

## Agata Sobusiak

## Protection of trade secrets and fostering innovation among small and medium-sized enterprises within the European Union

Doctoral dissertation prepared at the
Department of European Economic Law
under the supervision of Dr. hab. Monika Namysłowska, Prof. UŁ (primary supervisor)
and Dr. Agnieszka Jabłonowska (assistant supervisor)
in the field of legal sciences.

The sector of small and medium-sized enterprises (hereinafter referred to as SMEs) plays an incredibly important role in the economy of the European Union. Current research conducted by the EU institutions indicates that entrepreneurs classified as SMEs account for over 99% of all businesses in the EU, employ nearly two-thirds of the workforce and contribute to around 50% of the EU's GDP. In Poland, the share of SMEs in the economy is at a similar level. The significant presence of SMEs in the EU is highly desirable, as it is widely accepted that their existence contributes to ensuring sustainable and balanced economic growth. Although SMEs are usually more flexible and adapt to changes more easily and quickly than large entities, they are much more susceptible to economic situations. It is estimated that as a result of the limitations and obstacles faced by SMEs in their operations, only about 30%-60% of them are able to stay in the market for 5 years or longer. For these reasons, it is appropriate for legislators at both the EU and national levels to adopt legal solutions aimed at supporting the development of SMEs.

An effective way to support SMEs is to promote their innovation. Available research demonstrates the positive impact of innovation on the performance of SMEs in various aspects. Innovative activities bring benefits to SMEs, allowing them to differentiate from competitors, increasing customer loyalty and creating barriers to entry for potential imitators. It has been proven that innovation enables SMEs to achieve stable growth, employ more workers, and increase investments, thereby contributing to the growth of the EU economy.

Promoting innovativeness of SMEs is not possible without providing entrepreneurs with effective tools to protect their innovations. Only by guaranteeing SMEs the ability to derive tangible benefits from their investments into innovations, the innovativeness of SMEs can be fostered. However, the protection of innovation must be balanced in such a way that the knowledge generated by entrepreneurs' activities can be disseminated in the market.

Among manifold measures of fostering innovation adopted or explored in the EU, legal norms protecting IP assume a prominent position. Research indicates that currently, entrepreneurs commonly rely on trade secret protection as an effective means of safeguarding their innovations and intellectual property more broadly. Effective provisions on the protection of trade secrets allow, in particular, to minimize the costs of actual innovation protection and facilitate the sharing of confidential information through agreements between collaborating entrepreneurs.

The significance that market participants attach to this type of innovation protection is reflected in the legal regulations, including at the EU level.

The provisions on trade secrets were harmonised lately at the EU level. Common rules on many salient issues are currently laid down in Directive 2016/943 on the protection of undisclosed know-how and business information (trade secrets) against their unlawful acquisition, use and disclosure (Trade Secrets Directive), which all Member States have implemented to date. The purpose of the act was to approximate national laws of EU states in order to allow entrepreneurs to turn their innovative ideas into growth. In my dissertation, I examine whether this goal has been achieved.

The PhD thesis consists of four chapters. Chapter I focuses on the topic of innovation and the principles of EU innovation policy. Within this chapter, I discussed the concept of innovation, presented types of innovation and their characteristic features. I also explained he legal conditions regarding the protection of different types of innovation. These considerations are innovative in nature as they have not been widely addressed in doctrine thus far. This chapter also provides an overview of the definition of SMEs in both EU and Polish law. Further, I described examples of innovative SMEs, such as startups, *Mittelstand*, and hidden champions, analyzing the potential impact of legal conditions on the outcomes achieved by these entities.

In Chapter II, I focused on the analysis of the institution of trade secrets shaped by Directive 2016/943. I also took into account the provisions of the polish Act on Combating Unfair Competition, which implements Directive 2016/943 into the Polish legal order. I presented the genesis of this form of protection and the various doctrinal views regarding its legal nature. I also analyzed currently proposed new approaches to the legal classification of trade secret protection.

Chapter III provides a characterization of SMEs in the context of the principles and requirements discussed earlier for effective innovation development and implementation. This chapter covers the specific characteristics of SMES that influence their utilization of trade secret protection and external factors shaping how SMEs protect their trade secrets and the risks they face. In my considerations, I put significant attention to the issue of industrial espionage in cyberspace, which, although it poses a substantial threat to entrepreneurs, is only beginning to be recognized as a problem that both EU and national legislators should address.

In Chapter IV, I focused on the analysis of practical aspects related to the application of trade secret protection for innovation by SMEs in different stages of their lifecycle - the startup phase, the growth phase, and the maturity phase. Presenting the discussed topic in this manner provides an unconventional approach and ensures a new research perspective. The adopted formula of deliberations allows for placing trade secrets within the broad context of SME activities and systematizing the described circumstances through typical examples. Such an approach helps to highlight the importance of legal regulations concerning trade secrets in

supporting the innovation of SMEs. The analysis I have conducted takes into account J. Schumpeter's assumption that any tool supporting innovation has to encourage entrepreneurs to be creative and create new ideas, and support them in the practical use of these ideas in the market.

The outcome of my research suggests that though in general the legal protection of trade secrets can support SMEs in innovation creation, specific regulations adopted int the EU and in Poland contain many flaws and do not allow to achieve a full potential positive impact of the legal rules.

In general, trade secrets can provide understandable, universal, and flexible conditions for the protection of innovation. The reason for that is the fact that trade secrets can be successfully applied to all types of innovation – incremental and breakthrough, demand-driven, and supply-driven. They can positively impact the innovativeness of entities in all industries. The conditions for granting protection to trade secrets are constructed in such a way that they can be easily applied by SMEs and correspond to their needs. Ensuring legal protection to information developed by SMEs as trade secrets, therefore, serves as an incentive for entrepreneurs to invest in research and development, guaranteeing that their results will be protected from unauthorized use by competitors. An undeniable advantage of the discussed form of protection according to the Trade Secrets Directive is its applicability in the processes of open innovation. Contrary to what intuition may suggest, trade secrets are the tool that allows for sharing the broadest category of innovations. The legal protection granted to confidential commercial information facilitates knowledge transfer between partners by enabling claims to be made in case of misappropriation of confidential information.

However, due to how the regulation, especially in Poland, is shaped, SMEs using trade secrets to protect their innovation can meet many obstacles. Challenges faced by SMEs in implementing trade secret regulations: are following:

- a) lack of consistent trade secret protection within the EU THE considerations lead to the fundamental conclusion that the adoption of EU D 2016/943 did not lead to the creation of a coherent trade secret protection within the EU. The Polish implementation, which is not in line with Trade Secrets D in many ways, including a fundamental dimension as the scope of application, is the evidence that the level of protection of trade secrets within the EU is not uniform.
- b) limited applicability to innovation created in the open innovation model in Polish law open innovations, which involve the exchange of information between participants in the innovation process, are currently considered the most effective, especially for SMEs. Regulations at the EU level allows for their application by SMEs in open innovations.

Unfortunately, this possibility has been limited by the Polish legislator implementing EU solutions. The significant narrowing of the category of entities that are protected under the Polish Act on Combating Unfair Competition means that not all information shared within open innovation processes is subject to the required level of protection without justified reason. This may weaken the initiative of entities such as users, experts and others not engaged in economic activities to participate in open innovation processes, which in turn will negatively affect the possibilities of acquiring knowledge and utilizing it for the development of SME innovation.

- c) lack of easily applicable and effective mechanisms for enforcing claims Directive 2016/943 and polis rules on trade secrets protection also do not achieve the goal of establishing effective mechanisms for enforcing claims in case of infringement. The provisions do not include solutions that would help SMEs combat the most serious current threat they face i.e., industrial espionage in cyberspace.
- d) limitations of regulation on the protection of trade secrets in the presence of the challenges of modern technology Trade Secrets Directive nor the implementing polish regulations did not create solutions that would address the challenges of modern technologies. It is not certain whether laws on trade secrets can apply to data that forms the foundation of the modern economy. Furthermore, it is unclear whether big data can be covered by protection. In addition, the solutions contained in Directive 2016/943 and the Unfair Competition Act, which aim to balance the protection granted to businesses with the protection of societal interests, may prove insufficient in the face of advancing technological changes. Technological progress and advanced technologies such as cloud computing and machine learning may enable resource-rich businesses to maintain the confidentiality of their innovations for a very long time, thereby restricting access to knowledge and delaying market innovation. On the other hand, businesses that are unable to adequately secure their knowledge in the digital environment may be exposed to threats such as cyber industrial espionage, due to the high costs involved in such protection.

As a result of my research, I can conclude that although the provision of legal protection of business secrets by legislators can contribute to the development of SME innovation, the shape of the regulation adopted within the EU does not allow the full realization of the potential of the institution in question.