Introduction

Trade secrets, i.e. undisclosed information valuable for its holder's competitive position, have been described as 'the key appropriability mechanism in most industries'.[1] Indeed, up to 74 per cent of companies declare that they rely on trade secrets.[2] At the same time, former employees are reported to be one of the major sources of leakage of valuable undisclosed information[3] and the law surrounding the post-employment phase is described as 'perhaps the most significant part of the law on trade secrets'.[4]

In the increasingly service- and innovation-oriented markets, employees may be one of the most valuable assets of a company. With their knowledge, skills and ingenuity, they add to their employer's value by creating new technical solutions and products, building the company's relations with clients, creating marketing strategies and maintaining image. In doing so, they not only create, but also learn their employer's

[1] Wesley M Cohen, Richard R Nelson and John P Walsh, 'Protecting their Intellectual Assets: Appropriability Conditions and Why US Manufacturing Firms Patent (or Not)' (2000) NBER Working Paper Series Working Paper No 7552, 24 www.nber.org/papers/w7552.pdf accessed 1 June 2017.

[2] According to a survey prepared in 2013 for the European Commission, 74 per cent of EU companies ranked trade secrets as of medium or high importance for their competitiveness and/or innovative growth, see Baker&McKenzie Study 12, 122. By way of example, 70 per cent of Alstom's value depends on trade secrets, according to Alain Berger, SVP European Affairs – Alstom, 'Why Europe Must Reform its Trade Secrets Rules' (Managing Intellectual Property, 10 February 2015) www.managingip.com/Blog/3426227/Guest-blog-Why-Europe-must-reform-its-trade-secrets-rules.html accessed 1 June 2017. The problem with most of the statistical data concerning trade secrets is that it is based on anecdotal evidence, precisely due to the confidential character of the subject-matter.

[3] In 2013 in the EU, former employees were declared to be responsible for 45 per cent of all attempts or acts of trade secrets misappropriation, see Baker&McKenzie Study 13. Employees or former employees were defendants in 59 per cent of trade secrets misappropriation cases litigated in the US federal courts in 2008, according to David S Almeling, Darin W Snyder, Michael Sapoznikow, Whitney E McCollum and Jill Weader, 'A Statistical Analysis of Trade Secret Litigation in Federal Courts' (2010) 45:2 *Gonz L Rev* 291, 302–303.

[4] William van Caenegem, *Trade Secrets and Intellectual Property. Breach of Confidence, Misappropriation and Unfair Competition* (1st edn, Kluwer Law International 2014) 223.

trade secrets, such as information about products and processes; production plans; pricing structures; or preferences of clients. Much of that information is carried in the heads of those employees and thus, when they leave service, consciously or not they take that knowledge with them.

If an ex-employee starts his own competitive activity or enters employment for another company, using the information learned in previous employment, this may have a negative impact on the competitive position of the former employer, who until then might have been the only market participant to profit from use of this data. Moreover, once the secret information leaves its holder's enterprise and control, the risk of its disclosure increases.

The threats connected with the departure of employees who know the intricacies of their employer's business grow with the changing economic landscape. Automation and the advance of information technology result in a shift from labour markets based on manufacturing of goods to a knowledge-based service economy which relies essentially on human knowledge.[5] At the same time, the pace of social development and economic change is increasing, and with it the mobility of employees. Life-time employment with one company is no longer a reality in most industries,[6] and the booming IT and Internet-based services require quick change and adaptation; promote entrepreneurship; and increase the number of start-ups.[7] Decreasing job security is accompanied by reduced workforce loyalty.[8] This setting has been described as a 'new psychological contract' under which the employees accept lower job security in return for training provided by the employers.[9]

The rising value of information in the economy and reliance on its use by both employers and employees, combined with increasing work mobility, cause tensions. On the one hand, the employers wish to protect their competitive advantage stemming from the use of valuable information,

[5] Darin W Snyder and David S Almeling, *Keeping Secrets: A Practical Introduction to Trade Secret Law and Strategy* (1st edn, Oxford University Press 2012) 29.

[6] Norman D Bishara, 'Covenants Not to Compete in a Knowledge Economy: Balancing Innovation from Employee Mobility against Legal Protection for Human Capital Investment' (2006) 27 *Berk J Emp & Lab L* 287, 292; Snyder and Almeling, *Keeping Secrets: A Practical Introduction to Trade Secret Law and Strategy* 27.

[7] On these developments in the United States, see Bishara, 'Covenants Not to Compete in a Knowledge Economy: Balancing Innovation from Employee Mobility against Legal Protection for Human Capital Investment' 287, 291–292. In the context of computer industries, see Miles J Feldman, 'Towards a Clearer Standard of Protectable Information: Trade Secrets and the Employment Relationship' (1994) 9 *HTLJ* 151, 157.

[8] Snyder and Almeling, Keeping Secrets: A Practical Introduction to Trade Secret Law and Strategy 28.

[9] Katherine VW Stone, 'Human Capital and Employee Mobility: A Rejoinder' (2002) 34 *CTLR* 1233, 1243.

and to protect their investments in developing and securing this data. On the other hand, use of this information by a departing employee may be essential for him to continue his professional activity, and thus decisive for the exercise of his freedom of self-determination in choosing a place of work. At the same time, trade secrets are used as means to protect innovation. Thus, their enforcement is an important element of public policy relating to incentivising innovation, entrepreneurship and dissemination of knowledge.[10]

When compared to patents, copyright or trademarks, trade secrets are often referred to as the 'Cinderella of IP law'[11] due to a lack of comprehensive regulation and research.

Secrecy may, like IPRs, protect intellectual creations. At the same time, there exist considerable discrepancies with respect to treatment of trade secrets in various jurisdictions, both as regards secrecy alone and as regards its relationship with the classical IPRs. It seems that one of the reasons for such a situation is that, while trade secrets may cover the same subject-matter as patents, utility models, designs or copyright, they are not uniformly recognised as a right of intellectual property and their regulation is fragmented.[12] While in some countries they are seen as a right of intellectual property or administered by a dedicated statute,[13]

[10] The conflicting interests as well as policy considerations pertaining to protection of secrecy in the post-employment context are the subject of the analysis presented in Chapter 1.

[11] Report on Trade Secrets for the European Commission, Hogan Lovells International LLP, Study on Trade Secrets and Parasitic Copying (Look-alikes) MARKT/2010/20/D para 34 http://ec.europa.eu/internal_market/iprenforcement/docs/parasitic/Study_Parasitic_copying_en.pdf accessed 1 June 2017 (Hogan Lovells Report); 'The Cinderella of IP (or not)' (*The IP Kat*, 18 December 2012) http://ipkitten.blogspot.de/2012/12/the-cinderella-of-ip-or-not.html accessed 1 June 2017; Ansgar Ohly, 'Der Geheimnisschutz im deutschen Recht: heutiger Stand und Perspektiven' [2014] GRUR 1, 1.

[12] The general framework is laid down in Art 39 TRIPS. For an account of the situation within the EU, see Hogan Lovells Report. For a discussion of the legal nature of trade secrets, see Chapter 2, part III.

[13] Trade secrets are considered an IPR in Italy. For details, see Hogan Lovells Report paras 130–136. Sweden on the other hand seems to be the only EU country which has a statute dedicated to the regulation of the use of trade secrets, see Hogan Lovells Report para 217. This seems also to be the case in the United States, under the framework of protection of trade secrets is laid down in the UTSA, see Milgrim on Trade Secrets vol 1A 2-2; Richard A Epstein, 'Trade Secrets as Private Property: Their Constitutional Protection' (2003) John M Olin Law & Economics Working Paper No 190 (2d Series) 1 http://papers.ssrn.com/sol3/papers.cfm?abstract_id=421340 accessed 1 June 2017; Mark A Lemley, 'The Surprising Virtues of Treating Trade Secrets as IP Rights' (2008) 61 *Stanf L R* 311, 325; Robert G Bone, 'Trade Secrecy, Innovation and the Requirement of Reasonable Secrecy Precautions' in Rochelle C Dreyfuss and Katherine J Strandburg (eds), *The Law and Theory of Trade Secrecy: A Handbook of Contemporary Research* (Edward Elgar 2011) 48.

other countries address infringement of a trade secret within the framework of unfair competition,[14] general tort or contract law.[15]

The lack of uniform treatment and developed doctrinal approaches increases legal uncertainty, also where disputes between employers and their former staff are concerned.

The discrepancies between national approaches to protection of trade secrets within the European Union have been recognised as an obstacle to the smooth functioning of the Internal Market. To address this problem, in 2013 the European Commission issued a Proposal for the Directive on the protection of undisclosed know-how and business information (trade secrets) against their unlawful acquisition, use and disclosure.[16] The Trade Secrets Directive was enacted on 8 June 2016 and entered into force on 5 July 2016.[17] The Member States are to implement it by 9 June 2018.[18] The Directive lays down a definition of trade secrets; regulates their acquisition, use and disclosure; and provides for measures and procedures of enforcement as well as remedies in cases of misappropriation.

As a result of the United Kingdom European Union membership referendum (broadly referred to as the Brexit referendum) which took place on 23 June 2016 and in which the majority voted to leave the EU, the implementation of the Directive in the United Kingdom is uncertain. The Article 50 TEU process of withdrawing from the EU has been triggered on 29 March 2017 and the terms of withdrawal have not yet been negotiated. In the meantime, the United Kingdom remains a full member of the EU, and in this book, references to implementation of the Trade Secrets Directive in the United Kingdom are made under this assumption.

[14] For example, Germany, Austria and Poland, Hogan Lovells Report paras 251–252.
[15] Hogan Lovells Report para 253. In the United Kingdom, protection of trade secrets is ensured by way of action for breach of confidence, Hogan Lovells Report para 257, but the nature of the ex-employee's obligations remains unclear, Gurry on Breach of Confidence paras 12.152–12.153. Most EU Member States provide for contractual protection of trade secrets, Hogan Lovells Report para 258.
[16] Proposal COM(2013) 813 of 28 November 2013 for a Directive of the European Parliament and of the Council on the protection of undisclosed know-how and business information (trade secrets) against their unlawful acquisition, use and disclosure http://ec.europa.eu/internal_market/iprenforcement/docs/trade-secrets/131128_proposal_en.pdf accessed 1 June 2017.
[17] Directive (EU) 2016/943 of the European Parliament and of the Council of 8 June 2016 on the protection of undisclosed know-how and business information (trade secrets) against their unlawful acquisition, use and disclosure [2016] OJ L 157 (hereinafter Trade Secrets Directive or TSD). References in this book are made to the final text of the Directive. Legal literature referring to the previous drafts of the Directive is cited only in so far as it pertains to the final text.
[18] Art 19(1) TSD.

The conflict of interests between employers and their former employees is at the centre of the discussion presented in this book. It examines the approaches towards enforcement of trade secrets against ex-employees in Germany, United Kingdom, United States and under the Trade Secrets Directive. The analysis focuses on the balancing of the private and public interest and its role in the determination of the scope of post-employment duties and in the framing of remedies.

Recognising the necessity of a case-by-case assessment, the existing guidelines for determination of the extent to which former employees may use information learned during service are identified and critically assessed. They are systematised and the guidelines which might help to reconcile the conflicting interests are put forward. The overreaching considerations in this respect are the need to allow for sufficient flexibility in order to accommodate the varying circumstances and interests, and the necessity to ensure legal certainty in the enforcement of rights to valuable information.

The concept of 'employee' used in this analysis relates to people who are in an employment relationship; perform their duties in furtherance of the employer's interests; are bound by instructions given by the employer; and work under the employer's control and at his risk, not as part of an independent business. Therefore, unless otherwise indicated, members of organs of companies, contractors, fiduciaries and staff whose duties are otherwise regulated by special legislation are not within the realm of the discussion.

The discussion presented in this book starts with an introduction of the role which protection of trade secrets plays in the economy as well as in the market for innovation and employment (Chapter 1). The interests which come into conflict, where trade secrets are enforced against former employees, are presented on the private and on the policy level.

This background discussion is continued in Chapter 2 with a comparative analysis of the definitions of trade secrets adopted in the legal orders; the types of information which may be protected as trade secrets; and the relationship between secrecy and IPRs. The discussion of the legal nature of trade secrets completes the introductory part. Furthermore, this part of the book contains a discussion on the terminology used to designate trade secrets.

The following two chapters present an analysis of the scope of post-employment duties which employees have with regard to information they learned during service. The statutory and implied (default) duties are discussed in Chapter 3, and the framework within which those duties may be regulated by way of contract is presented in Chapter 4.

Chapter 5 contains a discussion of the basic remedies available for aggrieved employers in case of a found or threatening infringement of a right to a trade secret.

The discussion is followed by a summary in which the findings are recapitulated.

The analysis presented in this book is based on the state of law and research as it stands on 1 June 2017.

The terms 'employer' and 'employee' used in this book refer equally to both men and women.