ANDRÁSSY UNIVERSITÄT BUDAPEST

ANDRÁSSY WORKING PAPER SERIES

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Legal Form and Internationalization of Small and Medium-Sized Enterprises in the EU

2014

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Abstract

Limited liability legal form plays an important role in supporting entrepreneurial activities. This paper tests empirically the relationship between legal form and internationalization of small and medium-sized enterprises (SMEs). Data are obtained from a representative, population weighted, sample of 9,480 European SMEs, carried out by the EU Commission in 2009. For some additional country-specific variables we use data from Eurostat and the World Bank. To test our hypotheses, we perform logistic regressions. Our findings confirm the positive impact of limited liability legal form on internationalization, independent of firm size effects. This also holds for different modes of internationalization (import, export, technological cooperation, being part of a subcontractor relationship, foreign direct investments). In addition, we control for company specific, market-related factors and institutional factors. Our findings confirm the importance of providing low cost limited liability legal forms for SMEs and of supranational legal innovations like the European Private Company.

Topics: Corporate Law and Regulation

JEL Classification: F2, K2, L2

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Legal Form and Internationalization
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1. Introduction

Promoting the internationalization of small and medium-sized enterprises (SMEs) plays a major role in the EU Commission's policy regarding SMEs for some years now.[1] To this end the *Small Business Act* proposed *inter alia* the introduction of a common, EU-wide applicable private limited legal form, the *European Private Company* (also known as *Societas Privata Europaea*) (EU Commission 2008; Eckardt 2012a; Eckardt/Kerber 2014). It should offer an inexpensive, flexible and easy to adopt uniform legal form for SMEs to assist them in doing business internationally. Although the draft directive of the European Private Company has yet not found the necessary unanimous approval, it shows the great importance placed by the Commission on corporate law, and here in particularly on limited liability legal form, as an instrument to promote the internationalization of SMEs.

SMEs provide not only for the overwhelming majority of companies, but also for two thirds of the jobs in the EU-27. Moreover they account also for nearly 60% of the gross value added. This holds despite the on-going crisis in many EU member states (Wymenga et al. 2012). SMEs are important in regard to employment and job creation as well as innovation. Thus, they are vital for overall economic growth. Since the 1980s SMEs also became more and more integrated in the international division of labour (OECD 1997). SMEs with international business show a significantly better performance in regard to turnover growth, job creation and to innovation related activities (EU Commission 2010a, 54ff.). There are both push and pull factors for SMEs to internationalize, falling into the following categories: growth motives, knowledge-related motives, network/ social ties and supply chain links, domestic/ regional market drivers (OECD 2009, 12ff.).

SMEs differ significantly from large enterprises. This also affects them when doing business internationally. On the one hand small staff size usually allows for more flexibility in regard to customer preferences and changing market conditions as well as for a closer relationship between owner/ management and employees, thus mitigating principal-agent problems. On the other hand this leads to a lower degree of specialisation and division of labour within the company and to limited resources available, be it human or financial capital. The resulting problems also show in the main barriers to internationalization as perceived by SMEs: capital shortage, limited information on market conditions and lack of managerial resources (OECD 2009, 9ff.,

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EU Commission 2010a, 57ff., Svetlicic/Jaklic/Burger 2007).

To this end the Small Business Act proposed a number of measures to support SMEs in general as well as in regard to internationalization. Limited liability legal form plays an important role, notwithstanding that competencies regarding corporate law are still mainly with the member states. Legal form consists of a set of complex legal rules that provide the framework for governing both the internal and external relationships of a company. No matter what type of business activity, the partners involved in it always act with having adopted a certain legal form. One main characteristic of legal form is whether limited liability applies or not. While large enterprises are mostly private or public limited liability companies, a large share of SMEs are established under a legal form with unlimited liability. In the EU-27 about one in five SMEs establishes as sole proprietor, and one in seven as a partnership (EU Commission 2010ab, see *Table 3*).

In general limited liability is seen as promoting riskier behaviour than unlimited liability, since the owners of a firm do not have to bear the full risk in case of a business failure, thus shielding their private assets from their business assets (Kraakman et al. 2009, see section 2). Because internationalization involves higher risks due to the additional uncertainties of less well known foreign markets, limited liability legal form should be favourable to it. So far, however, there is no empirical analysis explicitly dealing with the impact of limited liability legal form on SME internationalization, although the literature on SME internationalization analyzes the impact of a variety of different institutions on the internationalization of SMEs (see section 2). Therefore, this paper adds to the literature by providing an econometric analysis as to this relationship.[2]

We analyze whether SMEs with a limited liability legal form show a higher probability to internationalize than companies in the legal form of sole proprietorship or partnership, which are of unlimited liability. In addition, we investigate whether there is also a relationship between the legal form adopted and the mode of a SME's international business activities. We test empirically whether differences in legal form translate to differences in SMEs' engagement in international trade via import, export, by technical cooperation, by subcontractor relations or by foreign direct investments.[3] We use data from a representative, population weighted, sample of 9,480 European SMEs, carried out by the EU Commission in 2009 (EU Commission 2010a). For some additional country-specific variables we use data from Eurostat and the World Bank.

Our findings confirm the hypothesized positive relationship between limited liability

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[2] For an analysis of this question that focuses on countries encompassed by the new EU Strategy for the Danube Region, see Eckardt (2012b).
[3] Note that the data available do not allow making any statements as to the motives of companies for choosing a particular legal form.

legal status and internationalization. This holds generally for SMEs, even when controlling for an interaction between legal form and firm size. Moreover, our findings show a significantly lower probability for sole proprietors and partnerships in contrast to private limited enterprises to undertake import or export activities. Since 30%, resp. 25% of all SMEs engage in these forms of internationalization, SMEs would benefit from efforts by the EU to provide low cost and easy to adopt limited liability legal forms throughout the EU.

The remainder of this paper is structured as follows. After a short overview of the relevant literature in section 2, we derive hypotheses on the relationship between legal form and SME internationalization. In addition we control for the main company-specific, market-related and institutional factors of internationalization. Data and methods are described in section 3. Section 4 presents descriptive statistics, while our multivariate analysis is discussed in section 5. Section 6 concludes and discusses the limitations and implications of our analysis.

2. Literature Review and Hypotheses

There are two main strands of literature dealing with the questions addressed in this paper: the literature on SME internationalization and the literature on corporate law and agency relations.

Although the literature on SME internationalization deals with different institutional aspects, it does neither explicitly focus on the legal form of firms nor whether they act under limited or unlimited liability. The literature on entry modes of SMEs in foreign markets analyzes different dimensions which are seen as relevant for entry decisions. However, these do not include legal form as a key determinant (for a comprehensive overview see Brouthers/Hennart 2007, Fernandez/Nieto 2005, Zahra/ Neubaum/Naldi 2007). One strand of literature concentrates on governance modes (contracts, joint ventures, wholly owned subsidiaries) by referring to transaction costs economics, another analyzes the factors affecting establishment modes (greenfield vs. acquisitions), with again another exploring the impact of ownership modes for SMEs' internationalization (Anderson/Gatigon 1986; Canabal/White III 2008). In addition, the literature that studies drivers and/or obstacles to internationalization also does not explicitly deal with legal form (see for example EU Commission 2010a, Hollenstein 2005, OECD 2009). The same holds for approaches that investigate the impact of legal origin on SMEs' internationalization, which is the relationship between the broader legal environment of the home or host country (Li/Vertinsky/Zhang 2013).

Research that deals with the question of firms' choice among legal forms in regard to

internationalization is rather normative and descriptive in nature. It explores the potential (dis-)advantages of different legal forms in regard to governance structures, taxes, accounting obligations etc.. It emphasizes the advantages of limited liability compared to unlimited liability legal form in international business, but without providing empirical evidence on the motives and factors affecting SMEs' choice of legal form (Eckardt 2012a, 2012b, 2012c; EU Commission 2010b; Knoth 2008; Munkert/Stubner/Wulf 2010; Petzold/Knoth 2011).

In contrast to the literature on SME internationalization, legal form is in the focus of agency theories (Fama/Jensen 1983; Jensen/Meckling 1976). It addresses the question of what causes and effects different legal forms have. Limited liability legal form is of particular interest in this respect. Besides, there is a long tradition in the Law and Economics literature on corporate law which draws heavily on agency theory. It deals with the effects of limited liability legal forms for firms. While the literature is mostly about public limited companies, whose shares are publicly traded, its main findings also apply to privately held closed enterprises (Carney 2000; Easterbrook/Fischel 1991; Kraakman et al. 2009; Schaper 2012).

Following Kraakman et al. (2009), limited liability legal status constitutes an enterprise as (1) a separate legal personality, both (2) shielding its owners' private assets from its creditors[4] as well as (3) shielding the firm's assets from withdrawing them by its owners at will. These three aspects have profound implications in respect to transaction and coordination cost savings, allowing entrepreneurs to undertake riskier business activities while at the same time reducing monitoring costs for creditors. But limited liability legal forms usually entail higher establishment and running costs than sole proprietorship or partnerships – which both are of unlimited liability – because of minimum capital requirements, more complicated governance structures and additional compulsory administrative duties that have to be fulfilled.[5]

Despite the broad literature on the general effects in corporate law and economics, there are so far only few econometric studies. Storey (1994) explicitly analyzes the impact of legal form on enterprises. He finds that limited liability legal form has a positive impact on bank lending and on firm growth. Harhoff/Stahl/Woywode (1998) provide evidence that limited enterprises undertake riskier business which results in higher insolvency rates, while at the same time showing a positive relation to firm size. Empirical studies on the financing of SMEs examine the influence of limited liability

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[4] Note that a SME's creditors are not only those giving loans like banks, but also customers and suppliers, when providing customer or supplier credit, as well as workers or tax authorities, when wages resp. taxes are paid late etc., for example.
[5] For a more detailed analysis see Eckardt (2012c) and Eckardt/ Kerber (2014).

legal form on loan prices and collateralization of loans (Elsas/Krahnen 1998; Lehmann/Neuberger/Raethke 2004) as well as on leasing (Neuberger/Raethke-Doeppner 2013). They find no effect of legal form on loan prices, but on collateral: incorporated firms have to provide more often collateral, because they are riskier.

In addition there are some studies that analyze the extent of horizontal regulatory competition in the EU between the 27 different legal forms for private limited enterprises.[6] They show that indeed legal form plays a role for SMEs when deciding where to establish. There is some descriptive evidence that SMEs react to incentives resulting from differences in minimum capital requirements in different member states (see for the Netherlands Bratton/McCahery/Vermeulen 2009, for Germany Eckardt 2012b and Eckardt/Kerber 2014). Becht/Mayer/Wagner (2008) found empirical evidence that companies migrate to member states with lower costs of establishing a limited liability enterprise. The studies by Hornuf (2012) and Braun et al. (2013) confirm these findings for the EU. For the US Häusermann (2011) found that differences in establishment fees significantly affect the number of limited liability companies established in a state. According to his analysis there is also some, but not uniform, evidence that differences in substantive law and in adjudication also play a role for SMEs in where to establish, as is the case for publicly held companies. Based on qualitative interviews Gevurtz (2012) found that for owners or managers of limited liability companies in the US, legal infrastructure also plays an important role when deciding on where to establish.

Following from the existing literature we thus draw the following conclusions: (1) institutional factors and thus also legal form matter for SMEs in regard to the form and entry mode of internationalization, (2) limited liability legal form is preferred when it comes to riskier business activities, and (3) legal form and the associated costs matter for SMEs when deciding on where to establish. Bringing together these findings we state our main hypothesis. Accordingly, SMEs with a limited liability legal form should show a higher probability to undertake international business, since it is more risky than being active just in the better known domestic market. To test empirically for this relationship, our main hypothesis thus states that limited liability legal form as used by private limited enterprises has a positive impact on internationalization in contrast to the legal forms of sole proprietor or partnership which are of unlimited liability (*H1*) (*H1*). We test this hypothesis also separately for the different modes of internationalization (import, export, technological cooperation, being a subcontractor, having subcontractors, foreign direct investment).

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[6] Since the Centros jurisprudence of the ECJ in 1999, free choice of different legal forms and therefore direct regulatory competition has become easier in the EU. See Heine/Kerber (2002).

Since internationalization is also influenced by company-specific, market-related or institutional variables, we control for these aspects, too (see *Table 1* below for an overview of all hypotheses). Internationalization requires companies to exert additional efforts. Accordingly, the number of employees is a critical factor for SMEs (OECD 2009, 9ff., EU Commission 2010a, 57ff., Svetlicic/ Jaklic/Burger 2007). Therefore internationalization should increase with company size (*H2a*). Besides, the more experienced a company is, the more effective it uses its resources as it can exploit learning effects (but see Nassimbeni 2001, 247, Zhou/ Wu 2014, 134). Thus, we expect that enterprise age also has a positive effect on internationalization (*H2b*). Finally, engaging in international business activities requires an entrepreneurial attitude due to the related additional uncertainties of foreign markets compared to being active in a SME's familiar local market. Product and/or process innovations also include additional risks and uncertainties, which require entrepreneurial capabilities as the Schumpeterian literature on innovations shows (Nassimbeni 2001). Thus, we expect that more innovative SMEs show also a higher inclination to internationalize (*H2c*).

To control for the impact of market-related variables we include industry and the size of a SME's national market. Business activities are more or less locally bound. Due to (inter-)national specialisation and division of labour some goods and services are more integrated in a global supply chain than others. Thus we assume that hypothesis (*H3a*) states that SMEs in less locally oriented industries have a higher probability to do business internationally. We assume that manufacturing and wholesale trade are more international than construction, retail trade, transport and communication as well as business and personal services. Besides, geographic market size does not coincide with national borders. Accordingly, the same geographic market size might result in "internationalization" for SMEs from smaller countries in contrast to SMEs from bigger countries. Hence we expect that country size has a negative impact on internationalization of SMEs (*H3b*).

Finally, institutional differences should also show in differences in regard to internationalization. Therefore we include variables on the public support for internationalization, a country's regulatory burden placed on international activities and the ease of getting credit as well as on legal origin. We expect that SMEs which are aware of public policies to support SME internationalization show a higher probability to engage in international business activities (*H4a)*. This is irrespective of whether SMEs actually use such public support for their international business activities.[7] On

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[7] Only 15% of those SMEs that were aware of public support for internationalization indeed used financial or other government support for their internationalization activities (EU Commission 2010b).

the one hand awareness of such programmes by SMEs might be driven by SMEs demand for public support of internationalization, as a result of which they spend some of their scarce time and resources for acquiring information about such possibilities. On the other hand awareness of such programmes by SMEs might result from these programmes being well targeted. In either case, a positive correlation between awareness of public support programmes and SMEs being active internationally shows the positive impact such public policies could have.

In addition, we assume that the higher a country's regulatory burden placed on international activities, the lower the degree of SMEs' internationalization due to the ensuing additional administrative costs (*H4b*). Finally, we expect that there is a negative relationship between the difficulties of getting access to credit for companies in a country and their degree of internationalization (*H4c*). Since international business activities show higher risks due to the additional uncertainties involved, this should translate to a higher risk premium for getting credit for such activities. Accordingly, if access to credits is more restricted in a country, this should also hamper SMEs' international business activities.

Table 1: Hypotheses, variables and expected sign

Hypotheses on internationalization and legal form	Independent variables	Expected impact on dependent variable P(International business =yes)
Legal form		
H 1: A SME with a limited liability legal form shows a higher probability to do business internationally (to engage in *import; export; foreign direct investment; technological cooperation; being a subcontractor; having subcontractors*) than without limited liability legal form.	*Sole proprietor*	-
	Partnership	-
	Private limited enterprise	+
	Public limited enterprise	+
Company-specific hypotheses		
H 2a: The bigger an enterprise is, the higher its probability to do business internationally.	*Enterprise size:*	
	1 employee	-
	2 to 3 employees	+
	4 to 5 employees	+
	6 to 9 employees	+
	10 to 249 employees	+
	Ln employees	+
H 2b: SMEs with an *entrepreneurial attitude* as expressed by *product and/or process innovations* show a higher probability to do business internationally.	*Product and/ or process innovation*	+

Table 1: Cont.

Hypotheses on internationalization and legal form	Independent variables	Expected impact on dependent variable
		P(International business = yes)
H 2c: The more *experience* a SME has, the higher its probability to do business internationally.	*Ln Enterprise age*	+
Market-related hypotheses		
H 3a: In manufacturing and wholesale trade the probability of an SME to do business internationally is higher than in other industries.	*Manufacturing*	+
	Construction	-
	Wholesale trade	+
	Retail trade	-
	Transport and communication	-
	Business services	-
	Personal services	
H 3b: The smaller the *national market* of a SME, the higher its probability to do business internationally.	*Ln Population*	-
	France , Germany, Italy, Spain,	-
	Poland, United Kingdom	+
	Benelux Countries, Nordic Countries, Central European Countries, Eastern European Countries, Other Countries	
Institutional hypotheses		
H 4a: The better targeted *public policies* on promoting SME internationalization are, the higher the probability of a SME to do business internationally.	*Public policy on internationalization*	+
H 4b: The lower the *bureaucratic burden placed on international trade* is in a country, the higher the probability of a SME to do business internationally.	*Bureaucratic burden placed on international trade*	-
H 4c: The less difficult it is for SMEs *to get access to credit financing* in a country, the higher the probability of a SME to do business internationally.	*Difficulties of access to credit financing*	-

Source: Own composition.

3. Data and Methods

Data are obtained from a representative, population weighted, sample of 9,480 European SMEs carried out by the EU Commission in 2009 (EU Commission 2010a). From these 8,332 companies are from the EU-27 member states, For some additional country-specific variables we use data from Eurostat and the World Bank (Eurostat 2012; World Bank 2008a, 2008b).

To test the first hypothesis we use as dependent a dichotomous variable with 1, if a SME does business internationally, else 0 (see *Equations 1 to 5* in *Table 9* below).[8]

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[8] For variable description and descriptive statistics see *Table A.1* and *Table A.2* in the Appendix.

The following activities are included: import, export, technological cooperation with a foreign enterprise, being a subcontractor of a foreign enterprise or having subcontractors in another member state, foreign direct investment. To test the impact of legal form on these different modes of internationalization separately, we estimate six additional equations, where the dependent variable accounts for each of the different modes of internationalization (*Equations 6* to *11*) (see *Table 10* below).

Independent variables account for legal form by using a set of dummy variables.

To avoid omitted variable bias, we estimate five different equations (*Equations 1* to 5) to account for the impact of the company-specific, market-related and institutional influences on the internationalization of SMEs. To control for *company-specific factors* we include company size measured by size class resp. the log of the number of employees, experience measured by enterprise age and entrepreneurial attitude with product and process innovations carried out as a proxy. To account for interaction of legal form and enterprise size, we include interaction terms in all estimations with the exception of *Equations 1* and *2*. To control for *market-related factors* we include a set of industry dummies and population size resp. country dummies. To account for *institutional factors* we include variables on public support of internationalization, a country's regulatory burden, and the ease of getting access to credit financing in a country. Data on regulatory burden placed on trade and the ease of getting access to finance are taken from the World Bank *Doing Business* data (World Bank 2008a, 2008b). In addition, we include country dummies which account both for country size as well as for additional country-specific factors influencing SMEs' internationalization

Hypotheses are tested by one-sided tests using logistic regression for SMEs from the 27 EU member states in 2009. By estimating robust standard errors we control for heteroscedasticity. Collinearity is of no relevance. Before discussing our results in more detail we give a short overview of the underlying descriptive statistics.

4. Descriptive Statistics

According to the classification by the EU Commission, companies are defined as SMEs if they employ up to 249 persons (see *Table 2* below for additional criteria). 99.8 % of the 20 million enterprises in the EU member states fall under this category. SMEs provide 67% of the jobs and account for 58% of the gross value added in 2011.

Table 2: SME classification and distribution in the EU

Enterprise Size	SME Classification			EU Average		
	Employees	Turnover (Mio. € / year)	Total assets (Mio.€ / year)	Companies (in %)	Employees (in %)	Gross value added (Mio € / year in %)
Micro	1 to 9	up to 2	up to 2	92.1	30	21
Medium	10 to 49	2 to10	2 to 10	6.6	20	19
Small	50 to 249	10 to 50	10 to 43	1.1	17	18
Large	> 250	> 50	> 43	0.2	33	42
Total				**20,839,226**	**130,717,890**	**5,978,436**

Source: Own composition according to EU-Commission (2003), Wymenga et al. (2012, S.8, Tab.2.1).

Table 3 shows that on average 44% of SMEs in the 27 EU member states are engaged in international business activities in some form or another. Of these '*international*' SMEs, 90% are micro enterprises, 8% are small enterprises and 2% are medium-sized enterprises. The main legal forms available for SMEs are sole proprietorship and partnership, which usually place full liability on entrepreneurs. In contrast to that private limited and public limited enterprises are both characterised by limited liability. Private limited enterprises account for nearly 60% of all SMEs in the EU-27 with private and public limited companies showing an above average rate of internationalization.[9] However, even a third of sole proprietor companies and two fifth of partnerships do business internationally (see *Table 3*).

Table 3: Legal Form and Internationalization

Legal Form	SME Total (in %)	Internationalization (in %)
Sole proprietor	19	32
Partnership	14	41
Private limited enterprise	59	47
Public limited enterprise	8	55
SME total	**100**	**44**

Source: Own calculation based on data from EU Commission (2010a, b).

Private limited enterprises dominate in all size classes with an average share of nearly 60% of all SMEs (see *Table 4).* Sole proprietor firms rank second for enterprises with up to 3 employees, public limited firms for small and medium-sized enterprises. The degree of internationalization increases with company size from 25% in one-person firms to over 60% for companies with 10 and more employees. But micro enterprises rank first in absolute numbers with about 8 million doing business internationally. In contrast to that the absolute number of internationalized small and medium-sized

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[9] Internationalization comprises any of the following activities: import, export, international technological cooperation, being a subcontractor or having subcontractors, foreign direct investment.

enterprises is about 1 million.

Table 4: Company size, legal form and internationalization

Size Class (number of employees)	Sole proprietor	Partner-ship	Private limited enterprise	Public limited enterprise	SME total (1)	Internatio-nalisation(1)
1	40%	9%	44%	7%	12% (2.6)	25% (0.6)
2-3	22%	14%	58%	5%	26% (5.4)	38% (2.0)
4-5	17%	18%	57%	8%	21% (4.4)	50% (2.2)
6-9	11%	15%	66%	8%	33% (6.9)	49% (3.4)
10 – 249	8%	12%	66%	15%	8% (1.7)	61% (1.0)
SME total	**19%**	**14%**	**59%**	**8%**	**100% (20.8)**	**44% (9.1)**

(1) Absolute numbers in million in parentheses.

Source: Own calculation based on data from EU Commission (2010a, b).

For each of the different modes of internationalization *Table 5* shows the share of legal forms. Again, private limited enterprises clearly dominate compared to all other legal forms in each mode of internationalization.

Table 5: Mode of internationalization and legal form (in %)

	Sole proprietor	Partnership	Private limited enterprise	Public limited enterprise
Import	15	12	62	11
Export	12	12	69	7
Technological cooperation	15	12	64	9
Being subcontractor	16	11	62	11
Having subcontractors	15	11	66	8
Foreign direct investment	3	4	70	23
SME average	**19**	**14**	**59**	**8**

Source: Own calculation based on data from EU Commission (2010a, b).

When SMEs engage in international business activities, import (29%) and export (25%) are the most relevant forms, while only a very low share of SMEs is part of a subcontractor relationship or undertakes foreign direct investment (see "SME total" *Table 6*).

Table 6: Legal form and mode of internationalization (in %)

	Import	Export	Technologi-cal coope-ration	Being subcon-tractor	Having subcontrac-tors	Foreign direct investment
Sole proprietor	23	16	6	6	6	0.3
Partnership	26	22	6	5	5	0.6
Private limited enterprise	30	29	8	7	8	2
Public limited enterprise	41	23	8	10	8	6
SME total	**29**	**25**	**7**	**7**	**7**	**2**

Source: Own calculation based on data from EU Commission (2010a,b).

This pattern holds also when looking at the legal forms separately. However, SMEs in the legal form of a private or public limited enterprise show a higher participation rate in each mode of internationalization as compared to sole proprietors or partnership firms. For these, foreign direct investments play a particularly negligible role.

Table 7 shows for different industries in the EU-27 the degree of internationalization as well as how legal forms are distributed in different industries. Wholesale trade, manufacturing, transport and communication and retail trade show an above average degree of internationalization, whereas construction and personal and business services are much more local. In regard to legal form, again, private limited enterprises dominate in each industry. Sole proprietors have an above average share in retail trade and construction, while SMEs are established as partnerships or public limited enterprises above average in regard to wholesale trade.

Table 7: Industry, internationalization and legal form (in %)

Industry	Interna-tionali-zation	Sole Proprie-tor	Partnership	Private limited enterprise	Public limited enterprise
Manufacturing	73	15	12	66	7
Construction	23	29	10	57	4
Wholesale Trade	84	14	17	56	13
Retail Trade	50	26	19	47	8
Transport and Communication	61	15	14	62	9
Business Services	37	10	13	65	12
Personal Services	22	19	14	65	3

Source: Own calculation based on data from EU Commission (2010a, b).

As concerns country size, bigger countries display a lower degree of international business activities when compared to smaller countries (see *Table 8*). Besides, there are also different patterns in regard to legal form employed by SMEs between different countries (or country groups). Again, private limited enterprises dominate, with the exception of Poland, where over half of all SMEs are established as partnerships. This legal form plays also an important role in Italy and Eastern European countries, that is, in Romania and Bulgaria with about one third of all SMEs. Sole proprietorship is of minor importance in Spain and Eastern European countries. This is in contrast to Poland, the Nordic countries and those EU member states which are not explicitly listed (see "other countries" in *Table 8*). Public limited legal form plays a more important role in Spain and the Benelux countries, while it is only of minor importance in Italy, Germany, the United Kingdom, Poland, the Eastern and Central European countries.

Table 8: Country, internationalization and legal form (in %)

Country	Internatio-nalisation	Sole proprietor	Partner-ship	Private limited enterprise	Public limited enterprise
Italy	35	13	31	56	0
Germany	32	25	5	68	2
Spain	45	8	3	63	26
France	33	12	0	76	12
United Kingdom	39	22	13	64	1
Poland	49	38	54	6	2
Nordic Countries	57	31	2	57	10
Benelux Countries	56	19	11	52	18
Central European Countries	54	8	6	85	1
Eastern European Countries	56	18	32	48	1
Other Countries	63	30	3	57	10

Source: Own calculation based on data from EU Commission (2010). For definition of the variable C*ountry* see *Table A.1 in the Appendix*.

As this descriptive overview shows, internationalization plays an important role for SMEs in the EU-27 both in absolute and relative numbers. It increases with company size. In regard to legal form, there is a clear dominance of private limited enterprises in general. When it comes to internationalization, both private and public limited liability companies show an above average share. Following this pattern, we also find that sole proprietor enterprises and partnerships account only for below average shares of the different modes of internationalization.

5. Multivariate Analysis

In the following we firstly discuss the empirical results for legal form on internationalization of SMEs in general, before we turn to its impact on the different modes of internationalization separately.

(1) Internationalization of SMEs

To account for the different effects of the independent variables on SMEs' internationalization, we proceed stepwise in *Equations 1 to 5 (see Table 9* below*). Equation 1 and 2* include variables on legal form as well as company- and market-specific effects. They differ only in respect of how company size is modelled. *Equation 3* tests the impact of interaction between legal form and company size class. *Equation 4* includes also institutional variables by using country dummies instead of population size, while *Equation 5* takes into account administrative burden and access to credit, too.

Following from our estimations, our main hypothesis *H1* holds. SMEs in a legal form without limited liability that is, established as sole proprietors or partnerships show a significantly lower probability of doing business internationally than private limited

enterprises (*Equation 1 to 5*). In addition, company size has a significant impact on SMEs' internationalization as hypothesis *H2a* states. *Equation 1* shows that this holds for one-person operations and for small- and medium sized enterprises (those with 10 to 249 employees) in contrast to those with 2 to 9 employees. According to *Equation 2* we find the natural log of employees has a significantly positive impact as hypothesized, too. When we interact legal form and company size in *Equation 3* to *5,* we find a significantly positive relationship of unlimited legal form (*sole proprietor*, *partnership*) and enterprise size. However, this does not rule out the significant negative impact of having been established as an unlimited legal form on internationalization.

These results do not change when we control for additional company-specific, market-related and institutional factors. For the impact of *company-specific variables*, we find that SMEs which have carried out product or process innovations over the years preceding the survey also show a significantly higher probability to internationalize (*H2b*). Thus, the entrepreneurial attitude (in the Schumpeterian sense) that shows in such innovation activities also translates to international business activities. In contrast to that we find no confirmation that a SME's experience as measured by the age of the company has a significantly positive impact (*H2c*).

As regards *market-related influences*, we can retain hypothesis *H3a* that the industry a SME belongs to has a significant impact on whether it does business internationally or not. Only SMEs which are engaged in wholesale trade show a significantly higher inclination for internationalization than companies engaged in manufacturing. In contrast to that, companies from retail trade, construction and business as well as personal services are significantly less involved in international activities. The same holds in respect to the size of the national market (see *H3b*). *Equations 1* to *3* show that bigger market size as measured by population size has a significantly negative impact on internationalization. These findings are robust, when we substitute country dummies for population size in *Equation 4.* There are no significant differences between the bigger countries Germany, Italy, France, and Spain as compared to the United Kingdom (UK). In contrast to that, SMEs from smaller countries or Eastern Europe show a significantly higher probability of internationalization than those from the UK.

When we control for additional *institutional influences*, we find a significantly positive impact of public policy support in regard to SME internationalization (*H4a*) in *Equations 4* and *5.* Control variables on the bureaucratic burden of a country placed on international business activities and of getting access to credit financing also show a significantly positive impact in *Equation 5* (*H4b*).

Table 9: Legal form and internationalization

	Equ.1	Equ.2	Equ.3	Equ.4	Equ.5
	Coefficient	Coefficient	Coefficient	Coefficient	Coefficient
Legal Form					
Reference: Private limited enterprise					
Sole Proprietor	-0.520***	-0.516***	-1.087***	-1.165***	-1.182***
	(-2.90)	(-2.93)	(-3.74)	(-4.06)	(-4.04)
Partnership	-0.377**	-0.352**	-0.855***	-0.889***	-0.930***
	(-1.89)	(-1.77)	(-2.74)	(-2.50)	(-2.57)
Public limited enterprise	0.127	0.088	-0.694*	-0.841*	-0.860*
	(0.46)	(0,32)	(-1.41)	(-1.65)	(-1.65)
Enterprise Size					
Reference: 2 to 3 employees					
1 employee	-0.624***				
	(-2.79)				
4 to 5 employees	0.155				
	(0.84)				
6 to 9 employees	0.190				
	(0.95)				
10 to 249 employees	0.514***				
	(3.06)				
Ln employees		0.342***	0.177**	0.160**	0.167**
		(4.88)	(1.97)	(1.77)	(1.83)
Interaction: Legal form X enterprise size					
Reference: Private limited enterprise					
Sole proprietor *X* ln employees			0.438**	0.370**	0.305**
			(2.28)	(2.01)	(1.68)
Partnership *X* ln employees			0.332**	0.308*	0.284*
			(1.68)	(1.54)	(1.41)
Public limited enterprise *X* ln employees			0.489**	0.524**	0.510**
			(0.16)	(2.11)	(2.04)
Product and/or process innovation	1.251***	1.240***	1.231***	1.225***	1.226***
	(8.88)	(8.77)	(8.74)	(8.56)	(8.47)
ln enterprise age	0.017	0.011	0.011	0.032	0.435
	(0.25)	(0.17)	(0.16)	(0.44)	(0.59)
Industry					
Reference: Manufacturing					
Construction	-1.871***	-1.840***	-1.821***	-1.795***	-1.811***
	(-7.49)	(-7.27)	(-7.26)	(-7.01)	(-6.90)
Wholesale trade	0.848***	0.911***	0.923***	0.998***	1.029***
	(2.71)	(2.92)	(2.91)	(3.04)	(3.17)
Retail trade	-0.660***	-0.616***	-0.602***	-0.559***	-0.560***
	(-3.00)	(-2.81)	(-2.75)	(-2.60)	(-2.59)
Transport and Communication	-0.488*	-0.451*	-0.421	-0.376	-0.396
	(-1.42)	(-1.31)	(-1.24)	(-1.11)	(-1.16)

Table 9: Cont.

	Equ.1	Equ.2	Equ.3	Equ.4	Equ.5
	Coefficient	Coefficient	Coefficient	Coefficient	Coefficient
Business services	-1.533***	-1.496***	-1.490***	-1.485***	-1.473***
	(-8.13)	(-8.01)	(-7.99)	(-7.74)	(-7.65)
Personal services	-2.102***	-2.077***	-2.087***	-2.037***	-2.046***
	(-7.93)	(-7.75)	(-7.92)	(-7.64)	(-7.53)
ln population	-0.518***	-0.518***	-0.517***		
	(-7.69)	(-7.36)	(7.47)		
Country					
Reference: United Kingdom					
France				-0.204	-1.811***
				(-0.82)	(-3.88)
Germany				-0.011	0.267
				(-0.04)	(0.84)
Italy				0.071	-0.683**
				(0.23)	(-2.01)
Spain				-0.127	-0.289
				(-0.48)	(-0.91)
Poland				0.497**	0.132
				(1.76)	(0.45)
Benelux Countries				1.239***	1.406***
				(4.33)	(3.61)
Nordic Countries				0.931*	0.686**
				(1.84)	(1.94)
Central European Countries				0.650**	-0.238
				(1.84)	(-0.54)
Eastern European Countries				0.807***	0.103
				(2.84)	(0.31)
Other Countries				1.147***	0.293
				(4.29)	(0.99)
Public policy on internationalization				0.682***	0.651***
				(3.78)	(3.59)
Bureaucratic burden					0.201***
					(3.12)
Access to credit					0.006**
					(1.76)
Constant	9.318***	8.868***	9.091***	-0.266	-0.856**
	(7.58)	(7.36)	(7.47)	(-0.72)	(-2.01)
Observations (1)	7832	7832	7832	7776	7497
Mc Fadden's R2	0.221	0.221	0.225	0.238	0.245
Wald(chi2)	352.32***	324.57***	326.93***	354.24***	372.01***

z statistics in parentheses; * p<0.1, ** p<0.05, *** p<0.01

1) Observations refer to the unweighted sample.

Source: Own calculation.

As regards the overall goodness of fit of our estimations, McFadden's R2 is around 0.22 with a significant Wald statistic.

To better see the impact of legal form on international business activities *Table 10* shows the probability of internationalization for sole proprietors in contrast to private limited enterprises based on *Equation 3* above. We calculate probabilities from the logits for companies of different size and depending on whether they did any product or process innovation over the last years preceding this survey. We calculate the probabilities for SMEs from manufacturing, resp. retail trade. As can be seen, SMEs established as sole proprietors show a lower probability to internationalize in both industries compared to limited liability SMEs of the same size, taking into account innovation behaviour, too. While internationalization increases with enterprise size, it does not rule out the impact of legal form on the probability of internationalization.

Table 10: Probability of doing business internationally for enterprises in the manufacturing sector and retail trade with different legal form

Legal Form	No Product or Process Innovations 2006 - 2008		Product or Process Innovations 2006 – 2008	
	Sole Proprietor	Private limited enterprise	Sole Proprietor	Private limited enterprise
Manufacturing				
1 employee	45	70	73	89
2 employees	48	73	76	90
5 employees	52	76	78	91
10 employees	55	78	80	92
50 employees	62	82	84	94
100 employees	65	84	86	95
249 employees	68	86	88	95
Retail Trade				
1 employee	31	57	60	81
2 employees	34	60	63	83
5 employees	38	63	67	85
10 employees	41	66	69	87
50 employees	47	72	75	90
100 employees	50	74	77	91
249 employees	54	77	80	92

Source: Own calculation based on Equation 3 in Table 9 (enterprise age = 23 years, population size = 12.7 million inhabitants)

(2) Modes of Internationalization

In *Equations 6* to *11* we estimate the model of *Equation 4* above with the different forms of internationalization as dependent variables (see *Table 11*). Our estimations confirm the findings of Equation 4 on the negative impact of unlimited liability legal form on internationalization for the different modes (*H1*). When compared to private limited companies, sole proprietors show significantly negative coefficient estimates for most forms of internationalization, only with the exception of having been part of a

subcontractor relationship.

In regard to *company-specific influences* we again find the results for enterprise size and interaction with legal forms to have a significantly positive impact on the single modes of internationalization (*H2a*). As discussed above, this size effect does not rule out the legal form effect. In addition, we find that entrepreneurial attitude matters (*H2b*). SMEs which have adopted product or process innovations show a stronger and significantly higher inclination to do international business, no matter what mode of internationalization we look at with the exception only of foreign direct investment. Besides, company age now proves significantly negative in regard to having been a subcontractor and foreign direct investment (*H2c*).

With respect to the *market-related variables* the results become more differentiated for the various industries (*H3a*) compared to *Equation 4* above. Controlling for country-specific effects again the results are differentiated than in *Equation 4* above. In regard to *institutional influences* for all modes of internationalization with the exception of having been in a subcontractor, we also find that the coefficient estimates on awareness of public policy support for SME internationalization have a significantly positive impact (*H4a*).

Overall goodness of fit of *Equations 6 to 11* are similar for import and export, but lower for all other internationalization activities than that of *Equation 4*.

Table 11: Legal form and modes of internationalization

	Imports	Exports	Techno-logical co-operation	SME was sub-contractor	SME had sub-contractors	Foreign direct investment
	Equ.6 Coefficient	Equ.7 Coefficient	Equ.8 Coefficient	Equ.9 Coefficient	Equ.10 Coefficient	Equ.11 Coefficient
Legal Form						
Reference: Private limited enterprise						
Sole Proprietor	-0.757***	-1.067***	-1.057***	0.303	-0.546	-2.432**
	(-2.38)	(-2.88)	(-2.38)	(0.62)	(-1.25)	(-1.82)
Partnership	-0.639**	-0.745**	-0.619	-0.497	0.318	-3.361***
	(-1.65)	(-1.94)	(-1.06)	(-0.94)	(0.54)	(-4.39)
Public limited enterprise	-0.705*	-1.054**	-0.543	0.627	-0.814	0.750
	(-1.44)	(-1.82)	(-0.83)	(0.95)	(-1.02)	(1.04)
Ln employees	0.205**	0.215***	0.101	0.341***	0.278***	0.563***
	(2.25)	(2.50)	(0.38)	(2.88)	(2.46)	(4.38)
Interaction: Legal form X enterprise size						
Reference: Private limited enterprise						
Sole proprietor *X* ln employees	0.232	0.233	0.732***	-0.332	0.484**	0.364
	(1.11)	(0.98)	(2.66)	(-1.25)	(1.71)	(0.86)
Partnership *X* ln Employees	0.167	0.042	0.411***	0.164	-0.117	0.989***
	(0.84)	(0.23)	(2.48)	(0.80)	(-0.57)	(4.64)

Table 11: Cont.

	Imports	Exports	Techno-logical co-operation	SME was sub-contractor	SME had sub-contractors	Foreign direct investment
	Equ.6 Coefficient	Equ.7 Coefficient	Equ.8 Coefficient	Equ.9 Coefficient	Equ.10 Coefficient	Equ.11 Coefficient
Public limited enterprise	0.429**	0.118	0.163	-0.069	0.226	0.087
X ln employees	(2.04)	(0.59)	(0.69)	(-0.32)	(0.82)	(0.46)
Product and/or process innovation	1.274***	1.063***	1.557***	0.713***	1.154***	0.004
	(8.12)	(7.05)	(6.09)	(3.07)	(4.76)	(0.01)
Ln enterprise age	0.048	0.100*	-0.148*	-0.293**	-0.173*	-0.451***
	(0.61)	(1.30)	(-1.37)	(-2.57)	(-1.51)	(-3.23)
Industry						
Reference: Manufacturing						
Construction	-1.467***	-2.512***	0.526*	0.087	0.359	-0.737
	(-5.45)	(-9.48)	(1.41)	(0.20)	(0.91)	(-1.19)
Wholesale trade	1.579***	0.277	0.153	0.250	1.031***	0.410
	(5.49)	(1.08)	(0.49)	(0.54)	(2.48)	(0.77)
Retail trade	0.147	-0.897***	-0.320	-0.656*	-0.294	0.053
	(0.62)	(-4.07)	(-1.09)	(-1.76)	(-0.72)	(0.11)
Transport and Communication	-0.884**	-0.377	0.849*	1.209***	1.864***	0.526
	(-2.32)	(-1.20)	(1.59)	(3.04)	(5.08)	(1.24)
Business Services	-1.484***	-1.554***	0.890***	0.111	0.827***	0.787**
	(-6.82)	(-7.47)	(3.09)	(0.37)	(2.99)	(2.32)
Personal Services	-1.347***	-2.150***	-0.040	-0.708*	-0.280	-0.619
	(-4.55)	(-7.17)	(-0.10)	(-1.92)	(-0.57)	(-0.94)
Country						
Reference: United Kingdom						
France	0.002	0.414*	-0.591	-1.234**	-0.367	-0.233
	(0.01)	(1.64)	(-1.26)	(-2.03)	(-0.66)	(-0.34)
Germany	-0.351	0.163	0.666**	0.583	0.636*	-0.073
	(-1.16)	(0.60)	(1.66)	(1.40)	(1.34)	(-0.13)
Italy	0.497*	0.143	-0.345	-0.792	-0.021	-0.686
	(1.31)	(0.41)	(-0.73)	(-1.42)	(-0.04)	(-1.01)
Spain	0.133	0.102	-0.339	0.224	0.966**	-2.554***
	(0.45)	(0.35)	(-0.79)	(0.50)	(1.92)	(-3.89)
Poland	0.426*	0.743***	-0.159	0.758*	0.032	-1.020*
	(1.32)	(2.45)	(-0.35)	(1.91)	(0.06)	(-1.31)
Benelux Countries	1.069***	1.162***	1.407***	1.758***	2.273***	0.661
	(3.46)	(3.80)	(4.01)	(4.44)	(6.01)	(1.00)
Nordic Countries	0.974***	0.784***	0.971***	0.733*	1.012**	0.419
	(3.02)	(2.51)	(2.57)	(1.74)	(2.28)	(0.68)
Central European Countries	0.679**	0.325	0.423	0.971*	0.853**	-0.741
	(2.13)	(0.79)	(0.60)	(1.88)	(1.93)	(-1.06)
Eastern European Countries	1.111***	-0.116	1.335***	1.529***	0.943**	-0.198
	(4.98)	(-0.39)	(3.36)	(4.17)	(1.93)	(-0.30)

Table 11: Cont.

	Imports	Exports	Techno-logical co-operation	SME was sub-contractor	SME had sub-contractors	Foreign direct investment
	Equ.6 Coefficient	Equ.7 Coefficient	Equ.8 Coefficient	Equ.9 Coefficient	Equ.10 Coefficient	Equ.11 Coefficient
Other	1.471***	0.575**	0.426	0.530	0.227	0.616
Countries	(4.98)	(1.95)	(1.04)	(1.22)	(0.45)	(1.02)
Public policy on	0.603***	0.581***	0.544**	0.395**	0.650***	1.489***
internationali-sation	(3.35)	(2.90)	(2.15)	(1.49)	(2.46)	(4.70)
Constant	-1.804***	-1.277***	-3.853***	-3.114***	-4.270***	-3.998***
	(-4.48)	(-3.52)	(-7.50)	(-5.44)	(-7.58)	(-5.41)
Observations[1]	7796	7806	7756	7776	7776	7791
Mc Fadden's R2	0.256	0.214	0.157	0.145	0.156	0.229
Wald(chi2)	346.16***	337.39***	226.50***	180.60***	254.90***	378.68***

z statistics in parentheses; * p<0.1, ** p<0.05, *** p<0.01

1) Observations refer to the unweighted sample.

Source: Own calculations.

6. Conclusions

To the best of our knowledge we are not aware of any empirical study analysing the relationship between legal form and the probability of SME internationalization. In this respect our multivariate analyzes provide a sound empirical confirmation that the stated positive relationship between limited liability legal status and internationalization does indeed exist. Legal forms with unlimited liability like sole proprietorship or partnership show a strongly negative impact on engaging in international business activities as compared to private limited enterprises, independent of enterprise size and other factors. When looking separately at the different modes of international business activities, this negative effect shows in particular for SMEs that engage in import and export business. These results do not change when we control for additional company-specific, market-related and institutional factors. For the impact of company-specific variables, we find that SMEs with product or process innovations also show a significantly higher inclination to internationalize. Thus, the entrepreneurial attitude (in the Schumpeterian sense) that shows in such innovation activities also translates to international business activities.

So far, legal form has been rather taken for granted when analysing the factors influencing SMEs' decision to internationalize. However, our findings show that additional insights on SMEs' internationalization can be gained by combining insights from the Law and Economics literature with the literature on SME internationalization. Our estimations provide strong evidence that there is a robust empirical relationship

between limited liability legal form and SMEs' internationalization. Legal form consists of a set of complex institutions that sets the framework for governing both the internal and external relationships of a company. It serves as a parameter that assists companies in coping with the additional uncertainties resulting from international business activities.

The results of our empirical analysis also contribute to an empirically informed policy-making. Although our econometric findings do not allow causal inferences, one way to support SMEs' internationalization is to facilitate establishment as private limited liability companies. Accordingly, reforms in corporate law at the national level to reduce costs – like lowering minimum share requirements for limited liability legal form – are well chosen. Our findings also support the efforts to introduce a supranational limited liability legal form like the European Private Company at the European level. Such an additional low-cost, easy to adopt and flexible private limited liability legal form would assist SMEs in doing business internationally. As a consequence, SMEs could better realize the gains form internationalization, thus contributing to better overall economic performance.

Nevertheless, further empirical work is necessary to better understand the interrelationship between legal form and internationalization of SMEs. On the one hand, we are still lacking empirical information about the determinants of SMEs' choice of legal form for internationalization. In particularly, the role played by intermediaries like international law firms and auditing companies in advising SMEs for choosing a legal form for internationalization is still an open field for additional research. Besides, further econometric research based on panel data could provide additional insights as to the exact relationship between legal form and internationalization. Finally, there is still much to learn about the relationship between legal form and different modes of internationalization.

References

Anderson, E., Gatignon H. (1986): Modes of Entry: A Transaction Cost Analysis and Propositions, in: Journal of International Business Studies, Vol.17, 1-26

Becht, M., Mayer, C., Wagner, H.F. (2008): Where Do Firms Incorporate? Deregulation and the Cost of Entry, in: Journal of Corporate Finance, Vol.14, 241-256

Bratton, W.W., McCahery, J.A., Vermeulen, E.P.M. (2009): How Does Corporate Mobility Affect Lawmaking? A Comparative Analysis, in: American Journal of Comparative Law, Vol.57, 347-385.

Braun, R. et al. (2013): Does Charter Competition Foster Entrepreneurship? A Difference-in-Difference Approach to European Company Law Reform, Journal of Common Market Studies, Vol. 51, 399-415

Brouthers, K.D., Hennart, J.-F. (2007), Boundaries of the Firm: Insights from International Entry Mode Research, in: Journal of Management, Vol.33, 395-425

Canabal, A., White G.O. III (2008): Entry Mode Research: Past and Future, in: International Business Review, Vol.17, 267-284

Carney, W.J. (2000): Limited Liability, in: Bouckaert, B., De Geest, G. (eds.), Encyclopedia of Law and Economics, Volume III. The Regulation of Contracts, Cheltenham, 659-691, http://encyclo.findlaw.com/5620book.pdf (last accessed: 05/10/2012)

Easterbrook, F.A., Fischel D.R. (1991): The Economic Structure of Corporate Law, Cambridge/Mass., London

Eckardt, M. (2012a): The European Private Company (EPC) – Does it Promote the Internationalization of SMEs?, Andrássy Working Papers, Working Paper No.27, Budapest, http://www.andrassyuni.eu/upload/File/Forschung/ Andrassy%20Working%20Papers/WPS27Eckardt.pdf (last access: 29.06.2013)

Eckardt, M. (2012b): Der Einfluss der Unternehmensrechtsform auf die Internationalisierung von kleinen und mittleren Unternehmen, in: Bos, E. u.a. (eds.): Der Donauraum in Europa, Andrassy Studien zur Europaforschung, Vol.1, Baden-Baden, 2012, 125-162

Eckardt, M. (2012c): The European Private Company: Do we need another 28th Private Company Law Form in the EU? On Regulatory Competition of Corporate Law, in: Discussions on Estonian Economic Policy, Nr.1, 2012, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2190951 (last access: 29.06.2013)

Eckardt, M., Kerber, W. (2014): Developing Two Tiered Regulatory Competition in EU Corporate Law: Assessing the Impact of the Societas Privata Europaea, in: Journal of Law and Society, Special Issue, Vol.41, 152-170

Elsas, R., Krahnen, J. P. (1998): Is Relationship Lending Special? Evidence from Credit-File Data in Germany', in: Journal of Banking and Finance, Vol.22, 1283-1316.

EU Commission (2003): Commission Recommendation of 6 May 2003 concerning the Definition of Micro, Small and Medium-sized Enterprises, 2003/361/EC, Official Journal of the European Union, L 124, 20.05.2003, 36-38

EU Commission (2008): "Think Small First" A "Small Business Act" for Europe, COM(2008) 394 final.

EU Commission (2010a): Internationalization of European SMEs, Final Report, EIM, Brussels, http://ec.europa.eu/enterprise/policies/sme/market-access/files/

internationali-sation_of_european_smes_final_en.pdf (last access: 04/04/2014)

EU Commission (2010b): Background Information and Descriptive Information on „Study on the Level of Internationalization of European SMEs", http://ec.europa.eu/enterprise/policies/sme/market-access/internationalization/ index_en. htm#h2-2 (last access: 04/04/2014)

Eurostat (2012): Volkswirtschaftliche Gesamtrechnung, http://epp.eurostat.ec.europa.eu/portal/page/portal/national_accounts/data/mai n_tables (last access: 04/04/2014)

Fama, E. F., Jensen, M.C. (1983): Separation of Ownership and Control. In: Journal of Law and Economics, Vol.26, 301-325

Fernández, Z., Nieto, M.J. (2005): Impact of Ownership on the International Involvement of SMEs, in: Journal of International Business Studies, Vol.37, 340-351

Gevurtz, F.A. (2012): Why Delaware LLCs?, Available at SSRN: http://ssrn.com/abstract=1998427, (last access: 04/04/2014).

Harhoff, D., Stahl, K., Woywode, M. (1998): Legal Form, Growth and Exit of West German Firms – Empirical Results for Manufacturing, Construction, Trade and Service Industries, in: Journal of Industrial Economics, Vol.47, 453-488

Häusermann, D. (2011): For a Few Dollar Less: Explaining State to State Variation in Limited Liability Company Popularity, University of St. Gallen Law & Economics Working Paper No. 2011-09. Available at SSRN: http://ssrn.com/abstract=1879430, (last access: 04/04/2014)

Heine, K., Kerber, W. (2002): European Corporate Laws, Regulatory Competition and Path Dependence, in: European Journal of Law and Economics, Vol.13, 43-71

Hollenstein, H. (2005): Determinants of International Activities: Are SMEs Different?, in: Small Business Economics, Vol.24, 431-450

Hornuf, L. (2012): Regulatory Competition in European Corporate and Capital Market Law: An Empirical Analysis, Intersentia

Jensen, M.C., Meckling, W.H. (1976): Theory of the Firm. Managerial Behavior, Agency Costs and Ownership Structure, in: Journal of Financial Economics. Vol.3, 305–360,

Knoth, A.F. (2008): Internationalisierung und Rechtsformwahl innerhalb der Europäischen Union, Synergieeffekte durch die Wahl einheitlicher Rechtsformen für Muttergesellschaft und ausländische Tochterunternehmen unter besonderer Berücksichtigung von Investitionen kleiner und mittlerer Unternehmen in den osteuropäischen Mitgliedstaaten der Europäischen Union, Ilmenau

Kraakman, R. et al. (2009): The Anatomy of Corporate Law. A Comparative and Functional Approach, Oxford et al., 2nd ed.

Lehmann, E., Neuberger, D., Raethke, S. (2004): Lending to Small and Medium-Sized Firms: Is there an East-West Gap in Germany?, in: Small Business Economics, Vol.23, 23-39

Li, J., Vertinsky, I., Zhang, H. (2013): The Quality of Domestic Legal Institutions and Export Performance. Theory and Evidence from China, in: Management International Review, Vol.53, 361-390

Munkert, J.M., Stubner, S., Wulf, T. (2010) (eds.): Founding a Company. Handbook of Legal Forms in Europe, Heidelberg et al.

Nassimbeni, G. (2001): Technology, Innovation Capacity, and the Export Attitude of Small Manufacturing Firms: a Logit/ Tobit Model, in: Research Policy, Vol.30, 245-262

Neuberger, D., Raethke-Doeppner, S. (2013): Leasing by Small Enterprises, in: Applied Financial Economics, Vol.23, 535-549

OECD (1997): Globalization and Small and Medium Enterprises (SMEs), Vol.1 (synthesis report) and Vol. 2 (country studies), Paris

OECD (2009): Top Barriers and Drivers to SME Internationalization, Report by the OECD Working Party on SMEs and Entrepreneurship, OECD, Paris

Pezoldt, K., Knoth, A. F. (2011): Internationalisierung und Rechtsformenwahl – Markteintritt in die osteuropäischen Mitgliedstaaten der Europäischen Union, in: Keuper, F., Schunk, H.A. (eds.): Internationalisierung deutscher Unternehmen, Wiesbaden, 371-390

Schaper, M. (2012): Selektion und Kombination von Gesellschaftsformen im institutionellen Wettbewerb. Typenvermischung und hybride Rechtsformen im europäischen und US-amerikanischen Wettbewerb der Gesellschaftsrechte, Berlin

Storey, D.J. (1994): The Role of Legal Status in Influencing Bank Financing and New Firm Growth, in: Applied Economics, Vol.26, 129-136

Svetlicic, M. Jaklic, A., Burger, A. (2007): Internationalization of Small and Medium-sized Enterprises from Selected Central European Countries, in: Eastern European Economics, Vol.45, 36-65

World Bank (2008a): Doing Business. Historical Dataset and Trends Data, http://www.doingbusiness.org/custom-query (last access: 04/04/2014)

World Bank (2008b): Doing Business 2009, Washington, http://www.doingbusiness.org/~/media/FPDKM/Doing%20Business/Documents/Annual-Reports/English/DB09-FullReport.pdf (last access: 04/04/2014)

Wymenga, P. et al. (2012): EU SMEs in 2012: at the Crossroads. Annual Report on Small and Medium-sized Enterprises in the EU, 2011/12, Client: European Commission, Rotterdam

Zahra, S.A., Neubaum, D.O., Naldi, L. (2007): The Effects of Ownership and Governance on SMEs' International Knowledge-based Resources, in: Small Business Economics, Vol.29, 309-327

Zhou, L., Wu, A. (2014): Earliness of Internationalization and Performance Outcomes: Exploring the Moderating Effects of Venture Age and International Commitment, in: Journal of World Business, Vol.49, 132-142

Appendix - Table A.1: Definition of Variables

Variable	Definition
Dependent Variable	
Internationalization	Dichotomous variable with 1 = Internationalization yes, 0 = no
Import	Dichotomous variable with 1 = Import yes, 0 = no
Export	Dichotomous variable with 1 = Export yes, 0 = no
Foreign direct investment	Dichotomous variable with 1 = Foreign direct investment yes, 0 = no
Technological Cooperation	Dichotomous variable with 1 = Technological cooperation yes, 0 = no
Being subcontractor	Dichotomous variable with 1 = SME was subcontractor yes, 0 = no
Having subcontractor	Dichotomous variable with 1 = SME had subcontractor(s) yes, 0 = no
Independent Variables	
Legal form	Set of dummy-variables with 1 = legal form yes, 0 = else:
	Sole proprietor; Partnership; Private limited enterprise; Public limited enterprise
	Reference class: Private limited enterprise
Company Size	Set of dummy-variables with 1 = size class yes, 0 = else:
	1 employee; 2 to 3 employees; 4 to 5 employees,; 6 to 9 employees, 10 to 49 employees
	Reference class: 2 to 3 employees
Ln employees	Natural log of continuous variable which measures how many employees (including the proprietor) the enterprise had in 2008
Product and/or process innovation	Dummy variable with 1 = product and/or process innovation between 2006 and 2008, 0 = else
Ln enterprise age	Natural log of continuous variable which measures how many years the enterprise has been in operation before 2009
Industry	Set of dummy variables with 1 = industry yes, 0 = else:
	Manufacturing, Construction Wholesale trade, Retail trade, Transport and communication, Business services; Personal Services
	Reference class: Manufacturing
Ln population	Continuous variable which measures the log of population size in 2008 [Eurostat 2012]
Country	Set of dummy variables with 1 = Country yes , 0 = else:
	France, Germany, Italy, Poland, Spain, United Kingdom, Nordic Countries (Denmark, Finland, Sweden), Benelux Countries (Belgium, Luxembourg, Netherlands), Central European Countries (Czech Republic, Hungary, Slovakia, Slovenia), Eastern European Countries (Bulgaria, Romania), Others (Austria, Cyprus, Estonia, Greece, Ireland, Latvia, Lithuania, Malta, Portugal)
	Reference class: United Kingdom
Public policy on internationalization	Dummy variable with 1 = SME knows of public policy programmes to promote SME internationalization: yes, 0 = no
Bureaucratic burden of international trade	Rank variable which measures the bureaucratic burden on international trade in a country (higher ranks mean higher burden) [World Bank 2008]
Difficulties of access to credit	Rank variable which measures the difficulties of getting access to credit in a country (higher ranks mean more difficulties of access to credit financing) [World Bank 2008]

Source: EU Commission (2010a, b) if not stated otherwise.

Appendix - Table A.2: Descriptive Statistics (weighted sample)

	Mean	Standard deviation	Minimum	Maximum
Internationalization	.44	.017	0	1
Import	.29	.015	0	1
Export	.25	.014	0	1
Technological cooperation	.07	.008	0	1
Being subcontractor	.07	.007	0	1
Having subcontractor(s)	.07	.007	0	1
Foreign direct investment	.02	.003	0	1
Sole Proprietor	.19	.011	0	1
Partnership	.14	.011	0	1
Private limited enterprise	.59	.017	0	1
Public limited enterprise	.08	.009	0	1
1 employee	.12	.009	1	1
2-3 employees	.26	.018	2	3
4-5 employees	.21	.012	4	5
6-9 employees	.34	.018	6	9
10-249 employees	.07	.003	10	249
Employees	6.62	.130	1	249
Product and/or process innovation	.40	.017	0	1
Enterprise age in years	21	.567	0	100
Manufacturing	.10	.007	0	1
Construction	.13	.010	0	1
Wholesale trade	.08	.008	0	1
Retail trade	.21	.013	0	1
Transport and communication	.06	.007	0	1
Business Services	.25	.013	0	1
Personal Services	.17	.021	0	1
Population	44.4 million	921399	410,290	82.2 Million
Public policy on internationalization	.16	.010	0	1
Bureaucratic burden of international trade	40.00	.757	3	116
Difficulties of access to credit	47.30	1.102	2	109

Source: Own calculations.

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