The Societas Europaea: Good News for European Firms

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July 2009

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When Council Regulation (EC) No 2157/2001 on the Statute for a European Company (Societas Europaea - SE) became effective on 8 October 2004, it offered publicly traded companies, for the first time, a choice between competing company laws, namely the national law of the company's home state and the law of the supranational SE. Using an event study methodology, we analyse a unique dataset of publicly traded firms that have announced to reincorporate under the SE Regulation. We find the re-incorporation decision to have a positive impact on firms' stock market value. The abnormal returns associated with re-incorporating as an SE increase over the years, which we interpret as the result of declining legal uncertainty and a rising reputational value of the SE corporate form.

Keywords: event study, Societas Europaea, European Company, EC company law, incorporation, charter competition, regulatory competition, legal arbitrage
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Abstract

When Council Regulation (EC) No 2157/2001 on the Statute for a European Company (Societas Europaea - SE) became effective on 8 October 2004, it offered publicly traded companies, for the first time, a choice between competing company laws, namely the national law of the company's home state and the law of the supranational SE. Using an event study methodology, we analyse a unique dataset of publicly traded firms that have announced to re-incorporate under the SE Regulation. We find the re-incorporation decision to have a positive impact on firms' stock market value. The abnormal returns associated with re-incorporating as an SE increase over the years, which we interpret as the result of declining legal uncertainty and a rising reputational value of the SE corporate form.

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1. Introduction

When it came to company law, European firms used not to have much choice. In most member states of the European Community (EC) as well as the European Economic Area (EEA), a legal rule known as the "real seat doctrine" restricted companies from incorporating in a jurisdiction other than that in which their corporate headquarters were located. The situation began to change fundamentally when in 1999 the European Court of Justice ruled that applying the real seat doctrine to companies from other EC member states violated the

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fundamental freedom of establishment under the EC Treaty.[1] The new case law effectively permitted company founders to choose a company law of their liking. It did not, however, provide the same freedom of choice to *existing* companies and their shareholders. There was no simple mechanism for "re-incorporating" a firm, that is, for transforming a company established in one jurisdiction into a company governed by the law of another jurisdiction.[2] Particularly for public companies with a large and dispersed shareholder base, it was virtually impossible to switch to another, more favourable company law. For them, the first choice to become available was between the national law of their respective home state and a new corporate form created by the EC: the European Company (Societas Europaea, SE). The European Company owes its existence not to the national laws of the member states but to EC law itself. Council Regulation (EC) No 2157/2001 on the Statute for a European Company (SE Regulation) entered into force on 8 October 2004. As soon as member states had adopted the required transposition measures, public companies organised under the laws of an EEA member state were able to re-incorporate as an SE,[3] thereby choosing to be governed by the SE Regulation.[4]

Since its introduction in 2004, the new corporate form has been increasingly used by European firms. While the number of SEs is still in the hundreds, it has so far shown exponential growth (Eidenmüller/Engert/Hornuf 2008, 2009). Commentators have asserted potential advantages that the SE might offer to firms and their shareholders. In prior work, we have studied the validity of some of these claims by examining the motives of SE founders (Eidenmüller/Engert/Hornuf 2009). Yet we know only little about whether and to which extent the alleged benefits of the SE corporate form actually materialise. This is especially true for the effects of SE law on shareholders of public companies. Fortunately, stock prices offer an observable measure of how securities markets value shareholders' position in the

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1 See ECJ, Case C-212/97 *Centros Ltd. v. Erhvervs- og Selskabsstyrelsen* [1999], ECR I-1459; Case C-208/00 *Überseering BV v. Nordic Construction Company Baumanagement GmbH* [2002] ECR I-9919; Case C-167/01 *Kamer van Koophandel en Fabrieken voor Amsterdam v. Inspire Art Ltd.* [2003] ECR I-10155.

2 Meanwhile, re-incorporations between the EEA member states should be possible by means of a cross-border merger into a shell company of the target jurisdiction under the Cross-Border Merger Directive 2005/56/EC. Member states were required to transpose the directive into national law by 15 December 2007.

3 Re-incorporation can be accomplished by way of a merger between two or more public companies from different member states (SE Regulation Art. 2(1)) or, more directly, by converting a public company into an SE; the latter method presupposes that the company has had a subsidiary that is governed by the law of another member state for at least two years (SE Regulation Art. 2(4)).

4 It should be noted, however, that the SE's company law differs only in part from that of the company's home state because the SE Regulation frequently makes reference to the national law of the member state in which the company's registered office is located, see subsection 6.2 below, particularly note 13.

firm. If markets are at least reasonably efficient, the stock price should reflect not only the expected future profits but also the firm's corporate governance structure.

In this paper, we adopt an event study approach to exploit this source of information. Event studies are generally a proven research tool, but they have a particularly prominent tradition in the empirical analysis of company law choice. They have been used extensively to evaluate re-incorporation decisions in the United States where firms have enjoyed free choice among the state company laws for much more than a century. As more than thirty listed companies throughout Europe have re-incorporated as an SE or have announced their decision to do so by 1 February 2009, we are in the fortunate position to apply this well tested methodology to the emerging issue of company law choice in Europe.

Our main finding is that securities markets view the new corporate form favourably. Announcing the decision to re-incorporate as an SE leads to significant positive abnormal returns. In the week following the announcement, cumulative average abnormal returns are in the order of magnitude of one to three percent. Apparently, investors in European firms consider the European Company "good news". Our result is further corroborated by the fact that abnormal returns surrounding the re-incorporation announcement have increased over the years. Markets seem to like the SE even better as they learn about it.

In the remainder of the paper, we briefly consider the relevant literature (section 2.) before presenting our data (section 3.) and the event study methodology we rely on (section 4.). Section 5. contains the main results on the abnormal returns on or around the announcement of the re-incorporation decision. In section 6., we analyse what might be driving abnormal returns. Section 7. concludes.

2. Literature

We are concerned with the economic consequences of company law choice, particularly with regard to shareholders in public companies. Our research interest has important policy implications: Which company law a firm elects may depend on the substantive differences in legal rules between jurisdictions. Whoever is in control of the decision will opt for the jurisdiction that best serves her own interests. Therefore, it is not a trivial question whether firms should be free to choose the company law under which they are organised. If re-incorporating in another jurisdiction tends to harm certain corporate stakeholders, the EC legislator may consider restricting firms' choices. For instance, additional requirements could be imposed to prevent harmful re-incorporations, such as exit rights for dissenting shareholders and creditors.[5] Learning about the consequences of company law choice can also inform policy making at the national level. If member states want to attract firms, or discourage firms from switching to another jurisdiction, they too should be interested in the effects of different legal rules on the various constituencies.

The U.S. has a long history of free company law choice. For more than a century, at least some of the states have actively engaged in what has come to be known as "charter competition," i.e. a competition among state jurisdictions to attract incorporations. For most of the time and until today the tiny state of Delaware has managed to dominate the market for incorporations. Its success has long been viewed with suspicion. The rival positions have originally been associated with Cary (1974), who argued that states engaged in a "race for the bottom", and Winter (1977), who took the opposite view that competition improved the quality of company law. It is important to note that the discussion in the U.S. focuses on the agency problem between managers and shareholders in public companies. Accordingly, the quality of Delaware's law – being the epitome of charter competition – was judged primarily by its impact on diversified shareholders. This common understanding and a growing confidence in market efficiency suggested a way to put the conflicting propositions to an empirical test: If incorporation in Delaware increased (decreased) stock market valuation, this would imply that charter competition benefitted (hurt) shareholders.

Hyman (1979) was the first to take this cue and to conduct a (somewhat rough) analysis of stock returns of firms announcing their intention to re-incorporate in Delaware. A survey by Bhagat and Romano (2007, pp. 971–2) counts a total of eight event studies on re-incorporations in Delaware alone, with none of them finding significantly negative returns on the announcement date and four documenting positive returns that are statistically significant. More recently, the event study methodology has been complemented by another approach

[5] At present, the SE Regulation does not provide any such safeguards. If an SE is formed by way of a cross-border merger, Art. 24 leaves it to the member states to protect minority shareholders and creditors of the merging companies. Cross-Border Merger Directive Art. 4(1)(b), (2) grants the member states a similar authority. To define its proper scope, the ECJ should consider the re-incorporation's impact on the respective group.

seeking to detect how the market evaluates Delaware law.[6] Daines (2001) and Subramanian (2004) examine whether Delaware companies generally enjoy a higher relative market valuation measured in terms of Tobin's Q[7] after controlling for a number of other factors. Again, the evidence seems to be slightly in favour of Delaware, with Daines finding a significantly higher valuation and the Subramanian analysis, using a refined methodology and a different sample, yielding no significant results.

As we pointed out in the introduction, choice of company law is a novel phenomenon in Europe. What little empirical research there is has mostly focused on the evolving use of foreign company law by start-ups since 1999 (Becht/Mayer/Wagner 2008). The opportunity for public companies to opt out of the national company law under which they were established is an even more recent phenomenon. So far, re-incorporating as an SE under European community law has been the only relevant alternative to the national company law of the firm's home jurisdiction. We documented in prior work that the SE has gained some popularity among European firms (Eidenmüller/Engert/Hornuf 2008, 2009). In addition, we provided evidence on the reasons for choosing the SE form rather than incorporating under national company law (Eidenmüller/Engert/Hornuf 2009). According to our earlier results, the most influential motive for incorporating as an SE appears to be the opportunity to reduce or avoid the effect of national worker co-determination laws. We will return to this and other explanations in interpreting the main result of our present study on abnormal returns surrounding the announcement of the re-incorporation decision. While the German Helaba bank has early on presented data on such abnormal returns (Helaba 2007, p. 1), we seem to be the first to document a *significant* effect for shareholders in public companies.

3. Data

Our main objective is to detect abnormal stock returns surrounding the decision of a listed firm to re-incorporate as a European Company. The first critical step is to identify our "event day", i.e. the point in time when the re-incorporation decision is made public. We collected data on three events: the first press release announcing the re-incorporation, the shareholder meeting authorising the re-incorporation, and finally the registration of the SE in the company register. We relied on *Thomson Knowledge* as a primary source to identify the event dates.

[6] For a critical assessment of the event studies on Delaware law see Bebchuk/Cohen/Ferrell (2002).
[7] Tobin's Q is defined as the ratio of the market value and the replacement cost of the firm's (net) assets.

Since all firms announced their intention in a press release before the respective shareholder meeting, this is the point in time when the market first learned of the re-incorporation decision. We obtained information of firms that have announced their intention to re-incorporate by 1 February 2009, even those that have not, or had not, yet been registered as SEs. For firms listed on German stock exchanges, we double-checked the dates against the inside information disclosure statements as recorded by the semi-official provider Deutsche Gesellschaft für Ad-hoc-Publizität (DGAP). Finally, we requested information from and clarified discrepancies with the investor relations departments of the respective firms.

As a result, we have generated a dataset of 33 publicly traded stock companies which announced to re-incorporate under the SE Regulation. Three firms were transformed into an SE just before going public. After dropping these 3 cases, our ultimate sample consists of 30 firms. MacKinlay (1997, p. 29) shows that this is a sufficient number for parametric tests to have a power of 98 percent to detect abnormal returns, provided that they have an absolute size of at least 1.5 percent and a standard deviation of no more than 2 percent. We rely on daily stock prices and indices from *Thomson Reuters Datastream*. The information on the method of incorporation, a possible transfer of the registered office, the (new) board structure, the number of employees and industry branch of the firm were hand collected from annual reports, special reports on the transfer of registered office and the website of the European Trade Union Institute[8].

[8] See http://www.worker-participation.eu.

Table 1. Public companies having announced to re-incorporate as an SE by 1 February 2009

Name of company, state of registration	Reg. office transferred from	Press announcement of re-incorp.	Shareholder meeting on re-incorp.	Date of registration as an SE	Board structure before re-incorp.	Board structure change	Industry*	Number of employees	Method of re-incorporation
Nordea, SE	-	16/06/2003	-	-	one-tier	-	K	32,000	-
Elcoteq, LU	FI	08/10/2004	27/09/2005	01/10/2005	one-tier	-	C	24,222	Conversion
Strabag Bauholding, AT	-	12/10/2004	12/10/2004	12/10/2004	two-tier	-	F	61,125	Conversion
Graphisoft, HU	LU	08/04/2005	10/05/2005	27/07/2005	one-tier	-	J	253	Conversion
Allianz, DE	-	11/09/2005	08/02/2006	13/10/2006	two-tier	-	K	177,000	Merger
Mensch und Maschine, DE	-	02/11/2005	30/05/2006	07/12/2006	two-tier	+	J	388	Conversion
Scor, FR	-	03/07/2006	24/05/2007	25/06/2007	one-tier	-	K	1,840	Conversion
Fresenius, DE	-	11/10/2006	04/12/2006	13/07/2007	two-tier	-	Q	114,000	Conversion
Surteco, DE	-	12/10/2006	31/08/2007	19/11/2007	two-tier	-	C	2,109	Conversion
HIT International Trading, DE	-	05/11/2006	24/09/2007	-	two-tier	+	G	5	Conversion
Prosafe, CY	NO	17/11/2006	22/12/2006	02/02/2007	one-tier	-	D	1,030	Conversion
BASF, DE	-	27/02/2007	26/04/2007	14/01/2008	two-tier	-	C	95,000	Conversion
Porsche Automobil Holding, DE	-	24/03/2007	26/06/2007	13/11/2007	two-tier	-	C	11,500	Conversion
Wiener Privatbank, AT	-	24/04/2007	31/05/2007	23/08/2008	two-tier	+	K	204	Conversion
Klöckner & Co, DE	-	20/09/2007	20/06/2008	08/08/2008	two-tier	-	C	10,581	Conversion
Interseroh, DE	-	26/09/2007	25/06/2008	24/09/2008	two-tier	-	D	1,729	Conversion
Catalis, NL	-	03/10/2007	03/01/2008	25/01/2008	one-tier	-	J	444	Conversion
SGL Carbon, DE	-	12/03/2008	25/04/2008	27/01/2009	two-tier	-	C	5,862	Conversion
Linde, DE	-	17/03/2008	-	-	two-tier	-	D	51,908	-
GfK, DE	-	27/03/2008	21/05/2008	04/02/2009	two-tier	-	M	10,000	Conversion
DVB Bank, DE	-	09/04/2008	11/06/2008	01/10/2008	two-tier	-	K	437	Merger
Q-Cells, DE	-	14/05/2008	26/06/2008	23/10/2008	two-tier	-	C	2,300	Merger
Solon, DE	-	15/05/2008	24/06/2008	02/12/2008	two-tier	-	C	850	Merger
IMW Immobilien, DE	-	23/05/2008	-	-	two-tier	+	L	88	Merger
Dexia, BE	-	03/07/2008	-	-	one-tier	-	K	35,200	-
Betbull Holding, AT	UK	17/09/2008	17/11/2008	31/10/2008	one-tier	-	R	109	Conversion
SCA Hygiene Products, DE	-	18/11/2008	-	-	two-tier	-	C	8,000	Conversion
Colexon Energy, DE	-	27/11/2008	-	-	two-tier	-	C	93	Merger
Navigator Equity Solutions, NL	-	17/12/2008	12/02/2009	-	two-tier	-	M	124	Conversion
Sword Group, FR	-	13/01/2009	-	-	one-tier	-	J	2,018	-

* NACE Rev. 2 Statistical classification of economic activities in the European Community

C = Manufacturing
D = Electricity, gas, steam and air conditioning supply
F = Construction
G = Wholesale and retail trade; repair of motor vehicles and motorcycles
J = Information and communication
K = Financial and insurance activities
L = Real estate activities
M = Professional, scientific and technical activities
Q = Human health and social work activities
R = Arts, entertainment and recreation

4. Event study methodology

In this section we outline our methodology for assessing the market response to the re-incorporation decision. We take the following three steps: First, we predict the returns for each day of the event window that we would expect if no event had occurred. Second, we subtract the expected returns from the actual returns to obtain the abnormal return. In our third and final step, we test whether the abnormal returns are statistically different from zero.

We calculate the return $R_{i,t}$ for security $i = 1, 2, \ldots, N$ and the return $R_{m,t}$ for the corresponding market index m (where t denotes a time index) as[9]

$$R_{i,t} = \frac{P_{i,t} - P_{i,t-1}}{P_{i,t-1}} \tag{1}$$

There are different ways to calculate predicted returns. The most widely used are the market model and the constant mean return model. The latter assumes that the mean return of a given security is constant over time and hence uses the security's mean return over a certain period of time as predicted return for the event window. By contrast, the market model presupposes a steady linear relationship between the returns of the individual security and the returns of the market. In so doing, the market model tends to reduce the variance in abnormal returns because it can capture the portion of the individual security's return that is related to the variation of the market return (MacKinlay 1997, p. 18). We want to take advantage of this property and therefore specify the market model as follows:

$$R_{i,t} = \alpha_i + \beta_i R_{m,t} + u_{i,t} \tag{2}$$

$$\text{with } E(u_{i,t}) = 0 \text{ and } Var(u_{i,t}) = \sigma_{i,t}^2$$

The error term $u_{i,t}$ is assumed to be normally distributed with an expected value of zero. Since the predictive power of the market model depends primarily on how well the market index matches the market component in the returns of the security as measured by the R^2, we rely on different indices covering the various European stock markets and market segments.

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[9] Another approach to calculate returns often used in financial mathematics is $R_{i,t} = \log\left(\frac{P_{i,t}}{P_{i,t-1}}\right)$. Since our results are barely affected by the way we calculate returns, we present the results using the more intuitive return measure in (1).

For instance, we choose from the DAX, MDAX, SDAX and TecDAX for the subsample of German companies. If a firm is part of one of these indices, as is the case for Allianz and BASF with respect to the DAX, we use this index. In the remaining cases, we choose the index that best approximates the firm's size and industry. We estimate the predicted return parameters in a window from 230 to 30 days before the event date. Separating the estimation window from the event window prevents the event from influencing the parameter estimates. We predict the normal returns $\hat{R}_{i,t}$ for each day in the event window based on the estimates of $\alpha_i$and β_i. The abnormal returns (prediction errors), are calculated as:

(3)
$$AR_{i,t} = R_{i,t} - \hat{R}_{i,t}$$
$$AR_{i,t} = R_{i,t} - (\alpha_i + \beta_i R_{i,t})$$

To test whether the abnormal returns are different from zero at the firm level we apply a t-test (where *v* denotes the t-value):

(4)
$$v_{i,t} = \frac{AR_{i,t}}{S(AR_i)}$$

$S(AR_i)$ is an estimate of the standard deviation of the abnormal return during the estimation window, which is calculated as

(5)
$$S(AR_i) = \sqrt{\frac{\sum_{t=-230}^{t=-30} \left(AR_{i,t} - \overline{AR}_i\right)^2}{T-1}}$$

where $\overline{AR}_i$ is

(6)
$$\overline{AR_\iota} = \frac{1}{T} \sum_{t=-230}^{t=-30} AR_i$$

Based on abnormal returns for each individual security we aggregate abnormal returns over securities in order to draw an overall inference for day *t*. The average abnormal returns are calculated as

(7)
$$AAR_t = \frac{1}{N} \sum_{i=1}^{N} AR_{i,t}$$

where the relevant test statistic is

$$v_t = \frac{AAR_t}{S(ARR_t)} \tag{8}$$

Information is sometimes not disclosed to the market at one distinct point in time. It may leak out before and disseminate after the public announcement (the event date). Also, we may not be able to observe the precise timing of the announcement. For instance, if it has been made after the market close it cannot show up in the event day's stock price. To capture the full abnormal returns associated with a piece of information, it has become standard practice to consider event windows of more than one day around the event date and calculate cumulative abnormal returns over more than one day. This can be done on both the firm level and the aggregate level. We denote $\underline{\tau}$ the lower and $\overline{\tau}$ the upper bound of the event window with $-30 \leq \tau \leq 30$. The cumulative abnormal return on the firm level is

$$CAR_i^{\underline{\tau},\overline{\tau}} = \sum_{t=\underline{\tau}}^{t=\overline{\tau}} AR_{i,t} \tag{9}$$

and the cumulative average abnormal return

$$CAAR^{\underline{\tau},\overline{\tau}} = \sum_{t=\underline{\tau}}^{t=\overline{\tau}} AAR_t \tag{10}$$

The corresponding test statistics are

$$v_i = \frac{CAR_i^{\underline{\tau},\overline{\tau}}}{\sqrt{\sum_{\underline{\tau}}^{\overline{\tau}} S^2(AR_{i,t})}} \tag{11}$$

$$v = \frac{CAAR^{\underline{\tau},\overline{\tau}}}{\sqrt{\sum_{\underline{\tau}}^{\overline{\tau}} S^2(AAR_t)}} \tag{12}$$

where $S^2(AR_{i,t})$ and $S^2(ARR_t)$ denote the variance of the (average) abnormal returns.

In addition to these parametric tests, we conduct the non-parametric Wilcoxon rank-sum test to check the robustness of our results. The test is implemented by ranking the absolute values of the abnormal returns. The lowest absolute value obtains rank 1, the second lowest rank 2 and so on. The statistic is given by

$$RS^{+} = \sum_{i=1}^{N} r_i^{+} \tag{13}$$

where r_i^{+} is the rank of the abnormal return for security *i* provided that it is positive. In other words, we only sum the ranks of observations where abnormal returns are positive. The corresponding test statistic is:

$$z = \frac{RS^{+} - \left(\frac{n^{+}(N+1)}{2}\right)}{\sqrt{\frac{n^{+}(N-n^{+})(N+1)}{12}}} \tag{14}$$

where n^{+} is the number of observations in the subsample with positive and n^{-} with negative abnormal returns. It follows that $N = n^{+} + n^{-}$.

5. Empirical findings

5.1 Firm level abnormal returns

We first present some results at the most disaggregated level of analysis, i.e. for individual firms on the day of the announcement. It appears that on the event day – which we denote as day 0 –, abnormal returns are significant at least at the 5-percent level for 4 out of 30 firms, namely Allianz, Betbull, Linde and Q-Cells. At day 1, we find statistically significant results for 3 firms, namely Betbull, GfK and Porsche, which might be due to the fact that some press announcements were released after the stock market had closed. For the significant results, the abnormal returns range from -5 to 7 percent. At the event day 0, we observe positive and negative abnormal returns for an equal number of firms. There were slightly more firms with positive abnormal returns on the day after the event date. A similar picture emerges when looking at the cumulative abnormal returns in the event window from day -1 to 1, with almost one third of the firms yielding significant results at the 10-percent or a higher level. Overall, announcing to re-incorporate under the SE Regulation had a significant statistical effect for nearly half of the firms in our sample on day -1, 0, 1 or the three days taken together.

Table 2. Firm-level abnormal returns

Day (t)	-1	0	1	-1 to 1
Firm				
Allianz	-.0054	-.0292***	.0034	-.0312
Strabag Bauholding	-.0195	-.0034	.0050	-.0179
BASF	.0077	-.0028	-.0000	.0049
Colexon	.0246	.0762*	-.0376	.0632
Betbull	.0003	.0578**	-.0536**	.0045
Catalis	-.0158	-.0149	-.0188	-.0495***
DVB Bank	-.0105	-.0035	.0147	.0007
Elcoteq	.0139	-.0079	.0017	.0077
GfK	.0084	.0169	.0475**	.0729**
Dexia	.0088	.0264	.0016	.0368
Fresenius	-.0153	.0039	-.0106	-.0221
Graphisoft	.0192	.0023	.0030	.0245
HIT	.0026	.0010	.0027	.0063***
IMW	-.0008	-.0048	-.0066	-.0122**
Interseroh	.0086	-.0205	.0160	.0041
Klöckner & Co	.0152	-.0073	.0180	.0258
Linde	.0049	.0299**	.0185	.0533**
SGL Carbon	-.0212	.0171	.0155	.0113
Mensch und Maschine	.0011	.0168	.0048	.0227
Navigator	-.0056	-.0017	-.0079	-.0151***
Nordea	-.0048	-.0032	-.0002	-.0082*
Porsche	.0129	.0162	.0723***	.1015*
Prosafe	-.0254	-.0053	.0192	-.0115
Q-Cells	-.0132	.0447**	.0055	.0370
SCA Hygiene	-.0028	.0006	-.0036	-.0069
Scor	-.0379**	.0025	.0227	-.0127
Solon	-.0289	.0059	-.0087	-.0316
Sword Group	-.0119	-.0049	.0152	-.0017
Surteco	-.0008	-.0019	-.0001	-.0028*
Wiener Privatbank	.0000	-.0008	.0001	-.0006

Table 2 contains abnormal returns at the firm level. Returns were calculated as outlined in equation (3) and (9). Using the test statistics in (4) and (11) *** indicate the 1-percent, ** the 5-percent and * the 10-percent level of significance.

5.2 Average abnormal returns

In a second step, we sum up abnormal returns over individual securities and divide by the total number of firms to obtain the average abnormal returns for each day *t* within the event window. The significant results at the firm level on days -1, 0 and 1 do not carry over to the aggregate level, except for a weakly significant positive return on the event day 0. However, significant abnormal returns of the individual firms are spread over days -1, 0 and 1. As long as the market is reasonably efficient, one would expect a piece of information to cause abnormal returns only on one single day around the event date. At the same time, the change in the fundamental structure of the firm should have a lasting impact on the firm's (market) value. We should therefore be most interested in *cumulative* abnormal returns.

Table 3. Average abnormal returns

	AAR_t	t-test		Wilcoxon rank-sum test	
Day (t)		t-value	p-value	z-value	p-value
-20	.0001	.9779	48.9	-.093	92.6
-15	.0070	1.2179	23.3	1.183	23.7
-10	-.0013	-.5587	58.1	-.586	55.8
-5	-.0022	-.4109	68.4	-.278	78.1
-4	.0001	.0252	98.0	.483	62.9
-3	.0002	.0333	97.4	1.306	19.2
-2	-.0040	-1.2007	24.0	-1.573	11.6
-1	-.0031	-1.1424	26.3	-.0936	34.9
0	.0069*	1.6988	10.0	.771	44.1
1	.0047	1.1445	26.2	1.491	13.6
2	.0017	.2964	76.9	.751	45.3
3	.0016	.5575	58.2	.915	36.0
4	.0026	.8157	42.1	.524	60.0
5	.0024	.5710	57.2	1.388	16.5
10	-.0042	-1.3189	19.8	-1.964	5.0
15	-.0049	-.7959	43.3	-.508	61.1
20	.0025	.9372	35.7	.789	43.0

Table 3 contains average abnormal returns for individual event days. Returns were calculated as outlined in equation (7). Using the test statistics in (8) * indicates a 10-percent level of significance. The Wilcoxon rank-sum test was implemented as indicated in (13) and (14).

5.3 Cumulative average abnormal returns

There is some uncertainty as to when exactly the re-incorporation announcement hits the market and whether information may have leaked out before the official release. To capture the full effect of the re-incorporation decision in our sample, we cumulate the daily average abnormal returns over time. It turns out that the market on average appreciates the re-incorporation decision. Forming a European Company under the SE Regulation is good news for the respective firm, at least from the point of view of its shareholders. The cumulative average abnormal return for the event window from day 0 to 1 is positive and significant at the 5-percent level. The same result holds for all but one event window beginning on day 0 and ending at days 1 to 8. As can be gleaned from chart 1, the cumulative average abnormal returns increase still further until day 30.[10] The market reaction is also quite relevant economically. Cumulative average abnormal returns from day 0 to day 1, 2, 3 … 8 range between 1.2–3.0 percent, which is a substantial excess return for such a short time span. Apparently, re-incorporating under the SE Regulation is relevant information for a firm's market valuation.

[10] In the 30 days following the event date, daily abnormal returns are higher than in the preceding 30 days. A t-test on this difference comes out significant at the 1-percent level.

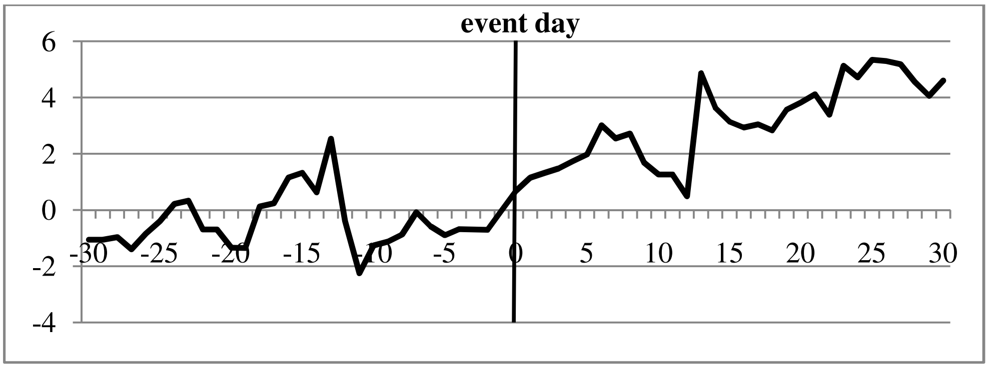
Table 4. Cumulative average abnormal returns[11]

window	$CAAR_t$	t-test t-value	t-test p-value	Wilcoxon rank-sum test z-value	Wilcoxon rank-sum test p-value
+ to -1	.0084	1.41	16.9	.833	40.5
+ to -2	.0062	.78	44.2	.401	68.8
+ to -3	.0079	.81	42.7	1.059	29.0
+ to -4	.0107	1.10	27.8	1.203	22.9
+ to -5	.0108	.82	41.8	1.347	17.8
+ to -10	.0000	.00	99.9	0.216	82.9
+ to -15	.0406	.62	53.9	-.660	51.0
+ to -20	.0229	.36	72.2	-1.070	28.5
+ to -25	.0435	.62	53.7	-.249	80.4
+ to -30	.0342	.50	62.2	-.378	70.5
-30 to -1	-.0106	-.33	74.5	-1.450	14.7
-25 to -1	-.0040	-.13	89.6	-1.388	16.5
-20 to -1	-.0134	-.48	63.6	-1.676	9.4
-15 to -1	.0133	.44	66.0	-1.121	26.2
-10 to -1	-.0126	-1.47	15.1	-1.697	9.0
-9 to -1	-.0113	-1.27	21.6	-1.286	19.9
-8 to -1	-.0087	-1.13	26.6	-1.203	22.9
-7 to -1	-.0007	-.09	93.1	-.998	31.9
-6 to -1	-.0058	-.50	61.9	-.483	62.9
-5 to -1	-.0090	-.88	38.6	-.915	36.0
-4 to -1	-.0068	-1.03	30.9	-.854	39,3
-3 to -1	-.0069	-1.12	27.1	-.442	65.8
-2 to -1	-.0070	-1.48	15.1	-2.170	3.0
0	.0069*	1.70	10.0	.771	44.1
0 to 1	.0115**	2.40	2.3	1.903	5.7
0 to 2	.0132*	2.03	5.1	1.697	9.0
0 to 3	.0148**	2.09	4.6	1.903	6.0
0 to 4	.0174**	2.62	1.4	2.499	1.3
0 to 5	.0198**	2.33	2.7	2.232	2.6
0 to 6	.0302**	2.70	1.2	2.499	1.3
0 to 7	.0255**	2.39	2.4	2.252	2.4
0 to 8	.0272**	2.47	2.0	2.273	2.3
0 to 9	.0168	1.61	11.8	1.573	11.6
0 to 10	.0126	1.17	25.1	1.347	17.8
0 to 15	.0314	.85	40.3	.551	58.1
0 to 20	.0382	.99	33.3	.616	53.8
0 to 25	.0535	1.21	23.6	.876	38.1
0 to 30	.0461	1.13	27.0	.746	45.6

Table 4 contains cumulative average abnormal returns. Returns were calculated as outlined in equation (10). Using the test statistics in (12) ** indicates the 5-percent and * the 10-percent level of significance. The Wilcoxon rank-sum test was implemented as indicated in (13) and (14).

[11] We use robust standard errors to account for possible heteroskedasticity.

Chart 1. Cumulative average abnormal returns



6. Explaining abnormal returns

Important as it is, the finding that re-incorporating under the SE Regulation on average increases firm value, inevitably leads to a new enquiry: What is it about the European Company that is driving abnormal returns around the announcement of the re-incorporation decision? We set out on this new quest and provide some indications suggested by our data.

6.1 Legal uncertainty and reputation effects

The cumulative abnormal returns in our study exhibit a striking trend. As can be seen in chart 2, they were positive on average only since 2005 and have been growing steadily over the whole period from 2003 to 2008. We conceive of two plausible (and interrelated) reasons for this pattern. Our first explanation is legal uncertainty. In the early days – beginning in October 2004 –, incorporating under European law involved considerable legal risk. Advisers were unfamiliar with the legal framework and did not have any experience with establishing an SE. Registering an SE was fraught with difficulty. For instance, the early attempt of the German firm Zoll Pool Hafen Hamburg to incorporate as an SE was abandoned because of flawed legal documentation. In a survey conducted in 2008, German SE users indicated that some government agencies were still unfamiliar with this new company type (Eidenmüller/Engert/Hornuf 2009, p. 26). However, as more and more firms adopt the new legal form, experience grows and knowledge spreads out. We therefore expect legal uncertainty to decline over time. By the same token, abnormal returns should increase. In addition, investors themselves also get more knowledgeable as the SE corporate form becomes more common. As a consequence, they can better assess the costs and benefits of re-incorporation. They seem to appreciate what they learn.

A second driver behind the trend in abnormal returns could be reputation effects. Firms might choose legal structures not only for their legal implications but also out of reputational concerns (Fleischer 2006). It is conceivable that firms use the SE to present themselves as a supranational venture of European or even global stature. In our survey mentioned above, respondents most often named the "Image of the SE" as a motive for incorporating under European law (Eidenmüller/Engert/Hornuf 2009, p. 27). The image conveyed by the SE corporate form should also become more powerful as it is more widely used, especially as long as the number of adopters still remains in the hundreds.

The time trend in abnormal returns is mirrored by the growth in the number of listed and non-listed European Companies generally. As Chart 3 documents, SE incorporations have risen nearly exponentially since 2004. It appears that the SE's popularity is increasing not only in the stock market but also among private owners, which conforms to our legal uncertainty and reputation account.

Chart 2. Cumulative average abnormal returns (%) from day 0 to 1

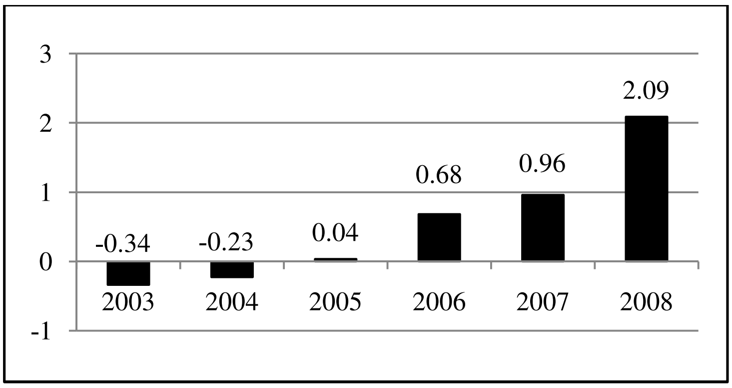
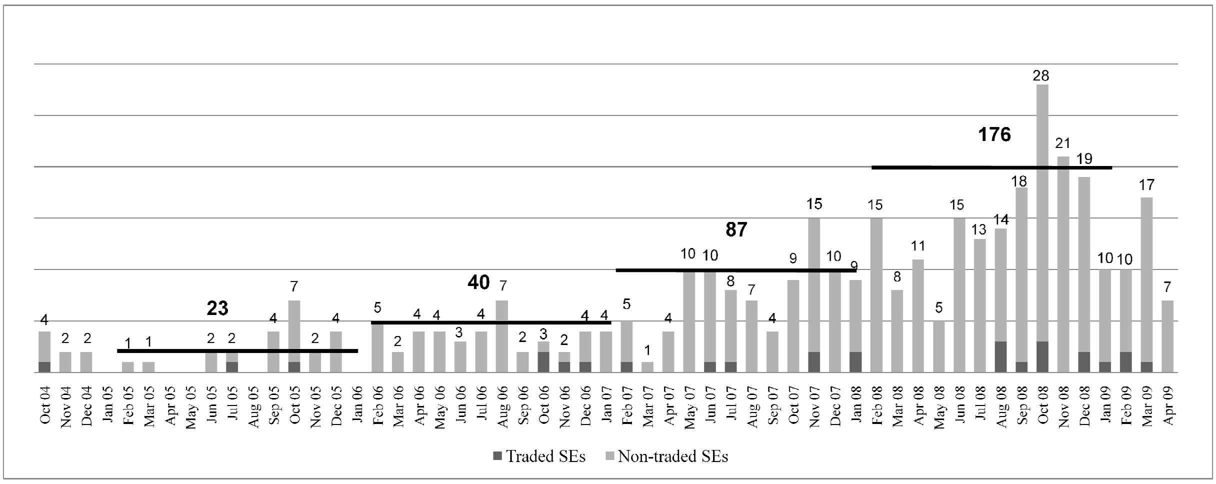


Chart 3. SE incorporations from October 2004 to April 2009



6.2 Legal arbitrage

Giving the company a more European or international look may be one reason for choosing the SE corporate form. This would speak to the relevance of legal "branding". It might imply that there is a demand for company types sponsored by supranational entities like the EC, simply because some firms wish to avoid being associated with a particular, or any, national jurisdiction. Yet for lawyers and policymakers it is certainly not the foremost concern what kind of image a corporate form may or may not convey in the marketplace. Instead, their primary interest is in legal rules. The debate on charter competition, accordingly, focuses on legal differences between competing jurisdictions. In this view, firms choose a company law to take advantage of rules that they consider preferable, i.e., they engage in what can be aptly referred to as "legal arbitrage".[12]

The European Company is in large part governed by the same set of rules as a public company under national company law. The SE Regulation fails to contain provisions for many matters of company law and instead makes reference to the rules of the SE's home state jurisdiction.[13] There are, however, a number of differences between an SE and a public company incorporated under national law regarding, inter alia, the corporate governance

12 While the term "legal arbitrage" (or "regulatory arbitrage") sometimes carries a negative connotation we use it only in a descriptive sense.

13 There are a number of references to member state law on specific issues (see, e.g., SE Regulation Art. 5, 13, 51, 57). In addition, SE Regulation Art. 9(1)(c)(i), (ii) states that the European Company shall be governed by the company law of the member state in which it has its registered office insofar as a matter is not covered by the SE Regulation itself or the company's articles.

structure, mandatory rules on worker co-determination, corporate mobility, and the possibility to consummate a cross-border merger. Building on the theoretical literature, we have identified a number of hypotheses on legal arbitrage opportunities to explain why firms choose to incorporate in the European Company form (Eidenmüller/Engert/Hornuf 2009). The evidence presented in Eidenmüller/Engert/Hornuf (2009) indicates that mandatory worker co-determination as imposed by some member states is a major driver behind SE incorporations. We therefore revisit this issue in subsection 6.2.1 before briefly considering other hypotheses in subsection 6.2.2. While our sample offers suggestive support for some of our hypotheses, we are unable to link them to our central finding of abnormal returns that accompany the decision to re-incorporate as an SE.

6.2.1 Mandatory worker co-determination

In our earlier work, we were able to show that national rules on mandatory worker co-determination in the (supervisory) board significantly increase the number of SEs in a members state (Eidenmüller/Engert/Hornuf 2009). The law applicable to the European Company provides an opportunity to mitigate or even escape the effects of national worker co-determination regimes: If a firm re-incorporates as an SE before reaching a statutory co-determination threshold, it can "freeze" the preexisting level of co-determination. For instance, if a German company with less than 500 employees switches to the SE corporate form, it can avoid co-determination even when, later on, it grows beyond the 500 employee statutory threshold. Likewise, if the company re-incorporates before having more than 2,000 employees, it can prevent co-determination rules from escalating to a 50 percent worker representation on the supervisory board. In addition, forming an SE offers further flexibility as firms can negotiate the terms of co-determination with their employees and tailor them to their particular needs and circumstances. For instance, an SE can keep its supervisory board to a smaller size than under the national co-determination regime, and it can have its foreign employees represented on the employee bench. Overall and in line with our prior evidence, we would expect co-determination rules to be one of the main factors in explaining abnormal returns.

A look at the country of origin documented in table 1 seems to support this conjecture. Nearly two thirds of the firms in our sample (18 out of 30) are registered in Germany where mandatory co-determination rules are particularly strict. In addition, the abnormal returns for the subsample of German re-incorporators are not only more than 5 times larger than for other firms, but the difference is also statistically significant at a (modest) 15-percent level.[14] Switching to the SE corporate form seems to be more value-enhancing for shareholders of German firms than for those of other companies. On the other hand, if mitigating the effects of worker co-determination were value enhancing, these benefits should occur most prominently in smaller firms, for which the SE offers a chance to escape co-determination rules entirely or preserve a preexisting lower level of employee representation. Of the German re-incorporators, five firms are plausible candidates for avoiding co-determination altogether;[15] preventing the stricter 50 percent co-determination requirement may have been a motive for another four firms.[16] However, there seems to be no connection between the opportunity to avoid co-determination and the rise in market valuation associated with the re-incorporation decision. For the nine German firms which may have sought to flee co-determination rules, cumulative average abnormal returns do not differ significantly from the remaining firms in our sample and are actually smaller than average.

We can think of different reasons for why we can find only limited support for the co-determination hypothesis. There may be overlapping effects pulling in the opposite direction. Looking at our full sample, for all but the largest firms, abnormal returns seem to rise with firm size. Perhaps using the SE's European image is more valuable for larger firms. Alternatively, a small firm's decision to re-incorporate may have raised suspicion among investors (especially in the early days). If this were true, it could conceal some of the benefits of avoiding co-determination, which under German law should occur in firms with relatively few employees (i.e., up to around 2,000 employees). On the other hand, it may very well be that co-determination is not bad, or is even good, for diversified investors in publicly traded companies. Extant evidence on the matter is mixed.[17] Co-determination might benefit public shareholders by putting directors on the board that are committed to the firm without being

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[14] For the subsample of German firms the cumulative abnormal returns reach 1.7 percent for the event window from day 0 to 1, while for the remaining firms they do not exceed 0.3 percent.

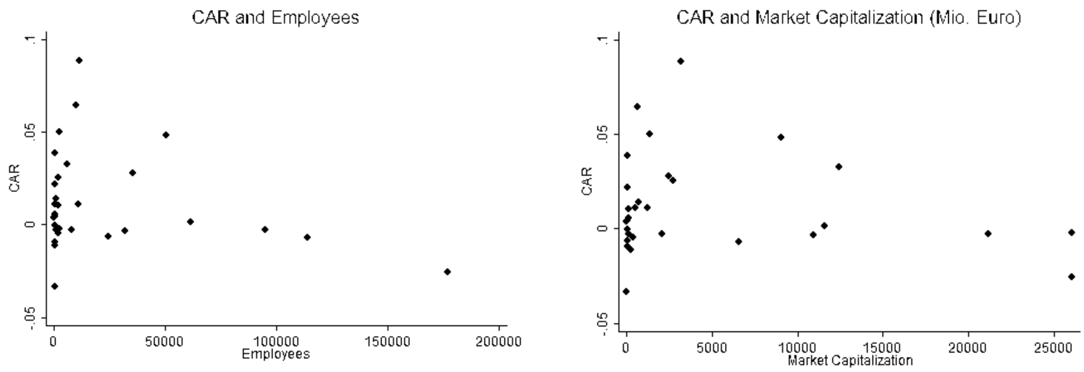
[15] Colexon (93 employees), DVB Bank (437 employees), HIT International Trading (5 employees), IMW Immobilien (76 employees), Mensch und Maschine (380 employees). From our telephone survey reported in Eidenmüller/Engert/Hornuf (2009) we know that avoiding co-determination can be a concern even for (growing) firms with around one hundred employees.

[16] Interseroh (1,729 employees), Q-Cells (2,100 employees), Solon (840 employees), Surteco (2,100 employees).

[17] Fauver/Fuerst (2006) find a positive impact on firm value as measured by Tobin's *Q* for certain degrees of co-determination. Addison/Schnabel (2009) provide a valuable survey of the empirical evidence.

affiliated to a controlling shareholder. If that is the case, the effect should be most pronounced in small firms where insiders would otherwise go largely unchecked.

Chart 4. Cumulative abnormal returns from day 0 to 1and firm size



6.2.2 Other differences between national company law and SE law

While national companies have come to enjoy greater corporate mobility within the EEA in recent years, the SE still has certain advantages in this regard. Being of genuinely "European" origin, it can transfer not just its corporate headquarters but also its registered office from one member state jurisdiction to another.[18] Our sample contains four firms that have transferred their registered office after re-incorporating as an SE (table 1), which would have been hardly possible if they had remained companies under national law. It seems plausible that corporate mobility was a motive in these firms' choice of the SE form. The proportion of such firms becomes even more noteworthy when one considers that only 23 firms in our sample have had the opportunity to transfer their registered office because the remaining 7 companies have not yet been registered as SEs.

Likewise, for some time and arguably until today, forming an SE under the SE Regulation was the most reliable way to consummate a cross-border merger, especially if public companies with many shareholders were involved. Table 1 reports that 6 European Companies in our sample have been established by using the merger method provided for in the SE Regulation. Although we cannot rule out that some of these mergers were carried out

[18] Details on corporate mobility and its implications are provided in Eidenmüller/Engert/Hornuf (2009).

with the purpose of forming an SE, we believe that at least in some cases it was the other way round – the SE was set up in order to accomplish the merger.

While firms seem to be using the additional legal opportunities offered by the SE, we again do not find any hint that this legal arbitrage is driving abnormal returns upon re-incorporation. Both firms with a subsequent transfer of the registered office and SEs established by way of a cross-border merger exhibit less-than-average abnormal returns on or around the announcement of the re-incorporation decision. On the bright side, this finding reassures us that abnormal returns do not result from particular corporate transactions that are announced concurrently with the re-incorporation. Otherwise, one might have suspected that the share price reaction only reflected the effects of a cross-border merger or relocation, for which the SE Regulation is used. The fact that abnormal returns in merger and relocation cases are smaller than average suggests that we are not confusing the general effects of the SE corporate form with those of a particular corporate transaction.[19]

Another difference between national company law and the SE Regulation relates to the corporate governance structure. Whereas many member states prescribe either a single board of directors (one-tier structure) or a duality of a supervisory board and a management board (two-tier structure), European Companies can choose between the two. Table 1 shows that 4 firms have changed their board structure after re-incorporating as SEs. Except for the Austrian Wiener Privatbank all of these firms have their registered office in Germany. All of them switched from the two-tier to the one-tier board model, which conforms to an earlier finding based on a larger sample of both listed and non-listed SEs (Eidenmüller/Engert/Hornuf 2009). But again, the data refuse to give an indication that the additional flexibility offered by the SE increases market value. The firms in our sample that have switched to the one-tier structure exhibit below-average abnormal returns.

[19] Of course, the opportunity to accomplish a cross-border merger or relocation also constitutes a legal advantage from choosing to re-incorporate under the SE Regulation. However, if the same transaction could be completed without using the SE corporate form, albeit at higher costs, its full benefit should not be attributed to the re-incorporation decision. For transactional and strategic reasons behind re-incorporations in Delaware see Bebchuk/Cohen/Ferrell (2002, pp. 1792-97); Bhagat & Romano (2007, pp. 972-3); Romano (1985, pp. 250 ff.).

7. Summary and Conclusion

Our analysis of abnormal returns surrounding the announcement of re-incorporation decisions yields a clear result: Re-incorporating as an SE tends to increase the stock market valuation of firms. By establishing the European Company, the EC has created a new company type that appeals not only to firms and their managers but also to diversified shareholders of public companies. We also observe that the abnormal returns associated with re-incorporation decisions are growing over time. Apparently, the SE creates more (market) value, the more investors become familiar with it.

What is less clear are the reasons for the SE's success in the first place. We know that avoiding or mitigating the effects of member states laws on mandatory worker co-determination plays an important role in the choice of the SE corporate form. However, firms for which this motive is particularly strong do not exhibit higher cumulative returns than others; rather, the converse is true. One can interpret this as (weak) evidence for the efficiency of such laws. But there are also other possible effects and explanations that pull in a different direction. It may well be the case that investors treat especially small firms that re-incorporate as an SE with general suspicion even though avoiding or mitigating the effect of mandatory worker co-determination raises firm value. Similarly inconclusive results are associated with other potential legal arbitrage motives that might be driving re-incorporating decisions.

Although we cannot make out the particular reasons for the SE's success, our main finding carries a very general policy lesson: A broader range of company law choice for European firms may open up new opportunities and help to unlock hidden value. The EC should keep experimenting with enhancing company law choice as well as offering additional company types such as the European Private Company that is presently being contemplated.[20]

[20] See the recent Commission proposal for a Council Regulation on the Statute for a European private company, COM (2008) 396 final.

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