

Why Do Businesses Incorporate in other EU Member States?

An Empirical Analysis of the Role of Conflict of Laws Rules

Carsten Gerner-Beuerle, Federico Mucciarelli,
Edmund Schuster, Mathias Siems*

Abstract. Research in law, political science and economics has taken a strong interest in the way companies strategically incorporate in foreign jurisdictions. However, the empirical research about corporate mobility in the EU has so far been limited in two respects: it has focused on the analysis of foreign companies in the UK and it has mainly been concerned with differences in the costs of incorporation such as minimum capital requirements. This paper aims to fill these gaps. It is the first paper that presents data on incorporations of foreign businesses in the commercial registers of each EU Member State. It is also the first one to assess the impact of differences in the conflict of laws rules applicable to companies as they reflect the case law of the Court of Justice on the freedom of establishment. It finds that countries which have a clear-cut version of the ‘incorporation theory’ attract more incorporations than countries which have retained elements of the ‘real seat theory’. The paper also discusses the policy implications from these findings for EU harmonisation in this field.

Keywords: freedom of establishment, market for incorporations, corporate mobility, conflict of laws, private international law

JEL classification: D22, G38, K15, K22, K34, L29, M13

* The authors are at UCL (Gerner-Beuerle), University of Modena & Reggio Emilia and SOAS University of London (Mucciarelli), the LSE (Schuster), and Durham University (Siems). Corresponding author: Mathias Siems (email: mathias.siems@durham.ac.uk).

1. Introduction

Do companies make strategic decisions to incorporate in certain jurisdictions following a search for the most favourable legal rules? This is likely to be the case as far as this choice allows businesses to reduce their tax bill, whether directly, or by benefitting from lower levels of transparency.¹ As far as company law is concerned, a prerequisite for meaningful choice of law is the ability of firms to freely and separately choose their place of incorporation, regardless of the physical location of their activities. Countries that follow the ‘incorporation theory’ recognise any company properly constituted according to the law of another country, and accept that the company law of the country of incorporation applies to such companies. Notably, this is the case in (and within) the US, with the result that many listed US companies choose Delaware as their place of incorporation (for US-EU comparisons see e.g. Ventrizzo et al., 2015: 35-97; Mucciarelli, 2012). By contrast, countries following the ‘real-seat theory’ seek to prevent free and separate choice of company law by determining the law applicable to a company by reference to the location of its headquarters; this effectively requires companies to incorporate in the jurisdiction from it is managed.

In the European Union, an interesting situation has emerged. The freedom of establishment enshrined in the Treaty and the corresponding case law of the Court of Justice have led to a general shift towards the ‘incorporation theory’; yet, it can also be observed that some Member States have retained some elements of the ‘real seat’ theory (see 2.1 and 4.2, below). Thus, this paper aims to explore the impact of the resulting differences on the incorporation behaviour of firms. It also fills gaps in the previous empirical literature on this topic, as it is limited in at least two respects: following the scenario of the landmark case in this area (*Centros*), it has focused on the analysis of foreign-based companies in the UK and it has mainly been concerned with differences in the costs of incorporation, such as the minimum capital requirements (see 2.2, below). By contrast, this paper presents data on all incorporations of foreign businesses in the commercial registers of each Member State today. It is also the first one to examine the impact of differences in the conflict of laws rules applicable to companies. This is an essential question to explore since the EU Commission seems to be considering proposing a new European instrument to harmonise these conflict of laws rules.²

The structure of the paper is as follows: Section 2 outlines the problem of the law on corporate mobility in the EU, it provides an overview of the previous empirical research and it explains the data collection of the present study. Section 3 presents descriptive statistics of foreign-based private companies in all Member States today as well as time series data on new incorporations in the UK since 1990. These new data are one of the innovations of this paper. They also provide an initial assessment of whether there is a meaningful market for incorporations in the EU. The regression analysis in Section 4 turns to the question of whether the country differences can be explained by differences in conflict of laws rules applicable to companies as well as other factors. The concluding Section 5 reflects on the wider implications of the findings, including the possible impact of the result of the UK’s ‘Brexit-referendum’.

¹ As illustrated by the so-called ‘Panama Papers’, see 2.2 (final paragraph), below.

² See the consultation ‘EU Company law upgraded: Rules on digital solutions and efficient cross-border operations’ (10 May 2017), available at http://ec.europa.eu/newsroom/just/item-detail.cfm?item_id=58190.

2. Background, previous research and data collection

2.1 Background and overview of legal situation in the EU

In the EU, despite partial harmonisation of substantive rules, companies are mostly creatures of national law. As a starting point, conflict of laws rules determining the law applicable to companies (*lex societatis*) are similarly determined at the Member State level; they may thus apply either the ‘incorporation theory’ or the ‘real seat theory’. This has important implications for corporate mobility since countries following the ‘real seat theory’ would effectively not accept it, if a business incorporated in a jurisdiction other than that of its headquarters.

The case law of the Court of Justice,³ interpreting the freedom of establishment of Article 49 of the Treaty of the Functioning of the European Union has led to some liberalisation regarding the freedom of selecting the preferred *lex societatis*. Although the Court generally does not phrase its arguments in the categories of conflict of laws rules, it has become clear that its case law has imposed some restrictions on the use of the real seat theory for companies from other Member States. This became most obvious in the landmark case of *Centros*: two Danish citizens living in Denmark established a limited liability company (Ltd) in the UK. The founders’ main motivation was to avoid the minimum capital requirements under Danish law. Even though it is somewhat unclear whether Denmark followed the real seat doctrine at the time, the Danish authorities refused to register a branch of *Centros Ltd* in the commercial register because it did not plan to conduct business anywhere except in Denmark. The Court of Justice rejected this line of reasoning and held that *Centros Ltd* was validly exercising its freedom of establishment and that the refusal to register was an obstacle to this freedom.

However, the Court also affirmed that Denmark was ‘entitled to take measures designed to prevent certain of its nationals from attempting, under cover of the rights created by the Treaty, improperly to circumvent their national legislation or to prevent individuals from improperly or fraudulently taking advantage of [the freedoms]’.⁴ In addition, the case law of the Court of Justice has emphasised repeatedly that it is possible for Member States to provide that incorporations in their own jurisdiction are tied to the requirement that the company has its headquarters, or other physical elements, in this country.⁵

Thus, the Court of Justice has left some ambiguities about the possibility of corporate mobility. It is therefore possible to distinguish between Member States that have a clear-cut version of the ‘incorporation theory’ and those that have retained some elements of the ‘real seat’ theory (see 4.2, below). Correspondingly, it is not clear whether it can be said that, at present, there is a meaningful market for incorporations in the EU, thus raising the question

³ *Centros Ltd v Erhvervs- og Selskabsstyrelsen* (1999) C-212/97; *Überseering BV v Nordic Construction Company Baumanagement GmbH* (2002) C-208/00; *Kamer van Koophandel en Fabrieken voor Amsterdam v Inspire Art Ltd.* (2003) C-167/01; *SEVIC Systems AG v Amtsgericht Neuwied* (2005) C-411/03; *Cartesio Oktato es Szolgaltato bt* (2008) C- 210/06; *VALE Építési kft.* (2012) C-210/06; C-106/16, *Polbud – Wykonawstwo sp. z o.o.* (2017) C-106/16.

⁴ *Centros*, *ibid.*, at paras. 24-25.

⁵ This goes back to the decision in *The Queen v HM Treasury and Commissioners for Inland Revenue, ex p Daily Mail and General Trust plc* (1988) C-81/87 and was confirmed in *Cartesio Oktato es Szolgaltato bt* (2008) C-210/06; *VALE Építési kft.* (2012) C-210/06.

how widespread it is that companies have their ‘real seat’ in a Member State different from the state of incorporation. This paper will attempt to answer these questions.

2.2 Previous empirical research

A European study on the application of the Cross-Border Mergers Directive explained the problems with collecting statistical data on questions of cross-border company mobility and on cross-border mergers in particular, as follows:

‘Collecting this data proved extremely challenging, as the information that the national registries keep is partial, and the commercial databases were inconsistent and scarce. Indeed, previous studies on parallel topics encountered the same problems in gathering accurate and quality information’ (Bech-Bruun and Lexidale 2013: 962).

The task of collecting data on the number of companies that operate in a Member State different from the one in which they have been incorporated or have their real seat is also a demanding one. To start with, it is therefore helpful to present an overview of the scope and method of the existing empirical research which has aimed to tackle this problem.

Table 1. Overview of empirical research on corporate mobility in the EU⁶

Paper	Topic / countries and time frame		Methodology of data collection
Armour (2005)	German businesses incorporating as UK ltds	1999 to 2004	<ul style="list-style-type: none"> Identified companies in the Companies House database, which had a largely German-language name and the name was ending with ‘Limited’ Acknowledged limitations: data merely impressionistic, potentially under or over-inclusive
Becht et al. (2008)	Businesses from EEA countries incorporating as UK ltds	1997 to 2006	<ul style="list-style-type: none"> Data obtained from the FAME database (Bureau van Dijk); where FAME data was incomplete, correction factors were applied (based on a comparison between FAME and Companies House databases) Directors’ residence as main criterion (with 50% and 100% thresholds)
Becht et al. (2009)	Registration of branches of UK ltds in ten Member States	2006	<ul style="list-style-type: none"> Data obtained through field experiments with assistance from country correspondents who reported on their attempts to incorporate and branch back a UK ltd Information recorded in the experiments includes the number of procedures involved, their cost and duration, as well as any obstacles encountered
Laa-manen et al. (2012)	Relocation of HQs in 17 European countries	1996 to 2006	<ul style="list-style-type: none"> News databases by Lexis/Nexis and Reuters; further internet checks Data mainly capture larger public companies

⁶ In addition, empirical studies, not discussed here, have analysed the incorporation of businesses as a European Company (SE), see e.g. Eidenmüller et al., 2010.

Braun et al. (2013)	Incorporation of private companies in five Member States	One year +/- law reform	<ul style="list-style-type: none"> • Most data collected from the AMADEUS database (Bureau van Dijk); for Germany and Poland, data collected directly from national company registers • Directors' residence as main criterion
Muller et al. (2013)	Cross-border mobility of SEs and transfers of registered offices	2009 to 2011 and 2007 to 2012	<ul style="list-style-type: none"> • Regarding mobility of SEs, the European Trade Union Institute's European Company database was used together with the Orbis database (Bureau van Dijk) • Regarding mobility of other companies, national business registers were directly contacted, generally to no avail (exception: Malta); indirect data collection (matching de-registrations with new registrations, Zephyr database used to track cross-border mergers)
Bech-Brunn & Lexisdale (2013)	Cross-border mergers in EU	2008 to 2012	<ul style="list-style-type: none"> • Timing of reincorporation tracked through direct and indirect enquiries (Thomson Knowledge, LexisNexis, Thomson Reuters) • Further information collected from various reports and the European Trade Union Institute
Ringe (2013)	German and Austrian businesses incorporating as UK ltds	2004 to 2011	<ul style="list-style-type: none"> • Data on German and Austrian companies collected from the Companies House via FAME database • <i>Centros</i> type companies identified if company incorporated in the UK with at least one German director where the company shares its registered office with at least 100 other companies (proxy for the involvement of an incorporation agency)
Sick (2015)	German business with > 500 employees incorporated in foreign legal form	1995 to 2014	<ul style="list-style-type: none"> • Combination of primary and secondary data sources, including: Federal Gazette's company reports, previous studies, corporate websites and other corporate databases
Teichmann and Knaier (2015)	Austrian businesses incorporating as German companies	2009 to 2012	<ul style="list-style-type: none"> • Data derived from the German Commercial Register by the Bundesanzeiger Verlag • German 'letterbox' companies (GmbHs / UGs) doing business in Austria were identified when shareholder is also the managing director and lives where the company does its main business

This literature suggests different proxies to identify the country with which companies are mostly connected, despite being incorporated in another jurisdiction. It has been observed that the registration of branches is not strictly enforced in many Member States (Becht et al., 2008: 245). Therefore, the most promising strategy is to proceed indirectly by examining the company's filings in the state of incorporation. One possibility is to use the address of the directors as an indication of the company's real seat. The proxy can be further varied by, for example, classifying a company as formally foreign if all directors live abroad, or if the majority lives abroad (as used by Becht et al., 2008; Braun et al., 2013). As far as the information is available, it can also be revealing to identify whether the managing director is also a shareholder (or even the sole shareholder) (as used by Teichmann and Knaier, 2015).

Alternatively, one may go further and aim to collect information about companies without any physical connection of the company to the country of incorporation. In order to identify such companies some studies have examined whether the company's registered office was shared with at least 100 other companies – i.e. it having a mere 'letterbox' in the country of incorporation. This is said to work reasonably well for the UK where registration agents use the same address for a large number of companies without any business activity in the state of incorporation (Ringe, 2013: 247), while in other countries this strategy is less reliable.

In this respect, a terminological and substantial clarification has to be made. In the literature, the term 'letterbox companies' is occasionally used for such companies that do business in one country, but are incorporated with only a 'letterbox' in another one (Sørensen, 2015). However, frequently, the term 'letterbox companies' is also equated with companies which are mere 'special purpose entities' (SPEs, also called 'conduit companies'). Those too merely have a 'letterbox' in the country of incorporation, but they only hold financial assets, they are not involved in business activity in any country, and their main purpose is to benefit from the tax advantages that can be gained by using SPEs as intermediate legal entities (see e.g. Eurodad, 2015: 18-19; UNCTAD, 2015: 189-190). This type of letterbox companies is often associated with companies established in offshore tax havens, for example in the British Virgin Islands,⁷ but such regimes also exist in some EU Member States (Eurodad, *ibid*: Luxembourg, Austria, Cyprus, Hungary, Spain). Those companies are not of core interest to the present paper as, due to their lack of business activity, they are unlikely to raise problems of conflict of laws rules applicable to companies resulting from a mismatch between place of incorporation and real seat.

2.3 Data collection of this study

EU law requires the registration of companies in the commercial registers of the Member States, and as of June 2017, those registers are interconnected at EU level as part of the Business Registers Interconnection System (BRIS).⁸ At present, however, the commercial registers do not provide researchers with deep-level access to company data from all Member States. While it is possible to identify the websites of the commercial registers,⁹ searching for data about all companies established in the EU presents various practical problems: the websites are usually only available in the official language of the country in question and its search functions are often very limited. Furthermore, deep-level access to the information that is of interest to this study, such as the nationality and addresses of directors, is not freely available but instead is typically charged per access to information on each individual company. It is therefore not feasible to compile a comprehensive dataset of the millions of European companies through the websites of the commercial registers.

⁷ As discussed, following the leaked information from the Panamanian law firm Mossack Fonseca, see eg 'Panama Papers: How assets are hidden and taxes dodged' (BBC News, 3 April 2016), available at www.bbc.co.uk/news/business-35943740.

⁸ The former is based on according to Directive 2009/101/EC, art. 3 and the latter on Directive 2012/17/EU and the Commission implementing regulation (EU) 2015/884. For the BRIS see also https://e-justice.europa.eu/content_business_registers_at_european_level-105-en.do.

⁹ List of register provided at https://e-justice.europa.eu/content_business_registers_in_member_states-106-en.do and www.ebr.org/index.php/member-countries/.

A more promising path is to make use of the commercial databases provided by Bureau van Dijk (BvD). Some of those databases cover company data for specific countries,¹⁰ but, for our purposes, it is helpful that all of the national databases of European countries are integrated in the BvD's general database Orbis.¹¹ Since Orbis is composed of information from various domestic sources, the completeness of the information varies between countries. For most Member States, the coverage of the companies included is good (see also 3.1, below), but there are some exceptions. The most notable one concerns the Greek data where many companies are missing. A query to BvD confirmed that their data only cover about 5% of the active businesses in Greece.

The present analysis focuses on private companies, since, in the EU, it is mainly those companies that have shown to be interested in foreign incorporations.¹² Orbis has a search function that allows for the search of 'standardised legal forms', but it is more reliable to choose manually the precise types of company for each of the Member States. This leads to a list of 14.7 million private companies incorporated in all Member States. Subsequently, we restricted the search to those companies where at least one director or senior manager is from a foreign country. For our purposes, it makes sense to exclude someone who runs a business in another Member State but establishes a company in his or her country of nationality. In the regression analysis (see 4, below), we are interested in persons who want to incorporate companies in another Member State despite having no special attachment to that country. The situation is different for nationals of that other country. For example, the control variable of a common language can be one of the variables explaining why a businessperson from Portugal may not incorporate a Finnish company, but this argument would not apply if this person were a Finnish national who runs his or her own business in Portugal with a company incorporated in Finland.

This search operation reduces the number of private companies available to a manageable size of 1.1 million companies. We also had to check to what extent this might exclude relevant information. In total, 63% of the private companies from all Member States provide information about the nationality of their directors and senior managers. For 13 of the 28 Member States, however, less than 50% of the companies include such information. However, generally speaking, for those countries any other information that may be helpful for the purposes of the present research is even less likely to be available in Orbis. Thus, the best that can be done is to use means of extrapolation as far as the data are incomplete, and, in the regression analysis, include control variables for the proportion of companies included in the dataset. We also checked for the robustness of any findings by way of excluding the countries where only limited data are available (see 3.1 and 4, below).

In the Orbis search results, we selected a number of fields relevant for the purposes of our research, also considering the proxies suggested by previous research (see 2.2, above). Thus, for the main parts of the analysis, we downloaded information about (i) the address and contact details of the company, (ii) the number of current directors and managers, their

¹⁰ See www.bvdinfo.com/en-gb/our-products/company-information/national.

¹¹ The other general BvD database, focussing on European data, is Amadeus. However, searching for company data from 2014 and 2015, we established that Orbis is more frequently updated since many of these data are not yet available through Amadeus.

¹² See Table 1, above. This is different from the situation in the US where the market of incorporations is mainly about re-incorporations of larger listed companies (though not only, see Dammann and Schündeln, 2013). For the possibility of re-incorporations in the EU see Gerner-Beuerle et al. 2018a.

nationality, place of residence and job title, and (iii) the nature of the company's shareholders, namely whether they are also the directors or senior managers of the company and whether they are natural or legal persons. While it would be interesting to have further details about the companies in question, for example, their employees and their business locations, those data are rarely available for private companies.

The Orbis category 'directors and managers' does not disclose which positions Orbis classifies under this heading. For most private companies, the main persons reported here are the executive directors/managers, but for some of the bigger private companies it may also include other managers with the authority to act on behalf of the company.¹³ We suggest that it is justifiable to consider all of these positions in order to identify the companies of interest in this paper since they can be indicators of the 'real seat' of a company. For the companies established in the UK, we also filtered the search results so as to only include the companies' directors, but the actual findings were very similar – with a correlation of close to 0.99.¹⁴

Some of the current empirical literature examines not the total number of incorporated companies but the new incorporations in a particular year (e.g., Becht et al., 2008; Braun et al., 2013). For the purposes of the present study, we aimed to identify all new foreign incorporations from 1990 to 2015. Using the 'segmentation by year' function provided by Orbis, this can, in principle, be achieved without downloading all of the data.¹⁵ However, sufficiently long and reliable time series data are only available for few of the Member States, notably the UK. We will therefore only use time series data for parts of subsequent analysis (see 3.1 and 3.3, below).

3. Descriptive statistics

3.1 *Estimation of foreign-incorporated companies*

While Orbis is a valuable global resource for information about companies, any search for specific details has to address its variations in data availability: variations between countries but also those between the relevant information about directors and senior managers (in the following, the term 'managers' will be used to refer to both of these groups). We therefore ascertained that for ten Member States less than 50% of the companies with at least one foreign manager provide information about the residence of at least one manager. In addition, as far as information is included in the Orbis data, it is often not useful since it does not mention the private address of the manager but simply restates the company's address.

Thus, instead of the residence of managers, the following analysis is based on their nationality. Moreover, the Orbis categories 'managers being shareholders' and 'shareholders

¹³ Since this paper is concerned with private companies, the problem did not arise whether this category would also include the members of supervisory boards of some public companies (such as the *Aufsichtsrat* in the German *Aktiengesellschaft*).

¹⁴ Correlation of 0.9889 between (i) the 27 observations that count the number of ltds that have a board of directors only consisting of persons from one of the other 27 Member States and (ii) the 27 observations that count the number of ltds where all 'directors and managers' are from one of the other 27 Member States.

¹⁵ While Orbis only allows the search of companies with at least one director/senior manager from a particular country, it is possible to search for all companies with any directors from all countries of the world with the exception of this particular country, which can then be deducted from the total number of companies with information about the nationality of directors/senior managers.

being natural or legal persons’ may be relevant since the foreign-incorporated companies that are of interest for this study are typically companies where natural persons are the main shareholders as well as the managers of the company. The information about ‘managers being shareholders’ is particularly well reported; thus, it will be used in the following in order to capture ‘Centros-type’ companies and exclude group structures such as the aforementioned special purpose entities (see 2.1 and 2.2, above).

Table 2: Top-ten target countries of businesses incorporated in other Member States (estimation of all companies excluding companies established by residents)

Country	Number of companies	Multiplicator
1. UK	227,064	1.7329
2. Estonia	33,524	7.4270
3. Romania	30,123	1.0126
4. France	27,029	25.1569
5. Slovakia	26,600	1.8165
6. Luxembourg	10,631	4.5478
7. Czech Republic	8,923	1.0297
8. Ireland	8,058	2.5086
9. Germany	7,866	1.5858
10. Cyprus	4,886	11.32309
<i>All Member States</i>	420,429	

Note: the ‘multiplicator’ corrects for variations in data availability (higher values indicate less reliable data)

Table 2 presents the estimated top-ten target countries. Following on from the considerations about possible proxies and data availability, it is based on companies with all managers being from any Member States other than the country of incorporation and the majority of those managers being shareholders. The raw target data have been extrapolated to estimate the total number of those companies across Member States, using the multiplicator. Subsequently, based on migration data provided by the UN, it has been estimated how many of the companies have been established by foreigners who are resident in the country of incorporation, a figure deducted from the number in the target data.¹⁶

In order to check the robustness of this nationality-based method of establishing foreign-incorporated companies, we compared our findings with the study of UK incorporations in the years 1997 to 2006 by Becht et al. (2008). For UK companies established in those years, it was still common to indicate the actual address of managers in the commercial register. Thus, we could compare the Becht et al. data with our time series (see 3.3, below) of foreign UK incorporations, the latter being based on the nationality of managers but then deducting the number of companies which were likely to be established by foreigners, resident in the UK at the time of incorporation (again, using the UN migration data). Both datasets are highly correlated (0.986) which gives us confidence in our technique of identifying companies established by foreigners who also live in their country of nationality.

¹⁶ Thus, the following formula was used for each country pair with I = country of incorporation and M = country of managers: absolute value (raw data – migrants from M in I * companies per capita in I). The population data are from www.un.org/en/development/desa/population/migration/data/estimates2/estimates15.shtml.

3.2 *Interpretation and network presentation*

In substance, it follows from Table 2 that the UK is by far the most popular target country, accounting for about 50% of the foreign incorporations. The UK is followed by four Central and Eastern European (CEE) countries in the top seven (Estonia, Romania, Slovakia, and Czech Republic), as well two further common law countries (Ireland and Cyprus) and three Western European countries (France, Luxembourg and Germany).

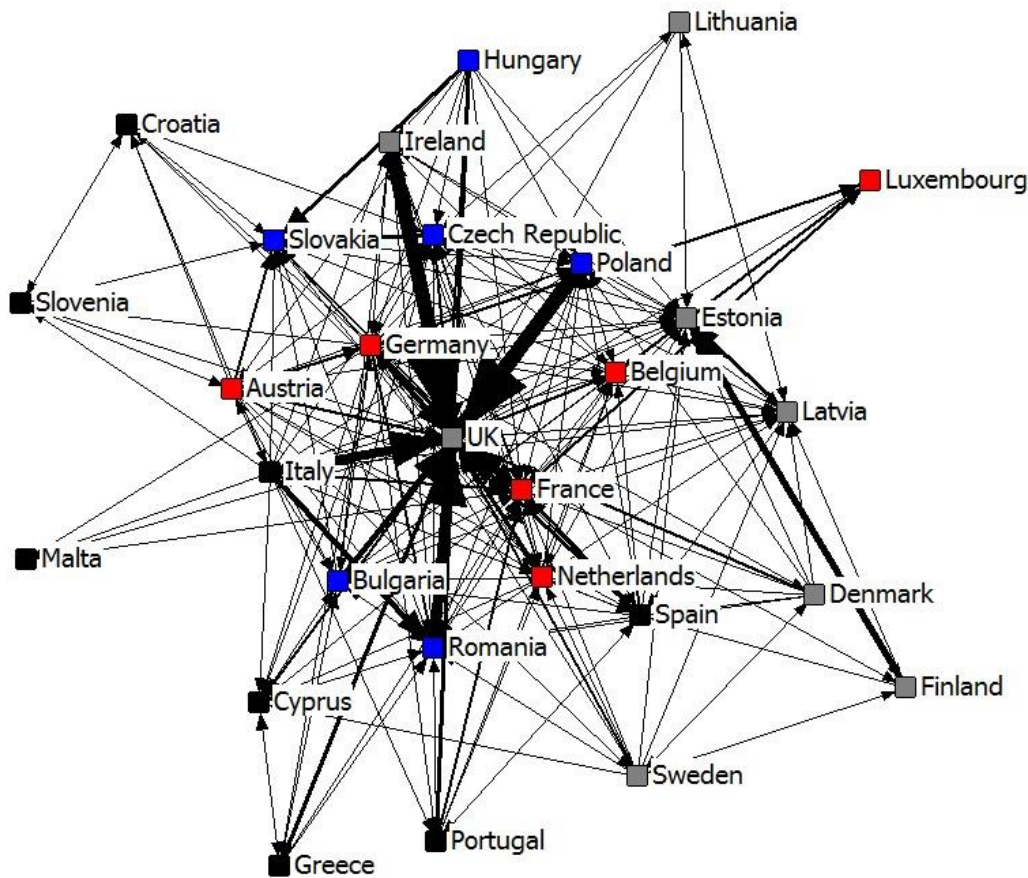
Generally speaking, it is doubtful why in the EU law makers may want to attract foreign incorporations. Member States lack the financial incentives that have influenced Delaware in the market for incorporations in the US. Usually, no periodic franchise tax or similar charge is levied by EU Member States, and when a company is founded, only administrative costs are typically charged. In principle, no other fiscal motives exist, since, usually, factors largely equivalent to the ‘real seat’ concept are decisive for the determination of a company’s tax domicile. Moreover, irrespective of the legal structure, physical permanent establishments are generally taxed based on their location. For the individual Member States, accordingly, there remains, on the one hand, a possible prestige gain as a non-material advantage. On the other, Member States where foreign firms choose their registered seat may profit from more clients for lawyers and other consultants, thus collecting more taxes and creating more jobs (for all of these considerations see Siems, 2008: 321-2).

There are, however, also some reasons why some of the CEE countries have become popular target countries for foreign incorporations. After the fall of communism, the business laws of the CEE countries have been going through various phases of reform, thereby increasing the potential of some of them to attract foreign incorporations. An internet search also shows a number of web sites that promote incorporation of businesses in Estonia, Romania and Slovakia.¹⁷ Moreover, it is likely that the situation in the CEE countries is not only about matters of company law, but is also related to other areas of law such as favourable tax and labour laws. For example, we may think about the situation of a Finnish businesswoman who registers a private company in Estonia and rents an office there, but keeps her own residence in Finland from where she manages the company. Such a scenario is therefore different from the scenario where the company has no physical connection to the country of incorporation at all. However, such companies too are of interest for our purposes since the Finnish businesswoman could also have incorporated the company in Finland while merely renting an office in Estonia. The question of how far the place of incorporation is a deliberate choice – and therefore the impact of differences in conflict of laws rules – is therefore also relevant in this scenario.

To get a fuller picture of the relationship between origin and target countries, it is necessary to consider the information for all countries, namely the matrix of each pair of possible countries which leads to $28 \times 27 = 756$ observations. This information can be presented as a network. Such a network presentation is helpful as it enables us to see whether cases of foreign incorporations are isolated or widespread (and thus, in the latter case, indicating that there may be an emerging market for incorporations in the EU).

¹⁷ See, e.g., www.estoniancompanyregistration.com/, www.companyincorporationestonia.com/, www.romania-company.com/, www.theromanianclub.com/, www.slovenskespolocnosti.sk/en, <http://zugimpex.com/slovakia-company.html>.

Figure 1: Network of businesses incorporated in other Member States



Note: ties present 50 or more businesses incorporated abroad based on estimation of foreign-incorporated companies (as explained in previous section)

Figure 1 displays all of the country pairs that have a tie-strength of at least 50: i.e., based on the estimated figures, there are at least 50 businesses from the origin country that incorporate a company in the target country.¹⁸ The direction of the arrows indicates which country is the origin and which is the target country. The network analysis program was also instructed to shift the position of countries according to the strength of their relationships using the technique of ‘spring embedding’. The figure shows that the UK is the centre of this mobility network. Many of the other close connections match geographic and linguistic similarities (e.g., Cyprus and Greece; the Czech Republic and Slovakia; Slovenia and Croatia; Sweden, Estonia, Latvia and Lithuania).

¹⁸ Based on the scheme of the UN Statistics Division (<http://unstats.un.org/unsd/methods/m49/m49regin.htm>), the colours of the nodes indicate the geographic classification into Eastern, Northern, Southern and Western European countries.

Table 3: Clusters of legal systems based on foreign incorporations

Clusters	Countries									
2 ($r^2=0.053$)	AT BG CZ FR DE HU IE IT NL PL PT					BE HR CY DK EE FI EL LV LT LU MT SI SE				
3 ($r^2=0.101$)	AT BE CY CZ EL HU LU			HR DK EE FI LV LT MT SE				BG FR DE IE IT NL PL PT		
4 ($r^2=0.146$)	AT BE CZ DE		DK EE FI LV LT			BG FR IE IT PL RO ES			HR CY EL MT PT SI	
5 ($r^2=0.190$)	AT HR CZ		EE FI LV		FR DE IE IT PL		BG CY DK EL NL		BE LU MT PT ES	
6 ($r^2=0.232$)	FR IE IT		CZ HU SK		EE FI LV		BG HR CY		AT BE DE LU	
7 ($r^2=0.271$)	FR IE IT		DK PT ES		EE FI		BG CY		HR	
8 ($r^2=0.308$)	IE IT PL		CZ HU		BE DE		FR PT		BG CY	
9 ($r^2=0.346$)	HR		EE FI		IE IT PL		DK LT		FR PT	
10 ($r^2=0.375$)	EE FI		HR		LT		BE		IE IT PL	

Note: calculations based on network of foreign incorporations (see Figure 1, above); this tables uses the official EU abbreviations (as available at <http://publications.europa.eu/code/en/en-370100.htm>) for the names of the Member States.

The closeness, according to these network data, can also be established more formally. Network analysis provides various tools to identify community structures (Ferligoj et al., 2011). Some of those tools rely on binary data, but for a valued network – such as the current one – it is preferable to use tools that consider the full information in the dataset. One such method is to calculate ‘optimisation clusters’. This refers to a formal method that ‘optimises a cost function which measures the total distance or similarity within classes for a proximity matrix’.¹⁹

Optimisation clusters require that the researcher specifies in advance how many clusters shall be created. In Table 3 this has been done, based on the absolute number of incorporations, for up to ten clusters since, with more clusters, we would often only have clusters of only one or two countries. The table also indicates how well the respective clusters explain the entire dataset (R^2). It can be seen that this number is low for the divisions with few clusters, but that it gradually increases with more clusters being added. For example, the eight-cluster division can then be seen as a plausible one, consisting of the following clusters (in the order from the table): a mixed one, an Eastern European one, a Western European one, a South-West and a South-East European one, a Central European one, and two mainly Nordic-Baltic ones.

It is also revealing to ‘track’ the position of individual countries throughout the ten clusters. The following groups of countries are always in the same respective cluster: the Czech Republic, Slovakia, and Hungary; Finland, Estonia and Latvia; Poland, Romania and Italy; the UK and Ireland; Cyprus and Greece; and Belgium and Luxembourg. These groups may

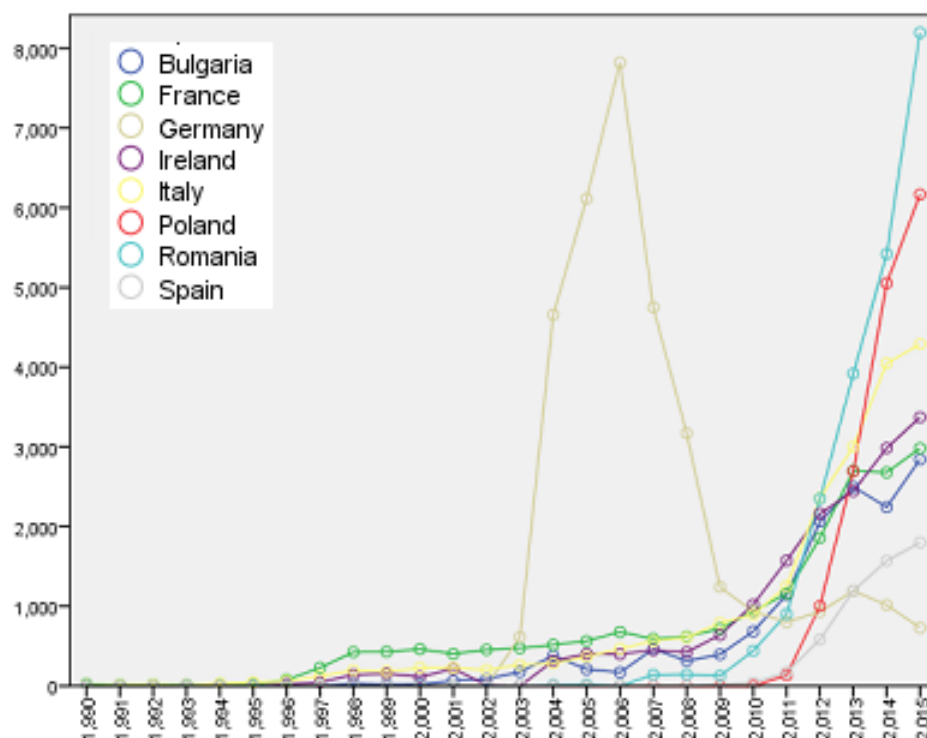
¹⁹ Definition at www.analytictech.com/ucinet/help/2cvtid.htm.

be seen as intuitive ones as they are those of neighbouring countries with further linguistic, social and economic similarities (a point further evaluated in the regression analysis, 4, below). For the purposes of this paper, however, it also shows the rather limited effect of the freedom of establishment of the Treaty, as interpreted by the Court of Justice, on the mobility of companies *across all* Member States.

3.3 Time series of new incorporations in the UK (1990-2015)

As already mentioned (see 2.3, above), reliable time-series data about incorporations are not available across all Member States. The UK data are a rare exception. The following reports the time series for incorporations of foreign-based ltds in the UK (i.e. with all directors being shareholders and nationals from another Member State but deducting the companies established by foreigners living in the UK). As the scale of incorporations differs considerably, the part of Figure 2 reports the eight countries with the highest numbers of foreign incorporations, the second one the next eight countries, and the third one the remaining Member States.

Figure 2: Time series of newly incorporated foreign-based UK ltds 1990-2015



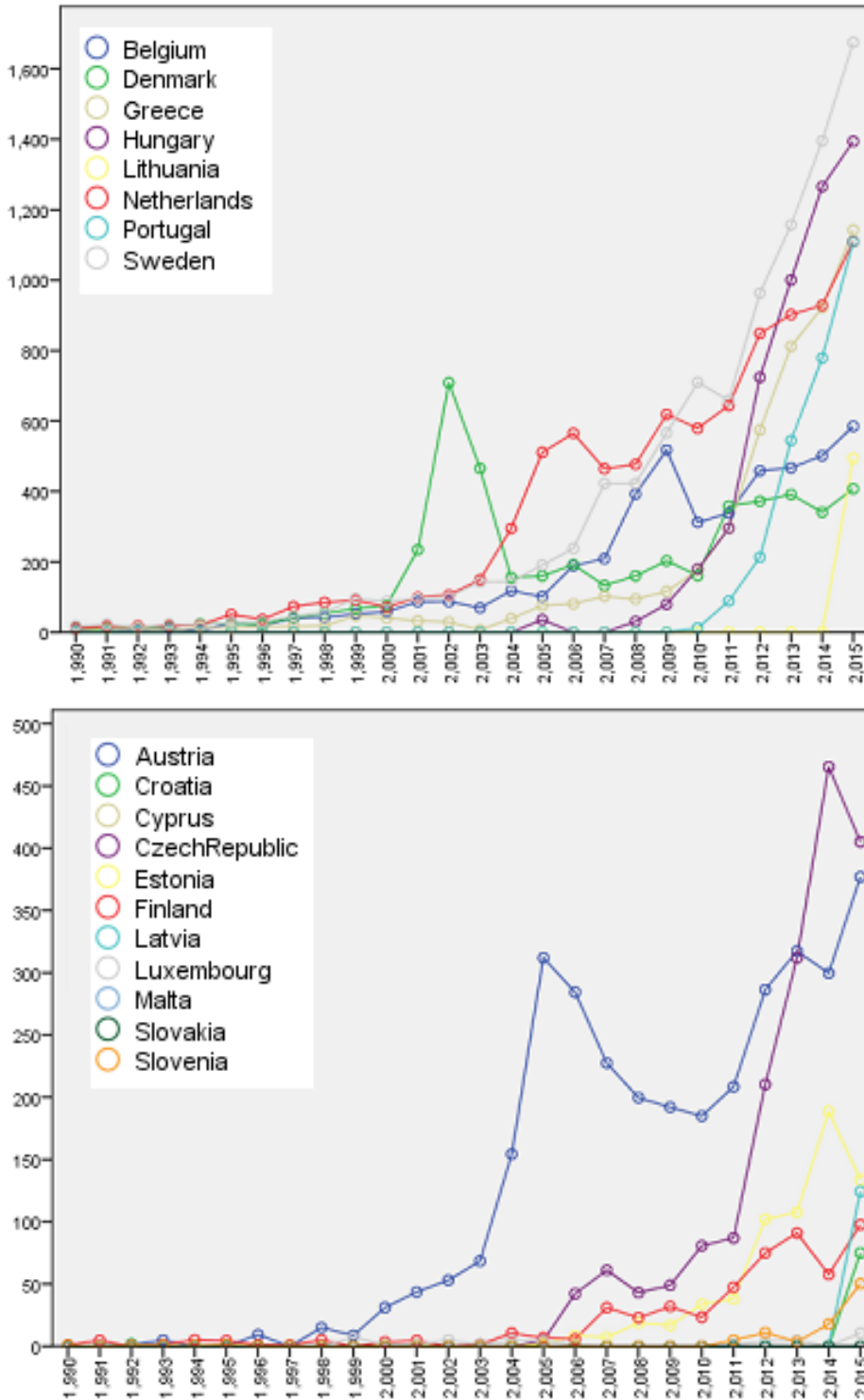


Figure 2 shows that prior to the 2000s most curves were flat, then followed by a rise of foreign ltd incorporations, first, in some of the pre-2004 Member States (notably, Germany, Denmark, the Netherlands and Austria), and in the 2010s across all Member States (both ‘old’ and ‘new’ ones). In some Member States, there has been a rise of UK ltd incorporations but then also a decline, at least for some years. According to Ringe (2013), this happened in Germany in particular, attributed to a reform of the law of private limited companies (MoMiG), but our figures also show some reversals of the general trend for Spain, Denmark,

Belgium and Austria. However, overall, the number of newly incorporated foreign ltds has continued to rise. Thus, we do not confirm Ringe's assessment of a mere 'flash in the pan'.

It can also be seen that most changes happened a number of years after the landmark case of *Centros* (see 2.1, above); it therefore follows that this judgment alone did not give businesses from other Member States the confidence to establish a company in the UK. Similarly, it is noticeable that in the post-2004 Member States the stark rise in UK incorporations only came a few years after their accession to the EU. Thus, this also justifies a cautious assessment of the effectiveness of the case law of the Court of Justice for corporate mobility in the EU.

4. Regression analysis: do differences in conflict of laws rules matter?

4.1 Methodological considerations

In order to assess the relevance of differences in conflicts of laws rules applicable to companies more formally the subsequent regression analysis is based on the cross-sectional data of currently incorporated companies. While time series data can be helpful to establish causal relationships, the aforementioned limitations of data availability mean that only the cross-sectional data enable us to analyse the relevance of differences in conflict of laws rules across all Member States. Likewise, it is not possible to analyse differences at the firm level since, for private companies, such information is unavailable on an EU-wide basis (see 2.3, above).

The incorporation data are count data. This indicates a Poisson or negative binomial distribution with a Generalized Linear Model (GLM). In the present case, negative binomial is preferred due to overdispersion, to be precise 'negative binomial parameter estimated via ML' in Stata. We use standard errors clustered by the countries of the commercial register, thus addressing the possibility that our data are correlated within groups of observations sharing the same country.

In all of the subsequent models, we use the original data on companies with all managers from another Member State and the majority of them being shareholders. We then also control for the availability of the relevant data in Orbis and migration to the country of incorporation (see Table 6, below: 'multiplier' and 'migration'). This approach was preferred over the use of the adjusted data (see Table 2, above). The adjustment was based on the assumption that migrants incorporate a company as frequently as the native population. It is also possible, however, that migrants are more likely to incorporate their own companies since it may be difficult for them to find employment in the public sector or local businesses. Thus, the use of migration as an explanatory variable is helpful since it would also capture any higher (or lower) rate of incorporations per capita of the migrant population.

In the regression analysis, we also consider the possible influence of the gaps in the data (see 2.3 and 3.1, above). Thus, in the main analysis we exclude the six countries with the most limited data (below 5%), which are Belgium, Croatia, France, Greece, the Netherlands and Sweden. To check the robustness of the findings, we also run regressions with all countries but the UK, the eleven countries with the most comprehensive data (above 50%), namely Bulgaria, Czech Rep, Denmark, Finland, Germany, Italy, Latvia, Poland, Romania, Slovakia, and the UK, as well as all 28 Member States.

4.2 Explanatory variables

The case law of the Court of Justice has facilitated the incorporation of companies in other Member States (see 2.1, above). Still, there may be ‘remnants’ of the real seat theory in some Member States, which might variously refer to the location of the administrative office or other fact-based criteria, in order to mitigate certain effects of a ‘pure’ incorporation theory.

Table 4: ‘Incorporation theory score’ showing ‘pureness’ of incorporation theory under rules of conflicts of laws (private international law)

Coding	Definition	Countries
1	if a connecting factor based upon the incorporation theory is clearly formulated in legislation or through judge-made law (i.e. in a way that everyone, even non-experts, can grasp it) and no exceptions are provided (i.e. no additional connecting factors based upon the location of a company’s real seat).	Bulgaria, Cyprus, Czech Republic, Finland, Hungary, Ireland, Lithuania, Malta, Netherlands, Slovakia, Sweden, UK
2/3	if (i) the situation that a connecting factor based upon the incorporation theory is clearly formulated but that this criterion is subject to exceptions, or (ii) that legal experts can identify that the country follows a connecting factor based upon the incorporation theory and no exceptions are provided but non-experts are uncertain about this position.	Austria, Belgium, Croatia, Estonia, France, Germany, Italy, Romania, Slovenia, Spain
1/3	as in previous scenario (ii) but exceptions to the incorporation theory clearly exist.	Denmark, Greece, Latvia, Luxembourg
0	scenario where even legal experts cannot identify that the country follows a connecting factor based upon the incorporation theory	Poland, Portugal

We classify the level of ‘pureness’ of the incorporation theory in four categories, as shown in the definitions in Table 4. The two main considerations are, first, whether there are exceptions to the incorporation theory, for example, special rules that deviate from the primary connecting factor of the place of incorporation for some questions of company law (which may be allowed under EU law, see 2.1, above). Secondly, we code whether the incorporation theory is clearly and explicitly formulated in legislation or through judge-made law; thus, this second factor considers whether there is sufficient legal certainty for someone who is not a legal expert, say, a businessperson without legal training, to be confident about the practical feasibility of cross-border corporate mobility in the EU.

In addition, in some Member States, rules of substantive company law contain requirements for companies to establish or maintain a specific connection to the territory of the Member State. The case law of the Court of Justice accepted that this (mere) regulation of domestic companies is compatible with the freedom of establishment (see 2.1, above). Table 5 provides a definition of any such territorial restrictions under substantive company law.

Table 5: ‘Territorial flexibility score’ showing whether substantive company law is free from real seat elements

Coding	Definition	Countries
1	if domestically incorporated companies do not have to have their headquarters or any other fact-based criteria on the domestic territory	Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Finland, Germany, Hungary, Ireland, Italy, Malta, Netherlands, Portugal, Romania, Slovakia, Sweden, UK
½	if domestic companies should have some fact-based connection to the domestic territory but this rule is uncertain	Poland
0	if there is a requirement that companies have to have their headquarters on the domestic territory	Austria, Belgium, Estonia, France, Greece, Latvia, Lithuania, Luxembourg, Slovenia, Spain

Based on these two sets of definitions, and with the information collected in a detailed comparative analysis (Gerner-Beuerle et al., 2016 and 2018b), we coded the laws of the Member States according to the ‘pureness’ of the incorporation theory and the substantive company law being free from territorial real seat elements (see again Tables 4 and 5). Any such restrictions tend to derive from the established position of the domestic laws prior to the case law of the Court of Justice and are therefore exogenous to variations in the prevalence of foreign-based companies today. In detail, it can be seen that some countries follow the same liberal approach for both questions (e.g., the UK, Sweden, Slovakia); however, there are also cases where conflicts of laws and substantive company law have evolved differently, for example, compare Lithuania (which only scores highly in Table 4) and Portugal (which only scores highly in Table 5). As indicated above, there is also the difference that the pureness of incorporation theory reflects the case law of the Court of Justice, while the question of whether substantive company law is free from real seat elements is merely a matter of domestic preferences. Overall, there is therefore only a modest positive correlation between these two variables of 0.37.

The decision to incorporate in a foreign country can also be driven by a number of other factors. For this purpose, we use various control variables reported in Table 6. The main aim is to test whether other characteristics of the country of incorporation may be more important than conflict of laws rules. Further control variables account for the closeness of the country pairs. We also considered that the data on private companies as they exist today are likely to be influenced by both the recent past and the present: while the past is of importance for the incorporation decision, the present is also relevant since companies that still exist today make the implicit choice to keep the present legal form.

Table 6: Description of explanatory variables

Name	Description (for <i>country of incorporation</i> unless stated otherwise)	Source
<i>Incorporation theory score</i>	‘Pureness’ of incorporation theory under rules of conflicts of laws (private international law)	Own research, see Table 4 and accompanying text

<i>Territorial flexibility score</i>	Substantive company law free from real seat elements	Own research, see Table 5 and accompanying text
<i>Incorporation costs</i>	Indicator that measures minimum capital, costs, procedures and time for establishing a company	http://www.doingbusiness.org/data/explore-topics/starting-a-business
<i>Corporate tax rates</i>	Corporate tax rate	https://home.kpmg.com/xx/en/home/services/tax/tax-tools-and-resources/tax-rates-online/corporate-tax-rates-table.html
<i>Rule of law</i>	Rule of Law score based on World Governance Indicators	http://info.worldbank.org/governance/wgi/index.aspx#home
<i>Legal origin</i>	Dummy variable for countries of the same legal origin (English, French, German and Nordic)	La Porta et al., 2008, data available at http://scholar.harvard.edu/shleifer/publications/economic-consequences-legal-origins
<i>Official language</i>	Official language of country pairs	http://www.cepii.fr/CEPII/en/publications/wp/abstract.asp?NoDoc=3877
<i>Geographic distance</i>	Distances between the cities constituting the economic centres between country pairs, weighted by share of country's population	as previous
<i>Population</i>	Population (in million)	http://ec.europa.eu/eurostat/statistics-explained/index.php/Population_and_population_change_statistics
<i>Companies per capita</i>	Limited companies (as reported in Orbis) per capita	Own calculations, see 3.1 above
<i>Multiplier</i>	Factor correcting for variations in data availability	Own calculations, see 3.1 above
<i>Migration</i>	Number of international migrants	http://www.un.org/en/development/desa/population/migration/data/estimates2/estimates15.shtml
<i>Manager country score</i>	'Purity' of incorporation theory in the country of the managers	Own research, see Table 4 and accompanying text
<i>Country dummies</i>	Dummy variables for each country of the managers (with the UK as the reference category)	

Apart from conflict of laws rules, it could rather be low incorporation costs, low corporate tax rates and a good rule of law rating of the country of incorporation that attract foreign businesses. With respect to the possible relevance of corporate tax law, it is worth noting that the concept of tax residence diverges from the mere formal registered seat and is normally a fact-intensive criterion, which, for instance, considers the place of a company's business or its headquarter (see Maisto, 2009). Thus, such a variable is unlikely to be significant for companies that only have a 'letterbox' in the incorporation country while doing business in another Member State. However, it is likely to be relevant for companies that have some physical connection to the country of incorporation – with the consequence that the tax

authorities apply domestic tax law, despite the fact that the company's managers are based abroad.²⁰ Such scenarios are within the scope of the present analysis (see 3.2, above).

More generally, it can be speculated that businesses may not choose a legal system by way of incorporation that is too unfamiliar to them. Thus, the variable on whether countries belong to the same 'legal origin' aims to account for this factor, using the categories of English, French, German or Nordic legal origin for all European countries, as reported in the most recent studies of this line of research (La Porta et al., 2008; Djankov et al., 2003 also had the category of 'socialist legal origin'). The use of this variable should not be regarded as an endorsement of the alleged importance of 'legal origins'. Indeed, it is doubtful whether these Western 'legal origins' can be seen as globally valid categories (Siems, 2016). However, given the mere European scope of this paper, there could be still some relevance of differences in the historical 'legal origins' between European countries.

Of course, not only legal similarities may play a role. Language could matter since registration of a company typically requires the use of the official language of the respective country. It can also be relevant as far as the choice of a place of incorporation may mean that the founders may become involved in legal disputes in the target country. Geography is likely to matter for businesses that operate in a border region – which can also mean that the main place of business could be in the neighbouring country. The population of the incorporation country could also be relevant. In the US, the popularity of the small state of Delaware is partly due to the fact that Delaware can focus on being attractive to incorporations from other states while more populous states have to balance more diverse interests. But the reverse is also possible: countries with a larger population being considered as a more secure choice for incorporating a company. This variable also controls for the effect that some of the companies in question may do some business in their country of incorporation and may therefore benefit from the larger market of this country.

The control variable of 'companies per capita' may capture a variety of factors. Some of those factors overlap with reasons already mentioned, such as costs of incorporation, but this variable also tests whether, more generally, the form of the private limited company is popular in the country of incorporation. To some extent, this variable may also capture the question whether countries attract more companies if they give preference to either the interests of shareholders or directors (for this topic see e.g. Fluck and Mayer, 2005). In addition, it should be noted that the principal-agent problems of corporate governance and the corresponding question about the strength of shareholder rights²¹ are mainly topics of large listed companies with at least some separation between ownership and control, whereas the present study is concerned with small private companies in which the majority of the managers are identical with the companies' shareholders.

Finally, as regards the country of incorporation, the control variables 'multiplier' and 'migration' are necessary since the regression analysis uses the original data of companies as available in Orbis (see already 4.1, above). We also checked whether there may be problems of multicollinearity; yet, none of the variables have a correlation of more than |0.5|.

²⁰ Or where, in practice, tax authorities are not fully informed as regards the factual connections of the company to another country, or are lenient in the way they apply the law as regards this connection.

²¹ For one of the quantitative datasets, coding the law of public companies, see www.cbr.cam.ac.uk/datasets/.

With respect to the country of the managers,²² we also consider the respective conflict of laws rules of this country. While the case law of the Court of Justice places restrictions on Member States' rules in so far as they apply vis-à-vis *foreign* companies, a number of ambiguities remain (see 2.1, above). These ambiguities often stem from differences between Member States as to the exact scope of company law, and its boundaries with other areas of law, and often primarily affect foreign-incorporated companies (for details see Gerner-Beuerle and Schuster, 2014). The existence of a 'pure' incorporation theory may thus not be the main concern for businesses seeking incorporation in a Member State, as long as any remnants of the real seat theory only affect companies incorporated elsewhere. However, beyond just measuring the closeness of a country's conflict of laws rules to the incorporation theory, the incorporation theory score may well proxy for other features of a national legal system.²³ Where a national company law is designed to give maximum freedom to shareholders in the internal organisation of private companies, the choice of a foreign company law for doing business in that Member State is unlikely to be regarded as problematic by the legislature in the real seat state: after all, most features of the foreign company law so chosen would also have been available under the company law of the real seat state. Since the real seat doctrine's most important effect is to assert regulatory sovereignty over all business activity carried out in a particular jurisdiction, thereby reducing or negating choice of law, it may be expected that the original choice of that approach and the preservation of some of its elements post-*Centros* correlates with the existence of mandatory rules of substantive company law which shareholders would not choose voluntarily. Thus, *prima facie* one may expect that the conflict of laws rules in both the country of incorporation and in the real seat state might influence the incorporation decision.

Beyond these specific considerations, that there could also be many unobservable reasons that may determine why people from a particular country may want to incorporate a private company in the first place. For example, this may be due to country differences in innovation or in bankruptcy, labour and social security laws. It is beyond the scope of this paper's focus on the relevant factors in the country of incorporation to examine details of these laws. Thus, dummy variables for the country of the managers are included in order to consider any of those factors. While this reduces the degrees of freedom by up to 27 (if all countries are included, see the next section), the number of observations remains well above the recommendation to have at least ten observations per parameter for categorical dependent variables such as count data (Long and Freese, 2001: 65; generally also Harrell, 2015: 72).

4.3 *Regression results*

The first three regression outputs report, in Table 7, the results excluding the six countries with the most limited data (see 4.1, above). They are therefore based on 22 (place of incorporation) x 27 (place of business) = 594 observations.

²² Based on their nationality but controlling for migration through the corresponding variable.

²³ For instance, historic reliance on the real seat doctrine as well as preservation, post-*Centros*, of some elements of that doctrine in a Member State's conflict of laws rules may be correlated with company law rules aimed at protecting non-shareholder constituencies.

Table 7: Negative binomial regressions (1) – dependent variable: number of companies with all managers being citizens of another Member State and more than half of those managers also being the shareholders of the company

<i>Independent variables:</i>	Model (1)		Model (2)		Model (3)		
	Coefficients and significance		IRR	Coefficients and significance		Coefficients and significance	
Incorporation theory score	2.080279	**	8.006701	1.469544	*	2.080279	**
Territorial flexibility score	-0.81764		0.441472	-0.79025		-0.81764	
Costs of incorporation	0.104062	**	1.10967	0.083438	*	0.104062	**
Corporate tax rate	-0.07587		0.926937	-0.0331		-0.07587	
Rule of law	-0.60188		0.547779	-0.72458		-0.60188	
Legal origin	0.763907	**	2.146644	0.750229	**	0.763907	**
Official language	1.607175	**	4.9887	1.242886	*	1.607175	**
Geographic distance	-0.00135	**	0.998655	-0.00144	**	-0.00135	**
Population (mn)	0.061998	**	1.06396	0.061998	**	0.061998	**
Companies per capita				13.93519	*		
Multiplicator	-0.14319	*	0.866586	-0.31475	**	-0.14319	*
Migrants	3.40E-06		1.000003	3.63E-06		3.4E-06	
Manager country score						1.872318	
Country dummies	#			#		#	
Constant	-0.44684		0.639647	0.630225			
Log pseudolikelihood	-2825.45			-2802.81		-2825.45	
	n=594			n=594		n=594	

*Note: ** significant at 1% level, * at 5% level;
dummy variables for the country of the managers (individual values not shown)*

These results show that, as far as the legal variables are concerned, the incorporation theory score, the costs of incorporation and legal origin are consistently statistically significant, but not the variables on the territorial flexibility score, corporate tax law and the rule of law.

The lack of significance of the territorial flexibility score is not implausible as it is doubtful how important any such restriction of substantive company law is in practice. It is not clear how far any requirement of a fact-based connection to the territory can be checked by the commercial registers – or, indeed, why registers would have an incentive to do so. For example, in Estonia, which we coded as having such a requirement, the country report of the underlying project states that in reality ‘there is no effective mechanism that would restrict the foreign-administrated companies to be registered in Estonia’ (Hoffmann in Gerner-Beuerle et al., 2018b) At a practical level, this specific insight is also confirmed by the fact that there are various service providers that offer quick and uncomplicated incorporation in Estonia to foreign businesses (see 3.2, above).

The variables about official language and geography are significant with the expected signs. In a further model (not reported here), we also examined the role of the spoken language, but it was found to be less significant than the official language. The variable on population shows that, in the EU, larger countries have an advantage in attracting foreign incorporations. Model (2) includes the variable on ‘companies per capita’ and confirms that other factors

may play a role for the incorporation decision. However, the incorporating score also retains its significance; thus, it is not simply a proxy for such other differences. Model (3) adds the incorporation theory score of the country of the managers. It is insignificant, which is likely to be the result of the complex factors that account for the choices managers make when incorporating a private company.

In further regressions, not reported here, we also checked a number of other combinations and variations of the variables (e.g., dropping variables, such as the ones on substantive law or legal origin; dropping the incorporation theory score for the country of incorporation but not the country of the managers) without changes to the results. As additional robustness checks we scaled the dependent variable per capita and per log GDP and run corresponding regressions using a gamma GLM with log link, applied to model (1): here too the results are unchanged for the main variables of interest and there are only minor changes for some of the additional control variables (namely that the multiplier loses its significance in the first variation and that official language drops to a 5% significance level in the second one).

Table 8: Interpretation of coefficients in model (1) of Table 7, above

Independent variables:	Coefficients and significance		Change per 1 Unit Increase (IRR)	Change per Standard Deviation
Incorporation theory score	2.080279	**	700.67%	213.79%
Territorial flexibility score	-0.8176418		-55.85%	-26.54%
Costs of incorporation	0.1040623	**	10.97%	68.23%
Corporate tax rate	-0.0758701		-7.31%	-50.42%
Rule of law	-0.6018829		-45.22%	-27.66%
Legal origin	0.7639068	**	114.66%	52.92%
Official language	1.607175	**	398.87%	75.38%
Geographic distance	-0.0013462	**	-0.13%	-97.55%
Population	6.20E-08	**	0.00%	143.22%
Multiplier	-0.143194	*	-13.34%	-127.28%
Migrants	3.40E-06		0.00%	31.68%

The coefficients of count data regressions do not lend themselves to intuitive interpretation as easily as OLS models. However, it is possible to say that a coefficient of x means that a change in the respective independent variable of 1 will result in a multiplication of the predicted count by e^x (see Winkelmann 2008: 70; Coxe et al. 2009: 124). Table 7 reports these ‘incidence rate ratios’ (IRR) for model (1) and Table 8 provides further ways to interpret the coefficients of this model. The column ‘change per 1 unit increase’ in Table 8 enables the calculation of an effect of changes to this variable, holding the other variables constant. The next column follows the same approach but examines the percentage impact of a one standard deviation increase. This is the best way to compare the effects of the individual variables. It can be seen that the incorporation theory score plays the largest role, followed by the population, geographic distance, official language, costs of incorporation and legal origin.

Table 9: Negative binomial regressions (2) – dependent variable: as Table 7

<i>Independent variables:</i>	Model (4)		Model (5)		Model (6)	
	Coefficients and significance		Coefficients and significance		Coefficients and significance	
Incorporation theory score	3.382553	**	2.104793	**	1.578953	**
Territorial flexibility score	-0.95515		-0.65626		-0.69515	
Costs of incorporation	0.10797	**	0.101664	**	0.063953	*
Corporate tax rate	-0.29792	**	-0.0836		-0.07589	*
Rule of law	0.139134		-0.44879		-0.73922	*
Legal origin	0.706026	*	0.749897	**	0.762654	**
Official language	0.400527		1.388102	**	1.171581	**
Geographic distance	-0.00158	**	-0.00138	**	-0.0015	**
Population	8.04E-08	**	5.75E-08	**	3.60E-08	**
Multiplicator	0.685718		-0.16251	**	-0.13767	**
Migrants	7.79E-07		3.37E-06	*	3.22E-06	*
Country dummies	#		#		#	
Constant	0.833491		-0.133796		3.916033	
Log pseudolikelihood	-1714.925		-3172.2658		-2865.7440	
	n=297		n=756		n=729	

*Note: ** significant at 1% level, * at 5% level;
dummy variables for the country of the managers (individual values not shown)*

To further check the robustness of the findings, Table 9 reports the regression results for the specification of model (1) for modified country groups. Model (4) examines the eleven countries with the most comprehensive data and model (5) does so for all 28 Member States (even the six countries with the very limited data). Model (6) excludes the UK as a possible outlier given that more than 50% of the foreign incorporations are registered in the UK (see 3.1, above). It should be noted that this is a hypothetical scenario since in an EU without the UK, it may well have been the case that a Member State with a similar law (such as Ireland or Cyprus, also given the significance of the ‘legal origins’ variable in all of the models) would have taken the position of the UK as a popular target destination.²⁴

The main results are unchanged in all of the three models. In model (4), the lower significance level for some of the variables is likely to be due to the lower number of observations. In models (4) and (6) it is however also interesting to note that the variable on the corporate tax rate is now statistically significant, with the expected negative sign. In addition, in model (6) the negative significance of the rule of law variable is likely to be due to the popularity of some of the CEE countries as popular target destinations (see Table 2 in 3.1, above).

It can be speculated that the lower rule of law score of a country may not always be against the interest of companies since it may go hand in hand with lighter requirements in terms of doing business. In this sense, model (4) may indicate a form of ‘market segmentation’, similar to the situation in the US (Barzusa, 2012; for Europe see also Zorzi, 2017): businesses

²⁴ Indeed, it can now already be seen that, following the Brexit referendum, some of the incorporation agents promote Irish companies as an alternative to UK ltds, see, eg, <https://go-ahead.de/>; www.limited-kaufen.com/.

which only aim at reducing the initial incorporation costs do so in the UK, while those which also aim at reducing taxation (and have a general preference for laxer laws) incorporate in other Member States.

The importance of differences in conflict of laws rules has also been confirmed in a corresponding empirical survey of lawyers from all Member States (Gerner-Beuerle et al., 2016: 65-99). Its main finding is that, despite the case law of the Court of Justice, there are significant practical obstacles to corporate mobility in Europe. This shows in many of the survey answers and holds true for both the aggregate level of the responses and the analyses of the responses for particular groups of respondents. It also correlates with the fact that most of the survey respondents expressed support for EU harmonisation of conflict of laws rules applicable to companies.

5. Conclusion

The empirical research about corporate mobility in the EU has so far been limited in two respects: it has been focused on the analysis of foreign-based companies in the UK and it has mainly been concerned with differences in the costs of incorporation. This paper had the aim to fill these gaps.

In the descriptive statistics, based on data from all EU Member States, we confirmed that the UK is the most popular target destination. To a lesser extent, foreign incorporations also take place in other Member States. In particular, within Central and Eastern Europe Estonia, Romania, Slovakia, and the Czech Republic are popular target destinations. However, the network analysis of these data also showed that the foreign incorporations typically happen between neighbouring countries with further linguistic, social and economic similarities; thus, the effect of the freedom of establishment on the mobility of companies across all Member States is still rather limited. The time series data of new incorporations in the UK also points towards the limited effect of the case law of the Court of Justice. Finally, the regression analysis suggests that decisions about domestic or foreign incorporations are not merely a result of the differences in substantive company law, in particular the costs of incorporation. Rather, we found that conflict of laws rules plays a key role: countries that have a clear-cut version of the ‘incorporation theory’ attract more incorporations than countries which have retained elements of the ‘real seat theory’.

These findings can have important policy implications. They show that the case law of the Court of Justice has not made all differences in the conflicts of laws rules applicable to companies obsolete. Thus, a possible reading of these findings is that harmonisation of those rules may be recommended. The significant relationship between the ‘purity’ of the incorporation theory and the use of a Member State’s companies by foreign incorporators also shows that EU harmonisation based on the incorporation theory would facilitate corporate mobility as one of the relevant policy considerations in this area (notwithstanding possible other considerations, see Gerner-Beuerle et al., 2016: 275-351).

Following the result of the UK’s ‘Brexit referendum’ from June 2016, it is possible that, after the eventual departure of the UK from the EU, the dynamics will change (see also Armour et al., 2017). For example, it could be suggested that other Member States will aim to fill the gap that will be left by the UK as the ‘European Delaware’. However, it is also possible that the UK keeps strong ties with the EU: in the (increasingly unlikely) event the UK agrees

arrangements similar to those in place between the EU and Switzerland, there will be no necessary change to the position of foreign companies incorporated in the UK (and vice versa). Yet, even if the UK decided for a looser arrangement, it may be the case that a future free trade arrangement would also cover the free movement of companies (cf. Sørensen, 2016). Thus, while the present paper certainly is not be the final word on matters of corporate mobility in the EU, it points towards the continuing need for empirically sound law-making in this field.

Acknowledgments

We gratefully acknowledge funding from the EU Commission (DG Justice) for the underlying Study on the Law Applicable to Companies 2016. We are also grateful for comments received in the course of presentations of earlier versions of this work at the Conference on Empirical Legal Studies in Europe (CELSE) in Amsterdam, the Annual Conference of the European Association of Law and Economics (EALE) in Bologna, the Annual Conference of the International Corporate Governance Society (ICGS) in Rome, the 6th CECL Conference on ‘Company Law Reform in Central and Eastern Europe’ in Warsaw, SOAS University of London, the Law & Economics Workshop at King’s College London, the Free University of Bozen-Bolzano, the University of Modena and Reggio Emilia, HEC Paris and meetings with the project’s steering committee in London. The remaining errors are entirely our responsibility.

Bibliography

Armour, J., Fleischer, H., Knapp, V., Winner, M. 2017. ‘Brexit and Corporate Citizenship’, *European Business Organization Law Review* 18: 225-249.

Armour, J. 2005. ‘Who Should Make Corporate Law? EC Legislation versus Regulatory Competition’, *Current Legal Problems* 58: 369-413.

Barzuza, M 2012. ‘Market Segmentation: The Rise of Nevada as a Liability-Free Jurisdiction’, *Virginia Law Review* 98: 935-1000.

Bech-Bruun and Lexidale 2013, Study on the Application of the Cross-Border Mergers Directive, prepared by for EU Commission, DG MARKT.

Becht, M., Mayer, C., Wagner, H. 2008. ‘Where Do Firms Incorporate? Deregulation and the Cost of Entry’, *Journal of Corporate Finance* 14: 241-256.

Becht, M., Enriques, L., Korom, V.E. 2009. ‘Centros and the Cost of Branching’, *Journal of Corporate Law Studies* 9: 171-199.

Braun, R., Eidenmüller, H., Engert, A., Hornuf, L. 2013. ‘Does Charter Competition Foster Entrepreneurship? A Difference-in-Difference Approach to European Company Law Reforms’, *Journal of Common Market Studies* 51: 399-415.

Coxe, S., West S.G., Aiken L.S. 2009. ‘The Analysis of Count Data: A Gentle Introduction to Poisson Regression and Its Alternatives’, *Journal of Personality Assessment* 91: 121-136.

- Dammann, J.C., Schündeln, M. 2013. 'Where Are Limited Liability Companies Formed? An Empirical Analysis', *Journal of Law and Economics* 55: 741-791.
- Djankov, S., La Porta, R., Lopez-de-Silanes, F., Shleifer, A. 2003. 'Courts', *Quarterly Journal of Economics*, 118: 453-517.
- Eidenmüller, H., Engert, A., Hornuf, L. 2010. 'How Does the Market React to the Societas Europaea?', *European Business Organization Law Review* 11: 35-50.
- Eurodad 2015. *Fifty Shades of Tax Dodging. The EU's Role in Supporting an Unjust Global Tax System*, Brussels: Eurodad.
- Ferligoj, A., Doreian, P., Batagelj, V. 2011. 'Positions and Roles', in J. Scott and P.J. Carrington (eds.) *The SAGE Handbook of Social Network Analysis*, London: Sage.
- Fluck Z., Mayer, C. 2005. 'Race to the Top or Bottom? Corporate Governance, Freedom of Reincorporation and Competition in Law', *Annals of Finance* 1: 349-378.
- Gerner-Beuerle, C., Schuster, E. 2014. 'The Costs of Separation: Conflicts in Company and Insolvency Law in Europe', *Journal of Corporate Law Studies* 14: 287-332.
- Gerner Beuerle. C., Mucciarelli, F., Schuster, E., Siems, M. 2016. *Study on the Law Applicable to Companies: Final Report*, Report for EU Commission, DG Justice.
- Gerner Beuerle. C., Mucciarelli, F., Schuster, E., Siems, M. 2018a. 'Cross-border Reincorporations in the European Union: The Case for Comprehensive Harmonisation', *Journal of Corporate Law Studies* 18: forthcoming.
- Gerner Beuerle. C., Mucciarelli, F., Schuster, E., Siems, M. (eds.) 2018. *The Private International Law of Companies in Europe*, Munich and Oxford: C.H. Beck/Nomos/Hart Publishing, forthcoming.
- Harrell, F.E. 2015. *Regression Modeling Strategies With Applications to Linear Models, Logistic and Ordinal Regression, and Survival Analysis*, 2nd edn, Cham: Springer.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A. 2008. 'The Economic Consequences of Legal Origins', *Journal of Economic Literature* 46: 285-332.
- Laamanen, T., Simula, T., Torstila S. 2012. 'Cross-Border Relocations of Headquarters in Europe', *Journal of International Business Studies* 43: 187-210.
- Long, J. S, Freese, J. 2001. *Regression Models for Categorical Dependent Variables Using Stata*, College Station: Stata Press.
- Maisto, G. (ed.) 2009. *Residence of Companies Under Tax Treaties and EC Law*, Amsterdam: IBFD.
- Mucciarelli, F. 2012. 'The Function of Corporate Law and the Effects of Reincorporations in the U.S. and the E.U.', *Tulane Journal of International and Comparative Law* 20: 421-468.

- Muller, P., Devnani, S., Ladher, R., Ramada, P. 2013. European Added Value Assessment on a Directive on the cross-border transfer of company seats (14th Company Law Directive), Annex II: Economic and Social Effects of the Requested Legislative Instrument - Research paper by London Economics, Brussels.
- Ringe, W.G. 2013. 'Corporate Mobility in the European Union – a Flash in the Pan? An Empirical Study on the Success of Lawmaking and Regulatory Competition', *European Company and Financial Law Review* 10: 230-267.
- Sick, S. 2015. 'Der deutschen Mitbestimmung entzogen: Unternehmen mit ausländischer Rechtsform nehmen zu' Mitbestimmungsförderung, Report February 2015, available at www.boeckler.de/pdf/p_mbf_report_2015_8.pdf.
- Siems, M. 2008. *Convergence in Shareholder Law*, Cambridge: Cambridge University Press.
- Siems, M. 2016. 'Varieties of Legal Systems: Towards a New Global Taxonomy', *Journal of Institutional Economics* 12: 579-602.
- Sørensen, K.E. 2015 'The Fight Against Letterbox Companies in the Internal Market', *Common Market Law Review* 52: 85-118.
- Sørensen, K.E. 2016. 'Free Movement of Companies under the New EU Free Trade Agreements', *European Company Law* 13: 46-55.
- Teichmann, C., Knaier, R. 2015. 'Experiences with the Competition of Regulators – a German Perspective', in A.J. Viera González and C. Teichmann (eds.), *Private Company Law reform in Europe: The Race for Flexibility*, Cizur Menor: Aranzadi, Thomson Reuters.
- UNCTAD 2015. *World Investment Report 2015: Reforming International Investment Governance*, New York: UN.
- Ventoruzzo, M., Conac, P.-H., Goto, G., Mock, S., Notari, M., Reisberg, A. 2015. *Comparative Corporate Law*, St. Paul, MN: West Academic.
- Winkelmann, R. 2008. *Econometric Analysis of Count Data*, 5th ed., Berlin, Springer.
- Zorzi, A. 2017. 'A European Nevada? Bad Enforcement as an Edge in State Competition for Incorporations', *European Business Organization Law Review* 18: 251-272.