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The Impact of a Break-Through Rule on European Firms

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Abstract:

We analyze the impact of a 75 pct. Break-Through rule on 1,035 European firms with dual class shares. In 3-5 pct. of the firms the controlling owners incur a direct loss of control, whereas in additional 11-17 pct. of the firms the controlling owners are likely to incur a control loss. Firms in Germany, Italy and the Scandinavian countries are more likely to incur a control loss. We continue to estimate the restrictions that the Break-Through rule puts on these firms' ability to issue new shares to outsiders without changing the control structure. We conclude that a significant number of the firms with dual class shares in the European Union will be affected by a 75 pct. Break-Through rule.

JEL classifications: G30, G32, G34 and G38

Keywords: Break-Through rule, Dual class shares, Corporate control, Takeovers and Voting rights.

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1. Introduction.

The EU initiative on the regulation of takeover bids was initiated by the 1985 White Paper on the completion of the Internal Market, which identified the need for a new company directive. A significant chapter in this ongoing process is the publication in January 2002 of the “*Report on the High Level Group of Company Law Experts on Issues related to Takeover Bids*” authored by a group of European law professors chaired by Jaap Winter. We will refer to this as the *Winter-report* throughout this paper. The Winter-report proposed a number of changes to the existing company laws around Europe, some of which have stirred an intense debate among economists and law researchers.

In this paper we focus on the impact on European firms of only one of these proposals, namely the introduction of a Break-Through rule, henceforth denoted BT-rule. The BT-rule states that an investor, after acquiring a certain threshold of the cash flow rights to a firm, should be able to break through the firm’s current control structure. The report suggests that the threshold should be set at 75 percent, so that any owner possessing 75 percent of the total outstanding shares, independently on the presence of dual class shares, should have complete control with the firm including the ability to replace the management and/or the board of directors instantly.

Obviously, a BT-rule affects only the control structures of firms having multiple share classes with different number of votes attached. Thus, many observers have seen this proposal as an attack on the control structure of firms with dual class shares, a type of ownership that is fairly common in many European countries (Faccio and Lang 2002). If controlling owners hold a large fraction of the superior voting shares (SVSs) and a small fraction of limited voting shares (LVSs), it is possible that the introduction of a BT-rule affects the control structure in the firm. An aggressive investor outside – or even belonging to - the group of controlling owners may buy enough of the votes with limited voting rights to invoke the BT-rule and takeover the firm.

However, it is worth emphasizing, that the impact of a BT-rule on firms with dual class shares will vary depending on how the ownership of such firms is organized; in particular, it depends on how many outstanding shares that exist of each type, the number of votes attached to each class, the distribution of shares among the group of owners and the threshold level assigned in the BT-rule.

Hence, if controlling owners in addition to their SVSs possess a large fraction of the LVSs, the impact of a BT-rule will be limited.

The main objective of the present analysis is to identify which firms within the European Union are likely to be affected by a BT-rule. We do this by analyzing the distribution of cash flow and control rights for 1,035 European firms across 10 countries with dual class shares.¹ Using Sweden as an example, we develop a method to categorize all 1,035 firms into four groups, depending on the control structure before and after the introduction of the BT-rule. We show that approximately 3-5 pct. of the firms, mainly in Denmark, Germany, Italy and Sweden, face a direct loss of control after the introduction of a BT-rule. In these firms there is a single owner or a group of controlling owners possessing at least 50 pct. of the votes but less than 25 pct. of the total outstanding shares.

In addition, many firms incur a potential control loss, which we define as a situation where none single owner, nor the group of largest owners possess 50 pct. or more of the votes in the firm and less than 25 pct. of the total outstanding shares. We estimate that between 45 and 62 pct. of the analyzed firms will face a potential control loss after the introduction of a BT-rule. Among the largest firms in Europe with dual class shares around two thirds of the companies faces a potential control loss.

Since this group is large, it is indeed important to distinguish between firms that are located in this group due to a general dispersed ownership structure and firms in which control is concentrated and cash flow is dispersed. We find that the former is the case for the British and Irish firms in our sample, whereas the latter is dominant for firms in Continental Europe and Scandinavia, indicating that the potential control loss for firms in these countries are likely to be more serious than for similar firms in UK and Ireland.

We formalize this argument by defining that only firms with a certain degree of disproportionality between votes and cash flow are likely to realize the potential control loss. We find that in addition to the group of firms facing a direct control loss, between 11-17 pct. (or between 119 and 179) of

¹ We did not find any dual class firms in Belgium and Portugal; hence, we analyze all EU countries except Greece, Holland and Luxembourg. These three countries are absent because of lack of data.

the whole sample of firms are likely to incur a control loss. Most of these firms are incorporated in Germany, Italy, Scandinavia and – surprisingly - in United Kingdom.

One likely response to the introduction of a BT-rule is that firms will – if possible – change their ownership structure to avoid any control loss of a BT-rule (as suggested for example by Bebchuck and Hart 2002, Bolton 2002 and Mayer 2002). This can have several implications for the ability to raise capital by issuing new shares in the open market. Some controlling owners may need to buy up more shares to avoid the consequences of the BT-rule. Other firms may be limited in the amount of new shares they can issue to outsiders without the controlling owner(s) falling short of the threshold value of 25 pct. of the outstanding shares. Hence, it is important to know the impact on the ability to raise new capital through share offers. Using Sweden as an example again, we develop a categorization of the BT-rule's impact on potential share issues and apply this to the 1,035 EU firms in our sample. We find that a significant number of firms may be affected this way through the introduction of the BT-rule.

In a recent paper Berglöf and Burkart (2002) provide a strong theoretical based analysis of the economic impact of the Winter-report with a focus on the BT-rule and the proposed mandatory bid rule. Berglöf and Burkart recognize the need for improvements in the corporate standards in Europe; however, they and other commentators (e.g. Bolton 2002, Mayer 2002 and Pagano 2002) criticize the whole idea of redesigning corporate governance standards in Europe through making changes in the regulation of the takeover process. Other observers (notably Jensen 2002) have supported the Winter-report arguing that creating a “level playing field” among European firms is the appropriate way to increase the standard of corporate governance in Europe.

In the present paper we do not add significantly to the debate about the welfare implications of the BT-rule. The main purpose of our analysis is twofold: first, to develop a categorization system useful to identify firms affected by corporate policy initiatives directed at firms with dual class shares and disproportionality between control and residual income rights, such as a BT-rule at any level; second, to use this system to specifically identify firms affected by a 75 pct. BT-rule as suggested in the Winter-report. Most of the debate regarding the introduction of a BT-rule refers to a few prominent cases, such as the Wallenberg controlled *Investor AB* in Sweden and *Telecom*

Italia in Italy to document the impact of a BT-rule (see Becht (2002) for the most rigorous case-based study). In this study we extend this handful of cases to a systematic analysis of almost all European firms with dual class shares.

The intensity of the debate about some of the proposals in the report has implied that the BT-rule has been removed from the directive proposal that was put forward by the EU-commission in October 2002. We still believe the present analysis is important for at least two reasons: First, the Winter-report had little empirically analysis of the impact of its proposal. It is difficult to evaluate the welfare implications of a given policy proposal without identifying the actual number of affected firms which is the contribution of the present paper. Second, it is likely that there may be future proposals in the ongoing process of harmonizing corporate laws within the European Union directed at firms with dual class shares and a significant disproportionality between the distribution of control and residual income rights. The categorization system developed in this paper should be easy applicable to the analysis of such future initiatives.

The organization of the rest of the paper is as follows: In the next section we briefly discuss our data set and the distribution of firms with dual class shares in Europe. Section 3 develops our categorization of the impact of a BT-rule using firms in Sweden as an example. Section 4 provides the main contribution of the paper, namely, the identification of firms affected by the BT-rule among all firms with dual class shares in Europe. Section 5 identifies the BT-rule's impact on firms' ability to raise capital through issuing new shares to outside investors. Finally, we discuss our findings in Section 6.

2. Data

We combine data from two sources. Most of our data origin from Faccio and Lang (2002), who surveyed the ultimate ownership and control structure in publicly traded companies in 15 West European countries. The data was mainly obtained from the countries' stock exchanges and public agencies.² It provides us with the ultimate ownership for 880 firms with dual class shares from

² For a full description of this data and the original sources we refer to Faccio and Lang (2002).

Austria, Finland, France, Ireland, Germany, Italy, Spain and UK.³ For these firms we have the ultimate distribution of ownership of those owners with at least 5 percent of the voting rights.

In addition to this data we have surveyed publicly traded companies in Denmark and Sweden listed on the stock exchanges in Copenhagen and Stockholm respectively.⁴ We have collected the ultimate ownership distribution for 70 Danish and 185 Swedish firms, which are all firms with dual class shares in these countries.⁵ For the record it should be noted that the data from Faccio and Lang (2002) are from 1996 to 1999 while the data from Denmark and Sweden are from 2001.

The available data on the ultimate owners fit our purpose well, since we are interested in the largest owner and the group of large owners in each firm. However we do not catch ultimate owners that have diluted their ownership stake into several holdings below the 5 percent disclosure level.⁶ For these firms our analysis will slightly underestimate the effects of the break through rule. Further it should be noted that we might place some companies in the wrong category if there recently have been significant changes to their ownership structure.

Firms with dual class shares:

A necessary condition for any impact of a BT-rule on the control structure of a given firm is that there exists disproportionality between the distribution of cash flow and votes. Hence, firms organized according to a one-share-one-vote principle will not be affected. Table 1 shows the presence of dual class shares in 12 EU countries.

Table 1 reveals that out of the 5,162 public traded European firms, for which we have information, slightly more than 20 pct. have dual class shares. Thus, dual class shares are a common way to organize corporations in Europe. It is perhaps a bit of a surprise, that UK is the country with most

³ There are no firms with dual class shares in Belgium and Portugal, while Greece, Holland and Luxembourg are missing due to absence of data.

⁴ The Danish data were obtained from *Greens*, who publish a yearly survey of the 5,000 largest Danish companies, and the Swedish data origin from *SIS Ägarservice*, who publish a yearly book on quoted companies in Sweden.

⁵ Faccio and Lang (2002) also include Swedish firms, but are fewer in numbers.

⁶ In Italy and UK the disclosure levels are 2 and 3 pct. respectively.

firms with dual class shares. Relative to the number of public traded firms, the Nordic countries (Denmark, Finland and Sweden) and Italy have most *dual class shares* firms.

3. A categorization system.

The presence of different voting classes is a necessary but not a sufficient condition for a BT-rule to have any impact on the control structure of a firm. The real impact is determined by the disproportionality between the distribution of votes and the distribution of cash flow rights in a given firm. This disproportionality is by itself determined by the number of share classes, the relative difference in number of votes attached to each share class, the distribution of shares across owners within each class and the number of shares in each class.

We have collected all this information for all firms with dual class shares in Sweden. In the following we therefore use the subset of 185 Swedish firms with dual class shares to develop a categorization system for the impact of a BT-rule on the control structure of Swedish firms. In the next section we apply this system to the large sample of 1,035 European firms.

There are two benefits of using only Swedish firms to develop our categorization system: First, Swedish firms frequently use dual class shares, thus, we expect the BT-rule to have a significant impact. Second, almost all firms with dual class shares in Sweden (174 of 185) have the following properties: There are two classes of shares and SVSs have 10 times as many votes attached than shares with LVSs. This information allows us to illustrate our categorization approach as we have done in Figure 1, where Panel A focus on the single largest owner, while Panel B focus on the group of large owners.

By focusing on the single largest owner, Figure 1 reveals the most direct measure of control loss due to the BT-rule. It shows the amount of cash flow internalized by the largest owner in each of the 174 Swedish firms with dual class shares and a 10 to 1 voting structure.⁷ On the horizontal axis is the fraction of shares with superior voting rights to the total amount of shares. Thus, if a firm (like

⁷ The 11 Swedish firms with dual class shares that have different voting structures than 10 to 1 are included in the general analysis in the Section 4.

Holmen AB, no. 453) has three times as many LVSs as SVSs, it will be located at 0.25 on the horizontal axis.

The vertical axis measures the amount of cash flow the largest owner possesses. We plot all 174 firms in the figure using the information on possession of the two share classes. In Table A.1 in the appendix we have listed all 1,035 firms with dual class shares and attached a number lexicographically on country and firm name. This is done to identify the effect of the BT-rule on firm level. We divide the firms according to if the largest owner has a majority of the votes or not. In the former case the firm is plotted with a dot, in the latter with a square in Panel A of Figure 1. The largest owner in our example from above, *Holmen AB* (no. 453), possesses 25.1 percent of the cash flow and 51 percent of the votes. Thus, we plot *Holmen AB* with a dot at 0.25 on the horizontal axis and 0.251 at the vertical. Similarly in the Wallenberg controlled *Investor AB* (no. 463) the largest owner has 21.4 percent of the cash flow but less than 50 percent of the shares, hence *Investor* is represented with a square at 0.407 at the horizontal axis and 0.214 at the vertical.

In the figure we have also drawn two lines. The first is denoted the *control line*, which is the minimum amount of cash flow any owner must internalize to have a majority of the votes. As an example, we can take a firm with an equal amount of superior and limited voting shares. Since each SVS has 10 votes relative to the LVS, the minimum amount of shares necessary to obtain a majority of the votes is 55 percent of the SVSs, which only implies the internalization of 27.5 percent of the total cash flow. If a firm instead has 10 times as many LVSs as SVSs, it is possible to control the firm by owning 95 percent of the SVSs and, thus, only internalize 9.5 pct. of the cash flow. The minimum of the control line is reached when the SVSs compose 9.1 percent of the total cash flow and for such firms an owner needs to hold all the SVSs and thereby internalize only 9.1 pct. of the cash flow to control the firm. The control line illustrates one of the main implications of organizing a firm with dual class shares; namely, the ability to control a firm by holding a majority of the votes and a smaller amount of the cash flow. Interesting enough, the figure shows that most of the Swedish *dual class share* corporations have chosen a ratio of SVSs to total cash flow between 0.05 and 0.25. It is indeed in this interval that *dual class shares* are very effective as a remedy to control the firm with little cash flow.

The second line in Figure 1 is the *Break-Through line*, which we have drawn for a BT-rule of 75 pct.⁸ If a firm is located above this line, there is a single owner who has enough cash flow to block any use of the BT-rule. On the other hand, for firms below the line no single owner can alone block the use of BT-rule in all possible situations.

Our categorization of the impact of the BT-rule follows from the areas defined by the control line and the Break Through line in Figure 1. If a firm is located above both lines, there is a single owner possessing enough cash flow to block any use of the BT-rule. In most, but not all, of these firms the largest owner also possesses a majority of the votes. If this is the case the introduction of the BT-rule has little impact on the controlling owner. Hence, we denote these firms as having *comfort with direct control*. *Fjällräven AB* is an example of a comfort with direct control firm, since the largest owner has 78.2 and 58.1 percent of the votes and cash flow respectively. The total number of Swedish firms in this group is 52.⁹

The second group of firms is the “squares” above the BT-rule, i.e. firms in which the largest owner possesses more than 25 pct. of the cash flow but has less than 50 pct. of the votes. In most of these firms the largest owner will be the controlling owner or among the group of controlling owners and the BT-rule will have little impact. For this reason, we denote these firms as having *comfort with indirect control*. The confectionery producer *Coletta Fazer AB* belongs to this group, since the largest owner with 44.1 and 34.7 percent of the votes and cash flow enjoys comfort without direct control. In total, there are 24 firms in Sweden in this group.

The rest of the firms are situated below the BT-line in Figure 1 implying that potentially there can be some kind of control loss. The most direct control loss comes for the largest owner in the firms with dots in the triangle surrounded by the BT-line and the control line. These firms are characterized by a single owner with a majority of the votes but less than 25 pct. of the cash flow. Before the introduction of the BT-rule, this single owner would have absolute control of the corporation. However, after an introduction it is in principle possible for an aggressive investor to

⁸ We have chosen a BT-rule of 75 pct. because this level is proposed in the Winter report. However, it is easy to repeat our analysis for any other threshold values.

⁹ When reporting the number of firms in each group we will include those Swedish firms, which could not be illustrated in the figure due to different voting structures, i.e. the total number of firms is then 185.

buy up all outstanding shares that are not in the hands of the controlling owner and apply the BT-rule to take-over the corporation. We say that these firms are characterized by a *direct control loss*. Two examples of Swedish firms that incur a direct control loss due to a 75 pct. BT-rule are *Novotek AB* and *Trelleborg AB*. It is worth emphasizing that the actual size of the BT-rule has a large impact on the number of firms in this group. As an example, the number of firms in this group for a 75 pct. BT-rule is 10, whereas Figure 1 shows that lowering the BT threshold to 70 pct (i.e. raising the BT-line in Figure 1 to 0.30) would increase this group by 12 new firms.

The final group of firms is the “squares” below the BT-line. These firms are characterized by the largest owner having less than a majority of the votes and less than 25 pct. of the cash flow. Even though we know less about the control distribution in these firms, it is clear from the figure that there is a potential control loss after the introduction of the BT-rule, hence, we define that these firms are characterized by *potential control loss*. *Volvo AB*, with a large owner controlling 9.9 percent of both votes and cash flows, and the bank *SEB AB* are prominent examples of Swedish firms in this group. We observe 99 firms in this group.

The group with a potential control loss consists of two kinds of firms: Firms with a dispersed ownership structure, similar to a dispersed one-share-one-vote ownership structure, and firms which have a significant disproportionality between cash flow and votes, in which the controlling owners exercise their control through implicit or explicit contracts with other owners. It is only the owners of the latter type of firms that are likely to incur a real control loss after the introduction of the BT-rule. We return to this important issue in the following section.

The premise of Figure 1, that the ownership of the largest owner is pivotal for analyzing the impact of the BT-rule, is indeed not satisfied in all corporations. In many firms control is allocated to a group of owners who are tied together by formal or informal agreements. Hence, it may be that the important factor is the amount of control obtained and the cash flow internalized by such a group. This idea is captured in Panel B, where we picture the amount of cash flow internalized by the group of owners with more than 5 pct. of the votes in the corporations. We interpretate this group as the group of controlling owners, even though this may not always be the case. The main difficulty with this assumption is that such a group does not necessary have common preferences, indeed, some of the owners with significant voting power can be hostile to the group of controlling owners.

This bias our analysis below towards underestimating the number of firms exposed to the BT-rule, because such hostile owners can include their own cash flow stake in an attempt to achieve the 75 pct. threshold level. This bias highlights the importance of the dual analysis of the largest and the group of largest owners.

The main difference between Panel A and B in Figure 1 is that firms in the latter figure moves up parallel to the vertical axis if there are several owners with more than five percent of the votes. Thus, more firms lie in the two *comfort* zones now and fewer firms are directly affected by the BT-rule. For instance, the corporation *Investor AB* is in the potential control loss group in Panel A, since the large owner (the Wallenberg Foundations) possesses 44.1 pct. of the votes. In Panel B, *Investor AB* is located in the *direct control loss* group, since there is an additional large owner (the BZ Group), so the group of controlling owners have more than 50 pct. of the votes but less than 25 pct. of the cash flow. Panel B in Figure 1 reveals that even if we look at the group of large owners, there is still a significant number of firms for which the BT-rule will imply either a direct or an indirect loss of control. We count that 14 firms incur a *direct control loss* and 27 firms incur a *potential control loss* from the introduction of the rule. Thus 21 percent of the firms in Sweden with dual class shares will either face a direct or potential loss of control due to the BT-rule.

To sum up, we have established that between 10 and 14 Swedish firms face a *direct control loss* and between 27 and 99 face a *potential control loss* after the introduction of a BT-rule. This implies that between 22 and 59 percent of the Swedish firms with dual class shares (or between 12 and 33 pct. of all public corporations) potentially may incur some control related effect of the BT-rule.

4. European firms affected by the BT-rule

The categorization system developed in the previous section can be extended to the whole sample of 1,035 European firms with multiple share classes. As mentioned above, a prerequisite for drawing Figure 1 was that the ratio of votes between SVSs and LVSs is constant for all firms in the figures. This is the case in all but 11 Swedish firms but not a general feature across Europe, implying that it is not possible to draw similar figures for all the firms in our sample.

However, we do have sufficient information about the distribution of cash flow and votes for all corporations in our sample to categorize each firm according to the four groups we developed in the

previous section. This is done in Table A.2 in the appendix for all 1,035 firms based on the numbers assigned in Table A.1. Figure 2 summarizes this information by illustrating the distribution of firms in each group divided into countries, the total sample and the largest firms measured on assets. The largest firms were drawn from a top-500 list of publicly traded European firms. Of these 500 firms 104 were in our sample of firms with dual class shares. In the appendix, we have marked these 104 large firms with bold in Table A.1 and we refer to them as the Top-500 firms in the following. Panel A in Figure 2 shows the distribution of firms according to the largest owner's possession of votes and cash flow, whereas Panel B shows the same information for the group of controlling owners.

Table A.2 identifies the firms behind the two figures through their assigned number. For example, we see in this table, that the three Italian firms where the largest owner incurs a direct control loss from the introduction of a BT-rule are *Telecom Italia*, *Telecom Italia Mobile* and *Ifil*. From the right column in Table A.2 we notice that these three firms still are in the *direct control loss* group even when we look at the whole group of controlling owners.

Figure 2 together with Table A.2 in the appendix, provide a number of insights about the impact on European firms of the BT-rule. First, if we look at only the largest owner around 35 pct. or 329 of the European firms with dual class shares are characterized by having either *comfort with direct control* or *comfort with indirect control*. These firms will not be affected directly by the BT-rule, because the largest owner possesses at least 25 pct. of the cash flow. Among the large European firms in this group, we find *Associated British Food PLC*, *BMW AG*, *Carlsberg Breweries A/S* and *Pirelli SPA*. The BT-rule does not increase the likelihood of being taken over, since the largest owner has sufficient shares to block any attempt to invoke the BT-rule. It is worth mentioning that in principle these firms can still incur an indirectly cost, because the rule may limit the amount of cash flow they can sell or the firms' ability to raise capital by issuing new shares without affecting the existing control structure. We return to this issue in the following section.

Second, if we instead look at the group of large owners the share of firms that are in the two *comfort zones* increases to 52 pct. or 536 firms. Hence, slightly more than half of the firms will not incur a control related cost after the introduction of a BT-rule. As mentioned above, the absence of any direct cost of the BT-rule hinges on the assumption that all large owners wish to keep the

current control structure. If instead, one of these owners with a significant cash flow stake supports a take-over initiative, the firm is not protected anymore. Examples of firms which are not protected when we analyze the largest owner, but well protected if all large owners can keep together, are the German firm *Heidelberger Zement AG*, the British firms *First Choice Hollidays PLC* and *Hammerson PLC*, and the Swedish firm *Skanska AB*.

Third, in 3 pct or 33 of the European firms in our sample the single largest owner will face a *direct control loss* after the introduction of a BT-rule. These are firms like the three Italian firms mentioned above, *ISS* in Denmark, the German firms *Fresenius Medical Care* and *RWE Aktiengesellschaft* and the Swedish firms *Kinnevik* and *Trelleborg*. If we focus on the largest European firms it is interesting to notice that there is only a slightly higher fraction of firms (4 pct.) which incur a direct control loss. This indicates that size does not seem to affect which firms incur a control related cost after the introduction of a BT-rule.

Fourth, the number of firms incurring a *direct control loss* increases to 5 pct. or 45 if we look at the group of large owners. Interesting enough there is a country bias, since most of these firms are located in Denmark, Germany, Italy and Sweden. There is only one British firm (*Harris Philip PLC*) in this group when we analyze the group of largest owners (and none if we focus on the largest owner), which may signal that the use of dual class shares is different in UK than in the continental Europe. We return to this issue below.

Finally, 643 (62 pct) or more than half of the firms in our sample are located in the *potential control loss* group using the largest owner's ownership stake and 456 (or 44 pct.) if we investigate the group of large owners. From Table A.2 we notice that there are many large and well-known European corporations such as *Diageo*, *Fiat*, *Groupe Danone*, *Shell*, *Stora Enso* and *Volkswagen* in this group. It is important to restate the existence of two types of ownership structures within this group: Firms with dispersed ownership but little disproportionality between control and residual income and firms with strong disproportionality between control and cash flow where the largest owner (or largest owners) does not possess a majority of the votes. In the former case we do not expect a significant impact of the BT-rule since these firms are similar to firms with a single share class. In the latter type we expect that the largest owner (or the group of large owners) in reality

controls the firm through formal or informal contracts. For such firms the BT-rule is likely to have a significant impact.

The distribution of firms among these two types will differ across countries. We expect that the dispersed ownership structure explanation is more prominent in the many UK firms than in the Continental European firms within this group. We can find some support for this argument, by looking at Figure 3, which plots the largest owner's and group of large owners' possession of cash-flow against their possession of votes, in panel A and B respectively, for all firms in the *potential control loss* group. In Continental European and Scandinavian countries like Austria, Denmark, Finland, Italy and Sweden, we observe a scattered plot with many firms lying significantly above the 45-degree line. We have estimated the regression line for these scattered plots and added to the figure. Notice that proportionality between cash flow and votes imply a regression line close to the 45-degree line, whereas disproportionality implies a regression line above the 45-degree line. Hence, we see that in Continental European and Scandinavian countries most of the firms with dual class shares have a strong disproportionality.¹⁰ Thus, control is concentrated in these firms, supporting the argument that there is a real loss of control from a BT-rule, since it is likely that the group of large owners in reality has complete control over the corporation before the BT-rule.

The results are quite different for UK and Ireland. We notice from Figure 3 that most firms lie close to or on the 45-degree line and the regression line is not too far from the 45-degree line. This indicates that there is limited disproportionality between cash flow and votes in these countries even in corporations with dual share classes. Hence, for these two countries, firms are in general *not* in the *potential control loss* group because there is a group of controlling owners who have little cash flow but many votes. On the contrary, the ownership structure is frequently dispersed but there is a significant degree of proportionality between control and residual income. For these reasons we do not expect the BT-rule to have major impact on the British and Irish firms within this group.

Interestingly enough, Figure 3 confirms the traditional view on the difference between the Anglo-Saxian and Continental European model of corporate structure (Shleifer and Vishny 1997, La Porta et al. 1999, Barca and Becht 2001 and Gurgler 2001). In the Continental and Scandinavian

¹⁰ See also Bennedsen and Nielsen (2002) for an analysis of the consequences of disproportionality.

countries, dual class shares is a remedy to keep control concentrated and introduce disproportionality between control and cash flow. In Ireland and UK, even firms with dual share classes tend to have dispersed ownership and to a large extent proportionality between control and cash flow.

We can apply the preceding arguments to separate out the firms in the potential control loss group whose owners are likely to incur a real loss of control. Figure 4 depicts the distribution of disproportionality across all firms with potential control loss. We measure the degree of disproportionality as the difference between the amount of votes and cash flow internalized by either the largest owner (Panel A) or the group of largest owners (Panel B). Thus, Figure 4 summarizes the more detailed information in Figure 3. We define the group of firms whose owners are *likely to incur a control loss* as all firms in which the disproportionality measure is 10 pct. or higher. Notice that the relative size of this *likely control loss* group is significantly larger in Denmark, Germany, Italy and Sweden than in UK and Ireland, confirming the insight from Figure 3. In Table A.2 in the Appendix we have specified which firms belong to this *likely control loss* group.

With these definitions we observe in Panel A, that in total 179 or 28 pct. of the firms in the potential control loss group are likely to actually face a real control loss after the introduction of the BT-rule. Examples are *Stora Enso*, *Fiat* and *Ericsson*. On the other hand, large UK firms such as *British Airways* and *Diago* are not likely to incur a real loss even though these firms belong to the potential control loss group. The argument is that these firms have diluted control even before the introduction of the BT-rule and their organization is very similar to the organization of firms with a single share class.

It is interesting to notice that 27 out of the 63 larger firms in the potential control loss group are also in the *likely control loss* group. Thus the share of larger firms that are likely to face a real control loss within the potential control loss group is larger than the share of small and medium firms. This indicates that a significant number of the European top-500 firms will be affected by the rule.

Figure 4, Panel B provides the distribution of disproportionality among the potential control loss firms focusing on the group of largest owners. We notice that 119 or 26 pct. of the 456 firms in the

potential control loss group are likely to actually realize this cost. Notice, the share of larger firms that are likely to face a real control loss within the potential control loss group is now almost the same as the share of small and medium firms.

Figure 5 summarizes the main findings in the present paper. In this figure we depict the actual number of firms which we have identified as incurring a direct or likely control loss. *We find that somewhere between 166 (16 pct.) and 212 (20 pct.) depending on if we focus on the largest owner or the group of largest owners, are categorized into these two groups. These numbers are our best estimate of the actual number of European firms affected through their control structure by the proposed 75 pct. BT-rule. Notice that the identity of these firms can be found using Appendix A.1 and A.2.*

Focusing on control loss related to the largest owner, we observe in Panel A in Figure 5 that 212 firms are likely to be affected by the rule. There is a significant variation across countries in the number of firms affected by the BT-rule. We notice that Sweden, our illustrative example, has 69 firms, which incur either a direct control loss or are likely to incur such a loss. Sweden is the country most affected by the BT-rule both with respect to the absolute number of firms and relative to the number of incorporated firms. Other countries with many affected firms include Denmark, Germany, Italy and United Kingdom. It is worth noticing that our conclusion about British firms are moderated by at least two factors: First, none of the British firms are in the direct control loss group, thus the impact of the BT-rule is sensitive to the way we have defined the group of *likely control loss*. Second, UK is by far the European country with most incorporated firms, thus the fraction of affected firms relative to the number of incorporated firms is smaller in UK than in Denmark, Germany, Italy and Sweden.

Panel B in Figure 5 focuses on the group of large owners. We see that the picture in this figure is similar to Panel A. In total we identify 166 firms among the 1,035 firms with dual class shares, which will be affected by the rule even if the group of large owners can stay together. The country variation in Panel B does not deviate significantly from the country variation in Panel A; most of the affected firms are incorporated in Germany, Italy, the Scandinavian countries and UK.

We identify 31 firms among the 104 Top-500 firms in Europe that face a direct or a likely control loss from the BT-rule when we focus on the largest owner. Examples are *Groupe Danone*, *Heidelberger Zement*, *SAP* and *Stora Enso* and *Telecom Italia*. If the group of large owners can stick together this number reduces to 20. Examples are *Ifil*, *Fiat*, *Fresenius*, *Mesträ-Serla* and *Pirelli & Cacomandita*.

As a robustness check we also included firms with a disproportionality measure between 5 and 10 pct. of firms. This increased the number of affected firm to 193 if we analyze the group of largest owners and 284 if we analyze the largest owner. The only significant difference on country level is that more British firms are affected.

We sum up this section by emphasizing our main findings: We believe that the owners of at least 3-5 pct. (or between 33 and 47) of the European firms with dual class shares will incur a direct loss of control after the introduction of a 75 pct. BT-rule. In addition, we find that the owners of additional 11-17 pct. (or between 119 and 179) of the firms are likely to incur a control loss. These firms are identified in the Appendix. Furthermore, the significance of the BT-rule differs across countries, with firms in Germany, Italy and the Scandinavian countries being most vulnerable. In addition a significant number of British firms with dual class shares are potentially affected, even though the more dispersed ownership structure in these firms may reduce the actual impact.

5. The impact on firms' ability to raise capital via the stock market.

It is unlikely that changing the regulative regime in which European corporations work will not affect the organization of these firms. Several commentators (e.g. Bebchuck and Hart 2002, Berglof and Burkart 2002, and Bolton 2002) have suggested that some firms affected by the BT-rule for instance can reorganize themselves using pyramidal structures to keep the current control distribution, and other firms may choose to incorporate in a country outside the European Union. An alternative and less drastic response from the affected firms in the *direct or potential control loss* areas of Figure 1 and 2 above is that controlling shareholders buy up cash-flow until they reach the 25 percent threshold.

In addition to some owners buying up shares, the BT-rule is likely to restrict the willingness of corporations to raise capital by issuing new shares to investors outside the controlling group of

owners. In particular, it is likely that the firms prefer other and more expensive sources of capital than using the stock market if the latter implies a change in control structure.

We analyze these two questions simultaneously in the following. We assume that the corporations can issue only non-voting shares. Allowing for sale of voting shares may affect the control structure too, however, this effect would happen independently of the BT-rule. This motivates our assumption of issuing non-voting shares only.

To illustrate our approach we return to Figure 1, which illustrated the largest owner's share of cash flow in the Swedish firms. The firm *Nocom* (no. 496) has a single owner who possesses a majority of the votes and just above 25 pct. of the cash flow. Hence, this owner is in the comfort zone using the terminology developed in the previous section. However, if the firm issues new shares with limited or no voting rights to outside investors, the controlling owner's share of the cash flow is likely to fall below the 25 pct. threshold level. We conclude that *Nocom* may face an indirect cost of the BT-rule if it restricts their ability to use the stock market as a capital source without changing the control structure.

The situation is quite different for other large Swedish firms. For instance, *Hennes & Mauritz AB* (no. 449) has a controlling owner internalizing 45 pct. of the cash flow and is therefore able to sell a large sum of shares to outside investors without lowering the controlling owner's cash flow below the Break-Through threshold.

We estimate the firms' ability to raise capital by issuing shares to outsiders without falling short of the 25 pct. threshold. It is measured in percentages of the current outstanding shares to capture the fact small firms often need a smaller amount of new capital. The specific formula we apply is $CF/0.25 - 1$, where CF stands for the largest owner's (or group of largest owners') share of cash flow. Notice that this measure can be either positive or negative. A negative number implies that the largest owner(s) currently possesses less than 25 pct. of the cash flow and therefore must buy up shares to avoid the control loss induced by the BT-rule.

In Table A.3 in the appendix we group our sample of 1,035 European firms according to how much capital they can raise without being affected by the BT-rule. We have summarized this information in Figure 6.

Panel A of Figure 6 shows the possible issue of non-voting shares without changing the present control structure, focusing on the largest owner. The results vary significantly across countries in the European Union. Countries like Austria, Germany and Italy have a large proportion of firms in the positive range, whereas UK and Ireland have most firms in the negative, which is consistent with these countries having many firms with a dispersed ownership structure.

Notice that in general there are few firms in the interval (-10,10) pct., which we define as the relevant range for most large owners with an intention of changing the capital structure of a given firm. This supports the conclusion that changing capital structure in response to the introduction of a BT-rule may be an attractive option for only a small number of firms. Examples of the relative few firms located in the (-10,10) pct. range are *Bang & Olufson A/S*, *Fiskars OVI*, *Groupe Danone SA*, *Dresdner Bank AG*, *Volkswagen AG*, *Telecom Italia SPA*, *Allied Domecq PLC* and *Cadbury Schweppes PLC*.

Returning to the group of large owners in Panel B, we observe that approximately half of all firms significantly can expand their cash flow without affecting the current control structure. Large corporations like *BMW AG*, *Airitalia SPA*, *Saab AB* and *Royal & Sun Alliance Insurance PLC* are able to expand their cash flow with at least 100 percent without contribution from the coalition of controlling owners.

As emphasized above, many firms will be in the negative area due to a dispersed ownership structure. Figure 7 analyzes the impact on capital structure where we have removed all firms with a disproportional measure less than 10 pct. for either the largest owner (Panel A) or the group of largest owners (Panel B). When we focus on the largest owner this leaves us with 230 firms. There are 32 of these which are located in the (-10; +10) pct. range. This is a realistic estimate on the number of firms that will choose not to issue shares to outsiders or whose controlling owner may try to buy up shares. This is a small number and it is sensitive to the method we have applied. If we instead include all firms with a disproportional measure larger than 5 pct. it increases the number of

firms in this range to 46. Panel B focuses on the group of large number. With a 10 pct. disproportionality cutoff level we observe that 46 firms are located in the (-10; +10) pct. range. Again this is a relative small number. If we instead use the 5 pct. cutoff level on the measure of disproportionality, the number of firms likely to be affected is 56.

From the present analysis we can conclude that a significant number of firms are likely to either use alternative and more expensive sources of capital or to buy up own shares to neutralize the effect of a BT-rule. There is one important caveat to this conclusion. We have identified firms, which either have an incentive to change capital structure if they are below the BT-rule's threshold value or can not issue shares if they are above this threshold. However, many old well-established firms do not use the stock market to raise capital. Thus, it is likely that some of the firms we have identified even in the absence of a BT-rule would use other channels to raise capital. This may imply that the real number of firms incurring a capital related cost from the BT-rule is smaller than we have found.

6. Discussion.

The BT-proposal has been controversial and raised much discussion among lawyers and economists. In the present paper, we have tried to qualify this debate by a systematic investigation of which European firms are likely to be affected by the BT-rule. The Winter-report argued that the introduction of the BT-rule in the European Union would level the playing-field and thereby extend the outside pressure on the corporations, which is supposed to generate an improved standard of corporate governance to the benefit of the European Community.

Even though the intensive debate following the Winter-report has implied that the BT-rule has been removed from the new directive proposal to the EU commission in October 2002, it is still important to understand the empirical consequences of introducing such an rule in Europe. Not least because it is likely that there may be future proposals in the ongoing harmonization process directed at firms with dual class shares and a significant disproportionality between the distribution of control and residual income rights.

We have shown that the controlling owners in 3-5 pct. or 33 to 47 of the 1,035 firms with dual class shares incur a direct loss of control due to the BT-rule. In addition to this direct control loss, we

expect that the controlling owners in 11-17 pct of the corporations are likely to face a control related loss. These firms are in particular incorporated in Denmark, Finland, Germany, Italy, Sweden and United Kingdom. Between 20 and 31 of these firms belong to the group of largest European firms. On the basis of these findings we draw our main conclusion; a significant number of the European firms with dual class shares are likely to be affected by the BT-rule.

It is important to emphasize that this does not in itself imply that the rule is good or bad for the European Community. Proponents may argue that the desired mobility of corporate control and the implied effects on corporate governance only will be achieved if there are a significant number of firms affected by the rule. If the common organization of the firms imply that the owners where in the *comfort zones* (to use the language of Figure 2), the proposal would be redundant, since it would have little real impact.

Similarly, opponents of the proposal may be serious concerned with the number of firms affected and the fact that many well-driven large European firms appears to be among the vulnerable corporations. It is likely, that these firms will reorganize themselves to avoid the impact of the BT-rule. We have shown that buying up cash flow to neutralize the rule is realistic for only a few firms. Hence, in an attempt to neutralize the BT-rule's impact, we can expect many other firms to reorganize the ownership structure through pyramidal schemes or to incorporate in countries outside the European Union. Of course all such activities are expected to be costly in addition to working against the intention behind the BT-rule.

An interesting question if the BT-rule in the future would be implemented in the European Union is if owners are entitled to compensation due to loss of control. This question has two dimensions: First, if a loss of control legally entitles an owner to being compensated. We have little to say about this question which is likely to be determined by the European or the national courts. However, if a control loss should be compensated, there is a second dimension to this issue, which is to estimate the size of any individual owner's loss of control. The individual firm's actual or likely loss must be the basis for defining the size of a potential compensation. Our categorization system may be helpful in dealing with this question. For instance the largest owner in a firm characterized by *comfort with direct control* in Panel A in Figure 2 is significantly less affected than an owner in the *direct control loss* group is. In particular, our figures and appendices may explicit identify firms

which incur no direct or likely control loss from the future introduction of a BT-rule and, thus, may have less strong claims for being entitled to compensation.

References

Barca, F. and M. Becht (2001), *Control of Corporate Europe*, Oxford University Press, Oxford.

Becht, M. (2002), *Corporate Takeover Defenses in Europe*, Presentation at the ECGO Session on The Future of Corporate Takeovers in Europe at the Federation of European Securities Exchanges' 6th European Financial Markets Convention, Brussels, 31, May.

Bebchuck, L. and O.D. Hart (2002), *A Threat to Dual-Class Shares*, Financial Times, May 31st.

Bennedsen, M. and K. Nielsen (2002), *The Proportionality Principle*, Manuscript in preparation.

Berglöf, E. and M. Burkart (2002), *"Break-Through" in European Takeover Regulation*, SITE Staff Paper 02/03.

Bolton, P. (2002), *Should the EU adopt the Winter Proposals?*, Presentation at the ECGO Session on The Future of Corporate Takeovers in Europe at the Federation of European Securities Exchanges' 6th European Financial Markets Convention, Brussels, 31, May.

Faccio, M. and L.H.P. Lang (2002), *The Ultimate Ownership of Western European Corporations*, Journal of Financial Economics, 65, (3).

Gurgler, K. (2001), *Corporate Governance and Economic Performance*, Oxford university Press.

Jensen, M.C. (2002), *Should the EU adopt the Winter Group Proposals?*, Presentation at the ECGO Session on The Future of Corporate Takeovers in Europe at the Federation of European Securities Exchanges' 6th European Financial Markets Convention, Brussels, 31, May.

La Porta, R., F. Lopez-de-Silanes and a. Shleifer (1999), *Corporate Ownership around the World*, Journal of Finance, 54.

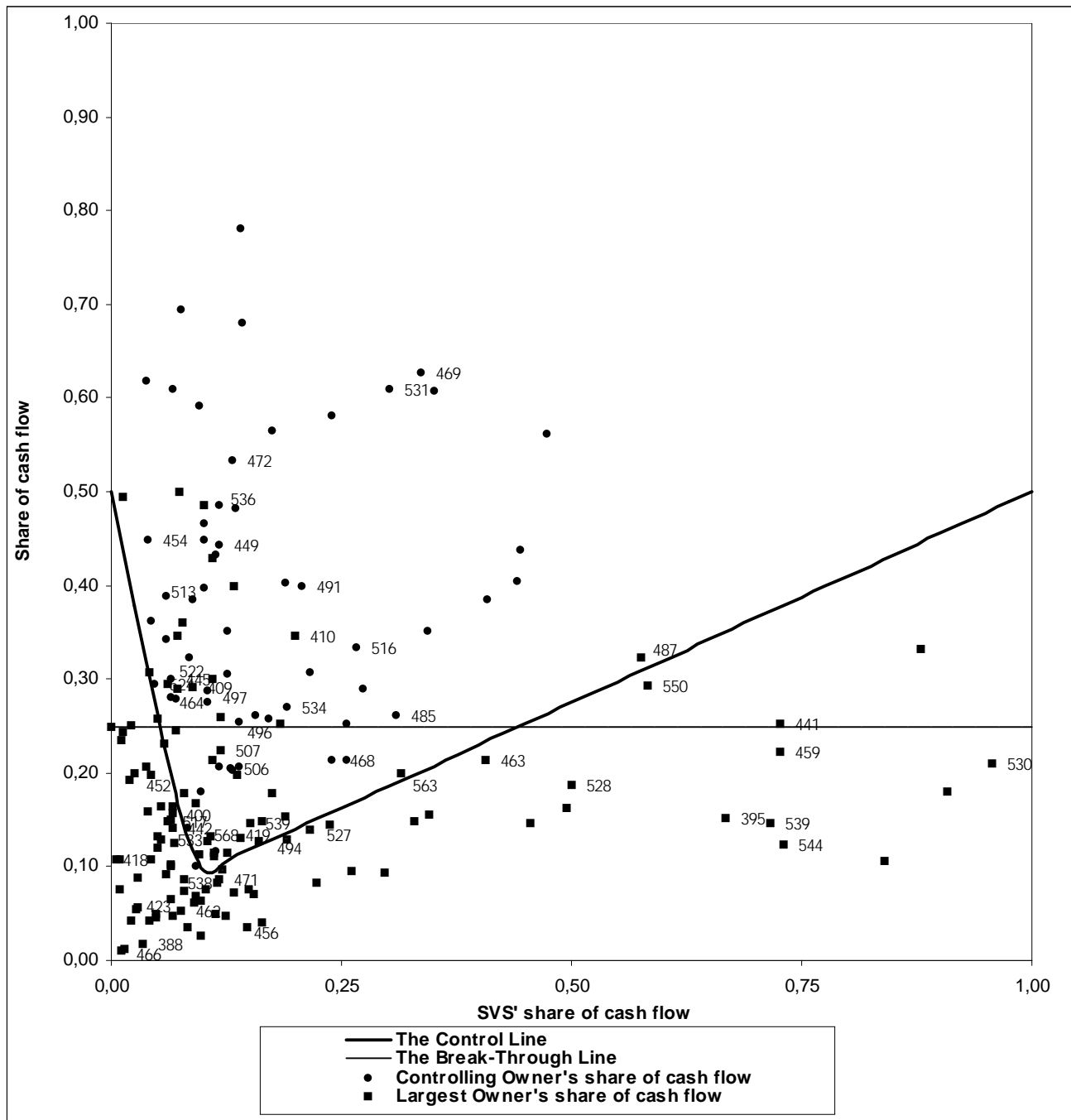
Mayer, C. (2002), *Should the EU adopt the Winter Group Proposals?*, Presentation at the ECGO Session on The Future of Corporate Takeovers in Europe at the Federation of European Securities Exchanges' 6th European Financial Markets Convention, Brussels,, 31, May.

Pagano, M. (2002), *Curing Symptom or Disease?*, Presentation at the ECGO Session on The Future of Corporate Takeovers in Europe at the Federation of European Securities Exchanges' 6th European Financial Markets Convention, Brussels, 31, May.

Winter-report (2002), *Report of the High Level Group of Company Law Experts on Issues Related to Takeover bids*, Brussels, January 2002.

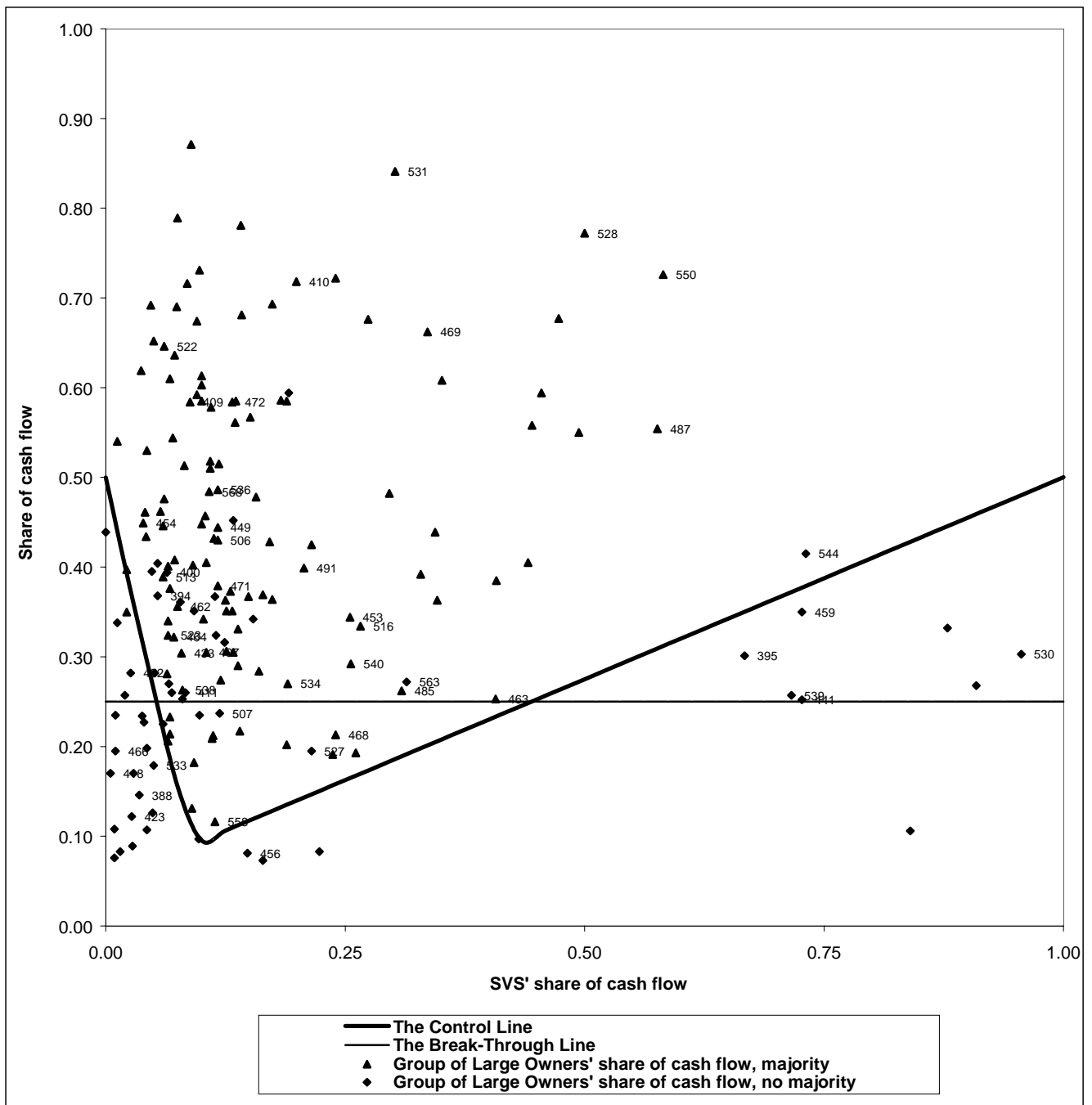
Figure 1

Panel A: Largest Owner's Share of Cash Flow in Sweden



Note: The figure contains all Swedish firms with dual class shares where the voting ratio between SVS(Superior Voting Shares) and LVS (Limited Voting Shares) is 10 to 1. In total there are 173 firms in the figure, we have labelled the 50 largest firms with a number referring to the companies listed in Table A.1 in the appendix. For each firm we plot the SVS share of the total cash flow on the horizontal axis. The firms are divided into two groups; those with a *controlling owner* and those where the *largest owner* possess less than 50 percent of the votes. We mark these two groups with a dot and a quadrangle respectively and plot the cash flow of this particular owner on the vertical axis. Thus, each firm is only represented once in the figure. The *Control Line* gives the minimum cash flow necessary to control the firm. The *Break-Through Line* illustrates the minimum cash flow level that will prevent other owners from breaking through.

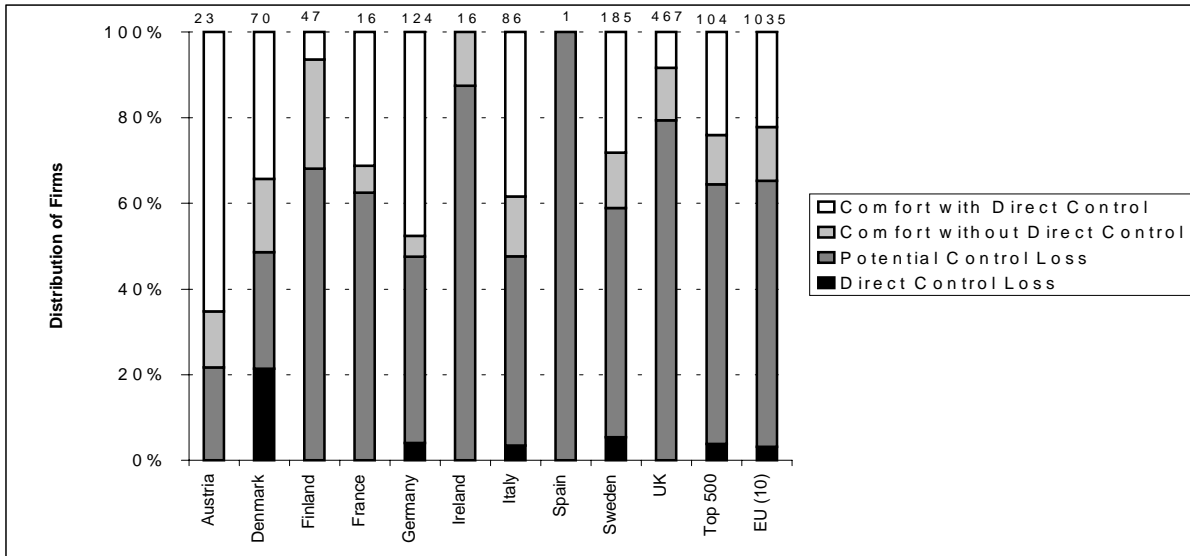
Panel B: Group of Largest Owners' Share of Cash Flow in Sweden



Note: The figure contains all Swedish firms with dual class shares where the voting ratio between SVS (Superior Voting Shares) and LVS (Limited Voting Shares) is 10 to 1. In total there are 173 firms in the figure, we have labelled the 50 largest firms with a number referring to the companies listed in Table A.1 in the appendix. For each firm we plot the SVS share of the total cash flow on the horizontal axis. We establish the group of owners by summing the cash flow and control rights for those owners which hold more than 5 percent of the votes. The firms are divided into two groups; those where the group of large owners possesses a *majority* and those with a *minority*, where the group of large owners possesses less than 50 percent of the votes. We mark these two groups with a triangle and a diamond respectively and plot the cash flow of this particular group on the vertical axis. Thus, each firm is only represented once in the figure. The *Control Line* gives the minimum cash flow necessary to control the firm. The *Break-Through Line* illustrates the minimum cash flow level that will prevent other owners from breaking through.

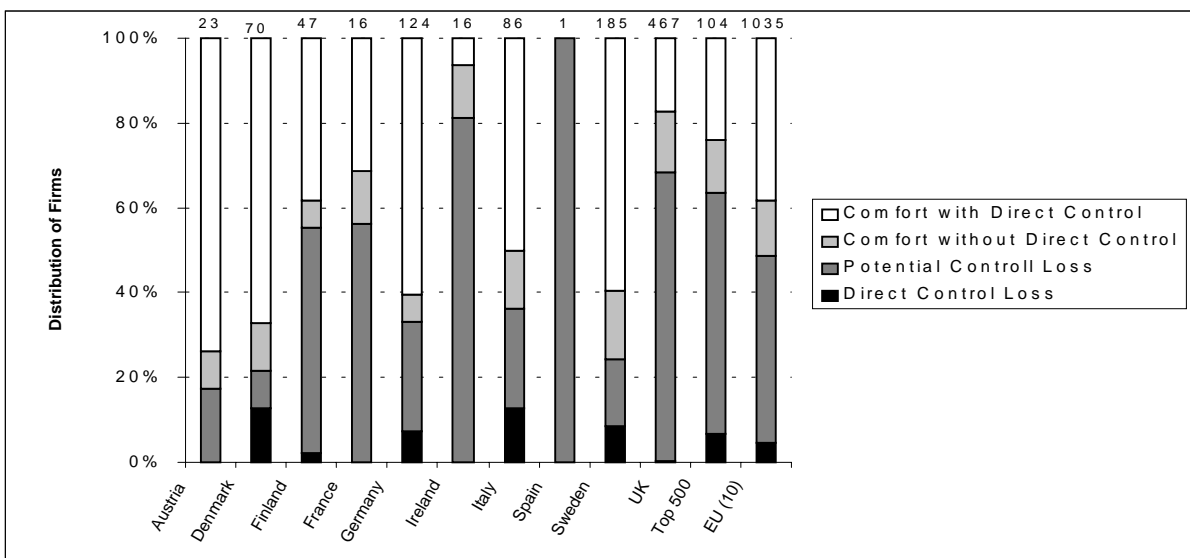
Figure 2

Panel A: The Impact of the Break-Through Rule on the Largest Owner.



Note: The figure summarizes the distribution of European firms into four categories in relation to the largest owner and the BT-rule (Figure 1, panel A). *Direct Control Loss* reflects that the controlling owner possesses a majority of the votes, but less than 25 percent of the cash flow. In firms with a *Potential Control Loss* the largest owner has both less than 50 percent of the votes and 25 percent of the cash flow. Similarly, *Comfort with Direct Control* and *Comfort without Direct Control* consist of firms where the largest owner possess more than 25 percent of the cash flow. The total number of firms with dual class shares in each country is showed at the top.

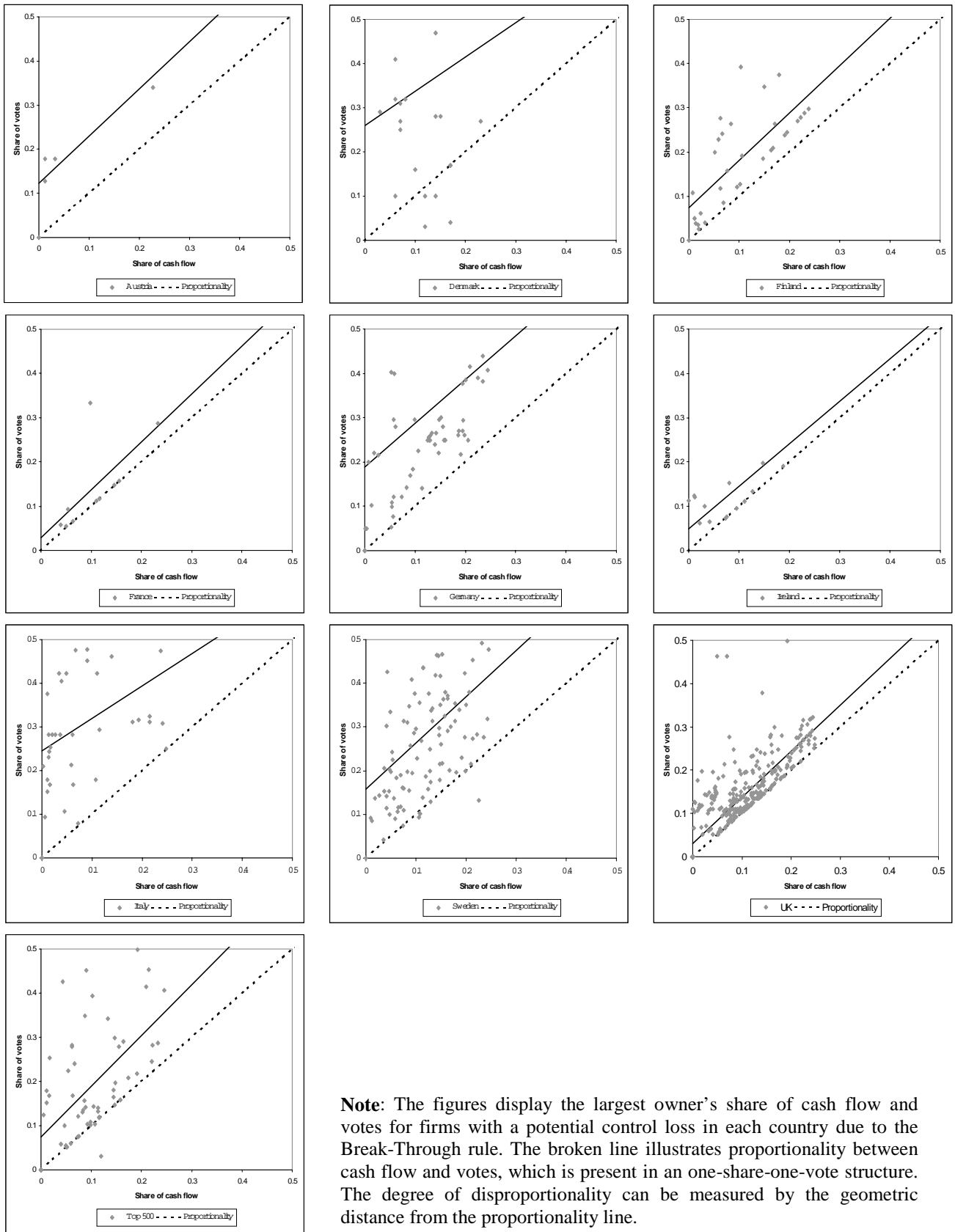
Panel B: The Impact of the Break-Through Rule on the Group of Large Owners.



Note: The figure summarizes the distribution of European firms into four categories in relation to the group of large owners and the BT-rule (Figure 1, panel B). *Direct Control Loss* reflects that the group of controlling owners possess a majority of the votes, but less than 25 percent of the cash flow. In firms with a *Potential Control Loss* the group has both less than 50 percent of the votes and 25 percent of the cash flow. Similarly, *Comfort with Direct Control* and *Comfort without Direct Control* consist of firms where the group of large owners possess more than 25 percent of the cash flow. The total number of firms with dual class shares in each country is showed at the top.

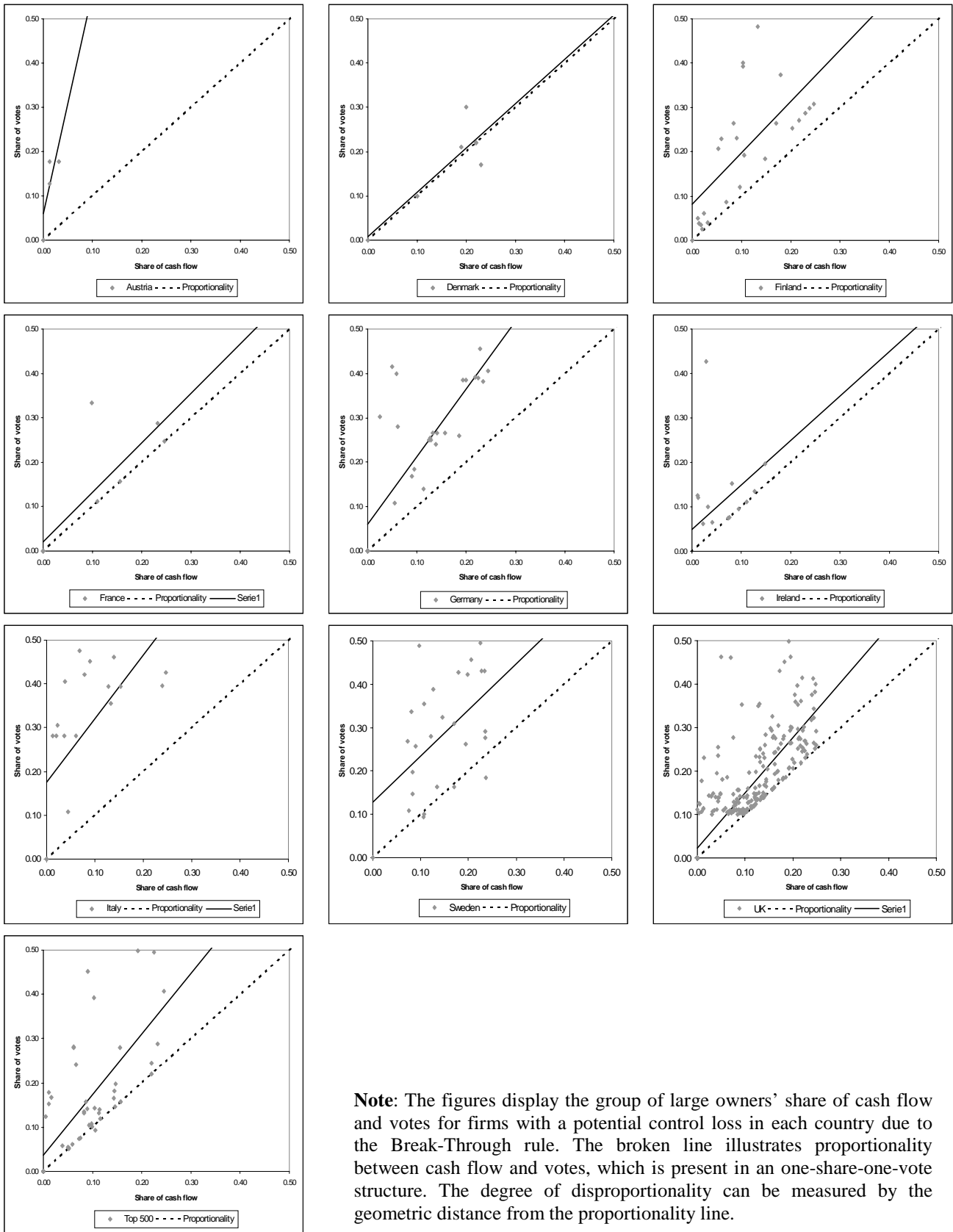
Figure 3

Panel A: Degree of Disproportionality in Firms with Potential Control Loss, Large st Owner



Note: The figures display the largest owner's share of cash flow and votes for firms with a potential control loss in each country due to the Break-Through rule. The broken line illustrates proportionality between cash flow and votes, which is present in an one-share-one-vote structure. The degree of disproportionality can be measured by the geometric distance from the proportionality line.

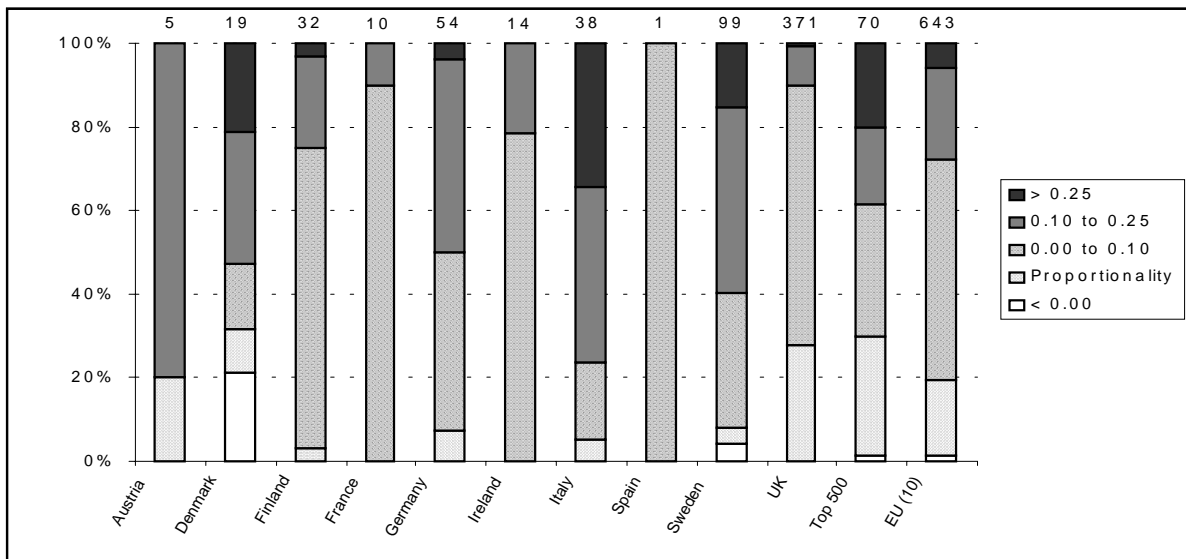
Panel B: Degree of Disproportionality in Firms with Potential Control Loss, Group of Large Owners.



Note: The figures display the group of large owners' share of cash flow and votes for firms with a potential control loss in each country due to the Break-Through rule. The broken line illustrates proportionality between cash flow and votes, which is present in an one-share-one-vote structure. The degree of disproportionality can be measured by the geometric distance from the proportionality line.

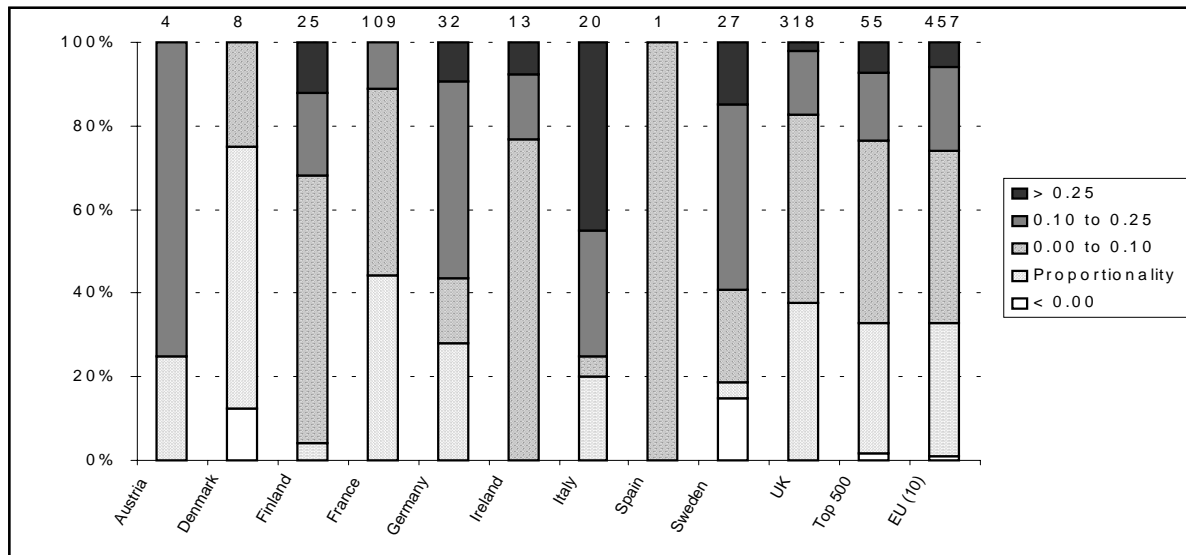
Figure 4

Panel A: Degree of Disproportionality in Firms with a Potential Control Loss, Largest Owner.



Note: The figure summarizes the distribution of European firms with a potential control loss into five categories in relation to the degree of disproportionality, defined as the difference between the largest owner's share of votes and cash flow. Proportionality reflects a situation where the largest owner's share of votes equals the share of cash flow. The figure summarizes the distribution of firms in Figure 3, Panel A, where the degree of disproportionality is given by the geometric distance to the proportionality line.

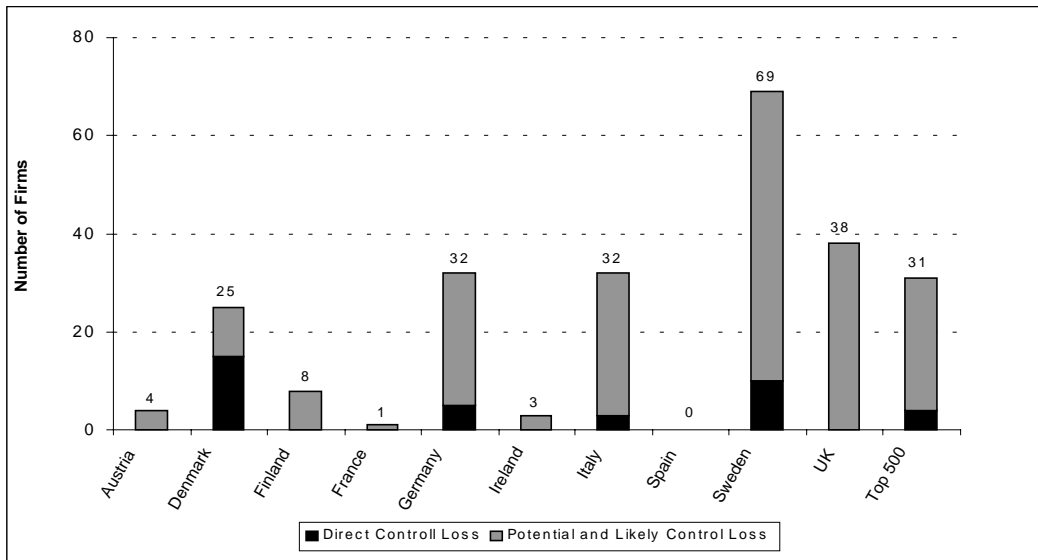
Panel B: Degree of Disproportionality in Firms with a Potential Control Loss, Group of Large Owners



Note: The figure summarizes the distribution of European firms with a potential control loss into five categories in relation to the degree of disproportionality, defined as the difference between the group of large owners' share of votes and cash flow. Proportionality reflects a situation where the group of large owners' share of votes equals the share of cash flow. The figure summarizes the distribution of firms in Figure 3, Panel B, where the degree of disproportionality is given by the geometric distance to the proportionality line.

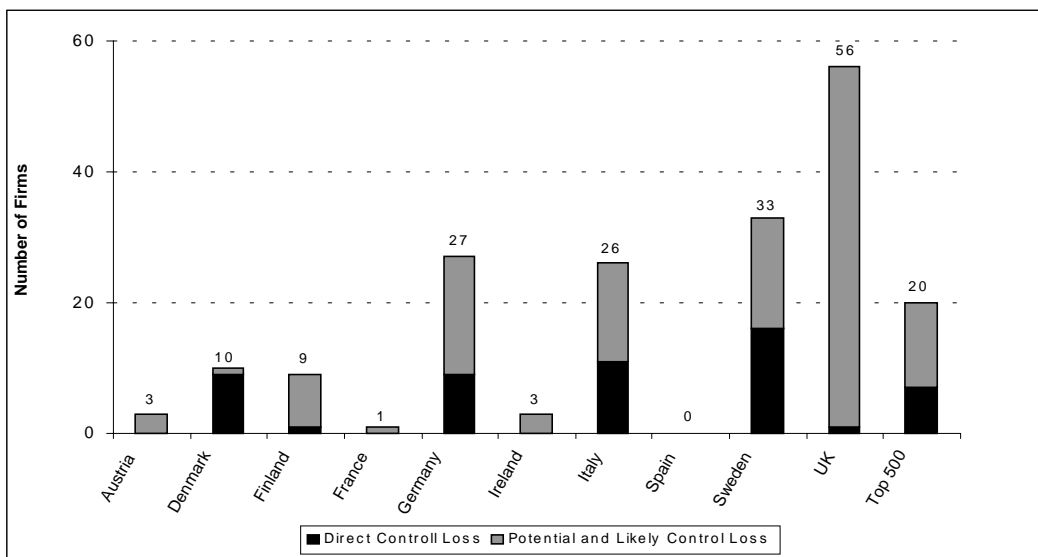
Figure 5

Panel A: The Impact of the Break-Through Rule, Number of Firms where the Largest Owner Faces a Direct or Potential and Likely Control Loss.



Note: The figure shows the number of companies where the largest owner faces a direct or a potential and likely loss of control. Total number of firms with either a direct or potential and likely control loss is displayed on top.

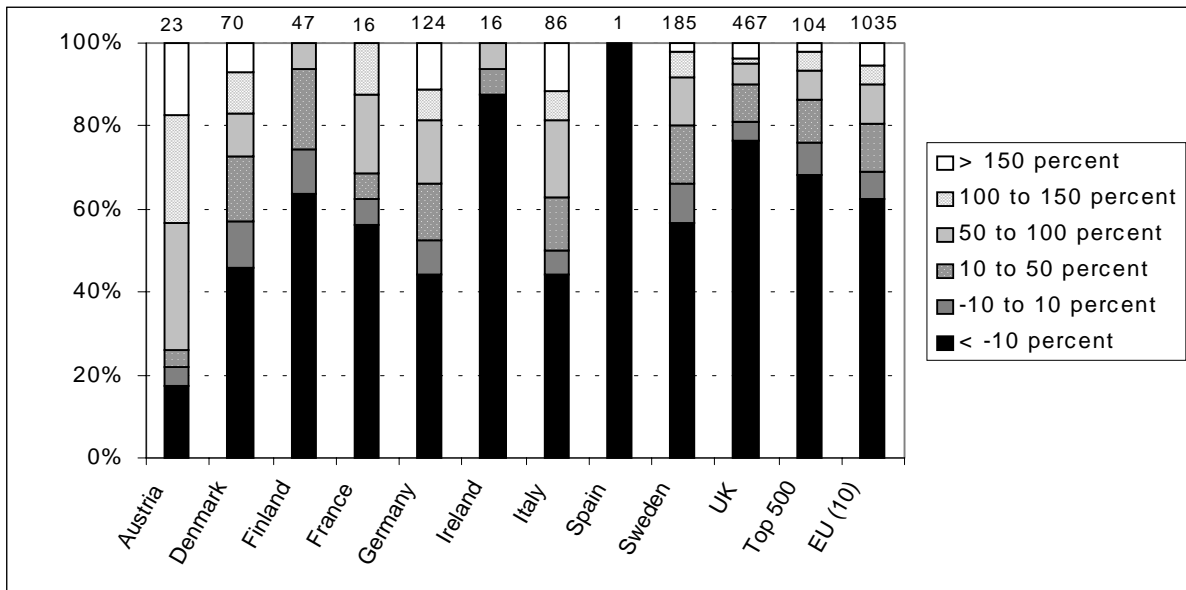
Panel B: The Impact of the Break-Through Rule, Number of Firms where the Group of Large Owner Faces a Direct or Potential and Likely Control Loss .



Note: The figure shows the number of companies where the group of large owners face a direct or a potential and likely loss of control. Total number of firms with either a direct or potential and likely control loss is displayed on top.

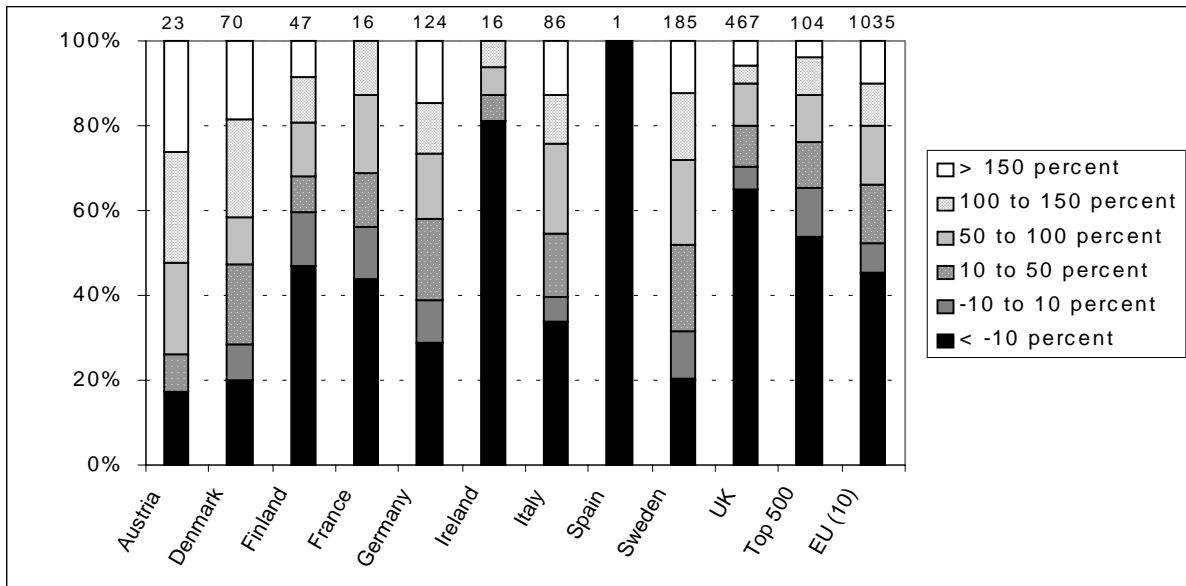
Figure 6

Panel A: The Impact of the Break-Through Rule on the Maximum Amount of Cash Flow that can be Issued to Outside Investors without Changing the Present Control Structure, Largest Owner.



Note: The figure summarises the distribution of European firms into 6 categories reflecting the maximum amount of cash flow that can be issued to outside investors without changing the present control structure. Positive numbers show how much the cash flow can be extended without reducing the largest owner's share below the Break-Through rule. Negative numbers reflect a situation where the present controlling owner does not offset the Break-Through rule.

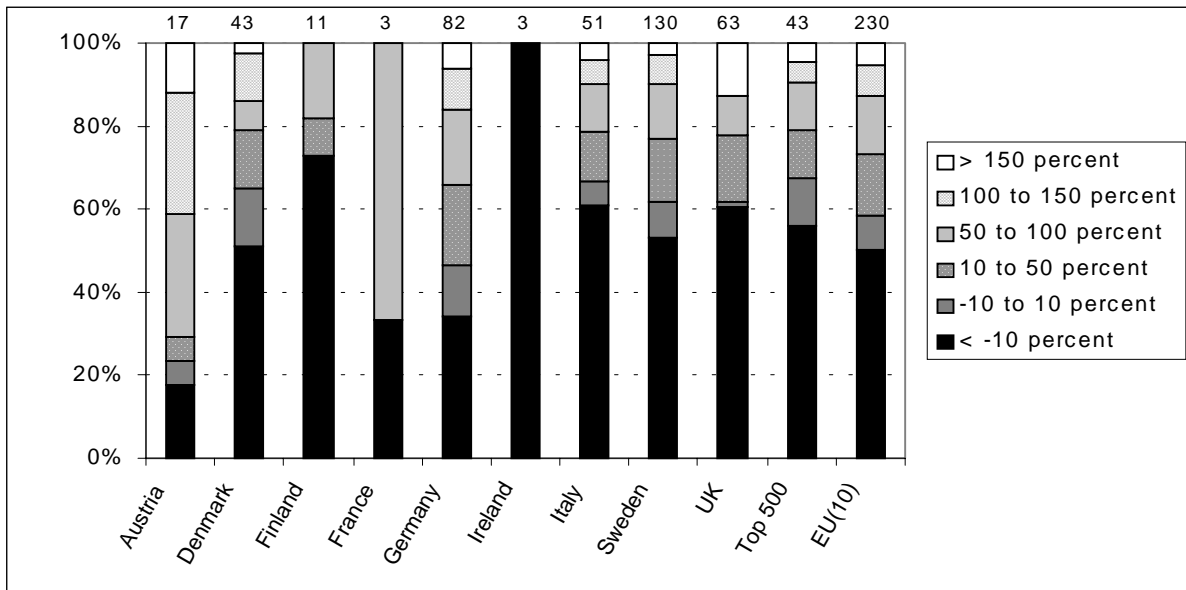
Panel B: The Impact of the Break-Through Rule on the Maximum Amount of Cash Flow that can be Issued to Outside Investors without Changing the Present Control Structure, Group of Large Owners.



Note : The figure summarises the distribution of European firms into 6 categories reflecting the maximum amount of cash flow that can be issued to outside investors without changing the present control structure. Positive numbers show how much the cash flow can be extended without reducing the group of large owners' share below the Break-Through rule. Negative numbers reflect a situation where the present group of owners does not offset the Break-Through rule.

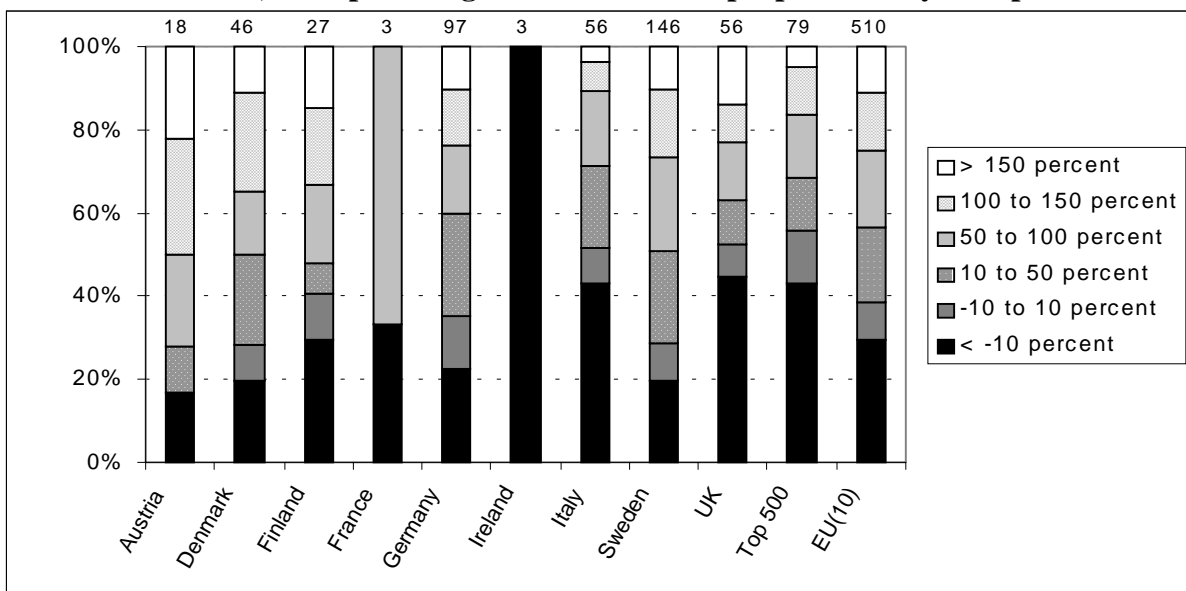
Figure 7

Panel A: The Impact of the Break-Through Rule on the Maximum Amount of Cash Flow that can be Issued to Outside Investors without Changing the Present Control Structure, Largest Owner with Disproportionality > 10 percent.



Note: The figure summarises the distribution of European firms with a disproportionality larger than 10 percent into 6 categories reflecting the maximum amount of cash flow that can be issued to outside investors without changing the present control structure. Positive numbers show how much the cash flow can be extended without reducing the largest owner's share below the Break-Through rule. Negative numbers reflect a situation where the present controlling owner does not offset the Break-Through rule.

Panel B: The Impact of the Break-Through Rule on the Maximum Amount of Cash Flow that can be Issued to Outside Investors without Changing the Present Control Structure, Group of Large Owners with Disproportionality > 10 percent.



Note: : The figure summarises the distribution of European firms with a disproportionality larger than 10 percent into 6 categories reflecting the maximum amount of cash flow that can be issued to outside investors without changing the present control structure. Positive numbers show how much the cash flow can be extended without reducing the group of large owners' share below the Break-Through rule. Negative numbers reflect a situation where the present group of owners does not offset the Break-Through rule.

Table 1, Dual Class Shares

Country	Number of firms	Number of firms with Dual Class Shares	Share
Belgium	130	0	0.00
Portugal	87	0	0.00
Spain	632	1	0.00
France	607	16	0.03
Germany	704	124	0.18
Austria	99	23	0.23
Ireland	69	16	0.23
UK	1,953	467	0.23
Denmark	210	70	0.33
Italy	208	86	0.41
Finland	129	47	0.36
Sweden	334	185	0.55
Total	5.162	1035	0.55

Source: Faccio and Lang (2002) with the addition and update of firms from Denmark and Sweden respectively.

Appendix

Table A.1, Lexicographic List of Companies with Dual Class Shares in 10 EU countries

Firms in **bold** belong to the "Top 500" group of the 500 largest firms in Europe measured on assets.

AUSTRIA (AG)			
1 Agrana Beteiligungs	7 Bau Holding	13 Mautner Markhof Nahrungs- & Genussmittel	19 Schlumberger
2 Allgemeine Baugesellschaft	8 Baumax	14 Messer Igm Robotersysteme	20 Ubm Realitaeten-Entwicklung
3 Ankerbrot	9 Eb Und Hypo - Bank Burgenland	15 Miba	21 Vogel & Noot Holding
4 Avw Invest	10 Grass Holding	16 Oberbank Ag	22 Voith Sulzer Papiermaschinen
5 Bank Fuer Kaernten Und Steiermark	11 Hild Handels	17 Oesterreichische Volksbanken	23 Wiener Staedtische Allg Versicherung
6 Bank Fuer Tirol Und Vorarlberg	12 Leipnik-Lundenburger Industrie	18 Ottakringer Brauerei	
DENMARK (A/S)			
24 Aab	42 Dantax	61 Inv. Selsk. Af 30.4.92	78 Potagua
25 Ab	43 Denka Holding	62 ISS	79 Radiometer
26 Agf Kontraktfodbold	44 Dlh	63 Julius Koch	80 Randers Rebslaeri
27 Alm. Brand Pantebreve	45 Dsv	64 Kompan	81 Realinvest.Dk
28 Ambu International	46 Egetæpper	65 Land & Leisure	82 Rias
29 Andersen & Martini	47 Expedit	66 Lastas	83 Roblon
30 Auriga Industries	48 F.E. Bording	67 Luxor	84 Rockwool International
31 Bang & Olufsen	49 FLS Industries	68 Migatronic	85 Sanistål
32 Brd. Klee	50 Flügger	69 Monb. & Thor.Hol	86 Schouw & Co.
33 Brdr. A & O Johansen	51 G. Falbe-Hansen	70 National Industri	87 Sif Fodbold Support
34 Brdr.Hartmann	52 Glunz & Jensen	71 Nordisk Solar Com.	88 Solar Holding
35 Brøndby If	53 Gpv Industri	72 Nørhaven	89 Spæncom
36 Carlsberg	54 Gyldendal	73 Novo Nordisk	90 Torsana
37 Chemitalic	55 H+H International	74 Novozymes	91 Viborg Håndbold Klub
38 Chr.Hansen Holding	56 Hafslund	75 Ntr Holding	92 Vt Holding
39 Coloplast	57 Harboes Bryggeri	76 Ove Arkil Holding	93 Wessel & Vett
40 D/S 1912	58 Hellebæk Fabrikker	77 Per Aarsleff	
41 D/S Svendborg	59 Højgaard Holding	78 Potagua	
FINLAND (OVI)			
94 A Company Finland	106 HK Ruokatalo	118 Metra Apb	130 Rautaruukki
95 Ålandsbanken Abp	107 Honkarakenne	119 Metsä-Serla	131 Stockmann Abp
96 Alma Media	108 Isko	120 Neomarkka	132 Stora Enso
97 Amer-yhtymä	109 Kasola	121 Olvi	133 Stromsdal
98 Atria	110 Kesko	122 Orion-yhtymä	134 Suomen Helasto
99 Biohit	111 Kesla	123 Outokumpu	135 Tamfelt Abp
100 Birka Line Abp	112 KONE	124 Hartwall Abp	136 Tulikivi
101 Chips Abp	113 Kylpylakasino Oyj	125 Panostaja	137 Turkistuottajat
102 Efore	114 Larox	126 Plandent	138 Vahto Group Plc
103 Elecster	115 Leo Longlife PLC Oyj	127 Pohjola-Yhtymä Vakuutus	139 Vaisala
104 Fiskars Abp	116 Mandatum Pankki	128 Raisio Yhtymä	140 Yleiselektroniikka
105 Hackman Abp	117 Martela	129 Rautakirja	
FRANCE (SA)			
141 Banque Nationale De Paris	145 Eridania Beghin-Say	149 Pechiney	153 Sagem
142 Bouygues	146 Essilor International	150 Promodes	154 Societe Du Louvre-Groupe Du Louvre
143 Casino Guichard Perrachon	147 Groupe Danone	151 Rhone-Poulenc	155 Taittinger
144 Credit Lyonnais	148 Legrand	152 Robertet	156 Total
GERMANY (AG)			
157 Aachener Und Muenchener Beteiligungs	164 Axa Colonia Konzern	171 Baywa	178 Commerzbank
158 Ag Rob	165 Badenwerk	172 Berliner Elektro Holding	179 Compugroup Holding
159 Akzo Nobel Faser	166 Baden-Wuerttembergische Bank	173 Bertelsmann	180 Concordia Bau Und Boden
160 Albingia Versicherungs-	167 Bankgesellschaft Berlin	174 Bhf-Bank	181 Cs-Interglas
161 Allweiler	168 Bayerische Hypo- Und Vereinsbank	175 Binding Brauerei	182 Custodia Holding
162 Altana	169 Bayerische Hypotheken- Und Wechsel-Bank	176 Biotest	183 Dahlbusch
163 Asea Brown Boveri	170 Bayerische Motoren Werke	177 Burgbad	184 Deutsche Hypothekenbank

185	Deutsche Pfandbrief- & Hypothekenbank	209	Hornbach Holding	233	Marschollek Lautenschlaeger And Partn	257	Steffen
186	Draegerwerk	210	Hornbach-Baumarkt	234	Metallgesellschaft	258	Sto
187	Dresdner Bank	211	Hornblower Fischer	235	Metro	259	Stragag
188	Dyckerhoff	212	Hugo Boss	236	Mineralbrunnen Ueberkingen-Teinach	260	Stuttgarter Bank
189	Edeka Zentrale	213	Jado Design Armatur Und Beschlag	237	Moebel Walther	261	Stuttgarter Hofbraeu Aktiengesellschaft
190	Ehlebracht	214	Jagenberg	238	Nordag Immobilien	262	Suedzucker
191	Erc Frankona Rueckversicherungs-	215	Jil Sander	239	Nordstern Lebensversicherungs-	263	Teutoburger Wald Eisenbahn
192	Escada	216	Jungheinrich	240	Nuernberger Beteiligungs-	264	Teutonia Zementwerk
193	Eurokai Kгаа	217	Kennametal Hertel Werkz + Hartstoffe	241	Prosieben Media	265	Trinkaus And Burkhardt Kгаа
194	Fag Kugelfischer Georg Schaefer	218	Kih Kommunikations Industrie Holding	242	Puma Rudolf Dassler Sport	266	Ueberlandwerk Unterfranken
195	Fielmann	219	Knuerr-Mechanik Fuer Die Elektronik	243	Reederei Herbert Ekkenga	267	Vereinte Versicherung
196	Fraenkisches Ueberlandwerk	220	Koegel Fahrzeugwerke	244	Rheinische Hypothekenbank	268	Villeroy And Boch
197	Fresenius	221	Koelnische Rueckversicherungs-Gesellsch	245	Rheinland Holding	269	Vogt Electronic
198	Fresenius Medical Care	222	Koenig And Bauer	246	Rheinmetall	270	Voith Jm
199	Froehlich Bau	223	Koetitzer Ledertuch Und Wachstum Werke	247	Rhoen-Klinikum	271	Volkswagen
200	Gea	224	Krones	248	Rieter Ingolstadt Spinnereimaschinen.	272	Walter Bau-
201	Glunz	225	Ksb	249	RWE Aktiengesellschaft	273	Wella
202	Hamburger Getreide-Lagerhaus	226	Kunert	250	SAP	274	Westag And Getalit
203	Hamburger Hochbahn	227	Lech-Elektrizitaetswerke	251	Sartorius	275	Wilkens Bremer Silberwaren
204	Hanfwerke Oberachern	228	Leffers	252	Siemens	276	Wkm Terrain Und Beteiligungs
205	Heidelberger Zement	229	Macrotron	253	Sixt	277	Wmf Wuerttem-Bergische Metall.
206	Heilit + Woerner Bau-	230	Mainzer Aktien-Bierbrauerei	254	Spar Handels-	278	Wuerttembergische Hypothekenbank
207	Henkel Kгаа	231	Man	255	Stada Arzneimittel	279	Zanders Feinpapiere
208	Herlitz	232	Markant-Suedwest Handels-	256	Stadtwerke Hannover	280	Zoologischer Garten Berlin
IRELAND (PLC)							
281	Adare Printing Grp.	285	CRH	289	Fyffes	293	James Crean
282	Allied Irish Banks	286	Elan Corporation	290	Heiton Holdings	294	Jefferson Smurfit Grp.
283	Arnotts	287	European Leisure	291	Iaws Group	295	Kenmare Resources
284	Bank Of Ireland	288	Fbd Holdings	292	Iwp International	296	Ryan Hotels
ITALY (SPA)							
297	Acqua Pia Antica Marcia	313	Cantoni Itc	329	Gemina Generale Mobiliare Interessenze Azionarie	345	Milano Assicurazioni
298	Acquedotto De Ferrari Valliera	314	Cartiere Burgo	330	Gim Generale Industrie Metallurgiche	346	Montedison
299	Aedes Spa Ligure Lombarda Per Imprese E Costruzioni	315	Cementeria Di Barletta	331	Ifi Istituto Finanziario Industriale	347	Montefibre
300	Alitalia Linee Aeree Italiane	316	Ciga	332	Ifil Finanziaria Di Partecipazioni	348	Necchi
301	Alleanza Assicurazioni	317	Cir Compagnie Industriali Riunite	333	Impreglio	349	Olivetti
302	Arnoldo Mondadori Editore	318	Cofide Compagnia Finanziaria De Benedetti	334	Interbanca Banca Per Finanziamenti A Medio E Lungo Termine	350	Pininfarina
303	Autostrade Spa Concessioni E Costruzioni Autostrade	319	Compart Spa Compagnia Di Partecipazioni Assicrative E Industriali	335	Istituto Bancario San Paolo Di Torino	351	Pirelli And C Accomandita Per Azioni
304	Banca Commerciale Italiana	320	Costa Crociere	336	Italcementi Fabbriche Riunite Cemento	352	Pirelli
305	Banca Nazionale Dell'agricoltura	321	Credito Italiano	337	Italjolly Compagnia Italiana Dei Jolly Hotels	353	Premuda
306	Banco Ambrosiano Veneto	322	Danieli Officine Meccaniche Danieli And C	338	Italmobiliare	354	Ras Riunione Adriatica Di Sicurta'
307	Banco Di Desio E Della Brian..	323	Euromobiliare Spa	339	La Fondiaria Assicurazioni	355	Recordati Industria Chimica E Farmaceutica
308	Banco Di Napoli	324	Falck	340	La Rinascente	356	Rejna
309	Banco Di Sardegna	325	Fiat	341	Linificio E Canapificio Nazion.	357	Reno De Medici
310	Bnl Banca Nazionale Del Lavoro	326	Finmeccanica	342	Magneti Marellii	358	Risanamento Napoli Societa' Per Il Risanamento Di Napoli
311	Caffaro	327	Finpart	343	Marzotto Spa Manifattura Lane Gaetano Marzotto And Figli	359	Saes Getters
312	Caltagirone	328	Finrex	344	Merloni Elettrodomestici	360	Saffa

361	Safilo Soc Az Fabbrica Italiana Lavorazione Occhiali	367	Simint	373	Stet Societa' Finanziaria Telefonica	379	Toro Assicurazioni
362	Sai Societa' Assicuratrice Industriale	368	Smi Spa Societa' Metallurgica Italiana	374	Teknecomp	380	Unicem Unione Cementerie Marchino Emiliane
363	Saiag Spa Industria Articoli Gomma	369	Snia Bpd	375	Teleco Cavi	381	Unipol Compagnia Assicuratrice Unipol
364	Saipem	370	Sopaf Spa Societa' Di Partecipazioni Finanziarie	376	Telecom Italia Mobile	382	Zucchi Vincenzo Zucchi
365	Santavaleria Societa' Di Partecipazioni Industriali	371	Standa	377	Telecom Italia		
366	Sasib	372	Stefanel	378	Terme Demaniali Di Acqui		

SPAIN (SA)

383 Dragados Y Construcciones

SWEDEN (AB)

384	AcadeMedia	431	Extended Capital Group	478	Medivir	525	SalusAnsvar
385	Active Biotech	432	Facile & Co	479	Mekonomen	526	SBI Holding
386	Adera	433	Fingerprint Cards	480	Micro Systemation	527	SCA
387	Affärsstrategerna	434	Finnveden	481	Midway holding	528	Scania
388	Allgon	435	Fjällräven	482	MiniDoc	529	Scribona
389	Ångpanneföreningen	436	Focal Point	483	MNRG	530	SEB
390	Arcam	437	Forum SQL	484	MSC	531	Seco Tools
391	Array	438	Frango	485	MTG	532	Sectra
392	Artema Medical	439	Frontec	486	MTV Produktion	533	Securitas
393	Artimplant	440	Frontyard	487	NCC	534	Segerström&Svensson
394	Assa Abloy	441	Gambro	488	Nea	535	SHB
395	Atlas Copco	442	Getinge Industrier	489	Nefab	536	Sigma
396	AudioDev	443	Geveko	490	Net Insight	537	SinterCast
397	B & N	444	Glycorex Transplantation	491	NetCom	538	Skanska
398	Beijer & Alma	445	Gorthon Lines	492	Netwise	539	SKF
399	Beijer G & L	446	Gotlandsbolaget	493	New Wave	540	Smarteq
400	Bergman & Beving	447	Havsfrun	494	Nibe Industrier	541	Softronic
401	BioGaia Biologics	448	Heba	495	Nilörngruppen	542	Spendrups
402	Biolight International	449	Hennes&Mauritz	496	Nocom	543	SRAB Holding
403	Borås Wäfveri	450	Hexagon	497	Nolato	544	SSAB
404	Brio	451	HL Display	498	Nordifa	545	Strålfors
405	Broström	452	Höganäs	499	NovaCast	546	Svedbergs
406	CashGuard	453	Holmen	500	Novotek	547	Svenska Orient Linien
407	CF Berg	454	Hufvudstaden	501	Obducat	548	Svolder
408	Cherryföretagen	455	IBS	502	Observer	549	Sweco
409	Clas Ohlson	456	IFS	503	OEM International	550	Sydskraft
410	Cloetta Fazer	457	Inac	504	Ortivus	551	Target Investment
411	Columna	458	Independent Media Group	505	PA Resources	552	Taurus Petroleum
412	Concordia Maritime	459	Industrivärden	506	Peab	553	Thalamus Networks
413	Confidence	460	InfiniCom	507	Perstorp	554	The Empire
414	Consilium	461	Intellecta	508	Platzer	555	Tivox
415	Daydream	462	Intentia	509	Poolia	556	TMT One
416	Dial Nxt Group	463	Investor	510	Prevas	557	Traction
417	Diamyd Medical	464	Invik	511	Pricer	558	Trelleborg
418	Drott	465	Itab	512	Probi	559	Tricorona Mineral
419	Duroc	466	JM	513	Proffice	560	TurnIT
420	e-Conomy Network	467	Kabe	514	Profilgruppen	561	VBG
421	Ecta Resurs	468	Kinnevik	515	Qualisys	562	VLT
422	Elanders	469	Latour	516	Ratos	563	Volvo
423	Electrolux	470	LightLab	517	ReadSoft	564	Wallenstam
424	Elekta	471	Lindab	518	Realia	565	Wedins Norden
425	ElektronikGruppen BK	472	LjungbergGruppen	519	Resco	566	Westergyllen
426	Enlight	473	Lundbergs	520	RKS	567	Wihl Sonesson
427	Ericsson	474	Lundin Oil	521	Rörvik Timber	568	WM-data
428	Esselte	475	M2S	522	Saab		
429	European Inst of Science	476	Malmbergs Elektriska	523	SafePay		
430	Expanda	477	MediRox	524	SälenStjärnan		

UNITED KINGDOM (PLC)

569	600 Group	577	Airflow Streamlines	585	Alliance Trust (The)	593	Ann Street Brewery Ltd
570	Abbot Group	578	Airsprung Furniture	586	Allied Domecq	594	Antofagasta Holdings
571	Abbott Mead Vickers	579	Airtours	587	Allied London Properties	595	Api Group
572	Aberdeen Asset Management	580	Albermarle Property Investments	588	Amber Industrial Holdings	596	Apollo Metals
573	Acatos And Hutcheson	581	Alexander Russell	589	Amec	597	Apv
574	Adscene Group	582	Alexanders Holdings	590	Andrews Sykes Group	598	Arabis
575	Aegis	583	Alexon Group	591	Anglo And Overseas Trust	599	Arcoelectric Holidngs
576	Aggregate Industries	584	Alfred Mcalpine	592	Anite	600	Asda Property Holdings

601	Associated British Foods	655	Burmah Castrol	709	Dartmoor Investment Trust	763	Fleming Overseas Investment Trust
602	Austin Reed Group	656	Burnden Leisure	710	De La Rue	764	Folkes Group
603	Australian Opportunities Invest Trust	657	Burnedene Investments	711	Dee Valley Water	765	Foreign And Colonial Emg Mkts Inv Tr
604	Avon Rubber	658	Burtonwood Brewery	712	Delta	766	Foreign And Colonial Investment Trust
605	B Elliott	659	Cable And Wireless	713	Dencora	767	Foreign And Colonial Smaller Companies
606	Baldwin	660	Cadbury Schweppes	714	Devro	768	Forminster
607	Bandt	661	Caffyns	715	Dewhurst Group	769	Fortnum And Masons
608	Bank Of Scotland (Governor And Company)	662	Caird Group	716	Diageo	770	Foster John And Sons
609	Bankers Investment Trust (The)	663	Cakebread Robey And Co	717	Dixons Group	771	Framlington Dual Trust
610	Banner Chemicals	664	Cala	718	Dixons Motors	772	Friendly Hotels
611	Banner Homes	665	Cambridge Water	719	Drummond Group	773	Friends Ivory & Sime
612	Bass	666	Campbell And Armstrong	720	Dunedin Income Growth Investment Trust	774	Fulcrum Investment Trust
613	Baynes Charles	667	Cape	721	Dunedin Worldwide Investment Trust	775	Fuller Smith & Turner
614	BBA Group	668	Capital And Regional Properties	722	Dwyer Estates	776	Gartmore Smaller Companies Trust
615	Bearing Power International	669	Capital Industries	723	Dyson Jandj	777	Gaskell
616	Beauford	670	Caradon	724	Eadie Holdings	778	Gbe International
617	Belgo	671	Carbo	725	East Surrey Holdings	779	General Accident
618	Bellway	672	Carclo Engineering Group	726	Eclipse Blinds	780	General Consolidated Investment Trust Pl
619	Bemrose Corporation	673	Carlisle Group	727	Edinburgh Investment Trust (The)	781	Ggt
620	Benchmark Group	674	Cater Allen Holdings	728	Edinburgh Us Tracker Trust	782	Gibbon Group
621	Bfs Income And Growth Trust	675	Cathay International	729	Eis Group	783	Gibbs And Dandy
622	BG Group	676	Celltech	730	Elliott	784	Gibbs Mew
623	Bicc	677	Cgu	731	Emap	785	Glynwed International
624	Blacks Leisure Group	678	Charles Baynes	732	Emess	786	Goode Durrant
625	Blockleys	679	Charter European Trust	733	Energis	787	Goodhead Group
626	Blp Group	680	Charter	734	English & Overseas Properties	788	Govett Oriental Investment Trust
627	Blue Circle Industries	681	Chelsfield	735	English And Scottish Investors	789	Govett Strategic Investment Trust
628	BOC	682	Chemring Group	736	Enic	790	Grampian Holdings
629	Bogod Group	683	Chesterfield Propert.	737	Enviromed	791	Granada Group
630	Boosey And Hawkes	684	Chloride Group	738	Era Group	792	Grand Metropolitan
631	Boot Henry And Sons	685	City Of London Investment Tr.	739	Eurodis Electron	793	Greenalls Group
632	Bowness Leisure	686	City Of Oxford Investment Trust	740	European Colour	794	Gresham Computing
633	Bp Amoco	687	City Site Estates	741	Eyecare Products	795	Hall Engineering Hld.
634	Bradford Property Trust	688	Close Brothers Group	742	Fandc Latin American Investment Trust	796	Halma
635	Braime Tf And Jh Holdings	689	Clubhaus	743	Farepak	797	Halstead James
636	Brent International	690	Cnc Properties	744	Ferrum Holdings	798	Hambros
637	Brent Walker	691	Coats Viyella	745	Fidelity European Values	799	Hammerson
638	Bridgend Group	692	Cobham	746	Finlay James	800	Hampton Industries
639	Bristol Water Holdings	693	Cohen A And Co	747	Finsbury Growth Trust	801	Hampton Trust
640	Britannic	694	Colt Telecom	748	Finsbury Smaller Companies Tr	802	Hardys And Hansons
641	British Aerospace	695	Consolidated Coal	749	Finsbury Trust	803	Harris Philip
642	British Airways	696	Cookson Group	750	First Call Group	804	Hartstone Group
643	British And American Investment Trust	697	Cooper Frederick	751	First Choice Holidays	805	Hawtal Whiting Holdings
644	British Assets Trust	698	Cornwell Parker	752	First Ireland Investment Company	806	Hawtin
645	British Polythene Industries	699	Cosalt	753	Firth Rixson	807	Hazlewood Foods
646	British Vita	700	Country Gardens	754	Fisher James And Sons	808	Headlam Group
647	Britton Group	701	Courtaulds	755	Five Oaks Investments	809	Heavitree Brewery
648	Brixton Estate	702	Courts	756	Flare Group	810	Helical Bar
649	Broadcastle	703	Coutts Consulting Group	757	Fleming American Investment Trust	811	Henderson Smaller Cos Inv Trust
650	Brockhampton Holdings	704	Cradley Holdings	758	Fleming Continental European Investment	812	Henderson Tr Pacific Investment Trust
651	Brown And Jackson	705	Craig And Rose	759	Fleming Far Eastern Inv Trust	813	Henry Boot & Sons
652	Brunel Holdings	706	Crest Nicholson	760	Fleming Geared Growth Investment Tr	814	Hewetson
653	Brunner Investment Trust (The)	707	Croda International	761	Fleming Income And Growth Investment Trust	815	Heywood Williams Group
654	Bulgin Af And Co	708	Daily Mail And General Tr.	762	Fleming Mercantile Inv. Tr.	816	Highland Distilleries Company

817	High-Point Rendel	872	Lowe Robert H	927	Quarto Inc (The)	982	Sr Pan-European Investment Trust
818	Hiscox	873	Manders	928	Quicks Group	983	St Andrew Trust
819	Hong Kong Investment Trust	874	Manganese Bronze Holdings	929	Rank	984	Standard Chartered
820	Hp Bulmer Holdings	875	Marshalls	930	Ransomes	985	Staveley Industries
821	Hunting	876	Martin International Holdings	931	Rea Holdings	986	Sterling Industries
822	Hyder	877	Marylebone Warwick Balfour Group	932	Readicut International	987	Sterling Publishing Group
823	Iceland Group	878	Mcalpine Alfred	933	Reckitt And Colman	988	Stoddard Int.
824	Intelek	879	Mccarthy And Stone	934	Reece	989	Swallow
825	Invesco English And International Trust Pl	880	Mckay Securities	935	Reed International	990	Swan Hill
826	Invesco Enterprise Trust	881	Mckechnie	936	Regal Hotel Group	991	Tate And Lyle
827	Investment Company (The)	882	Mepc	937	Regent Inns	992	Tds Circuits
828	Investors Capital Trust	883	Merchant Retail	938	Renold	993	Telewest Communications
829	J & J Dyson	884	Merchants Trust (The)	939	Reexam	994	Temple Bar Investment Trust
830	Jacks William	885	Mercury European Privatisation Trust	940	Ricardo	995	Thames Water
831	James Finlay	886	Mercury Keystone Investment Trust	941	Richards	996	Throgmorton Trust (The)
832	James Fisher And Sons	887	Molins	942	Rights And Issues Investment Trust	997	Tor Investment Trust
833	James Halstead	888	Morgan Crucible Company	943	Ring	998	TR European Growth Trust
834	Jenning's Brothers	889	Morgan Sindall	944	Rio Tinto	999	Transport Development Group
835	Jermyn Investment Properties	890	Morland	945	Rit Capital Partners	1000	Trinity Care
836	John Foster & Son	891	Morrison Construction Group	946	Riva Group	1001	Triplex Lloyd
837	John Menzies	892	Morrison Wm Supermarkets	947	Rms Communications	1002	Tt Group
838	John Mowlem & Company	893	Mountcashel	948	Robert H Lowe	1003	Uk Estates
839	John Waddington	894	Mowlem John And Co	949	Rodime	1004	Unilever
840	Johnson Matthey Public Limited Company	895	Mucklow A And J	950	Ropner	1005	United Assurance Group
841	Johnson Service	896	Murray Global Return Trust	951	Rotork	1006	Upton And Southern Holdings
842	Johnston Group	897	Murray Income Trust	952	Roxspur	1007	Vickers
843	Johnston Press	898	Murray International Trust	953	Royal & Sun Alliance Insurance	1008	Vision Group
844	Jones And Shipman	899	National Westminster Bank	954	Royal Bank Of Scotland Group	1009	Volex Group
845	Jones Stroud Holdings	900	Nhp	955	Rubicon Group	1010	Wace Group
846	Jordec	901	Olim Convertible Trust	956	Saltire	1011	Waddington
847	Jove Investment Trust	902	Paramount	957	Sandu	1012	Wagon Industrial Holdings
848	Jupiter European Investment Trust	903	Parkland Group	958	Scholl	1013	Walker Greenbank
849	Jupiter Extra Income Trust	904	Pascoe's	959	Scotcom	1014	Watmoughs Holdings
850	Kelsey Industries	905	Paterson Zochonis	960	Scottish And Newcastle	1015	Watts Blake Bearn And Company
851	King And Shaxson Holdings	906	Peek	961	Scottish Eastern Investment Trust	1016	Wessex Water
852	Kleinwort Overseas Investment Trust	907	Peel Holdings	962	Scottish Investment Trust	1017	Wew Group
853	Kunick	908	Peninsular & Oriental Steam Navigation	963	Scottish National Trust (The)	1018	Whitbread
854	Kynoch Group	909	Perkins Foods	964	Sears	1019	Whitecroft
855	Laing John	910	Pex	965	Second Alliance Trust (The)	1020	Wickes New
856	Lamont Holdings	911	Philip Harris	966	Securicor	1021	Wiggins Group
857	Langley & Johnson	912	Photo-Me International	967	Securities Trust Of Scotland	1022	Williams Hld.
858	Lasmo	913	Pic International	968	Sep Industrial Holdings	1023	Williams
859	Latham James	914	Pittards	969	Severn Trent	1024	Wilson Connolly Hld.
860	Law Debenture Corporation	915	Planit Holdings	970	Sheffield United	1025	Wintrust
861	Lazard Brothers And Company Limited	916	Plantation And General Investments	971	Shell Transport And Trading	1026	Witan Investment Company
862	Le Riches Stories Ltd	917	Polyhedron Holdings	972	Shires Income	1027	WM Morrison Supermarkets
863	Leigh Interests	918	Polymasc Pharmaceut.	973	Signet Group	1028	Wolverhampton And Dudley Breweries
864	Leslie Wise Group	919	Portsmouth And Sunderland Newspaper.	974	Simon	1029	Wood Arthur And Son Longport
865	Lex Service	920	Powell Duffryn	975	Sirdar	1030	Wyevale Garden Centres
866	Liberty International Holdings	921	Premier Farnell	976	Six Hundred (600) The	1031	Yeoman Investment Tr.
867	Liberty	922	Premier Health Group	977	Slough Estates	1032	York Waterworks
868	Lilleshall	923	Pressac Holdings	978	Smith And Nephew	1033	Yorkshire Water
869	London And St Lawrence Investment	924	Prestwick Holdings	979	Smith Wh	1034	Young And Co's Brew.
870	Lookers	925	Prowting	980	Smithkline Beecham	1035	Yule Catto And Co
871	Low And Bonar	926	Psit	981	South Staffordshire Water Holdings		

Table A.2, Company Position in Figure 2

Numbers refer to the list of firms in Table A.1

Zone 1: Direct Control Loss

Zone 2A: Potential and Likely Control Loss

Zone 2B: Potential and Unlikely Control Loss

Zone 3: Comfort without Direct Control

Zone 4: Comfort with Direct Control

COUNTRY	ZONE	N	COMPANY POSITION IN FIGURE 2, PANEL A	COMPANY POSITION IN FIGURE 2, PANEL B
Austria	1		-	-
	2	A	1, 2, 20, 21	1, 2, 20
		B	3	3
	3		4, 5, 22	4, 5
	4		6,-19, 23	6-19, 21-23
Denmark	1		25, 27, 33-35, 51, 52, 55, 62, 66, 68, 75, 76, 83, 91	35, 37, 51, 52, 55, 62, 66, 80, 91
	2	A	28, 37, 39, 43, 54, 70, 74, 77, 80, 85	24
		B	24, 31, 45, 53, 78, 81, 84, 87, 90	31, 53, 81, 90, 78
	3		26, 32, 47, 56,57, 58, 60, 65, 86, 88, 92, 93	45, 54, 57, 65, 70, 85, 87, 92
	4		29, 30, 36, 38, 40-42, 44, 46, 48-50, 59, 61, 63, 64, 67, 69, 71-73, 79, 82, 89	25-30, 32-34, 36, 38, 39, 40-44, 46-50, 56, 58-61, 63, 64, 67-69, 71-77, 79, 82-84, 86, 88, 89, 93
Finland	1		-	96
	2	A	94, 96, 100, 127, 132	94, 95, 100, 101, 118, 119, 132
		B	95, 99, 101, 102, 104, 105, 107, 108-110, 112, 113, 115, 122, 124, 125, 128, 131, 133-137, 139	99, 102, 104, 105, 107, 108, 110, 113, 115, , 122, 124, 125, 127, 128, 135-137, 139,
	3		98, 103, 106, 111, 114, 116, 117, 123, 126, 129, 130, 140	112, 130, 140
	4		97, 121, 138	97, 98,103, 106, 109,111, 114, 116, 117, 120, 121, 123,126,129, 131, 133, 134, 138
France	1		-	-
	2	A	154	154
		B	141-143, 146, 147, 149- 151, 156	141-143, 146, 147, 150, 151, 156
	3		155,	149, 155
	4		144, 145, 148, 152, 153	144, 145, 148, 152, 153
Germany	1		158, 169, 210, 214, 278	158, 184, 210, 214, 227, 234, 249, 277, 278
	2	A	164, 166, 174, 181, 184, 185, 187, 188, 193, 196-198, 200,, 208, 213, 218, 219, 222, 223, 233, 234, 238, 242, 250, 254, 266, 269, 277	164, 168, 174, 185, 187, 193, 197, 198, 200, 208, 219, 222, 233, 242, 250, 254, 260, 269
		B	157, 161, 168, 172, 178, 179, 192, 194, 201, 204, 205, 227, 231, 232, 236, 240, 241, 244, 245, 247, 249, 252, 260, 267, 271, 280	161, 172, 178, 192, 194, 201, 204, 231, 232, 244, 245, 252, 271, 280
	3		170, 171, 180, 226, 259, 273	157, 226, 236, 238, 247, 259, 267, 273
	4		159, 160, 162, 163, 165, 167, 173, 175-177, 182, 183, 186, 189-191, 195, 199, 202, 203, 206, 207, 209, 211, 212, 215-217, 220, 221, 224, 225, 228-230, 235, 237, 239, 243, 246, 248, 251, 253, 255-258, 261-265, 268, 270, 272, 274-276, 279	159, 160, 162, 163, 165-167, 169-171, 173, 175-177, 179-183, 186, 188-191, 195, 196, 199, 202, 203, 205-207, 209, 211-213, 215-218, 220, 221, 223-225, 228-230, 235, 237, 239, 240, 241, 243, 246, 248, 251, 253, 255-258, 261-266, 268, 270, 272, 274-276, 279

Ireland	1	-	-
	2	A 289, 290, 292	289, 290, 292
		B 281-287, 293-296	281-286, 293, 294-296
	3	288, 291	287, 291
4	-	288	
Italy	1	332, 376, 377	317, 332, 333, 339, 345, 356, 362, 366, 376, 377, 380
	2	A 299, 305, 311, 314, 315, 317, 319, , 325, 327, 329, 333, 336, 339-342, 345, 346, 349, 351, 354, 356, 359, 362, 366, 369, 378-380	311, 315, 325, 329, 336, 340-342, 346, 349, 351, 354, 359, 369, 379
		B 298, 301, 304, 306, 320, 321, 330, 348, 368	301, 304, 321, 330, 368
	3	302 318, 324, 338, 343, 353, 357, 363, 365, 370, 372, 382	302, 314, 319, 320, 324, 327, 338, 343, 348, 363, 365 370
4	297, 300, 303, 307-310, 312, 313, 316, 322, 323, 326, 328, 331, 334, 335, 337, 344, 347, 350, 352, 355, 358, 360, 361, 364, 367, 371, 373-375, 381	297-300, 303, 305-310, 312, 313, 316, 318, 322, 323, 326, 328, 331, 334, 335, 337, 344, 347, 350, 352, 353, 355, 357, 358, 360, 361, 364, 367, 371-375, 378, 381, 382	
Sweden	1	398, 403, 417, 458, 468, 488, 506, 540, 558, 565	398, 419, 427, 442, 468, 490, 498, 501, 515, 519, 526, 538, 547, 553, 558, 559
	2	A 385, 388-391, 394, 397, 400, 401, 407, 411, 415, 419-428, 432, 433, 439, 442, 444, 450, 452, 455-457, 462, 463, 475, 482, 490, 498, 499, 501, 503, 515, 519, 525-528, 533, 538, 539, 541, 543, 547-549, 551-553, 559, 566, 568	388, 391, 401, 406 421-425, 439, 452, 455, 456, 475, 527, 533, 543
		B 386, 392, 393, 395, 406, 413, 416, 418, 430, 440, 459-461, 466, 470, 471, 474, 478, 486, 492, 494, 504, 505, 507, 511, 512, 514, 517, 520, 523, 530, 532, 535, 537, 544, 559, 566, 568	386, 392, 413, 418, 466, 474, 478 507, 511, 520, 537, 560
	3	384, 405, 408, 409, 410, 434, 436, 437, 438, 441, 477, 479, 483, 487, 508, 510, 518, 521, 522, 529, 550, 555, 556, 567	385, 393-395, 400, 411, 415, 428, 434, 440, 441, 452, 459, 460, 470, 478, 482, 486, 504, 512, 521, 529, 530, 535, 539, 544, 551, 552, 556, 562, 563, 567
4	387, 396, 399, 402, 404, 412, 414, 429, 431, 435, 443, 445-449, 451, 453, 454, 464, 465, 467, 469, 472, 473, 476, 480, 481, 484, 485, 489, 491, 493, 495-497, 500, 502, 509, 513, 516, 524, 531, 534, 536, 542, 545, 546, 554, 557, 561, 564	384, 387, 389, 390, 39, 397, 399, 402-405, 407-410, 412, 414, 416, 417, 420, 426, 429-433, 435-438, 443-451, 453, 454, 457, 458, 461-465, 467, 469, 471-473, 476, 477, 479-481, 483-485, 487-489, 491-497, 499, 500, 502, 503, 505, 506, 508-510, 513, 514, 516-518, 522-525, 528, 531, 532, 534, 536, 540-542, 545, 546, 548-550, 554, 555, 557, 561, 564-566, 568	
UK	1		803
	2	A 571, 595, 596, 605, 617, 626, 663, 672, 695, 698, 719, 722, 733, 740, 744, 753, 777, 800, 802, 803, 805, 820, 821, 846, 856, 887, 914, 927, 928, 930, 946, 968, 980, 1005, 1009, 1012, 1013, 1028	569, 571, 589, 595, 596, 600, 617, 619, 625, 626, 636, 672, 695, 698, 706, 713, 722, 733, 740, 744, 753, 711 ,777, 778, 795, 800, 802, 805, 815 , 820, 821, 846, 856, 868, 876, 879, 887, 890, 914, 927, 928, 930, 946, 968, 973, 980, 988, 1001, 1005, 1006, 1009, 1011-1013, 1028
		B 569, 575, 577, 579-581, 583-587, 589, 591-593, 598, 599, 600, 602-604, 608, 609, 612-615, 618, 619, 622-625, 627-629, 631-634, 636, 637, 639-647, 649, 651-656, 658-660, 662, 664-666, 668-670, 674, 676-680, 682-684, 687, 689-692, 696, 697, 699-703, 705-707, 710-718, 720, 721, 724-729, 731, 732, 734, 737-739, 741, 742, 745, 748, 751, 752, 754, 756-763, 765-768, 770-772, 774, 775, 778-782, 784-786, 788-799, 801, 804, 806-808, 810-815, 816-819, 822- 826, 828, 829, 832-834, 836-838, 840-844, 847-855, 857-860, 862-865, 867-882, 884-886, 888-890, 892, 895-899, 901-906, 908, 909, 912, 916, 918-921, 923-925, 929, 932-939, 941, 943-945, 947, 949, 951, 952, 954-956, 958-967, 969-973, 975, 977-979, 981, 982, 984, 985, 987, 988, 990, 991, 994-999, 1000-1004, 1006, 1007, 1010, 1012, 1014, 1016-1024, 1026, 1027, 1030, 1032-1035	575, 580, 581, 583-587, 589, 591-593, 598, 599, 602, 604, 608, 609, 612-615, 618, 622-624, 627-629, 631-633, 637, 639-642, 644-647, 649, 651-655, 658-660, 662, 664, 666, 668-670, 674, 676-680, 682, 684, 687, 689-692, 696, 697, 699-701, 703, 707, 710, 712, 714-717, 720, 721, 724, 726-729, 731, 732, 734, 738, 739, 742, 745, 748, 754, 756-759, 761-763, 765-767, 772, 775, 779, 780, 782, 785, 786, 788-793, 796-798, 806, 808, 811-814, 816, 817, 819, 822-825, 828, 829, 832-834, 837, 840-844, 847-855, 857-860, 862-865, 867, 871-875, 878, 880, 881, 884-886, 888, 892, 895-899, 901-903, 905, 906, , 908, 909, 912, 920, 921, 923-925, 929, 932-39, 941, 944, 945, 949, 951, 952, 954-56, 958-67, 969-972, 975, 977-79, 984, 985, 987, 990, 991, 994-99, 1002-1004, 1007, 1010, 1014, 1016-018, 1020-024, 1026, 1027, 1030, 1033-1035,
	3	572, 573, 576, 597, 606, 607, 610, 620, 621, 630, 638, 657, 671, 673, 681, 685, 686, 693, 694, 704, 709, 723, 730, 736, 743, 746, 747 749, 750, 755, 764, 776, 783, 831, 835, 866, 883, 893, 894, 900, 910, 911, 913, 915, 917, 922, 931, 940, 942, 948, 950, 957, 974, 1008, 1015, 1029, 1031	576, 577, 605, 630, 634, 638, 656, 673, 685, 693, 702, 704, 705, 718, 723, 725, 730, 736, 737, 741, 743, 746, 750, 752, 755, 760, 764, 768, 770, 774, 776, 781, 784, 794, 799, 801, 804, 807, 810, 818, 826, 831, 836, 838, 869, 870, 877, 882, 883, 889, 894, 904, 917-919, 922, 940, 943, 948, 950, 974, 981, 1008 1015, 1019, 1031, 1032
4	570, 574, 578, 582, 588, 590, 594, 601, 611, 616, 635, 648, 650, 661, 667, 675, 688, 708, 735, 769, 773, 787, 809, 827, 830, 839, 845, 861, 891, 907, 926, 953, 976, 983, 986, 989, 992, 993, 1025	570, 572-574, 578, 579, 582, 588, 590, 594, 597, 601, 603, 606, 607, 610, 611, 616, 620, 621, 635, 643, 648, 650, 657, 661, 663, 665, 667, 671, 675, 681, 683, 686, 688, 694, 708, 709, 711, 719, 735, 747, 749, 751, 769, 773, 783, 787, 809, 827, 830, 835, 839, 845, 861, 866, 891, 893, 900, 907, 910, 911, 913, 915, 916, 926, 931, 942, 947, 953, 957, 976, 982, 983, 986, 989, 992, 993, 993, 1000, 1025, 1029	

Table A.3, Company Position in Figure 4

Numbers refer to the list of firms in Table A.1

Zone 1: < -10 percent

Zone 2: -10 to 10 percent

Zone 3: 10 to 50 percent

Zone 4: 50 to 100 percent

Zone 5: 100 to 150 percent

Zone 6: > 150 percent

COUNTRY	ZONE	N	COMPANY POSITION IN FIGURE 4, PANEL A	COMPANY POSITION IN FIGURE 4, PANEL B
Austria	1		1-3, 20	1-3, 20
	2		21	-
	3		4	4, 21
	4		5, 7, 8, 13, 16, 19, 22	5, 7, 13, 16, 19
	5		10, 11, 14, 15, 17, 18	8, 10, 11, 14, 15, 17
	6		6, 9, 12, 23	6, 9, 12, 18, 22, 23
Denmark	1		24, 25, 28, 31, 33-35, 37, 39, 43, 45, 51-55, 62, 66, 68, 70, 74-78, 80, 81, 83, 85, 87, 90, 91	24, 25, 31, 35, 37, 51, 52, 55, 62, 66, 80, 81, 90, 91
	2		27, 57, 64, 69, 72, 73, 84, 88	53, 64, 70, 72, 73, 78
	3		32, 38, 47, 48, 50, 56, 71, 79, 86, 92, 93	28, 33, 43, 45, 48, 57, 68, 69, 75, 77, 79, 85, 87
	4		30, 46, 49, 58, 60, 65, 89	30, 34, 39, 54, 71, 74, 83, 92
	5		29, 36, 40, 41, 59, 63, 82	29, 32, 36, 38, 40, 41, 49, 50, 56, 58, 59, 63, 65, 84, 86, 88
	6		26, 42, 44, 61, 67	26, 27, 42, 44, 46, 47, 60, 61, 67, 76, 82, 89, 93
Finland	1		94-96, 99-102, 104, 105, 107-110, 112, 113, 115, 118-120, 122, 124, 125, 127, 128, 131-135, 139	94, 95, 99-102, 104, 105, 107, 108, 110, 113, 115, 118, 119, 122, 125, 127, 128, 132, 135, 139
	2		98, 116, 129, 136, 137	96, 120, 124, 131, 136, 137
	3		103, 106, 111, 114, 117, 123, 126, 130, 138	112, 116, 130, 138
	4		97, 121, 140	106, 109, 111, 117, 123, 140
	5		-	98, 103, 121, 129, 133
	6		-	97, 114, 126, 134
France	1		141, 142, 146, 147, 149-151, 154, 156	141, 146, 147, 150, 151, 154, 156
	2		143	142, 143
	3		155	149, 155
	4		148, 152, 153	148, 152, 153
	5		144, 145	144, 145
	6		-	-

Germany	1	157, 158, 161, 164, 166, 168, 172, 174, 178, 179, 184, 185, 187, 188, 192-194, 196-198, 200, 201, 204, 205, 208, 210, 213, 214, 218, 219, 222, 223, 227, 231-234, 236, 238, 240-242, 244, 245, 247, 249, 252, 260, 266, 267, 269, 271, 277, 278, 280	158, 161, 164, 168, 172, 174, 178, 184, 185, 187, 192, 194, 197, 198, 200, 201, 204, 208, 210, 214, 219, 222, 227, 231-234, 242, 244, 245, 249, 252, 260, 269, 271, 280
	2	169, 171, 181, 209, 212, 226, 250, 254, 263, 274	157, 193, 209, 212, 226, 238, 247, 250, 254, 274, 277, 278
	3	170, 176, 177, 180, 190, 199, 207, 216, 220, 224, 246, 251, 258, 261, 265, 273, 279	169, 176, 177, 188, 190, 199, 205, 207, 216, 218, 220, 223, 224, 236, 241, 246, 251, 258, 261, 263, 266, 267, 273, 279
	4	162, 165, 167, 195, 211, 215, 225, 229, 237, 239, 243, 257, 259, 262, 264, 268, 272, 275	162, 166, 171, 181, 186, 195, 211, 215, 225, 229, 237, 239, 243, 257, 259, 264, 265, 268, 275
	5	160, 189, 202, 206, 221, 228, 235, 253, 270	160, 170, 179, 180, 189, 196, 202, 206, 221, 228, 235, 240, 253, 262, 270
	6	159, 163, 173, 175, 182, 183, 191, 203, 217, 230, 248, 255, 256, 276	159, 163, 165, 167, 173, 175, 182, 183, 191, 203, 213, 217, 230, 248, 255, 256, 272, 276
Ireland	1	281-287, 289, 290, 292-296	281-286, 289, 290, 292-296
	2	-	-
	3	288	287
	4	291	291
	5	-	288
	6	-	-
Italy	1	298, 299, 301, 304, 306, 311, 314, 315, 317, 319, 321, 325, 327, 329, 330, 332, 333, 336, 339-342, 345, 346, 349, 354, 356, 362, 366, 368, 369, 376-380	301, 304, 311, 315, 317, 321, 325, 329, 330, 332, 333, 336, 339-342, 345, 346, 349, 354, 356, 362, 366, 368, 369, 376, 377, 379, 380
	2	305, 320, 322, 338, 348	314, 327, 338, 351, 359
	3	297, 318, 324, 334, 353, 355, 363, 365, 370, 372, 381	297, 298, 305, 306, 319, 320, 322, 334, 355, 363, 365, 370, 381
	4	302, 303, 307, 323, 331, 337, 343, 347, 352, 357, 358, 360, 367, 373, 374, 382	299, 302, 303, 307, 318, 323, 324, 331, 343, 347, 348, 352, 360, 367, 373, 374, 378, 382
	5	300, 326, 344, 361, 371	300, 326, 337, 344, 350, 353, 357, 358, 361, 371
	6	308-310, 312, 313, 316, 328, 335, 364, 375	308-310, 312, 313, 316, 328, 335, 364, 372, 375
Sweden	1	385, 386, 388, 390-395, 397, 398, 400, 401, 403, 406, 407, 411, 413, 415-428, 430, 432, 433, 439, 442, 444, 452, 455-463, 466, 468, 470, 471, 475, 478, 482, 486, 488, 490, 492, 494, 498, 499, 501, 503-507, 511, 512, 514, 515, 517, 519, 520, 523, 525-528, 530, 532, 533, 535, 537-541, 543, 544, 547-549, 551-553, 558-560, 562, 563, 565, 566, 568	386, 388, 391, 392, 401, 406, 413, 418, 419, 421-425, 427, 439, 456, 466, 468, 490, 498, 501, 511, 515, 519, 526, 527, 533, 537, 543, 547, 553, 558-560
	2	389, 408, 434, 436, 440, 441, 443, 450, 453, 474, 477, 485, 496, 508, 518, 534, 554	411, 441, 442, 455, 457, 460, 463, 474, 475, 478, 485, 507, 520, 534, 535, 538, 539, 551, 552, 563
	3	384, 399, 402, 409, 410, 431, 438, 445, 451, 464, 465, 479, 481, 484, 487, 497, 516, 522, 524, 542, 546, 550, 555, 556, 564, 567	385, 393-395, 397-399, 426, 428, 430, 433, 440, 444, 452, 453, 458, 459, 461, 462, 464, 470, 482, 484, 486, 494, 496, 497, 499, 503, 508, 516, 523, 530, 540, 542, 548, 556, 562, 564, 565, 567
	4	387, 405, 414, 437, 446, 447, 448, 449, 454, 476, 480, 483, 491, 493, 495, 502, 509, 510, 513, 521, 536, 561	384, 387, 390, 400, 402, 403, 407, 415, 416, 420, 432, 434, 443, 445, 446, 449, 450, 454, 471, 476, 481, 491, 493, 502, 504, 506, 509, 513, 517, 521, 525, 536, 544, 546, 554, 555, 568
	5	396, 404, 412, 429, 435, 467, 472, 473, 489, 529, 531	389, 396, 408, 409, 412, 414, 431, 436, 437, 447, 448, 467, 472, 473, 479, 480, 483, 487, 488, 495, 505, 510, 512, 514, 532, 541, 549, 566
	6	469, 500, 545, 557	404, 405, 410, 417, 429, 435, 438, 451, 465, 469, 477, 489, 492, 500, 518, 522, 524, 528, 529, 531, 545, 550, 557, 561

UK	1	569, 571, 577, 579-581, 583-587, 589, 591-593, 595, 596, 598-600, 602-605, 608, 609, 612-615, 617-619, 622-629, 631-634, 636, 637, 640-647, 649, 651-656, 658-660, 663, 664, 666, 668-670, 672, 674, 676-680, 682-684, 687, 689-692, 695-703, 705-707, 710-722, 724-729, 731-734, 737-740, 742, 744, 748, 751-754, 756-763, 765-768, 770-772, 774, 775, 777-782, 784-786, 788-793, 795-808, 810-817, 819-826, 828, 829, 832-834, 836-838, 840-844, 846-860, 862-865, 867, 868, 871-882, 884-890, 892, 895-899, 901-906, 908, 909, 912, 914, 916, 918-921, 923-925, 927-930, 932-939, 941, 943-946, 949, 951, 952, 954-956, 958-973, 975, 977-980, 982, 984, 985, 987, 988, 990, 991, 994-998, 1000-1007, 1009-1014, 1016-1024, 1026-1028, 1030, 1033-1035	569, 571, 580, 581, 583-587, 591-593, 595, 596, 598-600, 602, 604, 608, 609, 612-615, 617-619, 622-629, 631-633, 637, 640-642, 644-647, 649, 652-655, 658-660, 666, 668-670, 672, 674, 676-678, 680, 682, 684, 687, 689-692, 695-701, 703, 706, 707, 710, 712, 714-717, 720-722, 724, 726-729, 731-734, 738-740, 742, 744, 748, 753, 754, 756-759, 761-763, 765-767, 772, 775, 777-780, 782, 785, 786, 788-793, 795-798, 800, 802, 803, 805, 806, 808, 811-817, 819-825, 828, 829, 832-834, 837, 840-844, 846-860, 862-865, 867, 868, 871-876, 878-881, 884-888, 890, 892, 895-899, 901-903, 905, 906, 909, 912, 914, 920, 923-925, 927-930, 932-939, 941, 944-946, 949, 951, 952, 954-956, 958-973, 975, 977-980, 984, 985, 987, 988, 990, 991, 994-998, 1002-1007, 1009-1014, 1016-1018, 1020-1024, 1026-1028, 1030, 1033-1035
	2	575, 639, 662, 665, 693, 694, 741, 745, 755, 776, 783, 794, 818, 866, 869, 870, 894, 947, 981, 999, 1032	575, 577, 589, 605, 636, 639, 651, 662, 664, 679, 713, 718, 745, 771, 784, 804, 904, 908, 919, 921, 999-1001, 1019
	3	573, 576, 578, 597, 607, 610, 611, 620, 630, 638, 671, 673, 681, 685, 708, 730, 743, 746, 750, 764, 830, 831, 883, 893, 900, 907, 910, 911, 913, 915, 917, 922, 931, 940, 948, 950, 957, 974, 993, 1008, 1029, 1031	576, 578, 611, 630, 634, 638, 656, 705, 719, 730, 737, 741, 743, 746, 751, 752, 760, 764, 770, 774, 781, 794, 799, 801, 807, 810, 818, 830, 831, 869, 870, 882, 883, 889, 917, 918, 931, 940, 943, 948, 950, 981, 982, 1008, 1032
	4	570, 572, 590, 594, 601, 606, 621, 635, 650, 657, 667, 686, 704, 709, 723, 736, 747, 749, 787, 827, 835, 891, 942, 1015	570, 572, 579, 590, 594, 601, 635, 643, 663, 665, 673, 683, 685, 686, 693, 702, 704, 708, 723, 725, 736, 750, 755, 768, 776, 783, 787, 826, 827, 835, 836, 838, 866, 877, 891, 894, 907, 911, 915, 916, 922, 947, 957, 974, 993, 1015, 1031
	5	574, 675, 809, 983, 992	573, 574, 597, 603, 610, 620, 650, 657, 667, 671, 675, 694, 711, 749, 893, 910, 913, 983, 992, 1029
	6	582, 588, 616, 648, 661, 688, 735, 769, 773, 839, 845, 861, 926, 953, 976, 986, 989, 1025	582, 588, 606, 607, 616, 621, 648, 661, 681, 688, 709, 735, 747, 769, 773, 809, 839, 845, 861, 900, 926, 942, 953, 976, 986, 989, 1025