

# DIVIDENDS AND EXPROPRIATION

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## Abstract

In Western Europe and East Asia, capital markets require higher dividends from corporations tightly affiliated (at the 20% level of control) to a group and, within a group, from corporations whose controlling shareholder has a lower ratio O/C of ownership to control rights. For loosely-affiliated corporations (whose controlling shareholder holds between 10% and 20% of control rights), dividends are positively related to O/C, reflecting expropriation not contained by capital markets. Such corporations comprise 2.94% of European corporations, but 15.44 % of Asian corporations. In our 9 Asian economies, the 11 largest groups at the 10% level comprise 53.75% of all corporations and 84.58% of loosely-affiliated corporations, so most expropriation occurs here. Dividend are higher in Europe than in Asia; having multiple large shareholders increases dividends in Europe but decreases them in Asia.

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The separation of ownership from control confronts all corporations with an agency problem. Amongst US corporations, the salient problem is that between managers and dispersed shareholders. Managers can expropriate shareholders by diverting corporate resources for personal consumption, e.g., through excessive perquisites and empire building.<sup>1</sup> In East Asia, (i) widely-held corporations are in the minority, (ii) the predominant ownership structure is control by a family, (iii) which often supplies a top manager. While these features of East Asian corporate governance have been highlighted by the Asian financial crisis, all three features are actually more pronounced in Western Europe. This we shall document by tracing the ultimate ownership of 5897 corporations from the Worldscope database for 5 West European and 9 East Asian economies. Therefore, the salient agency problem in these countries is expropriation of outside shareholders by the controlling shareholder<sup>2</sup>. Particularly rich possibilities for expropriation arise when the corporation is affiliated to a group of corporations, all controlled by the same shareholder, as is true for about half the corporations in Western Europe as well as in East Asia.<sup>3</sup> Corporate wealth can then be expropriated by the insiders who set unfair terms for intra-group sales of goods and services and transfers of assets and control stakes.<sup>4</sup>

Dividends play a basic role in containing insider expropriation because they remove corporate wealth from insider control.<sup>5</sup> This view of dividends is taken by La Porta, Lopez-de-Silanes, Shleifer, and Vishny (2000b) who report that higher dividends are paid by corporations in countries with strong legal protection of minority

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<sup>1</sup> Jensen (1986, 1989).

<sup>2</sup> Shleifer and Vishny, (1997, p.759) argue that when “large owners gain nearly full control of the corporation, they prefer to generate private benefits of control that are not shared by minority shareholders”.

<sup>3</sup> See Shleifer and Vishny (1997) for documentation that group affiliation is insignificant in the US.

<sup>4</sup> Shleifer and Vishny (1997), Bebchuk et al. (1998), Wolfenzon (1999) and Claessens et al. (1999a).

<sup>5</sup> Previous studies have proposed a number of explanations of why corporations are required to pay dividends: taxation (Allen and Michaely (1995), Litzenger and Ramaswamy (1979), Miller and Scholes (1978, 1982), Poterba and Summers (1984)); transaction costs (Pettit (1977)); the signaling of growth prospects and profitability (Asquith and Mullins (1983), Bhattacharya (1979), Healy and Palepu (1988), John and Williams (1985), Michaely, Thaler and Womack (1995) Miller and Rock (1985)); forestalling the diversion of cash to unprofitable projects that provide private benefits to "insiders" (Grossman and Hart (1982), Easterbrook (1984), Jensen (1986), Lang and Litzenger (1989)). The present study does not address the question of why corporations pay dividends.

shareholders, such as those countries with codes based on Common Law rather than Civil Law. This paper builds on their research by relating dividend rates to the discrepancy between the controlling shareholder's ownership rights  $O$  and its control rights  $C$ . Like Claessens et al. (1999a) and La Porta et al. (2000a), we use the ratio  $O/C$  as a measure of the corporation's vulnerability to insider expropriation within a group of corporations because its conceptual simplicity facilitates exposition and empirical analysis. Econometric analysis of the relationship between dividend rates and the  $O/C$  ratio <sup>6</sup> gets beyond the analysis of specific types of expropriation<sup>7</sup> to test how capital markets generally respond to the threat of insider expropriation in a broad range of economies.

We find that significantly higher dividends are paid by corporations that are "tightly-affiliated" to a business group via a chain of control which comprises at least 20% of the control rights at each link, and amongst such corporations, to those having a lower  $O/C$  ratio. By contrast, for corporations not tightly affiliated to a group, a lower  $O/C$  ratio is associated with significantly lower dividend rates. This correlation is driven by those corporations that are "loosely affiliated" to a group in that the control links are all above the 10% level, but are not all above the 20% level. Thus, capital markets seem to anticipate strongly the expropriation within corporations tightly affiliated to a group and to require high offsetting dividend rates. However, capital markets seem less alert to expropriation within loosely-affiliated corporations, giving their insiders latitude to pay lower dividends, when there is a greater discrepancy between their ownership and control rights. In our 9 Asian economies, the 11 largest groups at the 10% level of control comprise over half of all corporations and 5/6 of

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<sup>6</sup> Similar conclusions hold if  $O$  and  $C$  appear separately in the regressions.

<sup>7</sup> An important strand of the literature links ownership structures to the expropriation of different classes of stakeholders. Malitz (1989) examines debt restructuring in the United States for expropriation of bondholders' wealth by block-holders of equity. Slovin and Sushka (1997) study the expropriation of shareholders in subsidiary corporations by the parent corporation in listed stocks in the United States but cannot confirm expropriation. Weinstein and Yafeh (1998) find that Japanese corporations affiliated to bank-controlled groups pay higher interest rates on their liabilities than unaffiliated corporations, and interpret this as evidence that banks expropriate other stakeholders. Other studies on corporate governance in Japan (Aoki (1990), Prowse (1992), Hoshi, Kashyap, and Scharfstein (1991) and Kaplan (1994)) also find adverse effects of group affiliation on the market valuation of corporations.

those that are loosely affiliated. Most expropriation appears to occur here.

Group-affiliated corporations in Western Europe pay significantly higher dividend rates than in East Asia. Moreover, the presence of multiple large shareholders increases dividend rates in Europe, but reduces them in Asia. Thus, in Europe, the capital markets appear more effective at containing the controlling shareholder's expropriation of minority shareholders, especially in the presence of other large shareholders - who in East Asia appear to collude in that expropriation. This provides quantitative evidence on the impact of the widely-noted differences between Western Europe and East Asia in institutional development and business styles.

Section 1 explains our use of the controlling shareholder's ratio O/C of ownership to control rights to measure the corporation's vulnerability to expropriation. Section 2 presents definitions and summary statistics on ownership and control in Europe and Asia. Section 3 presents definitions and summary statistics on dividend rates. Section 4 presents our regression results. Section 5 concludes with some policy implications of our findings. Data sources for Asian and European corporations are listed in Appendices 1 and 2.

### **1. The O/C Ratio as a Measure of Vulnerability to Insider Expropriation.**

An investor can gain control rights in a corporation Z in excess of his ownership rights by pyramiding, i.e., owning Z indirectly through another corporation Y. Control of Y then gives control over all the voting rights of Y in Z, which will typically exceed the investor's ownership stake in Z through his partial ownership of Y. More generally, if he owns a fraction  $x$  of the shares of corporation X, which owns a fraction  $y$  of the shares in corporation Y, which owns a fraction  $z$  of the shares in Z, then via this ownership chain, he owns a fraction  $xyz$  of the shares of Z. However, his share of the control rights of Z via this control chain can be measured by its weakest link, i.e., the minimum of  $x$ ,  $y$  and  $z$ . For example, an investor who owns 50% of the shares of X, which owns 40% of the shares of Y, which owns 30% of the shares in Z, has 6% of the ownership rights of Z, but 30% of its control rights.

Let  $O$  be the controlling shareholder's share of the ownership rights in a

corporation and let  $C$  be his share of the control rights. The  $O/C$  ratio will be low if he controls the corporation via a long chain of intermediate corporations, i.e., the corporation is at the base of a pyramid which offers many opportunities for intra-group transactions to expropriate minority shareholders. In themselves, these considerations indicate that a corporation with a low  $O/C$  ratio will have low dividends, since the controlling shareholder will seek to keep control of corporate resources. However, rational capital markets might anticipate the higher risk of insider expropriation implied by a low  $O/C$  by requiring higher dividends.

The relative strengths of these two forces will be addressed empirically in this paper by regressing dividends on the  $O/C$  ratio. This provides a perspective on how capital markets respond to the threat of insider expropriation across a broad range of economies in Europe and Asia. Since the  $O/C$  ratio might fail to reflect this threat fully, these regressions are biased toward finding insignificant results. Our study of the relationship between dividends and the  $O/C$  ratio shall control for other possible systematic determinants of dividends, such as whether the corporation is in Europe or Asia, whether the legal system is based on Civil or Common Law, capital constraints, and financial leverage.

## **2. Ownership and Control of Corporations in Europe vs. Asia.**

We study corporations from France, Germany, Hong Kong, Indonesia, Italy, Japan, Malaysia, Philippines, Singapore, South Korea, Spain, Taiwan, Thailand, and the U.K. In the Worldscope database of all listed corporations in these countries, we use the accounting data for 1992-96, eliminating corporations reporting data that are not credible for a functioning business: negative cash flows, negative earnings or dividends exceeding sales, cash flow or earnings. We obtain ownership data on these corporations from Worldscope, plus national stock exchanges, national company handbooks and the other sources listed in Appendices 1 and 2. We trace backwards through the network of indirect ownership via other corporations to identify all the ultimate owners of each corporation that own at least 5% of its shares. We also identify the control stake of any ultimate owner that maintains a chain of control over that corporation which includes at

least 5% of the control rights at each link.<sup>8</sup> Claessens et al. (2000) carried out this task using 1996 data for East Asian corporations, of which 2603 have credible accounting data also; we extend their work to Western Europe, identifying the ultimate ownership and control of 3294 corporations with credible accounting data in 1996. Thus, our empirical results are based on 5897 financial and non-financial corporations, including many of small and medium size. Table 1 gives summary statistics of our East Asian and West European samples. For comparison, we give (in the column headed "LLS") the corresponding 1995 statistics of La Porta et al. (1999) for a sample of 870 non-financial corporations from 27 countries, each represented by its 20 largest corporations, plus a sample of 10 medium-size corporations. Their statistics differ from ours mainly because their sample has a higher ratio of large corporations.

Because of the difficulty of organizing dispersed shareholders, an ultimate owner that is the largest shareholder and holds a large percentage of its voting shares usually has de facto control. Such an owner is defined to be the corporation's "controlling shareholder" at the specified percentage of voting rights. We consider two cutoff levels: 20% and 10%. The 20% cutoff has been used in earlier studies by La Porta et al. (1999) and Claessens et al. (2000); we find evidence that control links of this strength are well recognized by capital markets. However, we also find evidence that weaker control links permit expropriation, which is not contained by capital markets. If no shareholder holds at least the cutoff percentage of the control rights, then the corporation is said to be "widely-held" at this control level. While corporations which are widely held at the 20% or the 10% levels are typical in the US, Table 1A shows that such corporations are a minority in Asia (respectively 43.60% and 20.28%), and even more so in Europe (respectively 39.01% and 15.60%). Thus, we focus on the agency problems of corporations with a controlling shareholder at these control levels. Families are the predominant controlling shareholders in Asia at both the 20% and the 10% levels (controlling respectively 37.86% and 45.05% of corporations) and even

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<sup>8</sup> The same 5% cut-off was used by La Porta et al. (1999) and Claessens et al. (2000).

more so in Europe (controlling respectively 43.13% and 55.90%).<sup>9</sup>

The controlling shareholder has especially tight control of a corporation if it has family ties to a top manager (CEO, Honorary Chairman, Chairman, or Vice-Chairman of the corporation) or if all other ultimate owners hold only a small proportion of the control rights, say less than 10%. Table 1B shows that European corporations are more likely to have family ties between the controlling shareholder and a top manager, but are also more likely to have multiple large owners with at least 10% of the control rights.

[Table 1 goes about here]

A corporation is said to be “group-affiliated” if it satisfies one of the following criteria: (i) it is controlled by a shareholder via pyramiding, i.e., indirectly through a chain of corporations; (ii) it controls another corporation in the sample; (iii) it has the same controlling shareholder as at least one other corporation in the sample; (iv) its controlling shareholder is a widely-held corporation or a widely-held financial institution<sup>10</sup>. Table 1C gives the percentages of corporations which are group-affiliated at the 20% and the 10% levels of control, as well the percentages of corporations in three nested subsets: those controlled via a pyramid; via cross-holding (i.e., the controlled corporation Z owns some shares in its controlling shareholder or in a corporation in its control chain); and via reciprocal holdings (i.e., the controlled corporation Z is the controlling shareholder of the corporation which controls it).

At both levels of control, Europe has a substantially smaller proportion of corporations controlled by pyramiding and cross-holding. It has a slightly smaller percentage of group-affiliated corporations at the 20% level, but a substantially lower percentage at the 10% level. Lowering the cutoff level of control from 20% to 10% adds only 97 European corporations (2.94%) to those classified as group-affiliated. This suggests that high levels of control rights (in excess of 20%) are generally needed for

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<sup>9</sup> The percentages would be even higher if we exclude Japan and the U.K., which have much less family control.

<sup>10</sup> Such corporations have the same incentive and opportunity to manipulate the corporations that they control as the controlling shareholder of a corporate pyramid. The same definition was used in Claessens et al. (1999b). Khanna and Palepu (1999) use a different definition.

effective control in Europe. By contrast, lowering the cutoff level of control from 20% to 10% adds 402 Asian corporations (15.44%) to those classified as group-affiliated, i.e., over 1/7 of Asian corporations are “loosely affiliated”, in that they are group-affiliated at the 10% level but not at the 20% level. This suggests that in Asia, effective control can be achieved with low levels of control rights, presumably because minority shareholders enjoy less protection.

Table 1D shows that, compared to Asia, the controlling owner in Europe typically owns a much higher proportion of shares in the corporations that it controls (34.6% vs. 15.70%), so it has less incentive to expropriate minority shareholders. It also has less scope to expropriate because it has a much higher ratio of ownership to control rights (0.877 versus 0.746).

Table 2, showing the size distribution of groups at the 20% and 10% levels of control, indicates that the typical European business group is smaller, and thus more transparent, which also reduces the scope for expropriation. This difference between Europe and Asia becomes more pronounced as the cutoff control level drops from 20% to 10%. At the 10% level, the top 18 ultimate owners in Europe control 533 corporations or 16.18% of the total. In Asia, the top 6 ultimate owners control 1153 corporations, or 44.30%; the top 11 ultimate owners control 1399 corporations or 53.75%, including 340 (84.58%) of those that are loosely-affiliated. Our regressions will indicate that loosely-affiliated corporations are most vulnerable to expropriation not offset by capital markets.

[Table 2 goes about here]

### **3. Dividend Data**

The rate at which corporations pay dividends provides a perspective on insider expropriation because dividends transfer wealth from the discretion of the controlling shareholder to all shareholders on a *pro-rata* basis. By contrast, balance sheet items above the dividend line can be manipulated in favor of the controlling shareholder. We define dividends as total cash dividends paid to common and preferred shareholders. The rate at which dividends are paid shall be measured by four ratios:



The dividend/cash-flows ratio (*Div/cf*), where cash flows are defined as total cash from operations, net of non-cash items from discontinued operations.

The dividend/earnings ratio (*Div/earn*), where earnings are measured after taxes and interest but before extraordinary items.

The dividend/sales ratio (*Div/sale*), where sales are net sales.

The dividend/market-capitalization ratio (*Div/mkcap*), where market capitalization is the total market value of common and preferred stocks.

The diversity of measures of the dividend rate should help insulate our overall conclusions from biases in individual measures that might arise from accounting practices and manipulations by controlling shareholders. In each case, we use 5-year averages over 1992-96, rather than annual figures, to smooth out noise and transitory factors. For corporations with incomplete data over the 5-year period, we compute the average over the years with complete data to maximize the size of our sample.<sup>11</sup> We adjust each corporation's dividend rates for industry effects by subtracting the median of the dividend rate for sample corporations in the same industry, as measured by the 2-digit SIC code. This leads to the corporation's industry-adjusted (IA) dividend rate.

[Table 3 goes about here]

Table 3 explains the construction of the variables used in our regression, which include those described above, plus corporation- and country-specific variables which control for other factors that might have a systematic effect on dividends. Corporation-specific variables include size, measured by the logarithm of the corporation's total assets,  $\ln(TA)$ , and leverage, measured by the ratio,  $D/A$ , of total financial debt (including leasing) to net assets. We expect highly-levered corporations to pay lower dividends, both because they must pay a higher interest rate on their loans and because creditors will seek to prevent the transfer of wealth to shareholders. As in La Porta et al. (2000b), the growth of sales decile,  $GSDecile$ , controls for a corporation's growth opportunities, which might call for retention of earnings to finance investment projects

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<sup>11</sup> Our conclusions would have been unchanged had we simply eliminated corporations with incomplete data.

internally. A capital rationing dummy, *CRation*, controls for the rationing which a corporation might face in the capital markets. To construct this variable, we first compute the average annual increase in stock capital (i.e., excluding reserves and retained earnings) plus financial debt (including leasing) as a ratio of sales. The use of flow variables focuses upon current instead of past rationing and is less vulnerable to accounting biases. We take the 5-year average of this ratio to smooth over rationing due to transitory factors, such as the business cycle. A corporation is capital rationed if its 5-year average increase in stock capital plus debt over sales is below the sample median, and its growth rate is above the sample median. In that case, *CRation* is set equal to 1; otherwise, to 0. We expect this dummy variable to have a negative impact on dividends, since high-growth, capital-rationed corporations tend to retain cash in order to finance not only current, but also future investment opportunities.

Three variables control for country-specific effects. The legal reserves ratio, *Legal Res*, is the minimum percentage of total share capital that the host country's corporate laws mandate for corporations to hold to prevent their dissolution. Legal reserves are created by requiring corporations to retain a certain proportion of annual earnings, until the threshold is reached. Such a requirement can have a negative impact on dividends, since it can prevent corporations from distributing all its earnings. The European dummy, *Europe*, is set equal to 1 if the corporation is in Europe, to 0 otherwise. We expect this to be positively related to the dividend ratios because insiders are less likely to expropriate minority shareholders in the more developed West European capital markets. The Civil Law dummy, *Civil Law*, is set equal to 1 if the country's company law or commercial code is based on Roman Law, to 0 if it is based on Common Law. This variable should be negatively related to dividends, in view of the finding of La Porta et al. (2000b) that minority shareholders enjoy less protection in Civil Law than in Common Law jurisdictions.

[Table 4 goes about here]

Table 4 summarizes the data used in the regressions. For each country, it gives the number of corporations in our sample, the percentages of corporations affiliated to a

group at the 20% and 10% levels of control, and the means of the ownership/control ratio and of the (5-year average of the unadjusted) dividend ratios. At the 20% level of control, the percentage of group-affiliated corporations is highest in Indonesia (70.06%); at the 10% level, it is highest in the Philippines (74.85%); within Europe, it is highest in Italy at both levels (56.99% and 60.62%). As we lower the cutoff level of control from 20% to 10%, group affiliation increases only slightly in Europe but some Asian economies exhibit sharp increases: Taiwan's group affiliation rises from 12.98% to 48.09%, Singapore's from 17.02% to 65.98% and Japan's from a high 58.81% to an even higher 73.72%. Note also that the difference between European and Asian rates of group affiliation is insignificant at the 20% level of control but is highly significant at the 10% level. The discrepancy between ownership and control is greatest in Japan (mean O/C = 0.632) and Italy (0.732); least in Thailand (0.950) and Spain (0.940); and differs significantly between Europe and Asia.

[Table 5 goes about here]

Panel B of Table 4 shows that (i) corporations with  $O/C < 1$  pay significantly higher dividends as a ratio of cash flows and of earnings compared to those with  $O/C = 1$ ; (ii) group-affiliated corporations pay significantly higher dividend rates (however measured) than non-affiliated corporations at the 20% level of control, but the pattern is less consistent at the 10% level. Table 5 compares industry-adjusted dividend rates when corporations are classified by both their O/C ratio and their group affiliation. Proposition (i) above holds for corporations affiliated to groups at the 20% level of control, as well as for those affiliated at the 10% level. Regarding proposition (ii), note that for corporations with  $O/C < 1$ , significantly higher dividend rates are implied by group affiliation at the 20% level, but not at the 10% level.<sup>12</sup> This suggests that capital markets contain expropriation within corporations group-affiliated at the 20% level, but not within corporations which are group-affiliated only at the 10% level. This issue

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<sup>12</sup> Thus, Table 4B's significantly higher overall rates of dividend for corporations affiliated to a group at the 20% level must be driven by corporations with  $O/C < 1$ ; at the 10% level they must be driven by corporations with  $O/C = 1$ . This can be confirmed from Table 5's t statistics for the difference in the dividends implied by group affiliation at the 20% and 10% levels for the cases where  $O/C < 1$  and where  $O/C = 1$ .

shall be analyzed in detail in the following regressions. These regressions shall use industry-adjusted dividend rates as dependent variables, but similar results hold for unadjusted rates.

#### 4. Regression Results.

Table 6 displays the results of cross-sectional OLS regressions of each of the four measures of dividend rate on (i) group affiliation, the controlling shareholder's ratio  $O/C$  of ownership to control rights, the European dummy, and products of the foregoing variables plus (ii) the corporation- and country- specific factors. The coefficients of the variables (ii) generally have the sign anticipated in Section 3 and are generally significant. In particular, we confirm the finding of La Porta et al. (2000b) that dividends are higher in Common Law than in Civil Law jurisdictions. The following discussion shall focus on the impact of the variables (i) on dividends.

Panel A shows the results when group affiliation is defined at the 20% level of control. All the regressions show that dividend rates are related positively to group affiliation and negatively to the variable  $O/C*Group$ , i.e., the ratio of the controlling shareholder's ownership to control rights multiplied by the group dummy. The coefficients of both these variables are significant for three out of the four regressions, namely, for dividends as a ratio of cash flows, earnings and market capitalization. These findings are consistent with the hypothesis that capital markets require corporations to pay higher dividends when the risk of expropriation is higher within a group. However, Panel B shows that when group affiliation is defined at the 10% level of control, then the coefficient on the group dummy becomes negative and the coefficients on the group dummy and the variable  $O/C*Group$  are not significant. Thus, we have evidence that capital markets systematically offset the greater propensity to expropriate within groups tightly controlled at the 20% level by requiring higher dividends; we have no such evidence for the broader range of corporations affiliated at the 10% level. We conclude that there is a significant difference between the dividend behavior of corporations which are group-affiliated at the 20% level and those which are affiliated at the 10% level, but not at the 20% level. This difference is addressed

next.

[Table 6 goes about here]

Table 7 reports regressions in which the sample is restricted to those corporations that are group-affiliated or to those that are non-affiliated; in each case, both the 20% and the 10% levels of control are considered. These regressions confirm that the 20% level of control in groups is a significant threshold for the expropriation that capital markets permit. For corporations affiliated to a group at the 20% level, there is a significant negative relationship between O/C and dividends as a ratio of cash flows and also as a ratio of earnings. This reinforces the indications in Table 6A that capital markets anticipate the risk of greater expropriation within group-affiliated corporations by requiring higher dividend rates by those with a lower O/C ratio. By contrast, for corporations not affiliated to a group at the 20% level, Table 7 shows that there is a significantly positive relationship between O/C and dividends as a ratio of market capitalization and also as a ratio of sales. Thus, capital markets seem less alert to expropriation in such corporations, giving insiders latitude to pay lower dividends when there is greater discrepancy between their ownership and control stakes. However, these significantly positive relationships between O/C and dividends disappear if the sample is restricted to corporations which are not affiliated to a group at the 10% level.

The findings reported in the last paragraph have an interesting implication. Partition the set of corporations which are not affiliated at the 20% level into two subsets: (a) those which are not affiliated at the 10% level; (b) those which are affiliated at the 10% level but not at the 20% level. We saw that subsets (a) and (b) taken together exhibited a significantly positive relationship between O/C and dividends as a ratio of market capitalization and also as a ratio of sales. We also saw that subset (a) fails to exhibit any significantly positive relationship between the O/C ratio and these dividend rates. It follows that the significantly positive relationship between the O/C ratio and these dividend rates for corporations which are not affiliated at the 20% level was due

mainly to subset (b), i.e., to loosely-affiliated corporations.<sup>13</sup>

To summarize: capital markets appear to contain expropriation within groups with tight control linkages at the highly-visible 20% level, as evidenced by the higher dividends paid by group-affiliated corporations with a greater discrepancy between ownership and control rights. However, capital markets appear to overlook the scope for expropriation by corporations which are loosely-affiliated to groups with control linkages between the 20% and 10% levels, as evidenced by the significantly lower dividend rates paid by such corporations which exhibit a greater discrepancy between ownership and control. Corporations that are not group-affiliated at the 10% level appear to have little scope for insider expropriation; there is no evidence of significantly lower dividend rates paid by such corporations which exhibit a greater discrepancy between ownership and control.

We next discuss differences in expropriation between Europe and Asia. Table 4B showed that corporations in Western Europe pay dividends at significantly higher rates than in East Asia. In Table 6, the significantly positive coefficients on the variable *O/C\*Group\*Europe* in all the regressions indicate that group-affiliated corporations with a higher value of the O/C ratio tend to pay higher dividend rates in Europe than those in Asia. In Table 7, the regression coefficients on the European dummy indicate that dividends are paid at a higher rate in Europe than in Asia, this difference being particularly large and consistently significant for group-affiliated corporations. Thus, the more developed capital markets of Western Europe anticipate more strongly the risk of expropriation in groups by generally requiring corporations to pay dividends at a higher rate.<sup>14</sup>

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<sup>13</sup> For corporations which are affiliated at the 10% level, there remains a significantly negative relationship between O/C and dividends as a ratio of cash flows and also as a ratio of earnings, presumably driven by the negative relationship due to corporations affiliated at the 20% level, which dominates the positive relationship due to corporations which are affiliated at the 10% level, but not at the 20% level.

<sup>14</sup> For group-affiliated corporations, the estimated values of the industry-adjusted dividend/sales and dividend/market-capitalization ratios are higher in Europe than in Asia for all values of O/C. For the dividend/cash-flow ratios, we find that the estimated equations for Europe and Asia intersect at  $O/C = 0.0369$ ; for all higher values of O/C, the estimated value of this dividend rate would be higher in Europe. Similarly, the estimated dividend/earnings ratio would be higher in Europe for any O/C above 0.0974.

What systematic factors underlie the significant differences between the dividend rates of European and Asian group-affiliated corporations? Table 1 showed that a higher percentage of European corporations have multiple large owners with at least 10% of the shares, which might mitigate expropriation by the controlling shareholder. To test this, we add a *Multiple Owners* dummy to identify such corporations in regressions of the dividend rates of group-affiliated corporations in Europe and Asia. To save space, we report only the results for the 20% level of control, as the results for the 10% level are essentially the same. Table 8 reports a striking difference between the coefficients of this dummy estimated in the two regressions. In Europe, the coefficient is significantly positive for two of the dividend rates, suggesting that having multiple large owners indeed helps containing the expropriation of minority shareholders by the controlling shareholder. In Asia, the coefficient is significantly negative for two of the dividend rates, suggesting that the other large owners typically collude with the controlling shareholder in expropriating minority shareholders. Accounts of Asian business relationships (Redding (1995)) suggest that the other large owners would typically be longstanding allies of the controlling shareholder, who could compensate them through other business dealings between their groups.

[Table 8 goes about here]

Table 9 presents country-level OLS regressions for group-affiliated corporations.<sup>15</sup> These regressions, of course omit the control variables specific to countries, but retain those specific to corporations. To save space, we do not report the regression coefficients of these control variables, only those of the *O/C* and the *Multiple Owners* variables, plus their t-statistics. Despite the smaller sample size, Panel A reports some evidence that the more developed European capital markets require group-affiliated corporations with a greater discrepancy between ownership and control rights

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<sup>15</sup> In Taiwan, the number of corporations affiliated to a group is too small for a meaningful regression. In Thailand, no corporations have multiple large shareholders.

to pay higher dividends. When group affiliation is defined at the 20% level,<sup>16</sup> there is a significantly negative relationship with the O/C ratio for three out of the four measures of the dividend rate in the United Kingdom and Spain, and for one of those measures in France. Germany would also have had a significantly negative relationship, but for the inclusion of the *Multiple Owners* dummy,<sup>17</sup> which itself has a significantly positive impact on dividends. Thus, the monitoring of other large shareholders makes it unnecessary for the German capital market to extract significantly higher dividends from corporations with a greater discrepancy between ownership and control. Amongst Asian countries, we find a significantly negative relationship between dividend rates and the O/C ratio only in Singapore.

Strikingly, in two East Asian countries (Indonesia and Thailand), and in one West European country (Italy, though only at the 10% level of significance) corporations which are affiliated to groups at the 20% level exhibit a significantly positive relationship between O/C and one of the measures of the dividend rate. Thus, in these three countries, capital markets permit the controlling shareholders of corporations affiliated to groups at the 20% level that have a lower O/C ratio to pay lower dividends, leaving wealth within the corporation that they could expropriate by intra-group transactions. This evidence confirms the widespread view of these capital markets as the ones in their region where minority shareholders enjoy the least protection.<sup>18</sup> Indonesia and Thailand figured prominently in the Asian financial crisis, which highlighted their weak capital market institutions and low transparency. Indeed, transparency may have been so low that the typical investor may not even have known who were the major holders of ownership and control rights in many corporations.

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<sup>16</sup> To save space, we do not present the results for the 10% level of control: at the country level, reducing the cutoff level of control from 20% to 10% adds only a few firms; the only effect of this is a slight reduction in the statistical significance of the results reported below.

<sup>17</sup> In the regression equation for the ratio of industry-adjusted dividends to earnings, this decreased the t-statistic of the coefficient of O/C from -1.86 to -.66.

<sup>18</sup> In Italy, there is, for example, widespread collusion amongst large shareholders. Gomes and Novaes (1999) document that, at the end of 1996, 19.14% of Italian listed corporations disclosed agreements amongst large shareholders, e.g., to restrict the transfer of shares, vote in concert or set corporate policies that would otherwise be decided by the board of directors. In our sample of 208 Italian corporations, from "Il taccuino dell'azionista" we learn that 39 corporations (18.75%) disclosed such agreements.



Panel B of Table 9 reports that, at the 20% level of control, in three European countries (France, Germany, and the U.K.) multiple large shareholders have a significantly positive impact on dividend rates; whereas in three Asian countries (Japan, Philippines, and South Korea), they have a significantly negative impact. Thus, despite the smaller samples, country-level results provide some confirmation of the positive impact of multiple large shareholders on dividend rates in Europe and their negative impact in Asia, which was reported in Table 8.

[Table 9 goes about here]

## **5. Conclusions.**

Our analysis of expropriation from the perspective of dividends, while narrow in scope, does provide quantitative evidence on the expropriation which takes place within business groups and on the differences in expropriation between Europe and Asia. We conclude with some implications for policy.

Expropriation by corporate insiders is not simply a matter of redistribution amongst shareholders: corporate insiders can choose to invest in projects with low or negative returns because they create opportunities for expropriation. This can pile up so much unrepayable debt as to precipitate macroeconomic problems, as the Asian financial crisis has shown. Just before this crisis, East Asian leaders had argued that the rapid economic progress in East Asia had been facilitated by a distinctive set of “Asian values” emphasizing family loyalties and long-term relationships. The financial crisis saw these values denigrated as “crony capitalism” which facilitated related-party transactions to expropriate minority shareholders within business groups controlled by politically-powerful families. While the crisis has driven home the importance of strengthening capital market institutions, there is no likelihood of fundamental changes in the role of families and business groups in Asia, especially now that the crisis has ebbed. It is therefore important to understand where and how the expropriation is taking place.

Western Europe provides a useful benchmark because, at first sight, families and business groups play just as great a role: Table 1 shows that, compared to Asia,

European corporations are about as likely to be group-affiliated at the 20% level and, at both the 20% and 10% levels, are more likely to have at least one shareholder that holds more than the cutoff percentage of control rights, be controlled by a family, or have a top manager from the family of the controlling shareholder. Yet, Western Europe appears to have avoided the problems highlighted by the Asian financial crisis by containing expropriation by its “crony capitalists”. We analyzed this containment from the perspective of dividends, which remove corporate resources from the control of insiders. Overall, capital markets have offset the greater exposure to expropriation within tightly-controlled groups by requiring that higher dividends be paid to corporations affiliated to such groups, especially to those exhibiting a wider discrepancy between ownership and control. Thus, capital markets appear generally capable of containing expropriation within tightly-controlled groups, although we identified some failures in Thailand and Indonesia.

By contrast, capital markets appear ineffective at containing expropriation of corporations that are loosely-affiliated to groups, i.e., whose control links all exceed 10% but do not all exceed 20%. We found that capital markets fail to extract more dividends from such corporations and that a greater discrepancy between ownership and control is associated with lower dividend rates. Table 2 indicates that such capital market failure is of little consequence in Europe, where loosely-affiliated corporations comprise only 2.94% of our sample; whereas in Asia, they comprise a significant 15.44%. Furthermore, at the 10% level of control, 84.58% of the loosely-affiliated Asian corporations are controlled by the 11 largest groups, which comprise 53.75% of our sample. The low transparency of such sprawling, loosely-affiliated groups makes it difficult for minority shareholders and analysts to discover where control resides, let alone identify and challenge unfair intra-group transactions. The apparently weak formal group linkages may be reinforced by non-transparent linkages through nominee accounts (common in Asian markets) and through collusion with other large shareholders, who appear to abet expropriation in Asia.

For capital markets to counter these problems requires greater transparency to

reveal the control links and the parties acting in concert, plus regulatory and legal reforms to strengthen the rights of minority shareholders, such as lowering the minimum percentages of shareholdings required to block major decisions, call an extraordinary shareholders' meeting or file class action suits. Such reforms would not only help minority shareholders challenge expropriation, they would also force the controlling shareholder to acquire more ownership rights to maintain control. This should reduce the incentive to expropriate and might force a consolidation of business groups into the simpler, more transparent structures prevalent in Europe, which capital markets could police more effectively.

While there is now a consensus for such reforms in Asia, the concentration of expropriation within a few groups that are large enough to manipulate a nation's political system means that the critical issue is the political will to enforce laws and regulations on the books. Grand debates on "Asian values" versus "crony capitalism", which range over the entire continent's business groups and families, diffuse attention from an expropriation nexus which, in the 9 most advanced Asian economies, can be traced to 11 ultimate owners who control more than half of the corporations with credible accounting and ownership data and 5/6 of those especially vulnerable to expropriation because loosely-affiliated; proportions which would be even higher if we add corporations controlled by long-term business allies. The Asian financial crisis will have served a useful purpose if it musters the political will to confront such extreme concentrations of abusive economic power.

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**APPENDIX 1: DATA SOURCES FOR EAST ASIAN CORPORATIONS (FROM CLAESSENS, DJANKOV & LANG (2000))**

Country	Immediate Ownership Data	Dual-Class Shares	Business Groups: Pyramids and Cross-Holdings
Hong Kong	Worldscope (1998) Asian Company Handbook (1998) Hong Kong Stock Exchange (1997)	Datastream International (1998)	Chu, Yin-Wah and Gary Hamilton, 1993, Business Networks in Hong Kong, University of California, Davis, mimeo.  Taylor, Michael, 1998, "Have Cash, Will Travel," <i>Far Eastern Economic Review</i> , Special Section on the Li Ka-Shing Conglomerate, March 5.  Hong Kong Stock Exchange (1997)
Indonesia	Worldscope (1998) Asian Company Handbook (1998) Institute for Economic and Financial Research (1996)	Datastream International (1998) Institute for Economic and Financial Research (1996)	Fisman, Ray, 1998, Announcement Effects of Suharto's Illnesses on Related Companies, Harvard Business School, mimeo, September.  W.I.Carr Banque Indosuez Group, 1997, Indonesian Group Connections, Jakarta, Indonesia  Indobusiness, 1998, 1995 Ranking of the Largest Indonesian Conglomerates, available at <a href="http://indobiz.com/company/warta/conglo/htm">http://indobiz.com/company/warta/conglo/htm</a>
Japan	Worldscope (1998) Japan Company Handbook (1998)	Datastream International (1998)	Dodwell Marketing Consultants, 1997, Industrial Groupings in Japan: the Anatomy of the Keiretsu," 12 <sup>th</sup> Edition, 1996/1997, Tokyo, Japan.  Sato, Kazuo, 1984, "The Anatomy of Japanese Businesses," M.E.Sharpe, Chapter 4.
Korea (South)	Worldscope (1998) Asian Company Handbook (1998)	Datastream International (1998)	Korean Fair Trade Commission, 1997, 1996 List of the Largest 30 Chaebol, Seoul, Korea.  Lim, Ungki, 1998, Ownership Structure and Family Control in Korean Conglomerates: with Cases of the 30 Largest Chaebol, Seoul University, Korea.

## APPENDIX 1 (CONTINUED)

Country	Immediate Ownership Data	Dual-Class Shares	Business Groups: Pyramids and Cross-Holdings
Malaysia	Worldscope (1998)	Datastream International (1998)	Hiscock, Geoff, 1998, Asia's Wealth Club, Nicholas Brealey. <a href="http://www.ambg.com.my">http://www.ambg.com.my</a> for the A-M Banking Group
	Asian Company Handbook (1998)	Kuala Lumpur Stock Exchange (1997)	<a href="http://www.berjaya.com.my">http://www.berjaya.com.my</a> for the Berjaya Group <a href="http://www.simenet.com">http://www.simenet.com</a> for the Sime Darby Group <a href="http://www.lion.com.my">http://www.lion.com.my</a> for the Lion Group <a href="http://www.hongleong-group.com.sg">http://www.hongleong-group.com.sg</a> for the Hong Leong Group
Philippines	Worldscope (1998)	Datastream International (1998)	Philippine Stock Exchange, 1997, Investment Guide 1996, Manila.
	Asian Company Handbook (1998)	Philippine Stock Exchange (1997)	Tan, Edita, 1993, Interlocking Directorates, Commercial Banks, Other Financial Institutions, and Non-Bank Corporations, Philippine Review of Economics and Business, 30, 1-50.
	Philippine Stock Exchange (1997)		
Singapore	Worldscope (1998)	Datastream International (1998)	Singapore Stock Exchange, 1997, Singapore Company Handbook.
	Asian Company Handbook (1998)	Singapore Stock Exchange (1997)	
Taiwan	Worldscope (1998)	Datastream International (1998)	Hiscock, Geoff, 1998, Asia's Wealth Club, Nicholas Brealey. China Credit Information Service, 1997, Business Groups in Taiwan, 1996-1997, Taipei, Republic of China.
	Asian Company Handbook (1998)		Baum, Julian, 1994, The Money Machine, <i>Far Eastern Economic Review</i> , August 11, for the corporate holdings of the Kuomintang.
Thailand	Worldscope (1998)	Datastream International (1998)	Tara Siam, 1997, Thai Business Groups 1996-1997: A Unique Guide to Who Owns What, Bangkok, Thailand.
	Asian Company Handbook (1998)	Securities Exchange of Thailand (1997)	<i>The Nation</i> , 1998, Thai Tycoons: Winners and Losers in the Economic Crisis, Special Issue, July.
	Securities Exchange of Thailand (1997)		Vatikiotis, Michael, 1997, From Chickens to Microchips: the Story of Thai Conglomerates, <i>Far Eastern Economic Review</i> , January 23.



**APPENDIX 2: SOURCES OF OWNERSHIP AND CONTROL DATA FOR WEST EUROPEAN CORPORATIONS**

Country	Immediate Ownership Data	Dual-Class Shares	Business Groups
France	The Herald Tribune (1997), "French Company Handbook 1997", SFB-Paris Bourse Financial Times (1997): "Extel Financial" Worldscope (1998) <a href="http://www.bourse-de-paris.fr/fr/market8/fsg830.htm">http://www.bourse-de-paris.fr/fr/market8/fsg830.htm</a>	Datastream (1999) Financial Times (1997): "Extel Financial" Les Echos (1996) Muus (1998)	The Herald Tribune (1997), "French Company Handbook 1997", SFB-Paris Bourse Financial Times (1997): "Extel Financial"
Germany	Commerzbank (1997): "Wer gehört zu wem" ( <a href="http://www.commerzbank.com/navigate/date_frm.htm">http://www.commerzbank.com/navigate/date_frm.htm</a> ) Financial Times (1997): "Extel Financial" Worldscope (1998)	Datastream (1999) Financial Times (1997): "Extel Financial" Die Welt (1996) Becht and Boehmer (1998)	Commerzbank (1997): "Wer gehört zu wem" Extel Financial
Italy	CONSOB (1997): "Bollettino - edizione speciale n. 4/97 - Compagine azionaria delle società quotate in borsa o ammesse alle negoziazioni nel mercato ristretto al 31 dicembre 1996" ( <a href="http://www.consob.it/trasparenza_soc_quot/trasp_soc_quot.htm">http://www.consob.it/trasparenza_soc_quot/trasp_soc_quot.htm</a> ) Il Sole 24 ore (1997): "Il taccuino dell'azionista"	Datastream (1999) Il Sole 24 ore (1997): "Il taccuino dell'azionista"	Il Sole 24 ore (1997): "Il taccuino dell'azionista" <a href="http://www.fiatgroup.com/it/informazioni/if2informaz-1.htm">http://www.fiatgroup.com/it/informazioni/if2informaz-1.htm</a> <a href="http://www.olivetti.it/group/">http://www.olivetti.it/group/</a> <a href="http://www.pirelli.com/company/index.htm">http://www.pirelli.com/company/index.htm</a>
Spain	Comision Nacional del Mercado de Valores (1998): "Participaciones significativas en sociedades cotizadas" ( <a href="http://www.cnmv.es/english/cnmve.htm">http://www.cnmv.es/english/cnmve.htm</a> )	Datastream (1999) Financial Times (1997): "Extel Financial" ABC (1996) Crespi-Cladera and Garcia-Cestona (1998)	Comision Nacional del Mercado de Valores (1998): "Participaciones significativas en sociedades cotizadas" ( <a href="http://www.cnmv.es/english/cnmve.htm">http://www.cnmv.es/english/cnmve.htm</a> ) Extel Financial

United  
Kingdom

Financial Times (1997): "Extel Financial"

London Stock Exchange (1997): "The London Stock  
Exchange Yearbook"

Financial Times

Worldscope (1998)

<http://www.hemscott.com/equities/company/>

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Datastream (1999)

Financial Times (1997): "Extel Financial"

Financial Times (1996)

Extel Financial

**TABLE 1: OWNERSHIP AND CONTROL IN WESTERN EUROPE & EAST ASIA**

	Cutoff = 20%			Cutoff = 10%	
	Europe	Asia	LLS	Europe	Asia
<b>A: % of corporations by controlling owner</b>					
No shareholder owns $\geq$ cutoff % of control rights	39.01	43.60	36.48	15.60	20.28
Family (owns $\geq$ cutoff % of control rights)	43.13	37.86	30.00	55.90	45.05
State	3.30	4.58	18.33	3.49	6.26
Widely-Held Financial Institution	10.12	4.94	5.00	19.64	17.80
Widely-Held Corporation	2.38	9.02	5.00	1.46	10.61
Misc. (Foreign-owned, reciprocal holdings)	2.06	0.00	5.19	3.91	0.00
<b>B: % of corporations with controlling owner that use control enhancements</b>					
Top manager from controlling shareholder's family	68.12	57.10	68.59	66.04	54.55
No other shareholder has $\geq$ 10% of control rights.	54.69	67.80	75.48	54.91	62.26
<b>C: % of corporations by forms of control</b>					
Affiliated to group	46.30	48.48	n.a.	49.24	63.93
Controlled via pyramiding	15.33	39.60	25.75	18.41	45.68
Controlled via cross-holding	6.01	10.12	3.15	6.27	11.02
Controlled via reciprocal holding	0.90	n.a.	n.a.	0.69	n.a.
<b>D: Mean % holding of largest shareholder of corporations where one shareholder holds at least 5% of the control rights</b>					
Ownership rights	34.60	15.70			
Control rights	37.75	19.77			
Ownership/Control rights	0.877	0.746			

**TABLE 2: GROUP SIZES IN WESTERN EUROPE & EAST ASIA**

The column headed “gps” gives the number of groups with  $n$  affiliated corporations where  $n$  is in the size range specified. The column headed “corps” gives the total number of corporations affiliated to groups in the specified size range.

Range for group size $n$	Cutoff = 20%				Cutoff = 10%				Loose-affil.	
	Europe		Asia		Europe		Asia		Eur.	Asia
	gps	corps	gps	corps	gps	corps	gps	corps	corps	corps
$100 \leq n$	0	0	6	867	0	0	6	1153	0	286
$50 \leq n < 100$	1	51	2	97	5	326	2	125	80	28
$20 \leq n < 50$	6	175	3	95	3	78	3	121	11	26
$10 \leq n < 20$	6	78	3	40	10	129	4	52	1	5
$5 \leq n < 10$	34	201	7	47	46	304	7	45	1	1
$n < 5$		1020		116		785		168	4	56
Total group-affil. corps		1525		1262		1622		1664	97	402
Total corporations		3294		2603		3294		2603		

**TABLE 3: DESCRIPTION OF REGRESSION VARIABLES**

Variable	Description
Div/cf	5-year average of dividends as a percentage of cash flows in fiscal years 1992-1996. Dividends are total cash dividends paid to common and preferred shareholders. Cash flow is total funds from operations net of non-cash items from discontinued operations. Source: Worldscope
IADiv/cf	Industry-adjusted 5-year average of dividends as a percentage of cash flows. We first compute for each industry the (worldwide) median of Div/cf. Then, the corporation's IADiv/cf is the difference between the corporation's dividend/cash-flow and the industry median. We rely on a corporation's primary SIC to define the industry.
Div/earn	5-year average of dividends as a percentage of earnings in fiscal years 1992-1996. Dividends are total cash dividends paid to common and preferred shareholders. Earnings are measured after taxes and interest but before extraordinary items. Source: Worldscope
IADiv/earn	Industry-adjusted 5-year average of dividends as a percentage of earnings. We first compute for each industry the (worldwide) median of Div/earn. Then, the corporation's IADiv/earn is the difference between the corporation's dividend/earnings and the industry median. We rely on a corporation's primary SIC to define the industry.
Div/sale	5-year average of dividends as a percentage of sales in fiscal years 1992-1996, where dividends are total cash dividends paid to common and preferred shareholders and sales are net sales. Source: Worldscope
IADiv/sale	Industry-adjusted 5-year average of dividends as a percentage of net sales. We first compute for each industry the (worldwide) median of Div/sale. Then, the corporation's IADiv/sale is the difference between the corporation's dividend/sales and the industry median. We rely on a corporation's primary SIC to define the industry.
Div/mkcap	5-year average of dividends as a percentage of market value of equity in fiscal years 1992-1996. Dividends are total cash dividends paid to common and preferred shareholders. The market value of equity equals total market value of common and preferred stocks. Source: Worldscope
IADiv/mkcap	Industry-adjusted 5-year average of dividends as a percentage of market value of equity. We first compute for each industry the (worldwide) median of Div/mkcap. Then, the corporation's IADiv/mkcap is the difference between the corporation's dividend/market and the industry median. We rely on a corporation's primary SIC to define the industry.

TABLE 3 (CONTINUED)

Variable	Description	Expected sign
Legal Res	The Legal Reserve variable is the minimum percentage of total share capital mandated by corporate laws to avoid the dissolution of an existing corporation. Varies from 0% in Hong Kong, Indonesia, Malaysia, Philippines, Singapore, U.K. to 100% in Taiwan. Source: La Porta <i>et al</i> , 1998.	-
O/C	The ratio of ownership rights to cash flow rights owned by the largest ultimate controlling shareholder, for corporations with an ultimate owner who owns at least 5% of the shares. Sources: Claessens, Djankov, Fan and Lang, 1999a, plus the sources listed in Appendix 2.	?
Group	Group affiliation dummy = 1 if the corporation is group-affiliated; = 0 otherwise. A corporation is “group-affiliated” if it satisfies one of the following criteria: (i) it is controlled by a shareholder via pyramiding, i.e., indirectly through a chain of corporations; (ii) it controls another corporation in the sample; (iii) it has the same controlling shareholder as at least one other corporation in the sample; (iv) its controlling shareholder is a widely-held corporation or a widely-held financial institution. Additional information about group affiliation is collected from country sources.	+
Multiple Owners	Multiple Owners dummy = 1 if there exist other shareholders who control at least 10 percent of the stock; = 0 otherwise	+
GSDecile	Rank decile for Growth of Sales, i.e., the 5-year average growth rate of net sales over 1992-1996. Corporations are partitioned into ten equal-size groups in ascending order of Growth of Sales and ranked 1 – 10. Source: Worldscope	-
CRation	Credit rationing dummy = 1 if the corporation's 5-year average percentage growth of net sales is above the (overall) median and its 5-year average increase of stock capital plus (financial) debt over sales is below the median, = 0 otherwise. Source: Worldscope	-
D/A	Ratio of total financial debt (including leasing) to net assets. Source: Worldscope	-
Ln(TA)	Natural log of the book value of total assets. Source: Worldscope	+
Civil Law	Civil Law dummy = 1 if the company law or commercial code of the country originates from Roman law, = 0 otherwise. Source: La Porta <i>et al</i> , 1998 and 2000.	-

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Europe	European dummy = 1 if the corporation is from Western Europe; = 0 if it is from East Asia.	+
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**TABLE 4: GROUP AFFILIATION, OWNERSHIP/CONTROL & MEAN DIVIDEND RATES IN EUROPE AND ASIA**

Dividend rates are unadjusted. The sample includes 5897 corporations in 1996. <sup>a</sup>, <sup>b</sup>, and <sup>c</sup> denote significance at the 1%, 5%, and 10% levels, respectively.

Country	Number of corps	% of corps gp.- affil. at 10%	% of corps gp.- affil. at 20%	O/C	Div/cf	Div/earn	Div/mkcap	Div/ sale
<b>Panel A: Summary statistics</b>								
France	529	48.96	47.26	0.930	12.69	31.41	2.22	4.33
Germany	598	53.18	44.82	0.836	16.79	35.69	1.79	2.10
Hong Kong	284	48.24	42.25	0.887	35.91	37.81	3.76	7.66
Indonesia	167	74.85	70.06	0.782	27.23	35.58	3.11	4.30
Italy	193	60.62	56.99	0.732	10.04	32.99	2.31	1.78
Japan	1039	73.72	58.81	0.632	13.08	35.29	0.81	0.69
Malaysia	222	59.46	40.54	0.852	24.53	27.63	1.11	3.63
Philippines	112	76.79	66.07	0.921	6.48	9.35	1.06	1.23
Singapore	194	65.98	17.01	0.802	21.77	29.50	1.27	4.01
South Korea	317	53.00	47.00	0.916	8.78	26.81	1.51	0.79
Spain	624	45.99	43.91	0.940	7.80	31.01	2.59	2.96
Taiwan	131	48.09	12.98	0.864	13.03	19.27	0.84	2.26
Thailand	137	43.07	37.23	0.950	29.76	44.75	3.05	5.81
U.K.	1350	47.48	46.15	0.864	31.99	39.11	2.56	6.82
All	5897	55.72	47.26	0.832	23.41	33.99	1.88	3.57
Europe	3294	49.24	46.30	0.877	26.48	35.87	2.30	4.72
Asia	2603	63.93	48.48	0.778	20.11	32.16	1.49	2.43
<b>Panel B: T-statistics for differences between means</b>								
European vs Asian corporations		-7.25 <sup>a</sup>	-1.12	13.27 <sup>a</sup>	6.63 <sup>a</sup>	4.57 <sup>a</sup>	13.24 <sup>a</sup>	8.64 <sup>a</sup>
Group-affiliated vs non-affiliated corporations at 20% level of control					3.38 <sup>a</sup>	6.00 <sup>a</sup>	2.45 <sup>b</sup>	3.88 <sup>a</sup>
Group-affiliated vs non-affiliated corporations at 10% level of control					1.58	4.95 <sup>a</sup>	-1.38	2.27 <sup>b</sup>



O/C = 1 vs O/C < 1 corporations	-2.39 <sup>b</sup>	-5.28 <sup>a</sup>	0.76	-0.16
Civil Law vs Common Law countries	-18.96 <sup>a</sup>	-5.58 <sup>a</sup>	-14.88 <sup>a</sup>	-15.68 <sup>a</sup>

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**TABLE 5: MEAN DIVIDEND RATES ACROSS OWNERSHIP AND AFFILIATION CHARACTERISTICS**

Dividend rates are industry-adjusted. The sample includes 5897 corporations in 1996. Medians and t (z)-statistics are reported in brackets. <sup>a</sup>, <sup>b</sup>, and <sup>c</sup> denote significance at the 1%, 5%, and 10% levels, respectively.

Variable	All corps	Gp-affil. corps at the 20% level	Non-affil. corps at the 20% level	T (Z)-statistic for difference	Gp-affil. corps at the 10% level	Non-affil. corps at the 10% level	T (Z)-statistic for difference
<b>IADiv/cf</b>							
O/C <1	5.82 (0.14)	6.42 (1.63)	1.51 (-3.89)	2.86 <sup>a</sup> (3.11 <sup>a</sup> )	4.80 (-0.64)	5.51 (-0.49)	-0.26 (-0.22)
O/C =1	3.24 (-3.21)	3.12 (-3.83)	2.63 (-3.55)	0.38 (0.34)	2.93 (-4.05)	2.78 (-3.51)	0.91 (-0.13)
T (Z)-statistic for difference	2.61 <sup>a</sup> (3.50 <sup>a</sup> )	2.42 <sup>b</sup> (3.22 <sup>a</sup> )	-0.67 (0.98)		1.54 (8.83 <sup>a</sup> )	1.43 (1.12)	
<b>IADiv/earn</b>							
O/C <1	3.69 (1.55)	5.06 (2.91)	-0.66 (-2.97)	3.84 <sup>a</sup> (3.95 <sup>a</sup> )	3.39 (1.10)	3.06 (0.82)	0.14 (0.07)
O/C =1	-0.33 (-3.88)	0.77 (-1.90)	-1.26 (-5.59)	1.83 <sup>c</sup> (2.02 <sup>b</sup> )	0.95 (-2.05)	-1.53 (-5.89)	2.27 <sup>b</sup> (2.25 <sup>b</sup> )
T (Z)-statistic for difference	4.75 <sup>a</sup> (5.27 <sup>a</sup> )	3.70 <sup>a</sup> (3.88 <sup>a</sup> )	0.41 (0.56)		2.25 <sup>b</sup> (15.02 <sup>a</sup> )	2.29 <sup>b</sup> (0.29)	
<b>IADiv/mkcap</b>							
O/C <1	0.58 (0.03)	0.62 (0.03)	0.30 (-0.12)	3.15 <sup>a</sup> (3.43 <sup>a</sup> )	0.48 (-0.04)	0.83 (0.28)	-2.13 <sup>b</sup> (-1.59)
O/C =1	0.64 (0.09)	0.66 (0.10)	0.61 (0.06)	0.58 (1.03)	0.61 (0.08)	0.64 (0.07)	-0.37 (0.04)
T (Z)-statistic for difference	-0.87 (-0.17)	-0.40 (-0.03)	-2.92 <sup>a</sup> (-2.58 <sup>a</sup> )		-1.61 (-5.63 <sup>a</sup> )	2.89 <sup>a</sup> (2.98 <sup>a</sup> )	
<b>IADiv/sale</b>							
O/C <1	2.43 (0.04)	2.46 (0.01)	1.55 (0.002)	1.88 <sup>c</sup> (0.35)	2.10 (-0.02)	2.43 (-0.005)	-0.44 (-0.13)
O/C =1	2.40 (0.06)	3.01 (0.06)	1.92 (0.001)	3.16 <sup>a</sup> (0.27)	2.93 (0.06)	1.91 (-0.003)	3.01 <sup>a</sup> (0.18)

T (Z)-statistic for difference	0.12 (-0.17)	-1.34 (-0.21)	-0.91 (0.34)	-2.30 <sup>b</sup> (-4.81 <sup>a</sup> )	2.13 <sup>b</sup> (-2.59 <sup>a</sup> )
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**TABLE 6: REGRESSIONS OF DIVIDEND RATES ON GROUP AFFILIATION AND THE OWNERSHIP/CONTROL RATIO**

Dividend rates are industry-adjusted. The sample includes 5897 corporations in 1996. The regressions use ordinary least squares. <sup>a</sup>, <sup>b</sup>, and <sup>c</sup> denote significance at the 1%, 5%, and 10% levels, respectively. T-values are reported in parentheses below the coefficients estimates.

<b>Panel A: Group affiliation defined at the 20% level of control</b>															
Dependent Variable:	Interc.	O/C	Group	O/C * Group	O/C* Europe	O/C*Gp *Europe	Ln(TA)	GS Decile	CRation	D/A	Legal Res	Europe	Civil	Adj. R <sup>2</sup>	F
IADiv/cf	4.97 <sup>a</sup> (2.88)	0.518 (0.38)	3.806 <sup>a</sup> (2.84)	-5.124 <sup>a</sup> (-3.20)	1.663 <sup>b</sup> (2.06)	1.967 <sup>b</sup> (2.06)	0.65 <sup>a</sup> (6.93)	-0.23 <sup>a</sup> (-3.06)	-0.199 <sup>a</sup> (-2.73)	-10.91 <sup>a</sup> (-13.17)	-8.12 <sup>a</sup> (-7.33)	-0.134 (-0.26)	-3.79 <sup>a</sup> (-8.83)	0.062	51.01 <sup>a</sup>
IADiv/earn	-18.93 <sup>a</sup> (-7.37)	-0.213 (-0.11)	7.468 <sup>a</sup> (3.75)	-9.005 <sup>a</sup> (-3.78)	2.572 <sup>b</sup> (2.14)	2.650 <sup>c</sup> (1.86)	2.22 <sup>a</sup> (15.78)	-0.27 <sup>b</sup> (-2.42)	-0.36 <sup>a</sup> (-3.34)	-12.70 <sup>a</sup> (-10.30)	-10.65 <sup>a</sup> (-6.47)	-0.509 (-0.66)	-0.803 (-1.26)	0.042	34.09 <sup>a</sup>
IADiv/mkcap	-0.56 <sup>a</sup> (-3.08)	0.625 <sup>a</sup> (4.41)	0.347 <sup>b</sup> (2.47)	-0.454 <sup>a</sup> (-2.71)	-0.437 <sup>a</sup> (-5.16)	0.199 <sup>b</sup> (1.98)	0.06 <sup>a</sup> (6.51)	0.010 (1.23)	-0.006 (-0.72)	-0.28 <sup>a</sup> (-3.25)	-0.67 <sup>a</sup> (-5.77)	0.68 <sup>a</sup> (12.38)	-0.45 <sup>a</sup> (-9.91)	0.076	63.06 <sup>a</sup>
IADiv/sale	2.80 <sup>a</sup> (4.00)	0.778 (1.42)	0.452 (0.83)	-0.704 (-1.09)	-0.087 (-0.27)	1.763 <sup>a</sup> (4.55)	0.48 <sup>a</sup> (12.54)	0.035 (1.14)	-0.25 <sup>a</sup> (-8.58)	-12.18 <sup>a</sup> (-36.26)	-1.86 <sup>a</sup> (-4.15)	0.91 <sup>a</sup> (4.33)	-1.15 <sup>a</sup> (-6.58)	0.169	155.07 <sup>a</sup>
<b>Panel B: Group affiliation defined at the 10% level of control</b>															
IADiv/cf	9.21 <sup>a</sup> (2.89)	-3.465 (-1.17)	-0.726 (-0.25)	-1.314 (-0.44)	1.285 (1.60)	2.728 <sup>a</sup> (2.91)	0.66 <sup>a</sup> (6.96)	-0.22 <sup>a</sup> (-2.96)	-0.20 <sup>a</sup> (-2.75)	-10.98 <sup>a</sup> (-13.25)	-8.15 <sup>a</sup> (-7.39)	-0.11 (-0.21)	-3.79 <sup>a</sup> (-8.88)	0.062	51.21 <sup>a</sup>
IADiv/earn	-10.11 <sup>b</sup> (-2.14)	-8.80 <sup>b</sup> (-2.00)	-2.206 (-0.51)	-0.069 (-0.02)	1.796 (1.50)	4.050 <sup>a</sup> (2.91)	2.21 <sup>a</sup> (15.73)	-0.25 <sup>b</sup> (-2.28)	-0.36 <sup>a</sup> (-3.35)	-12.78 <sup>a</sup> (-10.37)	-10.72 <sup>a</sup> (-6.54)	-0.37 (-0.48)	-0.75 (-1.18)	0.042	34.04 <sup>a</sup>
IADiv/mkcap	-0.11 (-0.32)	0.237 (0.76)	-0.142 (-0.47)	-0.123 (-0.39)	-0.482 <sup>a</sup> (-5.73)	0.345 <sup>a</sup> (3.51)	0.07 <sup>a</sup> (6.57)	0.01 (1.31)	-0.01 (-0.72)	-0.29 <sup>a</sup> (-3.30)	-0.68 <sup>a</sup> (-5.89)	0.66 <sup>a</sup> (12.19)	-0.45 <sup>a</sup> (-10.0)	0.076	63.29 <sup>a</sup>
IADiv/sale	3.35 <sup>a</sup>	0.223	-0.215	0.002	-0.026	1.545 <sup>a</sup>	0.48 <sup>a</sup>	0.03	-0.25 <sup>a</sup>	-12.19 <sup>a</sup>	-1.83 <sup>a</sup>	0.91 <sup>a</sup>	-1.17 <sup>a</sup>	0.169	154.23 <sup>a</sup>

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(2.59)	(0.19)	(-0.18)	(0.00)	(-0.08)	(4.07)	(12.60)	(1.11)	(-8.52)	(-36.28)	(-4.10)	(4.36)	(-6.77)
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**TABLE 7: REGRESSIONS OF DIVIDEND RATES BY GROUP AFFILIATION**

Dividend rates are industry-adjusted. At the 20% level of control, the sample includes 2787 group-affiliated corporations and 3110 non-affiliated corporations. At 10% level of control, the sample includes 3286 group-affiliated corporations and 2611 non-affiliated corporations. The regressions use ordinary least squares. <sup>a</sup>, <sup>b</sup>, and <sup>c</sup> denote significance at the 1%, 5%, and 10% levels, respectively. T-values are reported in parentheses below the coefficients estimates.

	Intercept	O/C	Ln(TA)	GSDecile	CRation	D/A	Legal Res	Europe	Civil Law	Adj. R <sup>2</sup>	F
<b>IADiv/cf as dependent variable</b>											
Group Affil.at 20%	19.18 <sup>a</sup>	-3.934 <sup>a</sup>	0.222	-0.364 <sup>a</sup>	-0.374 <sup>a</sup>	-13.611 <sup>a</sup>	-5.120 <sup>b</sup>	2.934 <sup>a</sup>	-6.385 <sup>a</sup>	0.112	44.88 <sup>a</sup>
	(7.75)	(-4.25)	(1.19)	(-2.87)	(-3.00)	(-8.96)	(-2.01)	(4.60)	(-8.02)		
Non-affil. at 20%	14.154 <sup>a</sup>	0.455	0.066	-0.445 <sup>a</sup>	-0.178	-12.257 <sup>a</sup>	-6.133 <sup>a</sup>	0.697	-3.829 <sup>a</sup>	0.070	25.23 <sup>a</sup>
	(4.96)	(0.31)	(0.33)	(-3.36)	(-1.35)	(-7.86)	(-3.78)	(1.05)	(-5.06)		
Group Affil.at 10%	17.96 <sup>a</sup>	-3.824 <sup>a</sup>	0.19	-0.36 <sup>a</sup>	-0.31 <sup>a</sup>	-13.32 <sup>a</sup>	-5.37 <sup>a</sup>	3.40 <sup>a</sup>	-5.92 <sup>a</sup>	0.110	51.74 <sup>a</sup>
	(8.02)	(-4.49)	(1.10)	(-3.16)	(-2.68)	(-9.61)	(-2.89)	(5.93)	(-8.47)		
Non-affil. at 10%	19.01 <sup>a</sup>	-3.758	0.14	-0.49 <sup>a</sup>	-0.24	-12.67 <sup>a</sup>	-6.47 <sup>a</sup>	0.29	-3.79 <sup>a</sup>	0.067	19.91 <sup>a</sup>
	(3.06)	(-0.69)	(0.62)	(-3.26)	(-1.60)	(-7.21)	(-3.20)	(0.38)	(-4.45)		
<b>IADiv/earn as dependent variable</b>											
Group Affil.at 20%	-3.256	-7.557 <sup>a</sup>	2.081 <sup>a</sup>	-0.422 <sup>b</sup>	-0.185	-21.363 <sup>a</sup>	6.442 <sup>c</sup>	5.262 <sup>a</sup>	-5.932 <sup>a</sup>	0.059	23.03 <sup>a</sup>
	(-0.89)	(-5.52)	(7.53)	(-2.25)	(-1.00)	(-9.50)	(1.68)	(5.57)	(-5.03)		

Non-affil. at 20%	-5.662	-1.091	1.180 <sup>a</sup>	-0.209	-0.900 <sup>a</sup>	-9.887 <sup>a</sup>	-11.489 <sup>a</sup>	1.209	1.520	0.021	7.85 <sup>a</sup>
	(-1.26)	(-0.48)	(3.77)	(-1.00)	(-4.36)	(-4.04)	(-4.51)	(1.16)	(1.28)		
Group Affil.at 10%	-3.74	-6.858 <sup>a</sup>	1.94 <sup>a</sup>	-0.43 <sup>b</sup>	-0.26	-19.88 <sup>a</sup>	-2.20	5.69 <sup>a</sup>	-3.47 <sup>a</sup>	0.051	22.87 <sup>a</sup>
	(-1.09)	(-5.26)	(7.39)	(-2.46)	(-1.48)	(-9.36)	(-0.77)	(6.48)	(-3.24)		
Non-affil. at 10%	13.39	-21.584 <sup>a</sup>	1.26 <sup>a</sup>	-0.15	-0.89 <sup>a</sup>	-8.56	-10.53	0.40	0.78	0.022	7.02 <sup>a</sup>
	(1.43)	(-2.62)	(3.70)	(-0.67)	(-4.02)	(-3.23)	(-3.46)	(0.35)	(0.61)		

TABLE 7 (CONTINUED)

	Intercept	O/C	Ln(TA)	GSDecile	CRation	D/A	Legal Res	Europe	Civil Law	Adj. R <sup>2</sup>	F
<b>IADiv/mkcap as dependent variable</b>											
Group Affil.at 20%	1.213 <sup>a</sup>	0.032	-0.024	0.003	-0.007	-0.180	-1.125 <sup>a</sup>	0.517 <sup>a</sup>	-0.439 <sup>a</sup>	0.079	30.72 <sup>a</sup>
	(4.30)	(0.30)	(-1.15)	(0.17)	(-0.48)	(-1.04)	(-3.82)	(7.11)	(-4.84)		
Non-affil. at 20%	0.358	0.537 <sup>a</sup>	-0.012	0.031 <sup>b</sup>	-0.010	-0.240	-0.544 <sup>a</sup>	0.263 <sup>a</sup>	-0.367 <sup>a</sup>	0.047	17.04 <sup>a</sup>
	(1.12)	(3.29)	(-0.52)	(2.07)	(-0.70)	(-1.37)	(-3.00)	(3.52)	(-4.33)		
Group. Affil. at 10%	1.05 <sup>a</sup>	0.031	-0.02	0.01	0.00	-0.26 <sup>c</sup>	-0.76 <sup>a</sup>	0.60 <sup>a</sup>	-0.45 <sup>a</sup>	0.088	40.48 <sup>a</sup>
	(4.24)	(0.33)	(-1.30)	(0.80)	(-0.22)	(-1.67)	(-3.68)	(9.48)	(-5.79)		
Non-affil. at 10%	1.97 <sup>a</sup>	-1.052	-0.001	0.02	-0.01	-0.16	-0.63 <sup>a</sup>	0.16 <sup>c</sup>	-0.36 <sup>a</sup>	0.030	9.01 <sup>a</sup>
	(2.72)	(-1.61)	(-0.05)	(1.21)	(-0.84)	(-0.80)	(-2.70)	(1.83)	(-3.66)		
<b>IADiv/sale as dependent variable</b>											
Group Affil.at 20%	6.112 <sup>a</sup>	0.620	0.578 <sup>a</sup>	-0.039	-0.329 <sup>a</sup>	-17.659 <sup>a</sup>	0.305	2.302 <sup>a</sup>	-2.030 <sup>a</sup>	0.252	118.61 <sup>a</sup>
	(5.32)	(1.44)	(6.67)	(-0.66)	(-5.70)	(-25.04)	(0.25)	(7.77)	(-5.49)		
Non-affil. at 20%	3.445 <sup>a</sup>	1.008 <sup>c</sup>	0.437 <sup>a</sup>	-0.039	-0.239 <sup>a</sup>	-11.775 <sup>a</sup>	-1.458 <sup>b</sup>	0.812 <sup>a</sup>	-1.165 <sup>a</sup>	0.148	57.52 <sup>a</sup>
	(3.01)	(1.72)	(5.47)	(-0.73)	(-4.52)	(-18.84)	(-2.24)	(3.04)	(-3.84)		



Group	5.27 <sup>a</sup>	0.590	0.56 <sup>a</sup>	-0.01	-0.31 <sup>a</sup>	-16.25 <sup>a</sup>	-0.62	2.18 <sup>a</sup>	-1.93 <sup>a</sup>	0.235	127.42 <sup>a</sup>
Affil.at 10%	(5.13)	(1.51)	(7.18)	(-0.26)	(-5.94)	(-25.57)	(-0.73)	(8.28)	(-6.03)		
Non-affil. at 10%	5.42 <sup>b</sup>	-0.518	0.48 <sup>a</sup>	-0.10	-0.24 <sup>a</sup>	-12.87 <sup>a</sup>	-1.43 <sup>c</sup>	0.94 <sup>a</sup>	-1.09 <sup>a</sup>	0.157	49.68 <sup>a</sup>
	(2.17)	(-0.24)	(5.22)	(-1.58)	(-4.13)	(-18.18)	(-1.76)	(3.13)	(-3.17)		

**TABLE 8: REGRESSIONS OF DIVIDEND RATES FOR GROUP-AFFILIATED CORPORATIONS IN EUROPE AND ASIA**

Dividend rates are industry-adjusted. Group affiliation is defined at the 20% level. The sample includes 1,525 group-affiliated corporations in Europe and 1,262 group-affiliated corporations in Asia. The regressions use ordinary least squares. <sup>a</sup>, <sup>b</sup>, and <sup>c</sup> denote significance at the 1%, 5%, and 10% levels, respectively. T-values are reported in parentheses below the coefficient estimates.

	Intercept	Multiple Owners	O/C	Ln(TA)	GSDecile	CRation	D/A	Legal Res	Civil Law	Adj. R <sup>2</sup>	F
<b>IADiv/cf as dependent variable</b>											
Europe	18.63 <sup>a</sup> (5.61)	-0.017 (-0.02)	-2.942 <sup>b</sup> (-2.11)	0.53 <sup>b</sup> (2.12)	-0.17 (-0.91)	-0.57 <sup>a</sup> (-3.37)	-13.93 <sup>a</sup> (-6.71)	15.36 (1.45)	-7.98 <sup>a</sup> (-4.45)	0.080	17.639 <sup>a</sup>
Asia	18.43 <sup>a</sup> (4.94)	-3.14 <sup>a</sup> (-3.78)	-2.061 (-1.63)	-0.16 (-0.56)	-0.33 <sup>c</sup> (-1.88)	-0.30 (-1.56)	-13.68 <sup>a</sup> (-6.08)	-5.79 <sup>b</sup> (-2.21)	-5.98 <sup>a</sup> (-5.10)	0.104	19.336 <sup>a</sup>
<b>IADiv/earn as dependent variable</b>											
Europe	5.55 (1.19)	3.719 <sup>a</sup> (3.26)	-5.878 <sup>a</sup> (-3.00)	2.09 <sup>a</sup> (5.92)	-0.16 (-0.61)	-0.28 (-1.19)	-26.62 <sup>a</sup> (-9.11)	16.91 (1.13)	-8.00 <sup>a</sup> (-3.18)	0.083	18.156 <sup>a</sup>
Asia	-12.71 <sup>b</sup> (-2.15)	-2.082 (-1.58)	-6.65 <sup>a</sup> (-3.31)	2.27 <sup>a</sup> (5.05)	-0.61 <sup>b</sup> (-2.17)	-0.04 (-0.15)	-14.41 <sup>a</sup> (-4.03)	3.20 (0.77)	-3.38 <sup>c</sup> (-1.82)	0.034	6.50 <sup>a</sup>
<b>IADiv/mkcap as dependent variable</b>											
Europe	2.01 <sup>a</sup> (5.83)	0.031 (0.37)	-0.355 <sup>b</sup> (-2.44)	0.03 (1.18)	-0.12 <sup>a</sup> (-6.32)	-0.003 (-0.15)	0.08 (0.36)	4.03 <sup>a</sup> (3.65)	-1.04 <sup>a</sup> (-5.57)	0.044	9.69 <sup>a</sup>
Asia	1.47 <sup>a</sup> (3.22)	-0.090 (-0.88)	0.185 (1.19)	-0.09 <sup>a</sup> (-2.68)	0.12 <sup>a</sup> (5.34)	-0.005 (-0.21)	-0.27 (-0.98)	-0.88 <sup>a</sup> (-2.75)	-0.61 <sup>a</sup> (-4.25)	0.093	17.12 <sup>a</sup>
<b>IADiv/sale as dependent variable</b>											
Europe	9.80 <sup>a</sup> (5.36)	0.825 <sup>c</sup> (1.85)	1.663 <sup>b</sup> (2.17)	0.88 <sup>a</sup> (6.36)	-0.11 (-1.11)	-0.30 <sup>a</sup> (-3.27)	-26.750 (-23.39)	-2.50 (-0.43)	-0.94 (-0.95)	0.298	81.86 <sup>a</sup>
Asia	3.96 <sup>a</sup> (4.71)	-0.457 <sup>b</sup> (-2.44)	0.011 (0.04)	0.15 <sup>b</sup> (2.38)	0.09 <sup>b</sup> (2.29)	-0.15 <sup>a</sup> (-3.38)	-5.45 <sup>a</sup> (-10.76)	-0.85 (-1.44)	-2.59 <sup>a</sup> (-9.82)	0.238	50.21 <sup>a</sup>

**TABLE 9: COUNTRY REGRESSIONS OF DIVIDEND RATES FOR GROUP-AFFILIATED CORPORATIONS**

Dividend rates are industry-adjusted. Group affiliation is defined at the 20% level. The sample size N for each country is given in the right column. The regressions use ordinary least squares. We report the estimated coefficients of the O/C variable for group-affiliated corporations. All regressions include corporation size ( $Ln(TA)$ ), the growth of sales decile ( $GSDecile$ ), the capital rationing dummy ( $CRation$ ), and leverage ( $D/A$ ) as control variables. T-values are reported in parentheses below the coefficient estimates. <sup>a</sup>, <sup>b</sup>, and <sup>c</sup> denote significance at the 1%, 5%, and 10% levels, respectively.

<b>Panel A: Coefficient Estimates for the O/C variable</b>					
	IADiv/cf	IADiv/earn	IADiv/sale	IADiv/mkcap	N
France	-8.393 <sup>a</sup> (-2.90)	2.766 (0.31)	-0.576 (-0.18)	0.613 (0.94)	250
Germany	-2.868 (-1.26)	-3.495 (-0.66)	1.310 (1.00)	0.094 (0.32)	268
Hong Kong	2.371 (0.25)	6.134 (0.83)	-2.686 (-1.04)	0.628 (0.80)	120
Indonesia	6.749 (0.97)	-1.203 (-0.21)	2.129 <sup>b</sup> (2.13)	-0.357 (-0.60)	117
Italy	-0.712 (-0.29)	4.333 (0.98)	0.638 <sup>c</sup> (1.70)	0.108 (0.36)	110
Japan	-0.337 (-0.43)	-3.250 (-1.20)	0.049 (0.93)	-0.053 (-1.22)	611
Malaysia	-0.341 (-0.05)	4.646 (0.49)	2.206 (1.00)	0.498 (1.21)	90
Philippines	-3.884 (-0.54)	1.364 (0.19)	0.685 (0.70)	0.233 (0.08)	74
Singapore	-29.916 <sup>b</sup> (-2.23)	-37.150 <sup>a</sup> (-2.93)	-1.313 (-0.99)	-1.387 <sup>b</sup> (-2.47)	33
South Korea	2.533 (0.74)	-8.208 (-1.14)	-0.047 (-0.24)	-0.213 (-0.66)	149
Spain	-0.012 (-0.09)	-5.390 <sup>a</sup> (-2.68)	-0.830 <sup>b</sup> (-2.53)	-0.462 <sup>a</sup> (-2.93)	274
Taiwan	n.a.	n.a.	n.a.	n.a.	0
Thailand	26.33 <sup>b</sup> (2.16)	21.520 (1.31)	3.550 (0.95)	0.960 (0.74)	51

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U.K.	-6.780 <sup>b</sup> (-2.37)	-8.653 <sup>a</sup> (-2.80)	2.207 (1.54)	-0.812 <sup>a</sup> (-3.32)	623
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TABLE 9 (CONTINUED)

Panel B: Coefficient Estimates for the <i>Multiple Owners Variable</i>					
	IADiv/cf	IADiv/earn	IADiv/sale	IADiv/mkcap	N
France	1.243 (1.09)	2.946 (0.85)	2.618 <sup>b</sup> (2.03)	0.257 (1.00)	250
Germany	0.923 (0.63)	9.954 <sup>a</sup> (2.92)	1.547 <sup>c</sup> (1.83)	0.058 (0.31)	268
Hong Kong	0.964 (0.20)	3.336 (0.87)	-0.790 (-0.59)	0.203 (0.50)	120
Indonesia	2.412 (0.68)	2.990 (1.01)	-0.186 (-0.36)	0.419 (1.36)	117
Italy	1.085 (0.62)	2.094 (0.66)	0.274 (1.02)	-0.068 (-0.31)	110
Japan	-0.190 (-0.33)	-0.390 (-0.19)	-0.074 <sup>c</sup> (-1.91)	0.035 (1.07)	611
Malaysia	-1.113 (-0.21)	-2.591 (-0.38)	-0.234 (-0.15)	0.044 (0.15)	90
Philippines	-29.687 <sup>a</sup> (-3.51)	-6.661 (-0.78)	-0.550 (-0.48)	0.118 (0.04)	74
Singapore	2.041 (0.29)	0.766 (0.12)	-0.095 (-0.14)	0.252 (0.86)	33
South Korea	-5.412 <sup>a</sup> (-3.32)	-2.568 (-0.74)	-0.034 (-0.36)	-0.270 <sup>c</sup> (-1.75)	149
Spain	-0.047 (-0.72)	-0.824 (-0.86)	-0.115 (-0.74)	-0.121 (-1.61)	274
Taiwan	n.a.	n.a.	n.a.	n.a.	0
Thailand	n.a.	n.a.	n.a.	n.a.	0
U.K.	-0.346 (-0.20)	3.435 <sup>c</sup> (1.88)	0.437 (0.51)	0.023 (0.16)	623