an unjust or “unfair” aspect of a specific law. Another, much more important, principal function of accident law is the reduction of the sum of accidents costs and the costs of avoiding accidents (Calabresi 1975, p. 26). This goal can be divided into the following three subgoals, which are “not fully consistent with each other” (Calabresi 1975, p. 29).

The first subgoal is also called “primary subgoal” and seeks to minimize the number and severity of damages of an infringing activity. This can be either achieved through simply forbidding the specific infringing act or through making this activity more expensive for the infringing party (Calabresi 1975, p. 26). These two approaches are also called “general deterrence” or market method and “specific deterrence” or collective method (Calabresi 1975, p. 27).

The second subgoal for cost reduction seeks to reduce the societal costs from infringing activities, namely reducing the arising costs of compensation of the victims, when the damage has already occurred. Secondary costs can be reduced by shifting the loss to another party (or several parties), which is accomplished either by risk spreading or the so-called “deep pocket method” (Calabresi 1975, p. 27f). Calabresi also notes that the term “secondary” does not mean that it is less important than the primary subgoal. However, in

the course of this master thesis, it will actually play a less significant role than the other two.

Finally, the third subgoal is characterized by the minimization of the cost of administering the treatment of damages. It is termed “tertiary” subgoal, “because its aim is to reduce the costs of achieving primary and secondary cost reduction” (Calabresi 1975, p. 28). Thus, it could be regarded as an “efficiency” goal, as it always seeks to compare the cost of measures, which contribute to the primary and secondary goal, with its caused cost reduction. As this tertiary subgoal is the most important for the following analysis, the following sections refer to this subgoal.

3.1.1. Primary Costs

To begin with, for each accident or damage, there are three types of cost which can be influenced by tort law (Calabresi 1975). First, this subsection describes the so-called primary costs. According to Schäfer and Ott (2012, p. 153), primary costs are defined as the value of all damages belonging to the infringed persons and caused by an infringing activity. From an economic perspective, primary costs are not expenses but opportunity costs including immaterial damages. They can also be viewed as so-called “bads” since primary costs cause disutility. In analogy to the homo oeconomicus economic theory about deriving utility from a good, a person does not want to consume a bad as long as the disutility from the damage avoidance costs are smaller than the disutility from the bad itself (Schäfer and Ott 2012, p. 154).

Generally speaking, primary costs contain the costs which depend on the “severity and frequency of incidences” (Weigel 2008, p.74). Moreover, the cost of preventive measures should be added. In other words, primary costs are those costs “which can be reduced only by terminating or altering one or more of the various activities whose interaction culminates in the costly event called an accident” (Michelman 1971, p. 650). Moreover, primary costs can never be eliminated but only be optimized, since prevention and changes of the accident-generating activity is itself costly, as Michelman (1971, p. 650) points out.

3.1.2. Secondary Costs

Since secondary costs will not be in the focus of the following analysis, this subsection is purposely kept brief. Nevertheless, it is useful to summarize the main characteristics of secondary costs, as both primary and tertiary costs are often interlinked with them. A rather intuitive explanation for the importance of secondary costs is provided by Schäfer and Ott

(2012, p. 159). The authors state that it actually does make a difference for the size of social damage, whether one person must bear the cost of a damage alone or whether it is split into much smaller amounts, carried by a large group of people. This idea is the basis for the system of every private or social insurance.

Moreover, this approach will only then lead to a reduction of secondary costs, if the decision to insure oneself is for each payer and insured person economically useful. In order to assess this, the basic economic analysis of expected utility is applied (Schäfer and Ott 2012, p. 161).

Important to notice is the fact that a decrease of social welfare and thus secondary costs only then accrue, if there is no risk spreading for risk averse people. Then, the secondary costs are the difference between the utility if an insurance is in place, and the expected utility if no insurance is in place. What has been explained for ordinary insurances can also analogically be applied for every form of risk spreading. Examples are the producer warranty, pooling of enterprising risks through the financial market as well as social welfare systems as a whole (Schäfer and Ott 2012, p. 162).

To sum up, secondary costs are the cost of maintenance and compensation for victims. There are various approaches in order to decrease the burden for society, such as risk spreading, insurances or the so-called “deep pocket” method, where the government steps in (Weigel 2008, p. 74).

3.1.3. Tertiary Costs

The most important type of costs for the following analysis are tertiary costs, defined by all expenses arising from processing and distributing of an occurred damage, including costs from investigating, identifying and administering the wrongdoing and its consequences and damages (Schäfer and Ott 2012, p. 164). When it comes to court, attorney, court and expert fees have to be paid, furthermore much time and effort is spent, which contribute as opportunity costs to tertiary costs. In other words, tertiary costs can also be described by costs which accrue in the event of loss, when administrative activities are needed in order to investigate the reason of losses, the identification of responsibilities, etc. (Weigel 2008, p. 74).

This type of costs is called “tertiary” because “its aim is to reduce the costs of achieving primary and secondary cost reduction” (Calabresi 1975, p. 28). The minimization of tertiary costs contributes to the achievement of the tertiary goal. Its aim is to keep the general balance of the cost reduction goal. In other words, the minimization of tertiary costs ought

to prevent primary and secondary cost reductions at an unreasonably high level of effort, which might cause costs that are effectively higher than the benefits through this effort. Therefore, a tertiary cost reduction is also called “efficiency” cost and cannot be independently discussed, as it always refers to primary or secondary costs reduction measures (Calabresi 1975, p. 29).

As primary, secondary and tertiary costs are strongly interlinked with each other, it is sometimes hard to tell whether a specific cost has to be identified as primary or tertiary. For example, if the costs of instituting a system in order to prevent damages are greater than the savings the systems would bring, this is a similar thought as to find that a specific policy measure would cost more than the damages it would prevent, although the first statement can be classified as tertiary and the latter as primary (Calabresi 1975, p.30).

Calabresi (1975, p. 225f) explains in detail which types of administering costs have to be considered for tertiary costs, as the payment of lawyers’ fees and payments for deciding the liability and valuing damages often causes pain and suffering recovering. Tertiary costs also serve as analytical instrument for the evaluation of efficiency of various law systems, although in principle expenses of administering could also be counted as primary costs once a system is fixed.

3.2. Behavior of the Cheapest Cost Avoider

As the term cheapest cost avoider already indicates, the question of which party could have prevented a specific damage at least cost leads through this section. The figure has been developed by Calabresi in order to introduce a valuable instrument for deciding who should be liable in a specific accident. The first subsection defines the figure of the cheapest cost avoider; the second one analyzes this very person in a whistleblower constellation who could act as the cheapest cost avoider.

The relevance and justification of the figure of the cheapest cost avoider has been discussed in various essays, most prominently by the legal economist Gilles (1992). The author supports the validity and essentially importance of the cheapest cost avoider’s concept by Calabresi, while also stressing some problems with using this figure as test for the person of liability in specific cases. Although unilateral-care and alternative-care cases are suitable for a cheapest cost avoider test, this concept is more limited in cases where more than one person should have taken some care in order to avoid the accident or the damage (Gilles 1992, p. 1308). In such cases, Gilles (1992, p. 1308) argues, “there is no single ‘cheapest’ cost-avoider.” This so-called joint-care problem, however, is not of utmost

importance in whistleblower cases when a single criminal offender is in the center of analysis.

3.2.1. Definition and Characteristics

In order to summarize the figure of the cheapest cost avoider, one should ask: “Who is capable of getting around losses at the minimum cost?” (Weigel 2008, p. 74). The figure of the cheapest cost avoider is strongly linked to the concept of primary costs described in *subection 3.1.1.* and characterizes the person who would have been able to prevent an already occurred damage with the least effort. This person could either be the infringing party itself, the victim, or another third party. When identified, this party should – from a law and economics perspective – both be incentivized to the prevention of damages and be held liable for compensation.

The figure of the cheapest cost avoider contributes valuable information for a judge, deciding which involved party should be held strictly liable for a specific damage. Calabresi and Hirschoff (1972, p. 1060) define the cheapest cost avoider as the party “an arbitrary initial bearer of accident costs would (in the absence of transaction and information costs) find it most worthwhile to ‘bribe’ in order to obtain that modification of behavior which would lessen accident costs most.”

Therefore, it serves as decision rule for the court. Contrary to a strict liability test under a Learned Hand type test, the search for the cheapest cost avoider “only requires a decision as to which of the parties to the accident is in the best position to make the cost-benefit analysis between accident costs and accident avoidance costs” (Calabresi and Hirschoff, p. 1060). Moreover, Schäfer and Ott (2012, p. 252) point out that a judge or a jury does not determine the cheapest cost avoider by simply opposing the aggregate avoidance costs to the aggregated cost reduction, as this would lead to a suboptimal result regarding allocation efficiency. A judge has rather to decide, if a certain act or omission is most efficient either for the infringing party or for the victim. Thus, she does not compare two averages, but two difference quotients. This marginal consideration comes close to the optimality condition (Schäfer and Ott 2012, p. 252).

In general, the allocation of the cheapest cost avoider figure to the right party respectively the minimized sum of primary cost can be proved by the Kaldor-Hicks-criterion (Schäfer and Ott 2012, p. 154). Cost avoiding measures should therefore be applied as long as their marginal benefit is higher than the marginal costs of these measures, a common result in

economic theory. If the sum of all primary costs and cost avoidance measures reach the minimum, then the socially optimal situation of welfare is achieved.

How can now the figure of the cheapest briber be assigned to the concept of whistleblowing? The first step towards the right allocation is to recognize that the cheapest cost avoider does not disclose her information about a certain wrongdoing, either because of her rational cost benefit analysis or because of Williams opportunistic behavior. As already mentioned above, this outcome is already devastating, as the cheapest cost avoider is the person who has all of the information needed to report a wrongdoing, knowing all processes and decisions (perhaps also of other colleagues). The cheapest cost avoider could prevent damage at the least (avoidance) cost. It might be possible to model tort and criminal law such that the cheapest cost avoider can be convinced to report her own wrongdoing, for example by implementing amnesty options or “Kronzeugen” rules into law. This can then serve as a substitute to whistleblowing. However, as this is often not the case, and will rather not be considered by a potential criminal or morally infamous person, there has to be another institution or person who the whistleblower can rely on.

As a next step, whilst keeping in mind that the society wants the prosecution to detect, end and punish harmful wrongdoing, the investigating process has to be examined. In the absence of a report of the cheapest cost avoider, the infringing activity is still going on and reduces welfare. Since it is very likely not a wrongdoing, which is so obvious that almost everybody can detect and report it, the prosecution is either fully dependent on a hint from the circle of the wrongdoer. Or it has to apply an enormously high level of effort in order to detect the crime, for example closely monitoring all companies, which is extremely costly and might nevertheless be unsuccessful. Even if the criminal behavior is detected and comes to court, the administrative costs for gathering enough evidence could be rather high. The cheapest cost avoider forces the authorities to incur additional costs.

At this stage, the whistleblower as cheapest briber steps in. She is in the position to disclose information to the authorities, thereby keeping the effort and cost levels of administrating the crime at a minimum. In other words, the whistleblower as cheapest briber minimizes the tertiary costs under special circumstances. However, the decision if an informed person blow the whistle or not heavily depends on incentives provided by law, including whistleblower protection, compensation and additional benefits.

3.2.2. Underlying Decision Process

Regarding whistleblowing, the cheapest cost avoider is in the most cases not difficult to determine. As the infringing party often acts with (criminal) intent, or at least chooses her actions consciously, this wrongdoing cannot be seen as an accident. For the latter scenario, it would need more effort to find ex post the cheapest cost avoider. Worth stressing is the reference that it is not *de facto* impossible that there are exceptional incidents with a series of unfortunate events, where a person is unknowingly an accomplice for a crime and could be also held accountable for the wrongdoing among others. However, if the reader focuses on one of the most serious crimes such as corruption, it is hard to imagine that an involved person is not aware of her actions and its consequences. The activities described in this master thesis do not include unconscious misconduct, but rather wrongdoings at will, corresponding to the rationality assumptions from *section 1.3*.

At the very time point, when an uninvolved person within an organization notices a certain act of wrongdoing, she derives automatically information about it and has to process it. She has to decide whether she wants to report the wrongdoing (internally or externally) and thus has to make a decision whether to blow the whistle. At this time, however, the infringing act of the wrongdoer either has already started and will sooner or later hurt the organization or the society. As another possibility, the criminal action even could have already ended and could have done some damage to an uninvolved party. Therefore, the potential informant has the possibility to make efforts in order to sooner end this infringing act, but cannot completely prevent it.

On the other hand, the wrongdoer herself apparently has even more information about the motives and characteristics of her infringing behavior. Based on the assumption that the infringing party acts with (criminal) intent, she has ex ante the free choice – apart from being victim of other crimes such as blackmailing, threats, etc. – of either starting the infringing activity or not. Thus, in contrast to the whistleblower, she does have the decision power to prevent the organization or society from any damage.

Recalling the definition of the cheapest cost avoider, it quickly becomes obvious to which person this figure can be attributed. Since the cheapest cost avoider is in the advantageous position to keep the primary costs at a minimum, in most of the cases the infringing party itself is able to prevent most of the damages at the lowest cost. She could either decide to postpone the wrongdoing, or to refrain from damaging the third party, or to begin the infringing action but choose a rather less harmful degree of action.

Without the “help” of the potential infringing party to decide that she will not commit a crime, the primary costs consist of the implementation and regular evaluation of the criminal and tort law. The legislative authority should try to model the legal norms in such a way that potential criminals are deterred by the punishment and compensation efforts. However, there is also a downside if the negative incentives are designed in a too broad way, namely that other persons, who do not belong to the target group of potential criminals, might change their behavior in a for the society less desirable way. They might, for example, try to hide certain useful information from others because they fear being accused of wrongdoing. What should also be included in the category of primary costs is the foregone utility of the potential infringing party, when she decides not to commit a crime or a wrongdoing.

How is the decision process of the cheapest cost avoider characterized? If an ordinary cost and benefit analysis is used, it becomes clear that the expected utility from a wrongdoing is often higher than the expected costs and disadvantages of getting exposed. Law and economic theory suggests that an infringing party always consider both the level of the fine and the subjective probability to be detected. Moreover, if whistleblower protection and incentives are at a high level, then the cheapest cost avoider might factor this incentive for other into his underlying decision process of continuing with the crime. If this is the case, then why should the infringing party prevent her own wrongdoing at high primary avoidance costs?

From a law and economics perspective, it is highly interesting why an informed and in the crime actively participating person, or at least someone refusing to stop the wrongdoing and thereby accepting the consequences, does not disclose any information to an authority in most of the cases. As highly involved accomplice and cheapest cost avoider, this person has best knowledge and deep insight about the wrongdoing. He or she would be the key for preventing the society from any damage. However, this perpetrator often remains silent because of strategic reasons, such as preventing personal disadvantages, either financially or in a reputational sense. Such strategic behavior is in accordance with our rationality assumption of the homo oeconomicus and could even be supported by Williams’ opportunistic behavior. As already mentioned in *section 2.2.*, a substitute to whistleblowing, namely a well-designed “Kronzeugen” rule, could be a proper instrument for achieving that an informed and responsible person takes action and discloses valuable information. However, uncertainty about the personal consequences and possible impunity from prosecution remains high for the cheapest cost avoider.

3.3. The Whistleblower as Cheapest Briber

This section aims to describe the main characteristics of the so-called cheapest briber as a law and economic figure, formulated by Guido Calabresi. As was pointed out in the previous *section 3.2.*, the offender as the cheapest cost avoider most often does not disclose information to an authority, since this person might seek to avoid personal legal consequences due to voluntary self-incriminating reports.

The authorities in the first place, and also the whole society, has then to rely on a third involved party, who gathers information about the wrongdoing and is willing to report it to an internal or external authority. As this whistleblower stays in the focus of the present master thesis, this section tries also to explain why the whistleblower can be identified as cheapest briber. Most importantly, it will discuss the underlying decision process of a whistleblower and which factors are included in the whistleblower's considerations from an economic point of view.

3.3.1. Definition and Characteristics

This subsection seeks to summarize the most important characteristics of the so-called cheapest briber. As a consequence, the whistleblower will be identified as the cheapest briber. Introducing the concept of the cheapest briber and linking it to the type of costs of *section 3.1.*, the following question always leads through the examination of identifying the right person as the cheapest briber. If the question of how efforts for the clarification of facts of a crime and enforcement of the consequences can be kept to a minimum arises, the answer to it will yield the figure of the cheapest briber (Weigel 2008, p. 75). The cheapest briber is able to keep tertiary cost at the minimum and therefore contributes to the efficiency of tort law.

The figure of the cheapest briber is also known as the 'best briber' which is derived from the 'best briber criterion' by Calabresi and Melamed (1972). According to Swanson and Kontoleon (1999, p. 385), it offers a second best option – in contrast to the best option of total (primary) cost avoidance – "when imperfect information and strategic behavior do not allow the determination of the least cost abater". Under such circumstances, the best briber is then able to reduce transaction costs and a more efficient solution might be achieved. As the authors point out, if the attempt to avoid the bargaining process because of costly damages fails (as it is the case in whistleblower cases), then one should seek to reduce its costliness (Swanson and Kontoleon 1999, p. 386).

3.3.2. Underlying Decision Process

The behavior of a person, who has gathered special information about a wrongdoing within her organization, can be determined and strongly influenced by whistleblower protection law. If incentives for potential whistleblowers are modelled in such a way that a whistleblower does not have to worry about future retaliation from her employer, this might increase the likelihood of reporting a wrongdoing.

The underlying decision process, whether to report a wrongdoing, can be described by a cost benefit analysis (De Schepper 2009). Often whistleblowers face serious retaliation with high economic and non-economic costs, for example in terms of losing the employment, facing a lawsuit because of disloyalty etc. (De Schepper 2009, p. 20).

De Schepper (2009, p. 21ff) also lists the costs of making the complaint and possible ensuing juridical procedures, the loss of invested capital in the company and the loss of human capital as costs for a whistleblower. While these costs could be expressed in monetary values, there are additionally non-economic costs such as psychological pressure from demoralizing and broken loyalty and trust (p. 25ff).

On the other hand, there are rare benefits to offset the economic costs. Regarding the economic costs, most whistleblowing protection rules provide protection from being fired or demoted and reinstatement, some provide compensation for the loss of wage after being fired as well as compensation for the costs of making the report and for possible future juridical procedures (De Schepper, p. 28f). Not only the number of benefits, but often also the intensity and certainty of provision is significantly lower than the whole variety of costs. This comparison alone should be a warning for the legislative authority to implement sound whistleblower protection rules.

If a potential whistleblower has to fear this enormous amount of disadvantages and cannot expect a compensation or protection from law, this rational person will very likely not disclose any information, which is undesirable from a societal and economic perspective. Whereas some people with given preferences would generally need all in all positive expected benefits to report a wrongdoing, even persons whose morality and ethics are above the average and closely to altruism would not blow the whistle, if legal whistleblower protection is weak. Therefore, whistleblowing law should try to encourage whistleblowing by five elements: require individuals to report certain types of wrongdoing, prohibit retaliation against whistleblowers, provide compensation for them, encourage to create

appropriate mechanisms for whistleblowing and lastly provide financial incentives (Clark 2012, p. 2).

Scientific literature shows that there are at least five major types of factors which influence the likelihood of whistleblowing reports. At first, psychological factors including organizational commitment and loyalty to the employer, cultural and ethical factors such as nationality, and organization policies play an important role. Moreover, two obvious, but nevertheless worth mentioning, factors are possible retaliation and also the type of wrongdoing matters for the decision to blow the whistle (Hassink 2007, p. 29).

Focusing on the underlying decision process a potential whistleblower experiences, it can be divided into four sequential steps. According to Keil et al. (2010, p. 790) they are described as the following. First, the cheapest briber has to recognize that a specific wrongdoing or criminal act exists. As a next step, the individual has to make an effort in assessing in which category the nuisance can be classified: worth reporting or not worth reporting? If the individual thinks that wrongdoing ought to be reported, then a decision about his or her personal responsibility of reporting must be made. The last step finally consists of choosing an adequate action, namely either reporting it to an internal or external authority, leave the organization or simply neglect it.

The authors Dworkin and Baucus (1998, p. 1282) argue that some characteristics of the first step, such as the type and seriousness of the wrongful activity, might have serious impact on stages three and four. However, without full compensation of all economic and non-economic cost for the whistleblower (as described in *subsection 2.3.2.*) the likelihood of blowing the whistle remains very low (De Schepper 2009, p.8).

3.4. Requirements for an Economically Sound Whistleblower Law

Both *chapters 4* and *5* assess the economic suitability and adequacy of European, respectively Austrian whistleblowing regulation on the basis of previous scientific findings of De Schepper (2009). Therefore, the most important requirements concerning an economically sound whistleblowing regulation of the awarded and as “best thesis of the year 2009” distinguished master thesis, as well as the key factors for the decision process of a potential whistleblower, shall be summarized in this chapter.

One of the most apparent results from De Schepper (2009) is that he graphically describes the cost benefit analysis for potential whistleblower as a balance which has to tip towards the benefit side in order to expect a disclosure from a whistleblower. This can be achieved through various ways, including cost reductions, cost avoidance, adding perverse and

compensatory benefits to induce whistleblowing and also by adding costs to *not* blowing the whistle (De Schepper 2009, p. 42f).

Moreover, the following three key points are most prominent and eminently important in De Schepper's master thesis and shall also be in the focus of the present master thesis in order to analyze the current European and Austrian whistleblower legislation on these factors. First, the author claims that the current whistleblowing regulation, if available, only focuses on the protection for immediate retaliation against a whistleblower, thereby ignoring all the expected costs from reducing his or her career perspectives. If this fails, then most of the whistleblower legislation provides at least compensation for the immediate consequences (i.e. compensation for loss of wage) (De Schepper 2009, p. 44). This, in De Schepper's opinion too strong, focus on counteracting immediate wealth is the "biggest disincentive for the whistleblower" (p. 45). Whistleblowing policies should rather tackle the career perspective losses.

Second, and this is strongly related with the first key findings, De Schepper (2009, p. 60) argues that "whistleblowing regulation should change its focus from providing protection to fully compensating the whistleblowers". His idea suggests the existence of a direct claim possibility for the whistleblower against the employer, at the best under a regime of strict liability for the employer. Compensation should be provided for losses of current wages, of invested capital and of invested human capital (i.e. of future earning potential), as well as for occurring costs from a possible lawsuit or post-whistleblowing procedures.

Furthermore, adequate and effectively incentivizing compensation should also be provided for non-economic damages such as harm from psychological harassment (De Schepper 2009, p. 60f). The second key results, shifting the focus from whistleblower protection towards whistleblower compensation, is however only then valid, if the government cannot guarantee the protection. On the other hand, keeping the whistleblower's identity secret – which is not the same as guaranteeing anonymity, since the latter could lead to an inefficient high level of unjustified reports – and mitigating or even eliminating criminal and civil liability for the whistleblower do contribute to incentivize whistleblowers.

The third and last key result, concerning the underlying decision process of a potential whistleblower, combines the first two findings and relates them to law and economics by using microeconomic theory in order to explain the whistleblower's decision. Starting point is a certain utility level represented by an indifference curve. As a rational individual, the whistleblower then takes all types of costs and benefits into account, assesses the expected personal costs and benefits and finally compares the future post-whistleblowing

utility level with his or her utility level ex ante. The informed person blows the whistle, if and only if the expected ex-post utility level is higher than the current utility level. Both the first and the second factors mentioned above, namely compensatory benefits in form of immediate wealth and protection against the loss of career prospects, strongly influences the utility level of a whistleblower (cf. De Schepper 2009, p. 42). However, under realistic assumptions, only the first is able to incentivize whistleblowers. De Schepper (2009, p. 61f) therefore suggests the so-called full compensation approach where the defrauding employer is strictly liable and must compensate all costs accrued for the whistleblower. Only then, the author argues, these costs would correctly be attributed to the wrongdoer. The following *chapters 4* and *5* use the results from this section for analyzing current whistleblower laws.

4. Whistleblower Protection in the European Union

Whistleblowing is an important key factor for detecting business related crimes like corruption and fraud, thereby preventing the society from further damages. A whistleblower report for the European Parliament (EP), initiated by a Member of the European Parliament (MEP), estimates that four to five percent of the European Union's gross domestic product is lost to corruption alone (EU Observer 2013). As Alexander (2004, p. 137) points out, "whistleblowers are indeed a vital tool in the fight against financial and economic crimes in their various forms." Although the author has already criticized the weak whistleblower protection and several possibilities of dissuading them through pressure 12 years ago, not much has changed in law codes in Europe since then (ibid.).

Quite the contrary, the European Commission (EC) refuses to take further measures for unified European whistleblowing legislation and pointed to the existing whistleblowing standards of the Council of Europe which already provide a high level of whistleblower protection (Nielsen 2013). Nevertheless, only four members of the European Union (EU) have legal frameworks for whistleblower protection that are considered to be advanced, namely Luxembourg, Romania, Slovenia and the United Kingdom (Transparency International 2013, p. 8).

As the economic theory underlying the whistleblowing phenomenon of *chapter 3* builds the basis for further scientific examination, this chapter aims to perform a brief economic analysis of legal whistleblower norms in the territory of the European Union. For this purpose, *section 4.1.* briefly summarizes the key elements of the most important

whistleblower protection law in the United States of America, which could serve as a role model for European legislators. It is followed by an overview of the current state of whistleblower protection in the member states of the EU. Finally, based on the findings and economic mechanisms in *chapter 3*, these legal norms are checked for their economic sense, concluding with recommendations for further improvements from an economic perspective.

4.1. The United States of America as Pioneer

From 1980 onwards, the United States of America has been implementing various whistleblowing laws and has been continuously improving them, as hostility and distrust against big business and government grew among the population. Despite, or rather because of this whistleblowing legislation, various corporate scandals (for example the cases of Enron, WorldCom and Tyco) were detected between 2000 and 2002. However, these scandals gave reason for further strengthening the whistleblower protection. In 2002, the Sarbanes-Oxley Act (SOX) was eventually passed by the US Congress, which was a major step towards improving and enhancing the control, detection and deterrence of wrongdoing (Dworking 2007, p. 1758).

The SOX basically consists of two parts, namely of a so-called Anti-Retaliation Model, aimed to ensure the protection of a whistleblower after disclosure, and of a Structural Model, requiring corporations to provide standardized reporting channels for employees in order to have the possibility to blow the whistle internally (Moberly 2006, p. 1109). Within ten years of being in force, the SOX has initiated “whistleblower protection in significant federal legislation” and promoted the use of codes of ethics and whistleblower hotlines (Moberly 2012, p. 53). Despite some critique on law effectivity, the SOX was all in all a success and a major step towards fighting corruption and other business related crimes (Moberly 2012, p. 54).

On the one hand, Arce (2009, p. 370) for example comes to the conclusion that SOX “inadequately provides sufficient incentives” for whistleblowers from a game theoretic perspective. However, an empirical analysis finds that the percentage detected frauds has increased from 6% in 2002 to 24% in 2010 (Dyck, Morse and Zingales 2010, p. 2216). Furthermore, the authors point out that SOX “dramatically changed auditors’ incentives” and “altered the cost of whistleblowing for employees” (p. 2249) by introducing several new policy rules regarding the competence of deciding of employment contracts with

auditors, job security after disclosure and the promotion of independence of equity research.

Whereas a legal examination comes after a short period of two years to the conclusion that SOX “does not go far enough to protect whistleblowers” (Cherry 2004, p. 1029), the same author stresses the major improvement and advance for conscientious employees partly because of mitigating the “at-will employment rule” (Cherry 2004, p. 1084). Some authors also criticize that SOX did not sufficiently protect whistleblowers against retaliation and that whistleblowers in the USA were not able to play a significant role “in uncovering the financial crisis that led to the Great Recession” in 2008 respectively 2009 (Moberly 2012, p. 1). Nevertheless, the same author also emphasizes the “stronger and more prevalent protection than ever before” (ibid.).

All in all, despite some flaws in the legal design of the Sarbanes-Oxley Act, a major part of scientific literature, examining the effectivity of and consequences from SOX’s legal implementation, agrees that the provision of anonymous whistleblowing channels, the establishment of criminal penalties for retaliation against whistleblowers, and the secure job protection for whistleblowers after disclosure are key elements for a stronger whistleblower protection (Hüttl and Léderer 2013, p. 298).

Although extraterritorial effects of the SOX are not recognized by jurisprudence, there are some spillover effects through multinational corporations in Europe because of their linkages with the USA through internal channels. However, this minimal positive impact cannot compensate the lack of an own European explicit whistleblower protection. As the following sections will conclude, an outstanding whistleblower protection is not in all EU member states present (ibid.).

4.2. Recent Developments of Whistleblowing in Europe

As the previous section has shown, the legislative authorities in the USA have made great efforts in improving and strengthening whistleblower incentives and protection. However, despite the existence of international treaties such as United Nations and Council of Europe conventions on corruption, which should ensure a common standard for whistleblower protection, the rather inconsistent whistleblower legislation and lack of harmonization among the EU member states suggests that an examination of the current whistleblower protection on EU territory might be useful. This section aims to summarize the recent most important developments regarding whistleblower protection in Europe.

To begin with, in October 2013, the European Commission rejected a request by some members of the European Parliament calling for a sound whistleblower protection law. The EU commissioner for home affairs Cecilia Malmström made her position very clear as she noted that "for the time being, the commission does not however intend to propose new legislation on (…) protection for whistleblowers" (Nielsen 2013). In fact, the European Commission referenced to international standards through the above mentioned treaties.

However, also within European institutions such as the European Parliament and the European Commission, there is increasing criticism for insufficient whistleblower protection for their employees. According to Panichi (2015, p. 1), EU officials blowing the whistle against illegal or unethical behavior "can be targeted for retaliation", which was also recently declared by court decision and internal documents. The European Ombudsman, an independent and impartial body that investigates complaints about maladministration in EU institutions, bodies, offices, and agencies, published an incident of an EU agency which "refused to investigate a complaint of psychological harassment" (Panichi 2015, p. 2) in order to avoid being exposed to claims.

The current status and the degree of legal whistleblower protection among the countries of the EU could not be more diverse. A minority of only a few countries has strong whistleblower protection which could be expected to incentivize disclosures of a specific wrongdoing to an authority. In several countries, whistleblower protection is considered to be very weak or does not really exist. In some countries, especially in Central and Eastern Europe, the term "whistleblowing" is even unknown, despite the existence of appropriate protection in some of them (Hüttl and Léderer, p. 286).

In 2015, the European Commission has published a report to the European Parliament and the Council regarding the "Protection of the European Union's financial interests – Fight against Fraud Annual Report 2014" (European Commission 2015a), which is an extensive and comprehensive staff working paper about already implemented, failed, and still missing measures to prevent damages to public interests such as public financial crime, organized crime, and tax fraud. Apart from many other subjects, this report also summarizes the current measures on whistleblower protection after gathering this information from the 28 member states. *Section 4.3.* will refer to this Report in order to describe the status quo regarding the protection of whistleblowers.

In addition, the European Parliament made 319 requests regarding the European Commission's Report (European Commission 2015b). With comment 146 of the request, the EP emphasized their concern about the protection afforded to whistleblowers and

urged the European Commission to address weak whistleblower protection and to fully upheld their rights. The European Commission's response defended their position as expected since it references to the Commission guidelines on whistleblowing from 2012, thereby providing "for a solid protection offered to whistleblowers acting in good faith" (European Commission 2015b, p. 69). By additionally stressing that the whistleblower shall not suffer from adverse consequences during his or her career, the European Commission on the one hand remains rather vague in their political position, but also recognizes the importance of whistleblower protection for the sake of public's interest.

In the report mentioned above, the European Commission further defends its policy and intensity of whistleblower initiatives on the EU level (European Commission 2015b, p. 72f). First, the EC emphasizes that the protection of whistleblowing is essential in bilateral discussions with the Member States, thereby referring to the current national competence of each member state. Moreover, workshops and various research projects funded and partly organized by the EU are mentioned as adequate measures for detecting and preventing corruption.

However, although the European Commission as the initiator of EU wide policies finds its measures as adequate and sufficient for addressing the problem of unsatisfactory whistleblower protection, the European Parliament "insists on the necessity to strengthen the current protection for whistle-blowers" referring to the national anti-corruption strategy 2013-2018 (European Commission 2015b, p.122).

Besides the weak and criticized whistleblower protection rules within the institutions of the European Union, the recently adopted Trade Secrets Directive (European Parliament 2016) again indicates that whistleblowing does not always attract the highest priority from the EU. According to political analyses of the European Greens, the Liberal Democrats and also of some journalists (cf. Lahodynsky 2015), this new Directive – whose aim is to ensure a high level of investment in Europe by guaranteeing strict protection of companies' internal valuable information – threatens to mitigate whistleblower protection and even the freedom of expression and information (The Greens/EFA 2016). The subject matter of the Directive is to provide legal measurements against "unlawful acquisition, disclosure and use of trade secrets" for companies (Art 1, European Parliament 2016, p. 17).

However, "the new definition (of Article 2; remark by the author) does not exclude e.g. information about illegal or harmful activities or pending investigations into such", as the Greens-European Free Alliance in its statement notes (The Greens/EFA 2016). This group of the European Parliament, as well as the Liberal Democrats, fear that the Trade Secrets

Directive might weaken whistleblower protection as the burden of proof of acting in the public interest is placed on the whistleblower. Moreover, “general public interest” is meant, “for which no common definition exists” (ibid.).

Furthermore, several politicians criticize the “massive power imbalance between whistleblowers (…) and corporations” (The Greens/EFA 2016) resulting from differences in solvency for possible legal disputes in the juridical aftermath. From an economic point of view, these circumstances enter into the decision process of a potential whistleblower, comparing all expected personal costs and benefits. Therefore, one may argue that all the above described factors have a significant chilling effect on the level of whistleblower activities.

All in all, whistleblowing recently has become increasingly important in all regions in the Western world for detecting offences against public interest, but whistleblowing policies in Europe nevertheless have not encountered all challenges of strengthening whistleblower protection. As was shown in this section, legal rules for incentivizing whistleblowers and their protection quantitatively remained on a low level and are qualitatively nearly unchanged.

Despite some obvious problems for whistleblowers after their disclosures in the recent cases in Europe, facing retaliation from their former employer and even lawsuits on a national level, the European legislators refuse to tackle the massive imbalance between costs and benefits for whistleblowers on the European level. By introducing an EU Directive or Regulation in order to harmonize legal whistleblower protection rules among the member states, the European Union could make a major step towards a strong, uniform whistleblower law. However, lacking political will for encouraged initiatives, the current missing uniform standards among the member states of the European Union show high diversity between various countries.

The following section discusses the current status of whistleblower protection and incentives in the heterogeneous legal European area. It shows that most of the rules are implemented on the national level and therefore enormously varies among the member states. *Section 4.4* afterwards examines whether these several current standards can meet certain requirements and ideas provided by De Schepper (2009).

4.3. Missing Uniform Standards among Member States

As the previous section has shown, the recent developments of whistleblower protection in Europe was characterized by little progress in initiating new policies. Still, a potential European whistleblower has to fear retaliation in some member countries, depending on current national law. This section gives an overview of the considerable disparities among national legislatives regarding whistleblowing. It highlights the most important current disadvantages and advantages of legal whistleblower protection, based on several reports of internationally accepted organization and groups such as Transparency International, OECD and G20, as well as scientific studies.

Since this master thesis provides a law and economics emphasis, this section shall give the reader a primary impression about the current divergence among whistleblower legislation in order to analyze which national rules are best suitable for incentivizing whistleblowers. At the end of this section, the reader ought to be familiar with the most important arguments in favor of a more serious approach towards whistleblower protection.

The Corruption Perception Index (CPI) 2015, computed by the international non-governmental organization Transparency International, lists Bulgaria – member of the European Union since 2007 – on rank 69, even behind developing countries such as Senegal (rank 61), Kuwait (55) and Saudi Arabia (48). Also Italy (61), Greece (58) and Slovakia (50) have only moderate places in the ranking, measuring the incidence of perceived corruption cases in the domestic public sector. On the other hand, there are several EU countries with top CPI ratings such as Denmark (1), Finland (2), Sweden (3), the Netherlands (5) and Germany (10) (Transparency International 2015).

This excerpt of results indicates the diversity of the level of corruption's occurrence among EU member states. As whistleblowing is a vital tool for the prevention and detection of corruptive processes, the strength of legal whistleblower protection might be linked with the incidence of corruption. It is useful to analyze the current whistleblower legislation in Europe in order to afterwards conclude their adequacy

The Council of Europe, for example, engaged two anti-corruption experts to perform an analysis about the feasibility of a legal instrument on the protection of employees disclosing information in public interest (Stephenson and Levi 2012). Once more, the authors stress the "crucial role of whistleblowing in uncovering and deterring secret or unaddressed wrongdoing" (Stephenson and Levi 2012, p. 5). In 2012 already, when the report was written, they came to the conclusion that there does not exist a country where

whistleblowers do not have to fear retaliation. Results from a questionnaire in 2009 have shown that most of the examined countries “have no comprehensive laws” for the protection of whistleblowers and only Belgium, France, Norway, Romania, the Netherlands and the UK have specific whistleblower laws (Stephenson and Levi 2012, p. 12).

In 2012, Stephenson and Levi therefore recommended that the EU member states should take action by setting out common principles for whistleblower protection. However, “the result would be not uniformity, but guidance on minimum standards” (p. 25). Exactly this is the core of a draft of Directive for discussion for a specific whistleblower protection in the public and private sector in the European Union by some renowned European law school professors on behalf of the Green/EFA Fraction in the European Parliament (Abazi et al. 2016). Such a European Directive could be a guideline for approaching a common whistleblower protection standard while taking into account the different existing mechanisms in each jurisdiction.

Before the beginning of an overview of best practice and worst case legal whistleblower protection rules on a national level, it is useful to name some prevailing conventions, relevant for the predominant majority of countries. At first, the UN International Labor Organization Convention of 1982 should be mentioned, which emphasizes the “filing of a complaint or participation in proceedings against an employer involving alleged violation of laws or regulations, or recourse to competent administrative authorities, is not a valid reason for the termination of employment” (Stephenson and Levi 2012, p. 23).

Moreover, the Civil Law Convention on Corruption of the Council of Europe first recognized the special role of whistleblowing for the prevention of corruption and recommended to broaden the protection against unjustified retaliation. In addition, several principles from conventions such as the Criminal Law Convention on Corruption, the United Nations Convention Against Corruption, as well as guidelines worked out by the UN Office on Drugs and Crime should determine the way, nations deal with whistleblowers (ibid., p. 23f).

To begin with, France recently achieved juridical progress in tightening its anti-corruption rules by strengthening whistleblower protection and granting more power to French courts for investigations of French companies abroad (Chassany 2016). Thus, France joins Belgium and Latvia in adopting direct measures on the protection of whistleblowers. In Denmark, for example, a web portal was established for reporting fraud concerning cases of conflict of interest involving public officials (European Commission 2015a, p. 16). Furthermore, regarding fraud prevention, detection and prosecution, interinstitutional working groups for elaborating stronger whistleblower protection rules were established in

all of the three countries, and additionally the Ombudsman no longer has to disclose the name of a protected staff member at the start of the investigation in Belgium (European Commission 2015a, p. 17).

Surprisingly, despite the previously mentioned inertia regarding more extensive whistleblower protection policies, the Anti-Corruption Report 2014 worked out by the European Commission admits that “whistleblowing faces difficulties given the general reluctance to report such (i.e. corruptive and irregular) acts within one’s own organisation, and fear of retaliation” (European Commission 2014, p. 20). From an economic point of view, this suboptimal situation could be improved by introducing transparent and strong legal rules for whistleblowers, thereby providing strong incentives in order to shift the key focus from the cost to the benefit side of a decision process. The European Commission (2014, p. 20) describes this as “creating effective protection mechanisms that would give confidence to potential whistleblowers”. Exactly this builds the baseline of De Schepper’s ideas of incentivizing whistleblowers.

As in the previous section already mentioned, whistleblower protection is also weak within EU institutions. A study comes to the conclusion that “the current whistleblowing rules within the EU institutions are not (yet) an effective instrument for fighting corruption and conflict of interest in EU institutions” (European Parliament 2011, p. 65). Both the design of legal rules in the broader legal framework as well as the content of whistleblower protection rules are only weakly implemented. This leads to the study’s criticism that the actual whistleblowing policy rules are “not clear for potential whistleblowers, do not encourage whistleblowing, are too narrow and incomplete” (European Parliament 2011, p. 65). Other points of criticism are the too strong focus on procedural terms for disclosing information, the imbalance of obligations to the disadvantage of the whistleblower and, according to the authors the probably major problem, the lack of adequate support and reliable protection (European Parliament 2011, p. 66).

Also addressing the problematic situation for whistleblowers within EU institutions, Transparency International (2014) provides the most extensive analysis, namely the Integrity System Report. Since 2004, EU civil servants are obliged to report any illegal activity or misconduct they observe during their work. Only recently, namely since 2014, “all institutions are also required to put their own internal procedures in place to protect whistle-blowers” (p. 12). However, only the European Commission has put its own guidelines in place. All in all, the report concludes that “the protection of whistle-blowers and of their anonymity, where relevant, is also potentially at risk through the current

practice of OLAF (i.e. the European Anti-Fraud Office) to share information on on-going cases with the European Commission" (Transparency International 2014, p. 12). This critique has led to the recommendation that EU institutions should develop harmonized whistleblowing procedures.

In order to complete the overview of current whistleblower regulation in Europe, a scientific study describes the dilemma of strong whistleblowing policies as the following. The already existing UN Convention has only the power of recommendations without element of force, whereas the Council of Europe Convention requires the signatory countries to comply, but provides only soft law for influencing national legislation (Hüttl and Léderer 2014, p. 303). Furthermore, the authors also interestingly point out that the comprehensibility of legal whistleblowing rules essentially contributes to the security of a whistleblower, otherwise "it is impossible for them to know in advance the possible legal consequences and dangers facing them" (Hüttl and Léderer 2014, p. 304).

4.4. Critique and Recommendations

Based on the three key points explained in *section 3.4.* and using the economically more attractive idea of incentivizing whistleblowers, some points of criticism formulated by international organizations can be newly assessed and recommendations for policy makers can be developed. As this master thesis describes the phenomenon of whistleblowing and its consequences in a law and economics fashion, and since critique and recommendations always imply value judgements, normative statements are made in this section. However, as *sections 4.2. and 4.3.* have already shown, European whistleblower regulations are manifold and highly diverse. Therefore, it is beyond the scope of this master thesis to analyze each legal rule and legal requirement for companies separately and extensively. Thus, the procedure of this section is characterized by roughly grouping the European countries with similar whistleblower laws into certain categories. The list of countries in the focus of the analysis explicitly does not claim to be exhaustive. As a next step, the categories are confronted with the criteria from De Schepper's (2009) work.

To begin with, the study of Transparency International (2013, p. 8) defines three degrees of ratings for the coverage of whistleblower protection. Countries with laws providing comprehensive or "near-comprehensive" provisions and procedures for whistleblowers in both the public and private sector are considered have *advanced* whistleblowing laws. Only four countries in the European Union, namely Luxembourg, Romania, Slovenia and

UK, deserve this label. Then, the “middleclass” with manifold EU countries follows with a *partial* whistleblowing law, meaning that there only exists partial provisions and procedures for whistleblowers. Finally, Bulgaria, Finland, Greece, Lithuania, Portugal, Slovakia and Spain are considered to have *no or very limited* whistleblowing regulations (Transparency International 2013, p. 8).

This assessment is based on prevailing international standards, including those 30 bullet points developed by Transparency International (2013, pp. 86-90). The recommendations for the EU member states include first the improvement on disclosure opportunities and second the strengthening of legal protections. Most importantly, all employees and workers in both the public and private sector need “accessible, reliable and safe channels” to report wrongdoing, and additionally have to be sure that they do not suffer from retaliation (Transparency International 2013, p. 22).

For the EU level, Transparency International (2013, p. 22) urges the European Commission to initiate the 2013 proposal by the European Parliament in order to define minimum standards among the EU member states. Again, the focus lies on the implementation of safe and secure disclosure channels for both private and public whistleblowers. In addition, also the EU institutions should provide strong protection mechanisms for their staff.

Surprisingly, all points of critique and recommendations concentrate on the whistleblower protection, respectively on cost avoidance, for example by guaranteeing save reporting channels in order to remain anonymous or at least disclose the whistleblower’s identity only to the authorities. However, only few proposals focus on the more important goal of compensating all personal cost accruing brief after the disclosure or in the future. One objective “aims to make the whistleblower whole” again, for example by “compensating lost past, present and future earnings and status” (Transparency International 2013, p. 89). At least in theory, this aspect well reflects the idea of De Schepper (2009) shown in *section 3.4*. However, as the report shows, most of those countries considered to have very limited or partial whistleblowing laws only provide (at the most) compensation in form of monetary rewards for potential income losses because of retaliation. Whereas the first result from *section 3.4.* showed the importance of compensating also future losses in terms of lost (human) capital investment and future career losses, these aspects are not enough recognized in most of the European countries (OECD 2016, p. 12).

All in all, whistleblowing laws in Europe are diverse and weak and do not reflect the economic ideas from De Schepper (2009). Only few countries do provide strong and

advanced whistleblowing laws, whereas the great majority has much space for improvements. The first step towards a stronger whistleblowing law should rely on creating trustworthy channels for the disclosure of information and simultaneously protect the whistleblower's identity in order to avoid costs. However, the governments should also take into account that a rational whistleblower will also take account all expected future utility increases and decreases when deciding if he or she should blow the whistle. The next chapter discusses whistleblower protection in Austria.

5. Whistleblower Protection in Austria

Whereas the previous chapter analyzes the current whistleblower legislation and shows its lack of comprehensives measures for a stronger whistleblower protection and incentives in Europe, this chapter aims to concentrate on Austrian legal rules. Hence, it allows the author to go into little more detail when examining the current whistleblower regulation concerning protection and incentives in Austria. The analysis procedure is identical to the one of the previous chapter, as it uses the three key criteria from De Schepper (2009). The following subsection summarizes the current whistleblowing legislation and describes recent developments and builds the foundation of the economic analysis of whistleblowing law in Austria. In *section 5.2.* the most important personal costs and benefits, contributing to a potential whistleblower's decision process, are identified and highlighted. Finally, *section 5.3.* performs the actual economic analysis and provides critique and recommendations for the Austrian legislative authorities.

5.1. Legal Implementation of Incentives and Disincentives

To begin with, the Austrian legal system, in contrast to other European whistleblowing laws, only recently provides whistleblower systems for the disclosure of "justifiable irregularities", including criminal offences or other legal violations but also undesirable developments (yet) within the Austrian law which can be criticized in public interest (Hofer, Mair and Müller 2015, p. 143f). However, contrary to the United States of America for example, the Austrian jurisdiction does not define whistleblowing as a legal concept. The following subsections will identify and examine the most important whistleblowing regulations in Austria.

5.1.1. Austrian Banking Act

Two important reporting systems for whistleblowers in Austria have already been mentioned in *subsection 2.1.4.,* namely the websites of the Office of Prosecution for Economic Crime and Corruption in Austria (WKStA) and the Financial Market Authority. According to the WKStA, its website was a major success for Austrian justice. Between March 2013 and July 2016, there were 4,467 reports, on average three to four reports per day. Roughly 71 percent of these reports gave reason for creating the anonymous communication channel, 10 percent of all reports led to further investigations and 1,358 reports were forwarded to the Federal Ministry of Finance. Moreover, and probably most important from an efficiency point of view, the prosecution initiated 31 charges, which have resulted in 13 convictions, 5 acquittals and 3 diversions until now (Der Standard 2016).

Both mentioned systems are results from a legal novella of the Austrian Banking Act (*Bankwesengesetz*), initiated by a European Directive. One specific paragraph, which was implemented into the existing version of the Austrian Banking Act in 2014, now provides that financial institutions must provide *adequate* procedures and measures which enable their employees to internally blow the whistle, thereby protecting the confidentiality of the whistleblower's identity (§ 99g BWG 1.1.2014 BGBl. I Nr. 184/2013). These adequate procedures and measures must explicitly provide protection against "retaliation, discrimination or other forms of bullying" as well as protection of individual-related personal data (cf. § 99g (3)).

By implementing this legal norm into law, the legislative authorities have addressed the problem of lacking appropriate possibilities for well-informed employees, who are aware of a certain criminal activity but not willing to report it and to disclose their identity. As a matter of fact, the provision of § 99g BWG can be interpreted as whistleblowing enhancing, thereby incentivizing employees to blow the whistle by protecting their identity against retaliation. Linking this provision to *section 3.1.* of this master thesis, guaranteeing confidentiality of treating a whistleblower complaint can be the cheapest cost avoidance measure of primary costs.

According to De Schepper (2009, p. 38), "this is a typical transfer of information from the lowest cost gatherer to the government agency, significantly lowering their costs of discovery of the fraud". Furthermore, this information is nearly costless to obtain, since the technical organization of preserving anonymity comes at low cost. What the author describes is known as the figure of the cheapest briber, analyzed in *section 3.2.*

However, despite the good will of the legislative authorities to improve whistleblowing legislation – and indeed, the provision of an anonymous whistleblower system is a major step towards avoiding personal costs – this measure helps to avoid personal costs for the whistleblower but does not provide net benefits for the whistleblower. Thus, only an employee, whose deep trust in the security measures for protecting its identity is imperturbable, will decide to blow the whistle. Of course, this prognosis is only then valid, unless we apply a holistic approach.

5.1.2. Public Service Law

Furthermore, the 2011 amendment of the Austrian Civil Service Law (Beamtendienstrecht) implemented two paragraphs titled “Protection against Disadvantage” (in German “Schutz vor Benachteiligung”, translation by the author) which provide protective measures in favor of judges and other civil servants when they are confronted with retaliation after blowing the whistle (Hofer, Mair and Müller 2015, p. 153; § 53a BDG and § 58b RStDG, 28.12.2011 BGBl. I Nr. 140/2011). The legal protection is only then guaranteed, if the report concerns a criminal offence listed in specific corruption prevention laws.

Moreover, there are two grave limitations respectively conditions for the protection of the whistleblower. First, the report must be made *bona fide* and second, it has to be a “reasonable suspicion” meaning that the whistleblower could have considered the reported facts as correct, whereby slight negligence excludes integrity and therefore forfeits the claim for the protection against retaliation (Hofer, Mair and Müller 2015, p. 159). From a law and economic perspective, this can be considered as major weakness of this provision. First, as a layman in the juridical field an employee might not assess the current situation correctly and will either risk to be protected post whistleblowing, or will remain silent because of fear from retaliation.

5.1.3. Act on Salaried Employment and Austrian Labor Constitutional Act

The current Austrian whistleblowing legislation differentiates between the public and the private sector, protecting the employees of each sector differently regarding the extent and strength of defending. Whereas civil servants might also often observe wrongdoings by colleagues or other employees not directly connected to them, the disclosure of private employees most often includes other near colleagues or the employer itself. This indicates the dilemma potential whistleblowers in private companies have to cope with. On the one hand, the moral attitude might force the employee to report certain abusive developments, on the other hand the employment contract foresees the duty of loyalty and allegiance to

the employer. In addition, the private employee is bound to protect commercial secrets and business confidentiality (Hofer, Mair, Müller 2015, p. 159).

The Austrian Act on Salaried Employment provides the employer the possibility of dismissing the employee because of distrust (§ 27 Z1 AngG). Hofer, Mair and Müller (2015, p. 160) argue that the mere filing of a criminal complaint does not fit to the provisions of § 27 Z1 AngG, but the employee has to proceed as carefully as possible. Thus, internal discussions with the direct supervisor could be a first step, which can prove to be a hierarchical problem. However, the freedom of speech in Art 10 ECHR might in some cases protect employees from being dismissed (Hofer, Maier and Müller 2015, p. 160). Similar to the Civil Service Law, the critique concerns the problem and difficulty of subjective assessments regarding the legal justification to blow the whistle.

Moreover, § 105 (3) Z1 lit. i ArbVG provides the right to challenge certain kinds of dismissals. More specifically, employees are protected from termination of employment for strategic reasons, when the employee has decided for a "obviously *not unjustified* assertion of rights or fulfilling his legal duties". The latter point, namely fulfilling legal duties, can be applied for reporting criminal offences because of company-internal circumstances. This refers to as whistleblowing. However, this legal provision obviously does not protect reporting ongoing undesirable developments, which are *not* considered to be illegal.

5.2. Current Assessment by Fractions in the Austrian Parliament

The previous section shows that the Austrian legislative authorities have provided some very basic elements of whistleblower protection to some extent. However, the current whistleblowing law, dispersed in various different laws in contrast to comprehensive and concentrated legal norms, fails to provide real incentives in order to tackle the problem of intimidated and reluctant employees, fearing personal retaliation after blowing the whistle.

Despite major critique of renowned international organizations (see the previous and the following sections), there is no political debate about further improving whistleblower protection or providing solid (financial) incentives in Austria. As the question of how to efficiently incentivize whistleblower does not tend to belong to the canon of topics, which are daily discussed in the media and public, the author of this master thesis have asked each political group of the Austrian Parliament to answer the following questions regarding their current legislator status.

- *How content is your fraction with the current regulation of whistleblower protection? What are the advantages and disadvantages in your opinion? Do you see space for improvement?*
- *Do you expect any spillovers from the newly adopted European Trade Secrets Directive on Austrian whistleblower protection?*
- *How do you assess the importance and interest of protection of business and trade secrets when public interest is infringed? How should the balance between protection of trade secrets and protection of public interest be handled?*

First of all, there are easier tasks than contacting member of the Austrian parliament in the summer break and politely requesting to submit their answers in a timely manner. Second and surprisingly, the spokesmen of NEOS, ÖVP, Team Stronach and the Greens Party have timely submitted their political statements regarding the mentioned questions about whistleblowing in Austria. Unfortunately, both the parliamentary fraction of SPÖ and FPÖ have ignored the request despite several inquiries. However, the following summary of the submitted political statements and overview about their commonalities and differences well reflects the balance between opposition and administration.

To begin with, the most interesting points of views of each political party should be summarized, whereas their depth and extensity reflect the original statements:

- **NEOS**: In the opinion of vice fraction spokesman Nikolaus Scherak, whistleblower protection regarding the unjustified termination of employment is sufficiently implemented. The prevention of "soft" retaliation factors such as bullying, social repression, or the stigmatization of the whistleblower as denunciator is difficult to achieve by law. NEOS suggests further improvements in assisting employees in their pre-reporting phase, when they have to assess whether an ongoing company-intern activity can be considered as criminally relevant. Independent institutions such as the Austrian Ombudsman Board could help to assess, whether certain observed activities do lie in public interest. The Trade Secrets Directive does not influence current law as it should prevent industry espionage. The tension between trade secrets and public interest is de lege lata adequately addressed. NEOS suggests to supplement § 162 StPO (criminal procedure code) by also adding proprietary disadvantages as legal reason for anonymously testifying before a court.

- **ÖVP**: The fraction spokesman Reinhold Lopatka emphasizes that the opinion-forming process regarding Trade Secrets Directive has yet not finished. Nevertheless, he finds

a good balance between protecting both trade secrets and the public interest. Concerning the protection of whistleblowers in Austria, he stresses the technical guarantee of remaining anonymous when using one of the reporting systems. Although Lopatka explicitely refers to § 53a BDG as current protection provision, he remains vague, when proposing the implementation of a whistleblower protection in the Stock Exchange Act.

- **Team Stronach**: The parliamentary fraction emphasizes the great importance of both the protection of trade secrets and of whistleblowers against retaliation, but does not offer a single solution approach. Quite the opposite is true, when the Team Stronach shifts the responsibility of providing sound whistleblower protection guidelines to the jurisprudence.

- **Green Party**: In a brief statement, the Greens massively criticize the imbalance of protection strength between the professional group of civil servants and private employees. They demand that whistleblower within a private company should not bear the risk of repression anymore, however they do not provide concrete measures as a solution to this problem. Regarding the protection of trade secrets, the Greens take a very special position. They state that the protection of public interest is always the top priority, especially with regard to environmental and consumer protection. If “companies intentionally launch a dangerous product”, they cannot expect that their business secret is going to be protected. However, the author of this master thesis refers to the already implemented institution of product liability.

As the reader already might have observed, all responding fractions of the Austrian parliament recognize and emphasize the importance of whistleblowing in the fight against corruption and economic crimes in their statements. However, in the view of the author, two eminent factors might weaken the strong impression of cross-party support for a strong whistleblower protection.

First, official statements can serve as an indicator for the significance of a specific topic within a political party. Nevertheless, the true level of effort for the best solution of a whistleblower’s problem could only be examined by a holistic legal analysis of all parliamentary processes and proposals. Second, not a single parliamentary fraction proposes stronger or more attractive whistleblower incentives in order to motivate employees to disclose ongoing criminal activities. It would be interesting to further examine

why the general idea of De Schepper (see *section 3.4.*) is still not present in Austrian politics and legislators, when all parties are aware of the fact that the United States are a pioneer in incentivizing whistleblowers. All in all, the interrogated parties recognize the importance of whistleblower both in the public and the private sector, but not each fraction sees the need of improvement of Austrian whistleblowing law.

Only NEOS remarked in their answers that in Austria there still exists a major problem of stigmatization. According to Transparency International (2013, p. 25), whistleblowers are still labelled squealers and tattletales (*Denunziant* or *Vernaderer*) because of their perceived disloyalty to their employers, although they serve public interest. In fact, this stigmatization can be a psychological barrier for potential whistleblowers, reluctantly to be harassed in the aftermath. But even for public interest, this can mitigate society's glue, when disclosing information in good intention is negatively connoted. Despite the evidence that reports motivated by pure personal, emotional reasons most likely will not withstand a Kaldor-Hicks-efficiency test, the appreciation of whistleblowers in form of rewards or premiums might dampen the effect of denunciations.

5.3. Policy Recommendations

Although several legal provisions concerning whistleblowing have been implemented in Austria in the recent years, these new legal rules generally do not match up to those best practice rules from the United States described in *section 4.1*. As Hofer, Mair and Müller (2015, p. 153) note, it is in their view remarkable and astonishing that up to the current time point there has yet not been to some extent a discussion about financial whistleblower incentives or monetary whistleblower compensation in form of a "whistleblower premium". This sort of critique corresponds to the idea of improvements through expanding financial benefits by De Schepper (2009). However, if such a whistleblower premium is modelled irresponsibly too high, this might cause an undesirable effect of increasing unjustified reports against an unpleasant person out of personal motives such as revenge. In the presence of a whistleblower premium, "an uncontrollable stream of groundless complaints" can be expected (De Schepper 2009, p. 43).

Generally, the official provision of reassuring whistleblowers that their identity *post* disclosure remains protected is an important and useful protection measure for whistleblower. At least under the assumption that the government confidentiality is likely to be sufficient and the former employer is definitely not able to be informed about the whistleblower's identity. However, this condition of perfect confidentiality is often unlikely,

as the employer (once confronted with its accusation) might be able to restrict the circle of "suspects", tracing it back to the whistleblower. Therefore, unless anonymity is protected with probability of one, full compensation is needed in order to incentivize the potential whistleblower (De Schepper 2009, p. 39).

Moreover, another interesting point is the phenomenon of subjective probabilities, often used in law and economics for examining whether a specific legal rule is effectively in place, combined with the level of whistleblowing activity in a specific country. The two fundamental requirements for this concepts are first the possibility that the sum of subjective probabilities can be greater than 1, and second the mere connection to feelings and often inaccurate assessments of the true probability. From behavioral law and economics, it is known that an individual's perception and procession of true information is often biased (cf. Gilboa et al. 2008). If, for example, there is a clear threat to an individual, but this person fails to correctly assess it (i.e. the subjective probability is smaller than the true probability), then this has a negative effect on the level of the exposed activity.

In fact, this effect can also take a different form, namely the opposite and other way round. Imagining a country with very strong whistleblower protection *and incentives*, it is a possible scenario that a criminal assesses the subjective probability of getting caught to be higher than the true probability in fact is. Thus, it would clearly lead to a more efficient outcome and positive effect, as the level of the criminal activity can be decreased. Law and economics, based on behavioral aspects, would take this effect into account and might conclude that stronger whistleblower incentives might even prevent criminal activities in the first place.

As Transparency International (2013, p. 26) notes in their whistleblowing study, positive steps toward a sound whistleblower protection is reflected by court rulings that "filing a valid criminal complaint does not violate employees' duty of loyalty to their employer". Nevertheless, they also criticize the obligation to choose the "gentlest way possible" for the disclosure.

Lastly, also the Austrian Chapter of Transparency International drafts some recommendations for Austrian whistleblowing law. First, they urge that the transparency in the public sector must be increased. Second, they are highly in favor of the "Kronzeugen" rule, which expires at the end of 2016 and ought to be extended. Finally, they urge Austrian policy makers to equalize the strength of protection between public and private whistleblowers (Transparency International – Austrian Chapter 2014, p. 2).

6. Conclusion

All in all, this master thesis has examined the interdisciplinary and complex topic of whistleblowing from an economic perspective. Whistleblowing always implies legal consequences for at least one party. Usually, legislative authorities aim to model whistleblowing laws such that legal provisions effectively and gently direct individual's behavior towards a more desirable attitude. Therefore, this master thesis has used a law and economics approach in order to confront legal norms and whistleblowing as a legal concept with economic methods and findings.

To recapitulate, the aim of this master thesis, represented by the two research questions, was to first economically describe the concept of whistleblowing assigning well-known law and economic characteristics to those of a whistleblowing constellation. Second, the current whistleblowing regulations in Europe and Austria were summarized and also economically analyzed by involving some findings from De Schepper (2009).

To begin with, some of the most significant findings and interesting results of this master thesis shall be summarized. First, *chapter 2* has shown the sheer complexity and interdisciplinary breadth of whistleblowing. The overview of the various definitions for example has shown that each discipline and even national legal system use different terms for the same underlying process. As a consequence, this conceptual distinction allowed to economically define the "Kronzeugen" rule from *section 2.2.* as substitute to whistleblowing. Moreover, the important role of NGOs as "gatekeeper" for whistleblowers, thereby protecting the whistleblowers' identity, was assessed to be insufficiently incorporated in society's consciousness. Furthermore, the overview of macro- and microeconomic costs and benefits of whistleblowing highlighted the circumstance that special regulations should take into account their various consequences with respect to public interest.

In addition, *chapter 3* has yielded interesting theoretical results, contributing a law and economics perspective to the scientific literature of whistleblowing. First, this master thesis identifies in most of the whistleblowing cases the personal union between the criminally acting person or the wrongdoer and the figure of the cheapest cost avoider. The wrongdoer him- or herself would have the chance to act differently and therefore avoid all accruing costs to the society, but resists to because of opportunistic or strategic behavior. Second, the prosecuting and investigating authorities then have to apply a much higher level of effort in order to detect the (criminal) and undesirable ongoing activity in order to prevent

the public from damages. These (sometimes prohibitively high) transactions costs can be effectively decreased and overcome when a whistleblower steps in. Third, this useful economic relationship between the prosecution and the whistleblower can be explained by another personal union, namely the whistleblower as cheapest briber. The latter one can be reduce the tertiary cost to a minimum and is therefore able to contribute to society's welfare.

In contrast to these findings with a theoretical attitude, the results and insights of *chapters 4* and *5* are strongly related to the reality of current whistleblowing regulations in Europe, respectively in Austria. On the one hand, it was shown that Europe, especially the European Union, has yet failed to initiate a common, EU-wide whistleblowing law by passing a European Directive. As was explained, it is rather the case that the legal provisions of the 28 member states remain on a national level and are highly diverse. However, as the United States have already shown in the last century, a stand-alone strong common whistleblower law can effectively contribute to prevent the society from corruption or other economic crimes. Hence, the EU ought to initiate a proposal for a stronger whistleblower protection and implement incentives for employees to blow the whistle.

On the other hand, the missing uniform standards among the EU countries provide much space for recommendations to improve upon their laws with regard to whistleblowing. As the analysis has shown, only few countries are considered to have strong whistleblowing laws and the great majority of the EU countries has yet failed to implement economically useful incentives for potential whistleblowers. From an economic perspective, the ideal incentives for achieving the goal of full compensation are currently not available for neither private nor civil employees. Thus, this master thesis encourages the European lawmakers to first further improve upon the availability, security, and attractiveness of transmission channels for potential whistleblowers. Second, and as a next step, when the basics of whistleblower protection is done, lawmakers should recognize the economic findings and implement useful and adequate incentives in order to prevent the public from harm.

Similarly, the implementation of Austrian whistleblowing rules has been only reluctantly advanced and can still be assessed as very basic and simple. The weaknesses of the Austrian legislation include for example the unequal treatment of the legal consequences between whistleblowers of a private company or from the civil service. Moreover, the employee has to first carefully consider to choose the "right" channel for his or her disclosure, as the obligation of loyalty to the employer is by contract very present.

Moreover, a brief overview of the political opinions of the parliamentary groups has shown that the commitment to further improvements of whistleblower protection and the introduction of incentives are not strongly present. Again, the examination of economically useful incentives showed the need for improvements.

All in all, this master thesis has constructively contributed to the scientific literature of whistleblowing. Nevertheless, as this topic has seldom been analyzed from an (law and) economic perspective, there are further interesting unanswered and unexamined research areas, being beyond the scope of this master thesis, whose results would be eminently valuable for scientific literature. For instance, it would be useful to empirically examine whether current whistleblowing regulation in each European country fulfill conditions for economic optimality, thereby regarding the whistleblower as anticipating and rational individual. All things considered, this thesis provides several points of references for further examining the economic perspective of whistleblowing.

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