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# ECONOMIC ANALYSIS OF THE RIGHT TO PROTECT COMMERCIAL SECRETS

The fundamental statement of this article is that in the regulated markets, the basic hindrance to the effective judicial review of the regulator's decisions derives from the fact that the factual basis for the regulator's decision is usually considered to be a commercial secret. For this reason, a new relationship must be established between the right to the protection of commercial secrets and regulatory intervention, by placing limitations on the right to the protection of commercial secrets. This article uses the accepted apparatus of law and economics to assess whether the goals of the right to the protection of commercial secrets are acceptable. It aims at finding an answer to the questions when the protection of commercial secrets enhances the proper allocation of resources and when it does not. The article puts a special emphasis on the economic effects of the information which constitutes a commercial secret of future behaviour. The conclusion of the article is that the legislator should consider making the commercial secrets used in regulatory procedures partially or fully public.

# INTRODUCTION

The legal institution of commercial secrets is an inherent element of a market economy. We consider it natural that the constitution – along with the freedom to conduct business and the freedom of competition – protects the privacy rights of businesses, thus we presume that the protection of the secrets of businesses constitute a fundamental right. Consequently, commercial secrets – if not formally, but substantially – are constitutional rights.<sup>1</sup> Nonetheless, it is far from obvious to associate legal persons and corporations with Article VI Paragraph 1 and 2 of the Fundamental Law of Hungary, containing the provisions on the right to private and family life, home, communications and good reputation, and the right to the protection of personal data. The origin of these rights is to be found in the relationship between the state and its citizens, derived from the protection of the separated private sphere, and its extension only seems necessary in a world ruled by modern market economy institutions (businesses and mostly legal persons). This is a global phenomenon and the "global law" can be traced back to the interpretation of the

<sup>&</sup>lt;sup>1</sup> The practice of the Constitutional Court is mostly related to the constitutional questions of special types of secrets, but many decisions clearly prove this statement. See for example the 24/1998. (VI. 9) and 61/B/2005. decisions of the Constitutional Court.

Hungarian constitution as well.<sup>2</sup> For instance, the European Court of Human Rights (ECtHR) held that Article 8 of the European Convention on Human Rights<sup>3</sup> about the right to respect for private and family life also applies to business entities, thus the private and family life of businesses is also entitled to protection in democratic, market economy, rule of law states.<sup>4</sup>

This extended interpretation, however, has its own price. On the one hand, businesses have to precisely keep track of all the data related to their economic activities (rules of accounting), and make them at least partially public (business registry, balance sheet). The reason for this is that the state has to be aware of all the relevant economic data of a company (mainly for tax purposes), moreover, some information from the balance sheet and the annual report has to be disclosed to competitors and other market participants (e.g. creditors) in order to ensure safe business relations and safe transactions.

There are some business relations (for example between a bank and its client) that make it necessary to disclose private data and commercial secrets. Due to these special business relations and the state's need for information, specialized sectoral secrets (tax-secret, bank-secret, insurance-secret, etc.) have been separated from the legal institution of commercial secrets. Beyond the state's want for information, the requirement of transparency in government functions also calls for limitations on the right to protect commercial secrets. In a modern market economy, where the state is the largest investor, the transparency of the functioning of the state is not only a question of democracy (and the possible violation of democratic principles), but also a concern for competition policy.<sup>5</sup> The economic relations between a business and the state are generally seen from the perspective of the business as a commercial secrets enable not market-oriented, irrational state decisions – mainly through the dangers of corruption – which deteriorates market economy efficiency and distorts competition.

<sup>&</sup>lt;sup>2</sup> The definition of commercial secrets as defined in the civil code (Act V of 2013) is based on the fundamental international norm, the TRIPS Agreement (*Trade Related Aspects of Intellectual Property Rights*) Article 39. 1. and 2. (Act IX of 1998. 1. *C*) supplement). (See: *Bobrovszky* [2006] p. 1385, which refers to the fundamental international agreement of the protection of industrial property, the 1883 Paris Convention; *Nagy* [2008] p. 555) The TRIPS Agreement is a cornerstone of the world trade system established in Marrakesh (together with the GATT and GATS), which was published in Hungary by Act IX of 1998. Section 2 of Article 39 of the Agreement defines commercial secrets by referring to Article 10bis of the Paris Convention, which latter was published in Hungary by the 18<sup>th</sup> Regulation with the force of a statute in 1970.

<sup>&</sup>lt;sup>3</sup> Act XXXI of 1993 on the publication of the Convention for the Protection of Human Rights and Fundamental Freedoms of Rome 4.XI.1950 and of the supplementing eight Protocols.

<sup>&</sup>lt;sup>4</sup> Case of Societé Colas Est and others *versus* France (Application no. 37971/97). European Court of Human Right, Strasbourg, 16 April 2002.

<sup>&</sup>lt;sup>5</sup> The regulation of public procurement – as part of the Community's competition policy – is based on community directives. (See: the Preamble of the 89/665/EGK Directive of the European Council of 21 December 1989. or Section 4 of the Preamble of the 2004/18/EK Directive of the European Parliament and Council of 31 March 2004., etc.)

This phenomenon was acknowledged by the former Civil Code of Hungary (Ptk.), when the commercial secret definition envisioned by the fundamental international norm, the TRIPS Agreement (Trade Related Aspects of Intellectual Property Rights), was incorporated and supplemented with additional provisions.<sup>6</sup> These made it clear that the business relations between the state and the private entities, in relation to public procurement, state (and EU) aid or other financial relations connected to the state budget, are public information, and could not be classified as a commercial secret. As a result of this trend, the Hungarian state could not have any commercial secrets from 22 May 2009, based on Paragraph 1 of the XXXI Act of 2009. However, the new Civil Code of Hungary that entered into force on 15 March 2014 has seemingly reversed this trend, diminishing the results of the early years of the 2000s in substantive law, by returning the commercial secret definition applicable before 2003, which does not contain the limitations on state functions.<sup>7</sup> So long as the Hungarian legal development did not abandoned the general standards,<sup>8</sup> commercial secrets have gradually become increasingly subordinated to pubic interest in the economic relations between state and business. This can be detected even today, when the right to the protection of commercial secrets is in conflict with other constitutional right. The fact that the protection of a commercial secret as a fundamental right can only be justified by an extended interpretation of the constitutional text which results in a situation, in which when it is in conflict with another constitutional right – especially with one of the fundamental norms defining our socio-economic system - the protection of commercial secrets will turn out to be the weaker and can be restricted. This is also the cost of an extended interpretation. For instance the fundamental right to legal remedies, laid down by Article XXVIII paragraph 7 of the Fundamental Law, is supposed to be a stronger right than the right to the protection of commercial secrets, thus courts - based on the necessity and proportionality test - must provide access to data, information or documents classified as commercial secrets. Also this is generally true for administrative procedures.<sup>9</sup>

These clashes lead to a number of practical problems. On the one hand, businesses often tend to classify their submissions in administrative and judicial proceedings

<sup>&</sup>lt;sup>6</sup> Act IV of 1959 (old Civil Code Section 2 Paragraph 81). The restrictive provisions were added by the Paragraph 16 of the Act XXIV of 2003, which entered into force on 9 June 2003 (old Civil Code Section 3-4 Paragraph 81)

<sup>7</sup> Act V of 2013 (Civil Code) Section 1 Paragraph 2:47

<sup>&</sup>lt;sup>8</sup> We will see later that even before the FIDESZ government with the two-third constitutional majority from 2010 and since, the situation was not clear, because the development of substantive law has gradually restricted the right to the protection of commercial secrets, but in the procedural legislation the lobby power of the opposite side has appeared as restrictions strengthening the protection of commercial secrets appeared, which made the protection of commercial secrets powerful even against constitutional rights. See the next footnote and the conclusion of the study.

<sup>&</sup>lt;sup>9</sup> This was undoubtedly true before the amendment of Act III of 1952 on the Civil Procedure Code on 1 January 2009. We will discuss the current procedural rules at the end of the study.

as commercial secrets, however, when they are asked to specify which exact data they are referring to as a commercial secret, hesitation is prevalent.

A detailed – yet at this point failing – regulation would be needed for the access to commercial secrets in judicial proceedings, which requires a lot of administration in the course of judicial review. This is especially true in the cases of judicial review of regulatory authorities' decisions. A good example for this is the legality review of price regulation decisions related to dominant market position in the field of info-communications, where the determination of cost-based price is based on the use of fundamentally important commercial secrets. The resistance to making these data available is nicely shown by the fact that in the field of info-communication even the regulatory authority is refusing – contrary to the law – to publish the preparatory documents for its market regulatory decisions, apart from the draft decision. Nonetheless, so far this approach has not hindered the judicial review, since the administrative authority is forbidden from making such documents public that were classified as commercial secrets by the interested parties.<sup>10</sup> It is, however, also doubtful that the cost-calculation method used by the authority to assess an effective service [bottom-up long-run incremental cost model (BU-LRIC)] is published in such detailed fashion as it is required by the statute.<sup>11</sup>

*Effective and substantial judicial review is, however, unimaginable without access to the most fundamental commercial secrets.*<sup>12</sup> If for example the judicial proceeding is about whether the cost-model used to determine the cost-based price was appropriate, the plaintiff company affected by the price regulation is allowed to access the fundamentally important commercial secrets of other service providers, since without such access the appropriateness of the cost-model could not be assessed. This alone – without considering the outcome of the case – provides a competitive advantage to the plaintiff company, which could unfairly distort competition, as opposed to the regulatory objectives.<sup>13</sup>

<sup>&</sup>lt;sup>10</sup> Point b) Section 1 Paragraph 36 of Act C of 2003 on electronic info-communication (Eht.). The interested parties classify basically all existing data as commercial secrets.

<sup>&</sup>lt;sup>11</sup> See: Section 4 Paragraph 108 of the Eht. This conclusion is based on the experiences of the judicial proceedings of ex 16, then 7 markets. (voice transmission call termination wholesale service in specific mobil radio-telephone network wholesale markets).

<sup>&</sup>lt;sup>12</sup> The regulation of electronic info-communications is based on community directives, and community law obliges nation courts to effectively enforce community law in the judicial cases. This is the *principle of effectiveness*. (*Steiner–Woods* [2000] p. 441–443.). Before the entry into force of the Lisbon Treating on 1 December 2009, this principle could be deducted from Article 10 (before Article 5) of the Treaty on the European Communities. After the Lisbon Treaty it is based on the second sentence of Section 2 Article 19 of the Treaty on the European Union. In the field of electronic info-communications, Section 1 Article 4 of the 2002/21/EK Directive of the European Parliament and Council of 7 March 2002 mandates the member states that effective judicial remedies against the decisions of the national regulatory authorities must be provided.

<sup>&</sup>lt;sup>13</sup> The fundamental hypothesis of this article is that the existence of effective judicial remedies is an essential legal and economic-efficiency element of an effective regulatory regime. This is, however,

By providing a general analysis to the legal institution of commercial secrets, this article aims to show that there is a theoretical possibility to make fundamentally important commercial secrets public based on the regulatory interests. This question should be worth exploring from practical aspects as well, however, since the author is not an economist, it is outside the scope of the article. Thus in the general economic analysis of the right to the protection of commercial secrets, we will not be providing a detailed description to those questions that do not relate tightly to the issues mentioned above, even though they might be essential and important elements of the economic analysis of the right to the protection of commercial secrets. The protection of commercial secrets plays a crucial role in vertical relations, such as between employer and employee, the analysis of which is mostly needed for understanding the justification for the legal institution of commercial secrets. Due to reasons of space, however, we will only make some brief remarks in this regard.

Lastly, it is important to note that this analysis is building on the current Hungarian legal environment, thus the conclusions are adapted to the Hungarian situation, consequently, it describes a special case of the economic analysis of the right to the protection of commercial secrets, the generalisation of which might need some corrections.

# THE LEGAL AND ECONOMIC CONSTRUCTION OF COMMERCIAL SECRETS

#### The legal definition of commercial secret

"Business secrets shall comprise all of the facts, information, conclusions or data pertaining to economic activities that, if published or released to or used by unauthorized persons, are likely to imperil the rightful financial, economic or market interest of the owner of such secrets – other than the State of Hungary –, provided the owner has taken all of the necessary steps to keep such information confidential." (Section 2 of Paragraph 81 of the former Civil Code).<sup>14</sup> This was the general definition of commercial secrets, applicable to all fields of law, based on the old Civil Code

not at all evident, so it is worth analysing. Similarly a further hypothesis of the study: a substantial judicial review includes the economic overview of the authority's discretionary power based on economic considerations, which could also be debated.

See: *Tóth* [2006], *Kovács* [2006], *Koppányi* [2006–2007] EU law, nonetheless, requires the effective judicial review. (See: previous footnote.)

<sup>&</sup>lt;sup>14</sup> Section 1 of Paragraph 4 of the act on competition refers back to this definition. (Act LVII of 1996 on the prohibition of unfair trading practices and unfair competition, Competition Act) The Criminal Code uses the same definition for commercial secrets, see the reasoning for Paragraph 18 of Act XCI of 2005.

up until 15 March 2014.<sup>15</sup> Section 1 of Paragraph 2:47 of the new Civil Code contains the new definition, which from a functional perspective is not fundamentally different. Presumably, similar conclusions could be drawn from the new definition of commercial secrets as well, nonetheless, since it is in force only since 15 March 2014, no relevant case-law and practice has evolved around it. Thus we will use the old definition in the article to show what the general definition of commercial secrets could be, which could also be applicable in any legal system.<sup>16</sup> The definition shall be approached in three ways. The first is the subject of the commercial secret, the second is the relevant conduct that could result in an injury of interests, and finally is the required conduct of the person entitled to the secret (the formal element of the definition) to make the commercial secret concretely identifiable with an external interference.

The subject of a commercial secret is the information. The definition of information is, however, an exceedingly wide category.

• According to some the world is nothing else then matter, energy and information. Nevertheless, others think that it is a *fact* that *Sz. L.* is a member of *B.* law firm, while it is a *circumstance* that he has an armchair in the left corner of his office, and the way *Sz. L.* usually sits in this chair, his individual body position is some sort of a *solution*. And it is just a mere *data* that *Sz. L.* writes 15-page longer claims than the average length of others' claims. If we can acknowledge a connection (even if there is or is not) between these facts, circumstances, solutions and data that is an information. Given that it is due to *Sz. L.*'s individual way of sitting in front of the computer that he is able to stare at his monitor 20 % more each day than the others (which can be verified by the average of time spent by the other lawyers in front of the computer), and thus he is able to write 15-page longer claims, then *Sz. L.* can evidently give a competitive advantage to his employer. This is an important commercial secret, because if it was made public, then either others would copy his special way of sitting, or *Sz. L.* would have to be paid more in order for him to be able to refuse the different daily job offers.

<sup>&</sup>lt;sup>15</sup> In the course of the analysis we will use this statutory definition, even though the current statutory definition of commercial secrets is partially different, and this definition could be analysed separately in each legal system *Nagy* [2008] (p. 554). For example five major theories may be distinguished for the justification of the regulation of commercial secrets. The Hungarian dogmatic approach is based on the personality and its protection, as we have already mentioned it in the introduction. However, the study must refer to the so-called contractual theory, the fiduciary theory (United Kingdom), and the misappropriation theory (United States), since these theories has significantly influenced the international legal literature of the economic analysis of commercial secrets.

<sup>&</sup>lt;sup>16</sup> Making this decision we took into account that the Hungarian version of this article was closed on 31 December 2009, and in this English version we aim only at signalising for the reader the changes that have occurred since, but we were unable to completely rewrite some parts based on the new regulatory regime/reaching the same conclusions, since this collection contains the original studies, not new analyses.

The terms fact, solution, data and circumstance are thus seen as elements of the information.<sup>17</sup> The statutory text expands the definition of commercial secret to all valuable sub-information that in themselves do not contain information, that could not be the subject of a commercial secret, because the threat of an injury in interests is only present with the acquisition of the information itself. The law considers the questions of evidence. It is extremely difficult – often impossible – to prove the realisation of the causal link between two facts that constitute two sub-information, which means that even the acquisition of the two sub-information that are individually invaluable can violate commercial secrets, if putting them together they can threaten financial, economic or market interests.

Making an information public or letting it be used by unauthorized persons can only violate the legitimate financial, economic or market interests of a business, if that information provides some kind of competitive advantage, including the level of command over resources.<sup>18</sup> An information kept in secret, thus, is nothing more in economic sense, then a competitive advantage. Then it is not surprising that beyond the general norms of the Civil and the Criminal Code, competition law is the one that protects commercial secrets with a separate provision (Competition Act, Article 4).

The person entitled to the commercial secret has to perform all necessary measures in order to keep the information in secret.<sup>19</sup> This element of the definition has a role in making the commercial secret, the legally protected information identifiable for third persons, including the law enforcement authorities. This shows that there is an information kept in secret, thus the owner of the information realised its value.

This element of the definition contains other important substantive criteria for the economic analysis, namely that it is the owner of the secret solely that can decide whether the information is valuable or not. Thus the commercial secret has no normative content.

<sup>&</sup>lt;sup>17</sup> By using the results of the formalistic information theory, we could have a more exact starting point for the analysis, so the results could be better generalised. It should be noted that in the data protection regulation the definition of data is wider, while the category of information is narrower. This approach is due to the special word-set of the data protection regulation, which is distinct from the legal vocabulary. Section 1 Paragraph 2:27 of the new Civil Code uses fact, information and other data, or a compilation thereof.

<sup>&</sup>lt;sup>18</sup> The "rightful" part could be separately analysed. From the standpoint of our study this is only relevant, because the reference to "rightful" strengthens the hypothesis that the advantage cannot come from outside the normal functioning of a market economy, thus it can only refer to advantages gained from the economy, so only legitimate competitive advantages. For example the real information behind a commercial that states content unfairly influencing consumer choices cannot be the subject of commercial secrets. However, the information behind a commercial statements, but not the consumer.

<sup>&</sup>lt;sup>19</sup> Section 1 Paragraph 2:47 of the new Civil Code states the condition goes as: the entitled person is not liable for protecting the secret, so their conduct related to the protection was what can be generally expected in the given situation. There is no substantive difference between the two solutions from the perspective of our analysis.

• This, however, does not mean that it would constitute a commercial secret if the owner of the secret would classify information as commercial secret that do not violate or threaten economic or market interests, or already public, let alone of public interest. Obviously this element of definition is important in a criminal proceeding regarding the violation of economic secrets or in a judicial case of commercial secret violation or of access to public interest data. First and foremost judicial cases regarding access to public interest data are when this element of the definition plays an important role. The cases that are relevant to this article, so when the subject of the judicial or administrative procedure is not the classification of a commercial secret, then this element of the definition is disregarded in the realm of the classification of commercial secret, and it only has a role in the disclosure of commercial secrets relating to assessment of the necessity and proportionality of the reasons for disclosure. This means that so long as in a case about the classification of a commercial secret does not decide on the character of a certain information, law influences the regulated subjects' conduct as if any information classified as a commercial secret by the owner of the information would in fact be a commercial secret. This determines both the procedure of the regulatory authority and the judicial review thereof.

Without presuming the economic theory related consequences of information society's impact on modern market economy, it should be noted that precisely the competitive advantages gained from information are the greatest in modern market economies, because the core competences which cannot be copied by others, are the ones that can ensure a long-lasting competitive advantage. Such core competences derive from institutional culture, institutional knowledge that are specific to the institutional structure, and are the collection of such institutional practices and knowledge that might only be partially known or stay hidden even from the management, because the procession and evaluation of this enormous amount of information is almost impossible. Due to this later fact, businesses attempt to classify as commercial secrets all information related to their economic functioning, and it is due to this that they have difficulties in giving reasons for such classification in an official - administrative - procedure. Nonetheless, for an economist it is clear that a rational business company is the sole authentic decision-maker in the question which information is providing its competitive advantage, thus which information is worth spending money on classifying and keeping as a commercial secret.

In summary: from an economic perspective a commercial secret is all the company's information kept as a secret that is able to provide a competitive advantage against the competitor companies. This is exactly the Anglo-Saxon definition of commercial secrets, which deeply influenced the TRIPS Agreement.

The *Restatement of Torts* (1939) for example says that a commercial secret is any information which is used in one's business, and which gives him an opportunity to

obtain an advantage over competitors who do not know or use it.<sup>20</sup> Under US law the definition goes as follows: A commercial secret is any information that can be used in the operation of a business or other enterprise and that is sufficiently valuable and secret to afford an actual or potential economic advantage over others.<sup>21</sup>

#### Information in microeconomic models

As a starting point, we should remember what presumptions the classical – static – economics model (competitors' model) establishes: there are a large number of smaller buyers and sellers, with competing homogeneous products, the capital goods also come in homogeneous units, none of the market participants are able to change to price alone (everyone is a price-taker), market entry is free, prices and goods can move without any limitations, market participants possess all relevant information to make an informed decision (even the consumer knows all the possible alternatives). There are no mechanisms in place to win over buyers, such as reducing prices, increasing the quality of goods, or using advertisements, also there is no personal relationship between buyers and sellers. In such a market the longterm profit is zero, both the buyers and the sellers act as a *homo oeconomicus* (who can make optimal decisions) and there are no transaction costs.

Thus in the classical analysis the existence of information is a crucial starting point in numerous regards (advertisement, winning over buyers, even acting as a *homo oeconomicus* assumes it). If being perfectly informed is such an important starting condition, then we should rightly presume that the existence of a legal institution like the protection of commercial secrets is against the competition, consequently, competition law should *per se* prohibit it. Controversially, the situation is that competition law does not only prohibit commercial secrets, but even protects them.

The obvious model-nature of the starting conditions of a competitors' market is even apparent – contrary to public opinion – in the classical microeconomic studies. Economics views asymmetric information as one of the main reasons for market failures. If asymmetric information causes market failures in the functioning of market economy, then the existence of the legal institution of commercial secrets, which protects secret information, still seems unjustifiable, and thus the existence of asymmetric information shall be removed through legal measures.

<sup>&</sup>lt;sup>20</sup> Restatement (First) of Torts Sec 757, Comment b (1939), http://www.osha.gov/pls/oshaweb/ owadisp.show\_document?p\_table=standards&p\_id= 10103 (25 February 2010).

<sup>&</sup>lt;sup>21</sup> Section 39 of the Restatement (Third) of Unfair Competition, Business Torts & Unfair Competition: A Practitioner's Handbook, American Bar Association, 1996, ISBN: 1-57073-294-9168.

Contrary to this viewpoint, there are other economic models describing a competitors' market. For example the paradigm of the new Austrian  $school^{22}$  – based on the more realistic presumption of limited rationality (*Simon* [1982]) – sets the unavoidable imperfection of human knowledge as a starting condition, and its focus is not the determination and theory of an equilibrium price, rather the market as a mechanism for spreading information. Its perspective is fundamentally different from the classical theory, since it considers the differentiation of products to be an immanent element of competition. The market is in motion not because of the buyer and the seller (producer), but only because of the intermediary merchant, the profit-oriented company. While the buyer and the seller are simply price-takers, the competition of entrepreneurs makes the profit disappear, because the difference between production prices and retail prices are always levelled. It must be noted that in this theory information has a completely different role as in the classic competitors' market model. Here *information is the driver of competition*, and in this regard this theory stands on entirely different grounds as the classic competitors' market model.

The existence of asymmetric information belongs to competition, without it we could not talk about competition. By this the legal institution of commercial secrets could be nicely explained. The legal institution of commercial secrets protects the intermediary entrepreneurs, who can – by disseminating information – influence the prices and who are the cornerstones of market economy and competition. In this context, however, the Pareto-optimality of market competition comes into question. The less profit those market participants who are able to influence prices can make, meaning that the less the price of information is, the more efficient a market competition in the allocation of resources is.

The modern theories of institutional economics, such as the property rights theory, the principal-agent theory, or the theory of transactional costs, may further differentiate our views on market economy as the dominant economic-regulatory mechanism. These theories influenced other disciplines, including organisational studies, or some areas of law, thus creating the school of *law and economics* that holds the economic analysis of legal institutions as its core subject of inquiry.<sup>23</sup>

Market exchange is just one form of economic processes, and distributions. The reproduction of goods in a company happens through administrative channels, instead of market regulatory mechanism, consequently, it cannot be stated that market exchange, the far from uncontroversial price-system is alone or even dominantly

<sup>&</sup>lt;sup>22</sup> The new Austrian school was founded in the 1960s and 1970s by Ludwig von Mises, its most influential representative was Friedrich von Hayek, nowadays its lead figure is I. M. Kirzner (In this topic we are relying on the monography of *Mátyás* [2003] and the study of *Mátyás* [2004])

<sup>&</sup>lt;sup>23</sup> Law and economics is the subject of major legal researches also in Hungary, especially in the field of civil law. (Vékás [1998], Sajó [1984]). The international literature of the subject is enormous. See on the different viewpoints: Burrows–Veljanovski [1981], Cooter–Ulen [2005], Kelman [1987], Polinsky [1989], Posner [1996].

responsible for economic regulation, even in a so-called market economy (*Coase* [1990]). The importance of Coase's work lays in his acknowledgement that the basis for well-defined property rights and a functioning system of market exchange – in other words the basis for the prevalence of market economy – is a more or less uncontroversial price-system. Without well-defined property rights, it is unavoidable that one of the reasons for market failures is to be the existence of negative (and positive) external effects (*Coase* [1990]). It follows Coase's basic argument that optimal solutions can arise, only if the value of transactional costs were to be zero. Consequently, the existence of transactional costs is the reason for the losses in efficiency. In cases where transactional costs create barriers to market solutions, law has to intervene. So if commercial secrets increase transactional costs, then it results in the loss of efficiency and can be a barrier to market mechanisms. Thus law has to intervene against commercial secrets, as against one element of transactional costs.

The principal-agent theory is also influential on our views about market economy, which describes processes beyond the well-defined property rights.

According to the members of the new institutional school (*Williamson* [1981]), who considered Coase as their forerunner, in the case of special capital goods, transactional costs are exceptionally high. This fact has, however, become dominant in the extremities of international division of labour, and become the obvious reason for the rise of bilateral monopolies. Two other models of microeconomics (the Azariadis–Baily–Gordon-model and the Okun-model) – based on the contract theory – explain the long-term contractual relations between seller and buyer, which relationship increasingly resembles the long-standing relations between employer and employee, by the high-priced nature of information. This explains not only the permanency of wages, but also of prices, thus imposing limitations on the functioning of classical market mechanisms. Based on commercial contracts, Williamson concluded that in the long-term commercial relations for specific capital goods the contractual partners develop so-called relational contracts and – due to the high transactional (mainly exchange) costs – they are often interested in collective profit-maximisation.

The literature of negotiation game theory is expansive, and includes a large number of meticulously executed experiments. One of the main results of the experiments was the realisation: the more definite the rights of the bargaining partners are, the more they tend to co-operate, while the less transparent their legal relations are, the smaller the chance is that they reach an agreement. According to Robert Cooter and Thomas Ulen, the negotiations become complex and burdensome, when private information is needed for the decision. Private information hinders negotiations, because mostly they must be made public in order to reach the rational conditions of coordination. In general: a negotiation is costly, if a lot of private information needs to become common for a deal (*Cooter–Ulen* [2004] p. 93). This makes it clear that commercial secrets between seller and buyer increase transactional costs. Lastly, it is worth referring to the empirical study showing that within a company the most effective tool to increasing competition between employees is to withhold information, especially in relation to employees who have accomplished performance-based successes within the organisation (*Hámori et al.* [2007]). However, here the causality chain is reversed. According to company leaders, one of the most crucial detrimental effects of in-house competition is the hindrance to the flow of information, which encourages the avoidance of too intense in-house competition. This fact shows that an intense competition leads to limitations on the flow of information, consequently, too intense competition is avoidable. Is it possible that the legal institution of commercial secrets was brought to life by the too intense competition? Would this mean that the legal institution of commercial secrets legitimises a detrimental effect?

We can conclude so far that information plays an increasingly important role in economic theories, and could be the basis of a new theory. The heightened attention is, however, understandable, since the "informational boom", the evolution of information technologies created a new – information – society, in which the functioning of institutions and market participants, and thus the functioning of the market economy, is fundamentally transforming. By the 21<sup>st</sup> century, information has become a key resource, while due to globalisation, market competition is ever increasing. There is almost no production factor left, including natural treasures, cheaper manufacturing technologies, qualified or cheaper workforce, which is out of the reach of a multinational company. Consequently, complex information-centred competition strategies have arisen, and the acquisition of unmatchable competitive advantages, the achievement of long-term competitive advantages has become a core competence.

All of this has the consequence that the problem of asymmetric information appears in a more complicated, complex form. Although it would follow – especially in the markets ruled by multinational companies – that the legal institution of commercial secrets, as a means of competition between companies, has been integrated into the protection of privacy and private secrets, nonetheless, the general purpose of that right – along with the rules on data protection – is to ensure information freedom rights, and to eliminate asymmetric information between companies and consumers for the sake of private individuals, and for the loss of companies (*Vikman* [2006] p. 23).<sup>24</sup>

As a consequence of this evolution, the literature on law and economics does not consider information as an external condition anymore, rather as a good with its own market. In the following sections, we will examine this theory and its plausibility.

<sup>&</sup>lt;sup>24</sup> However, this development is a dichotomy. While under the prior practice of the data protection ombudsman the commercial data handled by authorities was considered public data, and for example a decision stating the violation of a statute was a clearly public interest data, but under the newer practice the commercial secrets handled by authorities do not considered public data. (*Majtényi* [2006] p. 428, *Jóri–Bártfai* [2005] p. 159–164).

### THE MARKET OF INFORMATION

Robert Cooter and Thomas Ulen apply in their already mentioned work the property rights theory to information as well (*Cooter–Ulen* [2004] pp. 120–122). Here two difficulties are identified regarding the property rights of information and the creation of a market for information. Information has two distinct features that differentiate transactions of information from the transactions of regular private goods. The first of these features its *non-excludability*, while the other is its *authenticity*.

Its feature of *non-excludability*, makes information resemble to common goods. Information is difficult to create, however, it is usually easy to transfer. Information is sold by its creator for a fraction of its value. The use of information is free of competition, because – as opposed to other goods – the use of information does not reduces its quantity and its gains for others. "The use of information is thus *free of competition*" (*Cooter–Ulen* [2004] pp. 120–121). It is difficult to exclude others from the use of information, due to this the free rider problem exists. Consequently, similarly to public goods, the market is unable to produce the sufficient amount of information. Since the private sector on market grounds offers less than the optimal amount of information, in unregulated markets there is a lack of ideas, knowledge and most importantly creations embodying thereof.

It follows from the public good nature of information that it is either ensured by the state,<sup>25</sup> or in the realms of contracts the protection of commercial secrets creates the regulated market for commercial secrets, or supplementing the protection of commercial secrets intellectual property rights are also regulated. It seems from this that the legal institution of commercial secrets could be sufficiently justified.

The question of *authenticity* is usually mentioned in relation with contracts. This is based on the negotiation theory in the US literature, which provides a perfect terrain for game theory analysis.

The aim of the contracts system that can be created based on game theory is to transform games with non-efficient solutions to games with efficient outcomes. The enforceable contract transforms a game with a non-cooperative outcome to cooperative. The further aim of contracts is to promote the efficient publication of information within contractual relations. Situations with asymmetric information could be managed with this, leading to the redistribution of welfare rather than the extension of welfare, thus barely relating to our topic.

The two aims stand in a means-ends relationship. The efficient distribution of information enables cooperative outcomes. The problem of authenticity stems from the fact that the buyer is unable to assess the value of information before receiving it. It is a common problem that the information has to be revealed before the buyer in

<sup>&</sup>lt;sup>25</sup> Cooter–Ulen [2005] refer to the system of charity donations (p. 133), which, however, is equivalent with indirect state financing.

order to determine the value of it, but then what is the reason to pay for the known information? To understand the problem, we will shortly describe how contract law can contribute to the efficient disclosure and transmission of information.

In economics information is public, if in a negotiation process both parties are aware of it, while it is private, if only one party knows it, while the other does not. The stimulator of a transaction is private information. The transmission of information and the trade of goods enables one to take over control of knowledge and resources. Due to the fact that private information lies at the heart of transactions, law usually treats contracts based on asymmetric information as being enforceable. Nonetheless, efficiency requires that the merger of the control over knowledge and resources would be of the lowest cost, respectively to the costs of information transmission and of the trade of goods. Consequently, a contract is not legally enforceable in cases of omission of guidance, fraud, or bilateral misconception (in this case there is not even a bargain), however, it is enforceable in the case of a unilateral misconception.<sup>26</sup> By this, law attempts to promote efficiency through benefiting the pursuit of information and the merger of control of knowledge and goods. There is a possibility, nevertheless, that information was acquired by chance, thus without the costs of pursuit, and so the unilateral mistake of the other party does not lead to a boost in efficiency.

- *a)* For this reason, the literature classifies information based on its effects on economic efficiency. According to their nature, there are information that *enhance welfare* (productive information) and that *redistribute welfare* (redistributive information). Productive information are for example discoveries, inventions, etc. Contrary to this, redistributive information provide such an advantage to its holder, which can be used in a negotiation in order to redistribute welfare according to the holder's interests. For instance, if someone acquires the information before others where new rail-roads will be built by the state, it gives him a great advantage on the real estate market. Investments made for the acquisition of redistributive information may seem on the one hand like a luxury, but on the other hand it encourages those who do not wish to suffer welfare losses to be better informed so as to carry out defensive investments. The investments with a defensive aim are, however, only created obstacles to redistribution, but do not create new value.
- *b)* Additionally, information can be labelled according to the *method of acquisition*. Information can be acquired in an active manner, namely by investing resources into the recovery of information, or by chance, accidentally.

<sup>&</sup>lt;sup>26</sup> Under Hungarian law, a contract may only be challenged based on unilateral misconception, if the clearly false information was provided by a legal counsel advising both parties, and the misconception was regarding an essential question.

From an efficiency standpoint, there is only one combination of the nature and manner of acquisition of the information that clearly justifies the enforceability of a contract. *This is the productive information, which was a result of an intentional investment.* 

Most information, however, is in practice both productive and redistributive at the same time, thus mixed information. Most information also seems to be mixed from the aspect of being acquired through investment or accidentally. It can be asked for example whether the information acquired from the market situation itself – not intentionally, but as some kind of positive externalities – was gained accidentally or in an active way. If for instance we pursue a legal education, and later as a lawyer handle a lot of real estate contracts, we might accidentally acquire the information about where the next rail-road will be built. Conducting any kind of economic activity, we can come across a number of accidental experiences, which can be acquired by anyone pursuing the same economic activity, but in order to start such an activity we need a large amount of information and knowledge. Are these information the fruits of the investment into knowledge or the results of chance? It is a further difficult question, whether the accumulation of huge corporations' institutional knowledge is the result of intentional investments or accidents, the latter of which is a statistical necessity.

The literature distinguishes between three principles of economics: "1. A contract has to be enforced, if some productive information was not at the disposal of all parties, especially if that information was a result of the investment of one party. 2. Most contracts should be enforced, in which a mixed information (both productive and redistributive) was not at the disposal of both parties at the time of signing the contract. 3. A contract shall be annulled, if the party holding the information has not increased, only redistributed welfare, or the information was acquired accidentally." (*Cooter–Ulen* [2004] p. 283)

c) The third possible way to classify information according to its nature may be connected to the questions of authenticity: whether there is an *obligation to give guidance* or not. The obligation to provide guidance triggers the definition of security information. Security information refers to a knowledge that helps people to avoid damages. Naturally, law requires the parties to share with each other all security information they possess. Law often requires the seller to be aware of such information in an explicit manner.

There is another side to the problem of authenticity, which is independent of the lack or ambiguity of information and may be understood from the game theory analysis of such single transactions that are of great value. Single transactions of great value can often be described as the results of manoeuvres, of using unfair, but not illegal techniques against the other party. In these cases, the parties making offers to each other mostly disregard the losses caused by the breach of the promises. Separate studies deal with the issue of the appropriate amount of damages that deteriorate from the breach of contracts, but at the same time do not cause a loss in efficiency, thus the disproportionate amount of damages do not discourage from contracting (*Cooter–Ulen* [2004] pp. 205–206).

Contemplating this, the risks (ambiguities) are not only caused by the incomplete information known about the other side, which could only be eliminated through contract law with considerable transactional costs, but also they are caused by the fact that there are only a known and a definite number of games. If we are building a long-term, lasting relationship, of which duration is unknown, then we are facing an infinitely repeated game, in which cooperation is more likely than competition. Logic is that simple. It is well know that at any round of the repeated game, in which the principal (first player) invests money, the agent (second player) gains immediate profit by the expropriation. The principal may strike back by not investing anything in the following rounds, as a result of which the return of the agent will be zero. So long as the agent is unaware of which round is the last, and may assume that there are an infinite number of further rounds, expropriation is not a winning strategy, because he can expect more profit from the next rounds than from a once-only expropriation. As a result of this, long-term business relations are far more efficient than the single-time relations.

It can be observed in the economy that the intermediary commercial activities are attempted to be covered by exclusive distribution contracts, through which the advantage given to the agent ensures the continuous and long-lasting relationship. This on the other hand is advantageous to the principal.

Infinite games contribute to the enhancement of information authenticity, the improvement of business trust. A number of risk factors may be eliminated through this, nonetheless, the costs of exchange increase. Apart from the market of goods that can be acquired through single-time transactions of law value, the markets of all other goods and services are built on business confidence, which prerequisites, however, long-term relations and contracts, leading to the permanency of prices. Consequently, the distortion of market competition is not the result of the mere existence of asymmetric information, but of a game theory proved situation that derives from the lack of information regarding future action.

It can be noted that for the analysts of law and economics, asymmetric information brings market processes, market exchange and competition into motion. Similar conclusions have been reached by the members of the new Austrian school as well, reserving that they do not differentiate between productive and redistributive information, rather consider both as a source of profit, thus the driver of market competition.

Law and economics use the theory of transactional costs to show that transactional costs are the cost of the disclosure of asymmetric information. The bargaining process is about nothing else but the costs of negotiations and other expenses of signing a contract. Contract law attempts to reduce these costs. The other cornerstone of law and economics holds: in an efficient market economy, the most resources belonging to the one who pays the most for them, because he values them the most. We can thus conclude that the one who values resources the most, is the one with the better information.  $^{27}$ 

If *ceteris paribus* the person (company) possess the same amount of resources, the individual who will be more efficient is the one who is able to utilise those resources more effectively, consequently attaining a higher level of production. This derives only from advantages in information. In general terms, this means that there is no competition without asymmetric information.

As a consequence the question is not only whether competition is the most efficient allocator of resources, but in a dynamic perspective also whether competition is putting technical innovation into motion. An innovative enterprise in the Schumpeterian-sense is the one that induces market competition. The *existence of asymmetric information* is an essential condition of *technical innovation*. This asymmetric information situation is efficient, only if it involves new information – yet completely unknown and created not by chance, but through investment. *Consequently, the new information is without doubt a productive information*.

However, the static competitors' model that considers a perfect informational situation as a baseline, is not in contravention with the information-market approach. Namely, the new information could mean a new product and thus a new market, which is the basis of product diversification. There are claims that product diversification reduces the intensity of competition due to incomparability. If we take the approach of the new Austrian school, which considers product diversification not as feature of monopolies, but rather as a natural by-product of market competition, then we can conclude that the above mentioned critical view is only true, if there is no new information involved in the product diversification. The fact that in a certain market the intensification of competition can be sensed when new information is used, only means that the new product is a close substitute of the previous one. If we talk about new markets in these situations, then only a correction mechanism dependent on interchangeability relations starts on the previously Pareto-optimal competition market. If the two products are completely interchangeable, then the previous market disappears. If they are only partially interchangeable, then due to the reduction in the demanded amount, the market for the older product is necessarily curtailed. If the new information is disclosed with others and can be utilised, then soon the equilibrium price will be reached once more.

This, however, also shows that it is not new and non-productive information which sustains competition, but in fact hinder the emergence of a Pareto-optimal situation. Thus the product diversification leads to a loss of efficiency, only if it is

<sup>&</sup>lt;sup>27</sup> The one, who is badly informed and thus pays larger sums, will not be the holder of resources for long, because shortly will go bankrupt...

based on redistributive information. It follows that legal instruments may contribute to the strengthening of market competition, only if they are aiming at creating a market for productive information. Since the completely new information are definitely and undoubtedly productive, the legal system couples these up with property entitlements. This is the function of intellectual property rights. This is the basis for the recognition of intellectual property rights, patent rights, and trade mark rights<sup>28</sup>. The innovations and know-how also create such property rights, but these are special or borderline cases, because the former prevails in an employer-employee relationship, while the subject of the latter is difficult to define, thus in both cases the productive effect is harder to prove.

If we simplify the concept of know-how it can be considered as a special subsection of a commercial secret, which deals with information that is partially or fully protected with property rights, and in the given market situation it is more reasonable for the company to treat them as commercial secrets. Know-how is a special commercial secret in way that it is the most productive. As it is explicitly mentioned in the Civil Code, 29 this analysis disregards know-how, so all the conclusions of this study is limited to non-know-how commercial secrets. The reason behind this, is that know-how would require a separate analysis, which could lead to different conclusions in a number of questions.

The main feature of a market is that it enables the appropriation of information for a limited time – and sometimes with limitations, thus temporary monopolies can arise. The temporary nature of such monopolies compels their utilization, which could have major effect on other markets as well. The time limitation on the monopoly should be construed in a way to allow the emergence of a new market. The regulation should allow for monopoly rights so that after the emergence of a new market they should enable the evolution of a competitive market. This question could be analysed concretely, and it is the subject of the discipline of law and economics. With regard to trade marks the situation differs, because the time-frame of the protection is determined by the duration of the actual utilization.

The protection of trade marks is productive, because market value is only attached to these rights, if they are indicating a quality above the market average (or at least they are perceived by consumers as such). Since quality has a productive effect by definition, moreover, it reduces the consumer's need for information, strengthening business confidence, and thus eliminating problems regarding the authenticity of information about the product, it can be considered as a border-line means of productive product diversification.

<sup>&</sup>lt;sup>28</sup> This is only limitedly true for trade mark, because the trade mark provides new information for the consumer in the producer-consumer relation. The role of trade mark is more important in the reduction of search costs and in the fight against "market for lemons". The legal institution of trade mark would also need an economic analysis, just as now this article is providing it for commercial secrets. <sup>29</sup> Section 2 Paragraph 2:47 of the Civil Code.

It should be emphasised that our analysis of the legal institution of commercial secrets focuses on information other than the above mentioned, and although there might be interesting overlaps with know-how (for example it can be kept as a secret as well), but it is not the subject of this study, just as patents and intellectual properties.

We could think based on this that the legal institution of commercial secret protects information, which kept as a secret results in wastefulness, and loss of efficiency, thus the legal institution is not efficient in an economic sense. Especially so, as the subject of commercial secrets covers all economy-related partial information, thus its scope is seemingly endlessly expandable – except for the statutorily, explicitly defined, concrete information. Companies try to classify all information regarding their management and functioning as commercial secrets, which is only limited by the costs of the necessary actions to protect commercial secrets. We can thus assume that *most of this information is not productive, other legal institutions remove most of the productive information from the range of commercial secrets. Consequently, we consider the legal institution of commercial secrets as consisting of mixed and distributive information.<sup>30</sup> Such an interpretation of commercial secrets raises a number of basic questions in the literature, which although can be answered based on our analysis, are not part of this article (See on these issues: <i>Cooter–Ulen* [2007]).

First of all, it must be observed that commercial secrets as information have no legally created market. The Anglo-Saxon legal theory has come up with two justifications for the necessity of the protection of commercial secrets. *1*. Based on the property rights theory a commercial secret is a property, which inspires its owners for innovation. [See the US Supreme Court decision in Ruckelshaus v. Monsanto Co., 467 U.S. 986, 1001-1004 (1984)] Due to this, some consider a commercial secret to be an intellectual property right. *2*. Under the other theory, the protection of commercial secrets derives from the law of damages (and contracts). If someone transfers someone else's commercial secret without permission, he breaks a contract, and violates the due diligence requirement towards the entitled person, and owner. This due diligence requirement can be justified with the preservation of commercial morals and fair competition.

Since a commercial secret as an information has no market, the conclusions of the property rights theory may be debated. First, it is not clear how innovation is promoted by commercial secrets. Second, commercial secrets are distinguishable from intellectual property rights, since the protection is attached not to ownership, but to possession.

<sup>&</sup>lt;sup>30</sup> This assumption might be debated based on a more detailed analysis. After finishing the study, anyone could correct the results based on a wider interpretation. It should be noted that security information could not be classified as commercial secret, the reasons for which we will deal with in the next chapters.

According to *Bobrovszky* [2006] "the cohesion, the common ground of intellectual property... lays not in exclusive rights, those are only the core of it, but rather in its subject being different goods with intellectual values, and the two levels of protection... are separated from a private law standpoint": 1. One level being a *de facto* possession-like based on the protection of commercial secrets, 2. And the other being a *de jure* ownership-like based on patent and other exclusive rights (*Bobrovszky* [2006] 1388.p.).

Nevertheless, the *de facto* character of the protection of commercial secrets differentiates it from the protection of "other" forms of intellectual property, so defining it as a right is difficult. It follows that even the elimination of the legal institution of commercial secrets would not mean that the commercial secrets would not exist. It would be a mistake to assume that the economic analysis of the right to the protection of commercial secrets means that the scientific analysis that if there are no commercial secrets, then there are no redistributive or mixed information in market competition, which appear as asymmetric information. Studying this would only be reasonable in connection to such a legal institution that requires all redistributive and mixed information to be published and not kept as a secret. Such a regulation would cause "infinite" social costs, since the number of this information is practically endless, for this reason there exists no such regulation.

If we consider that commercial secrets exist without the legal institution of commercial secrets, then the function of the legal institution of commercial secrets should be searched elsewhere. This statement is proven by the fact that *the acquisition of market information by deducting the competitor's commercial secret from the competitor's product is an approved practice. So the existence of a commercial secret is a factual matter, not a legal one.* 

If we take into account that information in itself (as opposed to a patent as a right) cannot be considered as an object, thus it cannot be the subject of a property right,<sup>31</sup> then it is easy to realise that the right to the protection of commercial secrets is not to be associated with property rights, but rather it is a product of contract law.

This view is underlined by the analysts of law and economics, who always refer to examples taken from contract law, when dealing with problems of the protection of commercial secrets – especially from the employer-employee contractual relations (*Cooter–Ulen* [2008] p. 134). They also state as a general opinion that the weaknesses of the legal regulation of the protection of commercial secrets undermine the efficiency of the system as a whole.

<sup>&</sup>lt;sup>31</sup> Section 1 of Paragraph 5:14 of the Civil Code holds that the subject of ownership may be all things of a tangible nature which are capable of appropriation. Section 2 states that the definition of things also include money and securities, including natural resources that can be utilized as capital goods. While Section 3 refers to the special rules regarding animals. It is, however, difficult to interpret information as a "natural resource".

If for instance A as an investor signs a non-disclosure agreement with his employee B, who then discloses A's secret to C, and C did not know or could not have known about the breach of contract, then without a contractual relationship between A and C, A cannot bring a claim against C. Moreover, the disclosed information that is known by the given industrial sector may be utilised by anyone without compensation, if everyone is aware of the fact the information was made public with the violation of the non-disclosure agreement (ibid).

This example shows one of the main functions of the legal institution of commercial secrets. If non-disclosure could be obliged only by means of contract law - namely to keep information and prevent its transmission (so an obligation to endure) – then A can typically bring a case only against a (former) employee based on the contract, but then C could not even be held responsible, even if he knew (or should have known) that it was regarding a commercial secret. Not even if it had been C, who convinced B of breaking the contract. For one thing, it is quite probable that *B* as a regular (former) employee without the necessary funds would not be able to reimburse the damages caused by the breach of the secret. This is apparent, because *B* can calculate the loss from the breach of contract based on the multiplication of the probability of being caught and the damages caused. Since the subject of the commercial secret is unreasonably wide, and not well-defined, moreover, its utilization necessarily happens in secret and its public results only appear indirectly, then the multiplier of the probability of being caught is below 1, close to 0. It follows that an employee can be easily tempted, since chances are low that the breach of contract will be exposed, thus the compensation given by C for the breach of contract would not cover the caused damages. The legal institution of commercial secrets eliminates the too extensive – and thus not efficient – risk of breach of contract. It ensures that C can have a claim brought against them, if he knew (or should have known) that it is regarding a commercial secret, also if C abetted *B* to disclose the secret. If the legal institution of commercial secrets did not exist in civil law - without being of a contractual character - it would be as if criminal law only punished the thief, but not the dealer of stolen goods.

It should be noted that the legal institution of commercial secret creates a legal relation between *A* and *C* by a unilateral declaration. Consequently, *C* is not allowed to lawfully use a document labelled as *commercial secret*, even if he acquired it by coincidence and legally. (Such a document can be used only for what was permitted by the entitled person. If no permission was given, then the document cannot be used at all. It follows that even without special regulations, employees of public authorities and courts are obliged to keep the commercial secret. In the course of a judicial proceeding, the person entitled to the commercial secret discloses the commercial secret voluntarily – generally in a civil case for example because he wishes to use it for the case, so the other party has to make a statement of non-disclosure.)

It is, however, still a question whether innovation and market competition is enhanced by the acknowledgement and enforcement of such contracts between *A* and *B*, or by the legal relationship between *A* and *C* based on the existence of the protection of commercial secrets.

*Cooter–Ulen* [2007] (p. 134) has brought attention to the limited efficiency of the protection of commercial secrets. Empirical studies conducted in the Silicon-valley showed that employees working there often switch workplaces and in such cases they bring with them most of the commercial secrets of their prior employer. In more cases, employees do not even notice when they are breaking the contract, because the laws governing commercial secrets are in violation with the business norms of Silicon-valley. It is well-known that the real places of innovation in Silicon-valley are the pubs, where employees of similar status but coming from different companies spend their spare time.

The case of the Silicon-valley is a nice example of how the weaknesses of the protection of commercial secrets may be the driver of innovation, since the world's most successful IT companies are in Silicon-valley, which proves that regulating commercial secrets as a contractual matter hinders competition, so does the legal institution of commercial secrets.

If the legal institution of commercial secrets is an obstacle to innovation, what might be the reason for sustaining the legal institution of commercial secrets from the perspective of economic efficiency? It is shown by our earlier example that the legal institution of commercial secrets has important functions within the company, in employer-employee relations.

Section 2 Paragraph 4 of the Competition Act emphasises that "an unfair access to trade secrets shall also mean where access to such trade secrets has been obtained without the consent of the data proprietor through a party in a business relationship - including the provision of information, negotiations and making proposals prior to making a deal, where no contract is signed subsequently in consequence - or in a confidential relationship with such person - such as a contract of employment or any similar relationship, or membership at the time of, or prior to, gaining access to the secrets." Under b) and c) Subsections of Section 3 *'confidential relationship* shall, in particular, mean employment relationship, other work-related contractual relationship and membership; while *'business relationship'* shall comprise the provision of information, negotiations and making proposals prior to making a deal, whether or not a contract is subsequently signed in consequence.

This definition of commercial secrets fulfils an important function even in other business relationships, such as the buyer-seller (company – principal – consumer). Consequently, in the following sub-chapter we will shortly summarise our conclusions on the role of commercial secrets in vertical relationships.

# THE ROLE OF COMMERCIAL SECRETS IN VERTICAL RELATIONS

The main research area of asymmetric information even within the buyer-seller relation is the consumer markets, retail markets (*Carlton–Perloff* [2000]). In these cases usually commercial secrets are not – or only indirectly – responsible for the existence of asymmetric information situations. For one thing, the sellers are obliged to provide consumers with all safety information, so these cannot constitute a commercial secret. Safety information helps to eliminate the problem of limited information regarding the quality of the product, and the company is highly motivated to make all the positive quality characteristics public. Since the Competition Act prohibits – in the course of advertisement and consumer information – the concealment of information regarding the essential features of a product, thus none of this information can constitute a commercial secret.

Nonetheless, the legal institution of commercial secrets has a direct effect on how informed the consumer is, because if information as a whole or part constitute a commercial secret, then the validity of the facts and data behind the consumer information cannot be controlled. For example a credit-line contract of a bank and a retail company behind the interest-free, "costless" credit offered by the retail company might be a commercial secret, and the credibility of the provided information can only be checked through administrative procedures. Moreover, the protection of commercial secrets as a legal institution do not even play a role in these cases, as the holders of the commercial secret – the employees of the retail company or the bank – are not at all interested in the disclosure of the commercial secret. Consequently, this information would be kept as a secret, even if the legal institution of commercial secrets did not exist.

Since the sole interest of the consumer is to acquire all relevant information regarding the price and quality of the product, which is also required by other legal provisions, the company has no obligation to provide information about either the other features of the product or the market opportunities related (e.g. where the product is on sale), so the legal institution of commercial secrets has no influence over these market relations.

Regarding the quality and the price of a product, the company is not allowed to refer to commercial secrets against the consumers. This information in the company-consumer relation is protected by neither contract law, nor by the legal institution of commercial secrets. The fact that the consumer can acquire such information anyway, the information loses its commercial secret characteristic, since it can be freely transferred (regardless of whether the company would like to withhold it from the competitors).<sup>32</sup>

<sup>&</sup>lt;sup>32</sup> An example for this is the case of double price-discrimination between new and existing customers, when the existing customer does not terminate the contract only because the service provider – when realising the determinate intention – offers the discounts given to new customers, although

When neither retail or consumer markets are involved, but rather it is regarding the market of production factors in a broader sense, including the distributional, wholesale markets, when typically companies close deals with companies, then the information channels for prices and quality might differ. These questions have a wide literature, mostly in marketing.<sup>33</sup> Commercial secrets play a crucial role in the negotiation of the parties, and not only regarding contractual terms, but also the prices. Contrary to consumer markets, in the market of production factors the list prices and price reductions of the delivery contract between the parties constitute a commercial secret, thus the buyer is obliged to keep it. This only limits the buyer in using certain physiological techniques in the bargaining process (negotiations with other companies regarding prices cannot be referred to), but in general the company is not restrained in making an informed decision. At the same time, the legal institution of commercial secrets protects this information from the competitors on the seller's side.

It is, however, often not efficient that the seller<sup>34</sup> provides a greater price reduction to only one of its buyers, without being able to double-check the information from the buyer's competitors. Moreover, information regarding price as a commercial secret can only be redistributive information, thus it is not efficient in an economic sense either. Handling price information as a commercial secret on the market of production factors thus only leads to loss of efficiency.

The role of commercial secrets (and its legal institution) in these situations is limited to horizontal relations, so the efficiency of the regulation is dependent upon whether the legal institution of commercial secrets can be considered efficient in the relations of the competitors.

The employer-employee relation, in connection with the principal-agent theory in the literature on asymmetric information, has been in the spotlight of economic analysis as well (e.g. Spence [1973]). We have already showed that one of the main features of the legal institution of commercial secrets is related to the relationship of employer and employee. This comes from the fact that in the modern market economy governed by organizations, a large number of people represent

under its official communication it is not allowed to. This option is a commercial secret towards the competitors, but the customer can get hold of the information. This information then could be shared with other customers, or even competitors.

<sup>&</sup>lt;sup>33</sup> Microeconomic studies do not really deal with this. The reason for this is that microeconomic models assume that the companies making rational and optimal decisions are also acting as well-informed and expert participants in the market of production factors. Otherwise they would stay behind in the competition. Alternatively these supplier markets in the system of long-term contracts are prevalent, which follows from the already mentioned views of game theory and from the problems of the validity of information.

<sup>&</sup>lt;sup>34</sup> The literature of economics uses the term supplier for the seller of factors markets based on accounting jargon. We kept the term seller in this case, because supplier as a legal terms means something else.

the certain knowledge and information, which provides the company's competitive advantage, thus without the protection of commercial secrets this competitive advantage would be in all likelihood lost. For reasons of space, we do not have the opportunity to give a detailed account of this question from the aspects of economic analysis, so we will only discuss shortly the relevant assertions of an otherwise detailed analysis.

In the course of an employment, a commercial secret is best protected by the common/mutual interests of the employer and the employee, for this reason neither the contract law provisions for commercial secrets, nor the legal institution of commercial secrets can be justified from an efficiency standpoint by the conflict of interests between them, which is the alleged policy justification for regulating commercial secrets. However, as the conflict of interests can most efficiently be resolved by property rights on the side of the employer, thus without the regulation of commercial secrets inefficient situations may arise. The reason for this is that even the owner decides on "selling" a commercial secret based on the amount of the foreseeable profit. If the commercial secret belongs to more owners (and it is so in the case of property rights on the part of the employees), then the marginal cost of a single owner will be lower than the marginal benefit thereof of another company. In a situation like this a deal is struck even if the company selling the commercial secret could benefit more from the utilization of it than the other company. This outcome is not efficient.

Those employees are especially valuable for the company who make strategical decisions, and determine the company's business plan, goals, and specific actions for the future.

Information regarding future market behaviour is such a special information that there is a marginal benefit for a competitor company – if they exist – is always greater. The reason for this is the following. Let's assume that A company acquires the commercial secret of B about their future market conduct. This creates an asymmetric information for A company, because B company is not aware of A's future market actions. Let's assume that *B* company also acquires the commercial secret of A about their future market conduct. In this case B company has an advantage based on asymmetric information. Since one company's behaviour is modified by the information about the alleged actions of the other company, it is always that company with the competitive advantage based on asymmetric information, which acquired the other's commercial secret last. Let's assume that A and B companies acquire each other's commercial secrets at the same time. For this situation, game theory can give a description on when the returns are the highest. The outcome depends on whether they are aware of the fact that the other acquired their secret, and whether they know both sides are aware that the other side knows this. If both A and B knows all the facts, then they are in exactly the same situation regarding competitive advantages, as if they had never known each other's commercial secrets. Because the new steps that are based on the acquired information will not be known by either of them. If either company has more knowledge, for example if A knows about the simultaneous acquisition of commercial secrets, but B does not, then A has an informational advantage.

All this means that the protection of commercial secrets creates a symmetrical informational situation in relation to information on future market behaviour, and without the protection of commercial secrets far more asymmetrical informational situations would arise!

If such information (business plans, future price increases, expected innovations, patents, advertising campaigns, etc.) could be transferred by ex-employees, then the cost of keeping such information undisclosed would follow its benefits and advantages for the competitor. In such a situation the wage of the employees handling such information would be disproportionately high. The protection of commercial secrets is not efficient even at this point, which is proven by the fact that managers possessing such information have a higher income as compared to their performance, responsibility, etc.<sup>35</sup>

All these questions, however, belong not to the relations of employee and employer, but rather to the relations of competitors.  $^{\rm 36}$ 

#### COMMERCIAL SECRET IN COMPETITIVE RELATIONS

So far we have asserted that the legal institution of commercial secrets only increases situations with asymmetric information, with regards to mixed and purely distributive information. However, we have also shown that in case of some information, for example regarding future market behaviour, the number of situations with asymmetric information would increase without the legal institution of commercial secrets. <sup>37</sup> As a general observation, we can realise that since commercial secrets exist even without the legal institution of commercial secrets, then the commercial secret itself is responsible for asymmetric informational situations, and the legal institution of commercial secrets more costly. For example, if *A* competitor company discovers

<sup>&</sup>lt;sup>35</sup> We should note that this is not only due to the informational power of some people, this is only a factor. The control over resources for example can be just as important, which could justify the high level of management salaries.

<sup>&</sup>lt;sup>36</sup> For reasons of space we are not dealing with the non-compete agreements after the termination of an employment relation, the treatment of which is similar, because just as for the existing employment relations they ensure the protection of secrets on a contractual basis.

<sup>&</sup>lt;sup>37</sup> It would only "increase", because even without the legal institution of commercial secrets commercial secrets would exist, so generally even without the legal institution of commercial secrets two companies would not know each other's future market steps.

*B* company's cost-structure for a certain product, then this creates an asymmetric informational situation, which could only be balanced by *B* getting acquainted with *A*'s cost-structure for the same product.<sup>38</sup> In order to preclude an asymmetric informational situation from arising, not only the legal institution of commercial secrets shall be abolished, but also the data underlying the commercial secret shall be mandated to be made public. Nevertheless, as we have shown, this would mean "infinite costs", thus such an intervention would not be efficient.

It has also become clear that the real function of the legal institution of commercial secrets appears not between relations of company and consumer or company and employee, but rather it influenced informational situations between competitors.<sup>39</sup> Consequently, the law and economics analysis of the right to the protection of commercial secrets must be carried out for horizontal relations of market competitors. This, however, brings us to the problem that it matters what kind of commercial secret we are dealing with.

So far we have discussed that the commercial secret is regarding as mixed and redistributive information, and the protection of these cannot be justified with any kind of argument for economic efficiency, except for their advancement of symmetrical informational situations. However, we have also seen, that *making public the information about market actors' future behaviour cannot be symmetrical, thus concealing these is required if asymmetrical informational situations are to be avoided.* 

For the reasons above, first we will differentiate between the main categories of information constituting commercial secrets, and with these categories taken into consideration we will – assuming different market structures – analyse what effects the elimination of the legal institution of commercial secrets would have. According to this, we differentiate between *information regarding the future (behaviour) and factual information*, and within this latter part also between price- and cost-information. Naturally, a number of other types of information might exist, but since the category of commercial secrets is open logically, a conclusive and closed system of categories cannot be created. As for the market structures, the role of commercial secrets and role of the legal institution of commercial secrets will be examined on competitive markets, on oligopolies, on monopolies and on monopolistic market situations, as well as on a special case of regulated markets (price regulation).

<sup>&</sup>lt;sup>38</sup> Naturally, it is another question that based on the market structure this could lead to various competition situations. For example in case of a duopoly, the intensity of competition could decrease.

<sup>&</sup>lt;sup>39</sup> This statement is only true with the limitation that we disregard the seller-buyer relations on the market of workforce regarding employer and employee. However, even this proves that on the market of workforce the legal institution of commercial secrets is rather harmful in the seller-buyer relationship, and it pushes the average of wages down from the market balance to the detriment of the seller-employee (the buyer side is better-informed).

#### Categories of information

Information regarding the future is created by companies based on factual information. Factual information is not only information about the prices and costs, but also on quality, on selling conditions, or on clients and suppliers, etc. The availability of prices as factual information is critically important for consumers, but also crucial for market competitors. So it is in the interest of the company that the least people know what they are selling to whom and for what price.

• The ignorance of consumers regarding prices is valuable for companies. *Carlton–Perloff* [2000] describes the case of Ronald Kahlow, who attempted to take notes in a Best-Buy shop of the prices of different television sets. The shop took action against him and asked him that "for the sake of competition, please, do not take notes of the prices. It upsets the other costumers". The court held that taking note of prices is not against the law, so Kahlow was innocent.

It makes one wonder why a Best-Buy shop would go through all the trouble just to refrain a single consumer from making an informed choice. It is more likely that Best-Buy mistook Mr. Kahlow for someone coming from the competition. What argument can Best-Buy make against noting down the prices? Only something relating to commercial secrets. As we have mentioned the prices listed in a show room cannot be the subject of a commercial secret, while prices determined in closed negotiations (mainly in the market of production factors), prices used in trade are strictly under the protection of commercial secrets.

If the single most important indicator of an efficiently functioning market economy is a prices system, then how is it possible that the concealment of information about prices is protected by law? This is also a crucial question, since buyers are only interested in keeping the prices of a long-term frame-agreement in secret, if there exists some kind of anti-competitive alliance of interests between seller and buyer.<sup>40</sup>

Internet-based price comparison pages are able to make consumers better informed and also enable the comparison of different products. The success-story of mandatory motor vehicle liability insurance can serve as an interesting example, when the period for changing contracts was reduced to one month. (This statutory provision was abolished in 2010.) The reduction resulted not only in a price competition between service providers, but also for this one month (November) real competition had evolved. By reducing the competitive market for one month, information had become more concentrated and transparent, and the costs of transferring

<sup>&</sup>lt;sup>40</sup> This is for example when a major public undertaking stands on the buyer side, which is not only profit oriented, but political connections might also play a role in the decision-making.

had been significantly reduced (for example the certification of reward and penalty were handled between insurance companies, the whole process was conductible via internet, etc.). The fact that the prices were not constantly changing, made the price information on the market more traceable, resulting in well-informed consumers. It was less feasible to use higher prices than the competitive price, moreover, companies had to adopt a more focused and deliberate price strategy, also by analysing the competitors' prices.<sup>41</sup>

Companies can gain a dominant position on the relevant market, if consumers are unaware of the prices, but also if they are uninformed about the quality. Limited information may lead to a monopoly price even on a market, where otherwise competition would dominate.

Since the other side of the price-competition is the competition in quality (product diversification), regarding which information is more complex, thus the analysis of price information might be coupled with the questions of – here not discussed – standardised contracts.

Information related to the cost-structure of a certain product can tell us not only where and what kind of competitive advantage does one company have regarding the use of production factors, but also it can be assumed whether the relevant market is competitive. The cost-structure also shows how much the capital-cost of the certain product is for the company. The reports and the balance sheets of a company are only appropriate to assess the cost-structure, if the company is a single-product company. However, in case of multi-product companies all these constitute commercial secrets.<sup>42</sup> In the intermediary commerce, for example, it is understandable that no one would like to reveal to the competitors what it sells for, how much and to whom, because the existence of intermediary commerce is based on this information constituting commercial secrets.

Lastly, it should not be forgotten that price- and cost-information could be information regarding the future, for instance, if they are concerning the future prices of a company. Competition authorities consider it a cartel, if companies inform their competition about their future prices, because it enables them to coordinate their behaviour (concerted practice, collusion). The most difficult question related to information regarding the future is to decide whether this may be mixed information, or only redistributive by effect. It may be entirely possible that none of the above mentioned categories is appropriate for information on the future market conduct.

<sup>&</sup>lt;sup>41</sup> The LXII Act of 2009 eliminated this system of contracting

<sup>&</sup>lt;sup>42</sup> It should be added that precisely determining the item-cost of one product of a multi-product company raises serious problems in methodology, so it is not only about keeping the cost-structure as a commercial secret, but often the commercially valuable information are not even known by the company that is producing the given product.

# Commercial secrets on the competitive market

To begin with, we will use a game of logic to represent the real reasons behind the existence of commercial secrets. In the static model of the competitors' market the notion of commercial secrets is unknown, thus dissolving the assumptions of this model, we will attempt to introduce this term.

On a competitive market every actor is a price-taker, consequently, price is public data by definition. If a specific price (which is not the market price) is classified as a commercial secret by the company, then it would influence the equilibrium price. This, nonetheless, can only happen, if the consumer is under-informed, which creates some monopolistic power. The buyers are well-informed about the price on a competitive market, it is not possible to reach a price that is different from the market price, so there is nothing to be kept as a secret. Alternatively, if someone succeeds in selling at a higher price, then it has to be the result of product diversification. If a company finds out that a different company was able to sell something (somewhere, sometime, to someone, etc.) at a higher price, then it will attempt to acquire this segment of the market. Since on a competitive market there is no transactional cost, and the products are homogeneous, it cannot occur that prices are handled as a commercial secret.

The situation is comparable with costs and cost-structure. In theory, the costs of companies on a competitive market cannot be different, thus concealing the cost-structure would not create a competitive advantage.<sup>43</sup>

Although it is a rare case when new and cheaper technology is used to create the same product as the prior ones, but it is not unimaginable (this happened for example in the case of industrialisation of agricultural production). If the technology is indeed new, then it is not protected by commercial secret, but by the legal institutions of intellectual property law. If it is a solution constituting a commercial secret that is causing the reduction in the volume of production and at the same time in marginal cost (increasing economies of scale),<sup>44</sup> then a natural monopoly is created.<sup>45</sup> This example thus does not belong to the questions of competitive

<sup>&</sup>lt;sup>43</sup> Naturally, in reality the cost-structures are different even in the competitive market, because there is never a long-standing perfect balance situation, thus in the course of a competition law analysis in practice the characteristic of a competitive market is the price dispersion due to the distinct cost-structure, which is a result of a number of objective circumstances (for example some level of market dominance that is always present in practice). The harmonised raise of prices – due to the differences in cost-structure – always raise the suspicion of cartel.

<sup>&</sup>lt;sup>44</sup> It is natural to not refer to the case, when with increasing marginal costs, the marginal cost still remains the average cost even with a production size covering the whole market, because then the conclusions of the previous footnote are relevant.

<sup>&</sup>lt;sup>45</sup> This conclusion is only true in case of mono-product companies. For more products *Evans–Heck-man* [1983] showed that it can be economies of scale even without cost-subadditivity (natural monopoly) (See *Kiss* [2009] p. 93). All this, however, does not affect the validity of the statement.

markets. If by increasing the volume of production, marginal cost is increasing after reaching the ideal size of production (decreasing economies of scale), then the acquisition of a market share is not depending on whether the company treated the solution as a commercial secret. However, if a company conceals that it is conducting investments for the implementation of the newer technology – that is know to others – and later unexpectedly appears on the market with lower prices, then time can be highly relevant to the increase in market share, and so can also the treatment of the investment as a commercial secret. In this case the information treated as a commercial secret is productive, since it enables the company to reach the necessary production volume for the optimal production size. If others become aware of the company's intention of making an investment in technology, then – for the sake of staying on the market – they will also start investing, which could easily lead to a situation in which the advantages of the optimal production size could not be exhausted, and the industry will be characterised by oversupply and surplus capacities.

Nevertheless, it can be observed that this case is an example not for the concealment of costs as factual information, but for keeping the future investment plans of the company a secret, so the only consequence that could be drawn from it would be that the knowledge of future market behaviour is important even in competitive markets. Information of costs as facts, however, are generally known market information.

• If someone is considering giving up his well-paid profession, in order to live on truffle cultivation, he can look up all the websites that roughly show the returns of the investment in truffle cultivation. These would show that the cultivation of fruits or potato would bring at least the same returns as truffle cultivation, but due to the differences in technology, with different cash-flow. If someone has been cultivating truffles for years, he has such experiences that could give him a competitive advantage. Presumably, he would not be keen on sharing the knowledge gained through hard work with anyone, but the inherent characteristic of such information is that they result from combined experiences, so they cannot be easily transferred. The theory of easy transferability and impossible appropriation of information does not prevail for these kind of professional knowledge, so there is no need to protect these as commercial secrets.

At first, we could assume that the competitive model of the classical economics based on all information does not even require knowledge about the individual future market behaviour. The need for information is always connected to the specific situation, and the price movement carries this market information, based on which we may determine our future market behaviour. It follows, however, that information on other companies' specific future market behaviour is not market information. Since the competitive model presupposes that none of the market actors can influence the price, then the cost-benefit arising from one market actor's investment cannot be of a volume that can in itself influence market price, even if the company itself is able to sell at a lower price.

As a consequence, even if a company does not conceal its cost-reducing investments, it cannot happen that for this reason others start cost-reducing investments. In fact, the number of companies on a competitive market is so large that market actors usually conceive technological changes in the industry as a market incident. It follows that at times of technological change competitive markets may be highly unstable, because a lot of companies going through technological change at the same time results in huge oversupply.<sup>46</sup>

All this means that the future market behaviour – as opposed to our earlier stand – is in fact not a relevant market information, in order to collect all relevant market information, it is sufficient to follow past market occurrences.

As a result, the legal institution of commercial secrets plays absolutely no role in competitive markets. It is true though that the legal institution of commercial secrets is not beneficial, but it is also not detrimental in these markets, since commercial secrets have an insignificant effect on market competition.

#### Commercial secrets in oligopolies and monopolies

In an oligopoly the price can be influenced by a single market actor. The mechanism of this influence is disparate based on type of the oligopoly and the market situation. For example in an oligopoly with one dominant actor, it is most commonly the dominant actor who dictates the price, if it raises, the others will follow a bit later. As is evidenced, by the market of production factors vertical restrictions are common, such as treating prices as commercial secrets, which is due to the fact that in these market – even on the side of the buyers – the market situation is often oligopolistic (or oligopsonic). The concealment of list prices and price reductions from competitors in the case of long term contracts of huge volume enables the less effective functioning of the market price-mechanism. This also effects the stability of economic relations, and mainly – based on the conclusions of game theory – the more effective functioning of cooperation.

The transparency of prices and cost-structure would make the competitors' future market behaviour more predictable. The more transparent the functioning of an oligopoly, the more it can be expected that the competitors' reactions will be predictable. *On completely transparent markets, companies are able to concert their* 

<sup>&</sup>lt;sup>46</sup> It is a common situation in agriculture, and not only at times of technology change. If the high cost of strawberries induce a change in one year, then as a consequence everyone will operate with losses on the strawberry market in the following years.

practices even without agreements, which is considered parallel conduct in absence of intentional information sharing.

If companies share their future intentions, prices with each other, it leads to collusion (concerted practice), for this reason in oligopolies the law prohibits the sharing of any information regarding the future conduct, so these have to be kept secret.

If the legal institution of commercial secrets did not exist, and one company was more dominant than the others in the market, then this dominant company could invest more resources into the acquisition of commercial secrets, which would create asymmetrical informational situations to its advantage, leading to a competitive advantage against the others.

The real problem, nonetheless, is that the acquisition of commercial secrets is often a result of chance or a series of coincidences, and in absence of the legal protection of commercial secrets the companies of an oligopoly would gain competitive advantages in an unpredictable way. If *A* company hears that *B* company's competitiveness highly depends on its suppliers, and the market has high barriers to entry, then it can easily occupy the capacities of the supplier without the fear that *B* company will shortly be able to find a new supplier.

For this reason, in all the oligopolies, where one company has some kind of advantage against the others, the lack of protection of commercial secrets would accelerate the processes leading to a monopolistic market situation.

It is also clear that the protection of the commercial secrets of a monopoly company is a factor increasing barriers to entry. If these commercial secrets were not protected by law, then the entry costs will be lower, reducing monopoly prices to a certain level at which other companies could not be able to enter the market.<sup>47</sup>

Without the legal institution of commercial secrets, the competitive advantage of the monopolistic company with a competitive margin will increase the most. Without the legal institution of commercial secrets, oligopolies would be more transparent, which would enhance the chance of deviation from the equilibrium price, since it would be easier to predict future market behaviour.

In summary: the legal institution of commercial secrets is *inevitable* in case of oligopolies, which can counterbalance the absence of the starting conditions of a competitive market (barrier to entry, price-taking, etc.). The legal institution of

<sup>&</sup>lt;sup>47</sup> This is the common case, when in a geographically well-defined market the dominant companies define – according to wording of the Supreme Court – such "imaginary prices", which are just under the price increased by entry (transfer, local knowledge, etc.) of the product that is outside the geographic market but same or substitute. If one element of the barrier to entry decreases, then it means that the company outside the geographic market becomes competitive, and can enter the geographically defined monopoly market, unless the monopoly company decreases the price. If the monopoly still remains after the decrease of entry costs, then this reduced price will still be over the competitive price. For term "imaginary price" see the Magyar Autóklub contra GVH case of the Supreme Court (Kf.II.39048/2002/13.) concerning the judicial review of the competition authority's Vj.152/2000/51. decision.

commercial secrets prevents the unfavourable market situation from developing into a worse situation, and helps reaching a *status quo*, which is characterised by the limited competition of some market actors. *The absence of the legal institution of commercial secrets in such markets would only be beneficial for companies with the most dominant market position*.

If there is a dominant company on a market, then the complete lack of the legal institution of commercial secrets would help him. *However, if law did not protect the commercial secrets of only the dominant companies, then it would cause a significant competitive disadvantage to the dominant company. In this situation, the acquisition of the commercial secret by other companies would redistribute welfare for the weaker companies, as well as decreasing the costs of market entry.* 

# PRICE REGULATION AND COMMERCIAL SECRETS - CONCLUSIONS

What kind of conclusions could be drawn in the light of the foregoing for a market with price regulation?

As an example, we chose the already mentioned area of electronic info-communication.

In the case when the state regulates the prices of the service providers with significant market power in electronic info-communication law, it subjects the economically dominant companies to an asymmetric regulation to the favour of other companies. Such a price regulation is often coupled with transparency, publication, accounting separation standards, without which the service providers with significant market power would handle a number of information as commercial secrets. The existence of commercial secrets is so significant in these procedures that the legal dogmatic of the regulatory procedures fundamentally differs from a traditional administrative procedure. These distinctions derive from the fact that a large number of commercial secrets are managed by the procedure (See also *Kovács* [2008*a*], 2012]).

In these regulated markets, if the cost-data on which the price regulation is based was not protected by the legal institution of commercial secrets, then for instance, in a court proceeding the service providers with significant market power would not challenge the cost-model behind the price regulation, because their cost-data could easily become public as opposed to the others not challenging the regulation.

Contrary to this, *if law mandated the publication of all cost-data* that served as a basis for the price regulation – namely that the national info-communications authority would publish its draft decision with all the evidence in full length – then *this would burden all service providers with significant market power*, while *also re-distributing welfare among the companies without significant market power*.

In this case companies would not see any risk relating to commercial secrets in the judicial remedies, while the judicial proceedings and the information shared between parties would accelerate, making the legal remedy more effective.

In these instances the welfare redistribution is not to be criticised, because it reduces significant market power, which intensifies competition, thus creating the effect of welfare increase for consumers. In theory, there is a possibility that even less efficient service providers can enter the market,<sup>48</sup> but after the regulatory peak this problem is corrected by the market, if the significant market power and the related additional obligations disappear in time.

It would be especially advantageous, if the market could better control the reliability of information provided by service providers. At present authorities are not equipped with any kind of reliable control-mechanism to verify the validity of the data provided.<sup>49</sup> The national statute enables the authority to impose fines for providing false or misleading information, but the question is rather how the submission of false information can be detected.

Since companies with significant market power have some assumptions regarding their competitors – mainly based on their own market experience – they often have an estimate of the costs and other features of the competitors. If the provided data is public, then the market actors themselves are able to check the validity of the competitors' data, and signal if they have doubts about the reliability of the data, since in this game situation, it is in their best interest. If someone is submitting real data, then it is in his fundamental interest that others would do so.

It must be also seen that if cost-data serves as a basis for price regulation, then treating a set of cost-data related to the administrative price as a commercial secret could result in limited competitive advantage. This question is, however, more complex in the case of multi-product companies, since the cost-model calculated for one product might contain the cost-data not only for the price regulated wholesale product (service), but also for the freely priced product competing on the retail market. The data acquired in such way may be made quite transparent by an oligopoly retail market structure, leading to increasing prices even without concerted conduct.

Moreover, in an oligopoly the growing transparency might in itself reduce the intensity of competition, stimulating the emergence of parallel conduct, which could result in the consequences of intentionally concerted conduct, in a way that the *ex post* legal remedies of competition law could not be applied.

<sup>&</sup>lt;sup>48</sup> Since as a result of the redistribution of welfare the new entries or the smaller actors gain advantage, it can happen in case of a sufficiently big advantage that they can operate in a competitive manner even if compared to the incumbent it is less efficient.

<sup>&</sup>lt;sup>49</sup> Problems stemming from asymmetrical information based on the principle-agent theory also arise in the relation of regulatory authority and regulated service provider. These questions have a vast literature in regulation-economics. (See: *Kiss* [2007] p. 63, in detail: *Lafont–Tirole* [1991]).

It may be suggested that in the course of procedures on significant market power, there are instances when the market as a whole provides information classified as commercial secrets for the regulator, in order to decide who can be considered a service provider with significant market power. Additionally, the commercial secrets of service providers without significant market power become available. Since in the procedures on significant market power far less information is made public on service providers without significant market power (as they still constitute commercial secrets), thus the asymmetric informational advantage deriving from the asymmetric regulation is still on the side of service providers without significant market power. Additionally, treating smaller providers' data as a commercial secret is a manageable problem even in the legal remedy proceedings, because – due to the large number of smaller market actors – there are acceptable technical options to recover these in an anonymous way. Obviously, it makes no sense to create anonymous versions of the data of the large service providers with significant market power for the judicial procedure, because this data shows that it could be easily connected to the provider.

The above mentioned proposal, consequently, is not about diminishing the legal institution of commercial secrets, but rather about the classification of the data needed for the regulation of significant market power as public data. Making these data available for the public could eliminate the asymmetric informational situation, which results from the neglect of the legal institution of commercial secrets, between those initiating judicial review and those who do not.

Nevertheless, since the publication of such data could result in various consequences depending upon the oligopoly market situations on the adjacent and interconnected markets, and the enhancement of transparency on markets with few actors increases the threat of "legal collusion". The advantages and disadvantages of making data public shall be considered based on the detailed and precise analysis of types of data, in order to efficiently assess the set of data that could be made public. In case of the various marginal cost-based cost-models<sup>50</sup> that are currently used in the regulatory practice – based on the requirements of the European regime – the results could differ from for example the regulatory price determined through the optimal Ramsey-margin that uses the price-flexibility of demand. Our regulatory recommendation is worth considering in the former case, so in the current practice the publication of most information used for the regulatory process is viable.

When designing a regulatory regime, especially, if the law-maker intends to create a functioning system of legal remedies, it is necessary to change the system in this direction. Also EU law mandates all member states must ensure effective and substantial legal remedies.<sup>51</sup>

<sup>&</sup>lt;sup>50</sup> Different variations of Fully distributed costs (FDC), Long-Run Average Incremental Cost (LRIC), etc.
<sup>51</sup> See footnote 12.

In light of EU law and the constitutional criteria mentioned in the introduction, the rules under the Code on Civil Procedure (Act III of 1952) are entirely unexplainable. The rule<sup>52</sup> amending section 2 of paragraph 119 of the Code on Civil Procedure and the related section 3 of paragraph 192, which entered into force on 1<sup>st</sup> January 2009, made it dependent on the statement of the person entitled to the commercial secret whether the commercial secret can be used in the judicial proceeding.

This solution questions our basic hypothesis that the right to legal remedies as a constitutional right is stronger than the right to the protection of commercial secrets. Moreover, in the recent – procedural – legislation it is apparent that there is a tendency of placing the right to the protection of commercial secrets ahead of the right to legal remedies, contrary to constitutional arguments.

This legislative tendency is questionable not only from a constitutional, but also from an EU law standpoint, since in the future, the judicial trials on price regulation cannot be conducted, because the data serving as the basis for the decisions will constitute commercial secrets. The procedures may become increasingly complex and slow in a technical sense, especially in cases, when defining the relevant market is based on the data constituting commercial secrets of hundreds of service providers. This is because in these cases hundreds of notifications must be sent out - with the signalisation of the specific character of the commercial secret. Moreover, in relation to market definition and market analysis, even one service provider withholding consent could be enough to block substantial review, since the judge has no margin of discretion, and the basic data of market definition and market analysis can only be assessed based on the submissions of all market participants. If there is only one service provider, who is withholding consent, then the differences between the aggregated data of submissions and revealable data submissions precisely show the data of the exact company, who prohibited the revelation of its commercial secrets, so the commercial secret will remain concealed even when the company actively or by not submitting a statement – consented to the recognisability of its commercial secrets.

The new regulatory regime, however, not only eliminated implicitly the substantial judicial review of cases regarding regulated markets, but it can also make reaching a judicial decision impossible in a large number of other cases. These procedural rules result in a situation, where if an authority has used a commercial secret, but the entitled person does not consent to the revelation of the specific commercial secret, then the data cannot be used as evidence. The only loophole in the regulation is, when the plaintiff withholds consent of using his own commercial secrets as evidence, since under section 1 paragraph 164 of the Code on Civil Procedure in most cases the plaintiff is obliged to prove his case, so then he could not succeed,

<sup>&</sup>lt;sup>52</sup> Paragraph 10 and Section 1 of Paragraph 32 of the XXX Act of 2008 amended the cited provisions of the Civil Procedure Act.

which is clearly not in his interest. In all the cases, however, when the person entitled to the secret is a co-defendant/co-plaintiff, the opposite party or a third person outside the procedure, it is impossible to finish the procedure, if consent is withheld. Since in a judicial proceeding the defendant, administrative authority is an equal party to the plaintiff, the commercial secrets used by the authority without consent must be excluded from evidence. Consequently, the administrative decision must be vacated based on the lack of substantial evidence.<sup>53</sup>

Although the judge and his assistant may access this evidence in theory, but in practice they will not, if the given evidence cannot be used in the case, because such evidence should not influence the judicial decision.

So far in the judicial practice, a similar problem only arose in case of classified data. Then the right solution<sup>54</sup> seemed to be that the judge can request access from the person entitled to the secret (mostly from the National Security Authority, NSA), but the parties<sup>55</sup> are not allowed to access the data during the trial, and the judgement - just like the administrative decision - cannot contain a substantial reasoning. This procedure, however, could not be considered as effective and substantial judicial review. The only legal guarantee against the authority available to the client is that the final decision in the case was not made by a public servant of the secret service, but an independent judge had – at least a formalistic – oversight over the "decision" of the secret service. In case of a clear abuse of discretionary powers, there is the theoretical possibility to reverse the administrative decision – although without providing a reasoning. But even for this, the consent of the NSA was required, which was usually given after consultations between the leadership of the courts and the NSA. The National Security Authority as an important organisation of a democratic, rule-of-law state was aware of the criteria of the rule-of-law, and only upheld a theoretical option for refusing consent.

This kind of self-restrained behaviour is, however, not to be expected from a business company, moreover, they explicitly have – even a constitutional – right to prohibit the use of their commercial secrets.

The current rules on commercial secrets intensely interfere with the functioning of one of the pillars of rule of law, the judiciary, by not even providing a formal control like in the case of classified information, and by allowing for the exclusion of the use of commercial secrets in a trial, if the consent of the entitled person is withheld.

All this is not only makes it impossible to conduct judicial review over regulated markets, but also effects other judicial proceedings of administrative law, including

<sup>&</sup>lt;sup>53</sup> At least this would follow based on the rules of formal logic. The practice would in all likelihood try to come up with a more elaborate solution.

<sup>&</sup>lt;sup>54</sup> We cannot say that the judicial practice is coherent, due to the serious difficulties of handling the problem.

<sup>&</sup>lt;sup>55</sup> To be precise, the plaintiff, because the defendant administrative authority is usually aware of the used state secrets.

for example competition law cases. Cases of cartel and abuse of dominant position are built on a large amounts of commercial secrets. In these cases – even if unintended by the parties – the effective judicial review might be eliminated. Additionally, it effects also civil law cases, where the decision depends on the commercial secret.

The legislative intention behind hindering the judicial review in large economic and administrative cases related to business companies is unknown, along with the question that whose interest, or lobbying resulted in the rules, which are clearly and vigorously violate the rule of law, the principle of legal certainty, and the right to effective legal remedies. The legislative report of Act XXX of 2008, which introduced the amendments, is silent about the motivations and substantive reasons behind the amendment. Consequently, it is clear that creating a nuanced regulatory regime for the commercial secrets of regulated markets, is only possible after the abolishment of these obstacles.

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