

# Dividends and Expropriation

By MARA FACCIO, LARRY H. P. LANG, AND LESLIE YOUNG\*

*Whereas most U.S. corporations are widely held, the predominant form of ownership in East Asia is control by a family, which often supplies a top manager. These features of “crony capitalism” are actually more pronounced in Western Europe. In both regions, the salient agency problem is expropriation of outside shareholders by controlling shareholders. Dividends provide evidence on this. Group-affiliated corporations in Europe pay higher dividends than in Asia, dampening insider expropriation. Dividend rates are higher in Europe, but lower in Asia, when there are multiple large shareholders, suggesting that they dampen expropriation in Europe, but exacerbate it in Asia. (JEL G34, G35)*

Failures in East Asian corporate governance have recently attracted wide attention through being blamed for the East Asian financial crisis. Based only on journalistic anecdotes, the accusations of “crony capitalism” met regional scepticism and are now being shrugged off as East Asian economies recover. This paper provides a comprehensive analysis of the ownership and control structure of East Asian corporations, with West European corporations as benchmarks. We document that the problems of East Asian corporate governance are, if anything, more severe and intractable than suggested by commentators at the height of the financial crisis. These problems we locate in an extraordinary concentration of control, whereby eight groups control more than one-quarter of the corporations in the nine most advanced East Asian economies. This control is obscured behind layers of corporations, hence insulated against the forces of competition on less-than-

transparent capital markets. By examining how dividend behavior is related to the structure of ownership and control, we find evidence of systematic expropriation of the outside shareholders of corporations at the base of extensive corporate pyramids. Thus, the controlling shareholders can extract high returns from projects that yield negative returns to the corporation. The piling up of such projects in East Asia, with their burden of unrepayable debt, helped precipitate the financial crisis. Moreover, the concentration of corporate control is such that these problems should be recognized as problems of political, not merely corporate, governance. In Western Europe, corporate control is also highly concentrated, but we identify critical differences in the ownership and control structure, such that macroeconomic problems are unlikely to result.

Research on corporate governance has mostly addressed the United States, whose well-regulated, transparent financial markets and dispersed share ownership leave the salient agency problem as that between manager and shareholders.<sup>1</sup> In East Asia, widely held corporations are in the minority, the predominant ownership structure being control by a family, which often supplies a top manager. These features of “crony capitalism” are actually even more pronounced in Western Europe, as we shall docu-

\* Faccio: Dipartimento di Scienze dell’Economia della Gestione Aziendale, Università Cattolica del Sacro Cuore, Largo Gemelli 1, 20123 Milano, Italy (e-mail: mara.faccio@mi.unicatt.it); Lang: Finance Department, Chinese University of Hong Kong, Hong Kong (e-mail: llang@baf.msmail.cuhk.edu.hk.); Young: Asia Pacific Institute of Business, Chinese University of Hong Kong, Hong Kong (e-mail: leslie@baf.msmail.cuhk.edu.hk). We acknowledge helpful comments from Maurizio Murgia, Andrei Shleifer, a referee, and seminar participants at the 2000 European Financial Management Association meeting in Athens. We thank Stijn Claessens, Simeon Djankov, and Joseph Fan for providing their data for East Asia. Larry Lang acknowledges research support from a Hong Kong UGC Earmarked Grant.

<sup>1</sup> Michael C. Jensen (1986, 1989) argued that managers can expropriate dispersed shareholders by diverting corporate resources for perquisites and empire building.

ment by tracing the ultimate ownership of 5,897 corporations from the Worldscope database for five West European and nine East Asian economies. Therefore, the salient agency problem in these economies is expropriation of outside shareholders by the controlling shareholder.<sup>2</sup> As noted by Lucian Bebchuk et al. (1998), Stijn Claessens et al. (1999a), and Daniel Wolfenzon (1999), particularly rich possibilities for expropriation arise when the corporation is affiliated to a group of corporations, all controlled by the same shareholder, which we find to be 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 intragroup sales of goods and services and transfers of assets and control stakes.<sup>4</sup>

Dividends play a basic role in limiting insider expropriation because they remove corporate wealth from insider control. This view of dividends is taken by Rafael La Porta et al. (2000b), who report that higher dividends are paid by corporations in countries with strong legal protection of minority 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 gets beyond the analysis of specific types of expropriation<sup>5</sup> to test how capital mar-

kets 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 that comprises at least 20 percent 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-percent level, but are not all above the 20-percent level. This suggests that investors anticipate strongly the expropriation within corporations with low *O/C* ratios that are tightly affiliated to a group; higher dividends are paid to allay these concerns, as corporations compete for capital. However, investors seem less alert to expropriation within loosely affiliated corporations, allowing their insiders latitude to pay lower dividends, given a greater discrepancy between their ownership and control rights. In our five West European economies, loosely affiliated corporations comprise only 2.94 percent of our sample; in our nine East Asian economies, they comprise 15.44 percent. Moreover, the eight largest East Asian groups at the 10-percent level of control comprise over one-quarter of all East Asian corporations and three-quarters of 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 other large shareholders appear to

<sup>2</sup> Andrei Shleifer and Robert 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> Group affiliation is insignificant in the United States. See Shleifer and Vishny's (1997) survey of corporate governance.

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

<sup>5</sup> An important strand of the literature links ownership structures to the expropriation of different classes of stakeholders. Ileen Malitz (1989) examines debt restructuring in the United States for expropriation of bondholders' wealth

by block-holders of equity. For listed stocks in the United States, Myron Slovin and Marie Sushka (1997) study the expropriation of shareholders in subsidiaries by the parent corporation, but cannot confirm expropriation. David Weinstein and Yishay 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 of corporate governance and performance in Japan include Masahiko Aoki (1990), Takeo Hoshi et al. (1990), Stephen Prowse (1992), and Steven Kaplan (1994).

help contain the controlling shareholder's expropriation of minority shareholders; in East Asia they appear to collude in that expropriation. Against the West European benchmark, we thus have quantitative evidence on the impact of the failures of East Asian corporate governance and institutional development that the Asian financial crisis highlighted as "crony capitalism."

Section I explains the economic role of the controlling shareholder's ratio O/C of ownership to control rights as an indicator of the corporation's vulnerability to expropriation, hence as a driver of dividend policy. Section II presents definitions and summary statistics on ownership and control in Europe and Asia. Section III presents definitions and summary statistics on dividend rates. Section IV presents our regression results. Section V discusses the policy implications of our findings. Data sources are listed in Appendices A and B.

### I. The Economic Framework

We first explain the economic basis for testing for a relationship between the O/C ratio and dividends, highlighting two considerations with opposite implications for the sign of this relationship. 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 percent of the shares of X, which owns 40 percent of the shares of Y, which owns 30 percent of the shares in Z, has 6 percent of the ownership rights of Z, but 30 percent 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 that offers many opportunities for intragroup transactions to expropriate minority shareholders. This indicates that a corporation with a low O/C ratio will pay low dividends, since the controlling shareholder will seek to keep control of corporate resources. However, this consideration must be traded off against the impact of dividend policy on the corporation's market valuation, hence the future terms on which it can access capital markets.

Rational investors, perceiving the higher risk of insider expropriation within a corporation with a lower O/C ratio, would attach a lower value to its stock and would be less willing to supply capital.<sup>6</sup> Dividend policy can address these concerns. In practice, dividend rates are stable: increases are contemplated only if the managers believe that they can be sustained, mindful that dividend reductions tend to bring sharp falls in stock market value.<sup>7</sup> Dividend policy is thus a vehicle for long-term commitments by managers to shareholders that can be used to address the agency problems arising from information asymmetry and incomplete contracting between the two parties.<sup>8</sup> If these

<sup>6</sup> Consistent with investors regarding a low O/C ratio as indicating greater vulnerability to insider expropriation, Claessens et al. (1999a) find a positive relationship between O/C and Tobin's Q for corporations in East Asia. Given our finding of a negative relationship between O/C and dividends, we would expect a negative relationship between Q and dividend rates. Testing the relationship between market valuation and dividends is beyond the scope of this paper.

<sup>7</sup> John Lintner (1956), Eugene F. Fama and Harvey Babiak (1968), Joseph Aharony and Itzhak Swary (1980), Drew Fudenberg and Jean Tirole (1995), and Roni Michaely et al. (1995).

<sup>8</sup> Michael J. Barclay et al. (1995) provide a statement and empirical test of the agency cost model of dividends. The extensive literature on the information revelation function of dividends includes Ross L. Watts (1973), Suddipto Bhattacharya (1979), Paul Asquith and David Mullins (1983), James A. Brickley (1983), Kose John and Joseph Williams (1985), Avner Kalay and Uri Loewenstein (1985, 1986), Merton H. Miller and Kevin Rock (1985), Paul M. Healy and Krishna G. Palepu (1988), Praveen Kumar (1988), Lang and Robert H. Litzenberger (1989), and Bong-Soo Lee (1995). Other explanations of why firms pay dividends include taxation [Miller and Myron S. Scholes (1978, 1982), Litzenberger and Krishna Ramaswamy (1979), and James Poterba and Lawrence Summers (1984)]; transaction costs [R. Richardson Pettit (1972)]; and fore-

agency problems seem particularly severe in the light of objective information, such as a low O/C ratio, then managers could commit to refrain from expropriation by committing to a high dividend rate, thereby sustaining their corporation's stock market valuation and future access to capital.<sup>9</sup>

Theoretical analysis of the interaction between the above two considerations would involve a choice of model structure that prejudices which factors are key. By regressing dividends on the O/C ratio, we seek to identify the factors that are empirically important in determining 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, our regressions are biased toward finding insignificant results.<sup>10</sup> We 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.<sup>11</sup>

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stalling the diversion of cash to unprofitable projects that provide private benefits to "insiders" [Frank Easterbrook (1984), Jensen (1986), Lang and Litzenberger (1989)].

<sup>9</sup> If dividend changes affect expectations about expropriation, then stock market value should be more sensitive to dividend changes when O/C is low, than when it is high. Although beyond the scope of this paper, this could be tested by observing the effect of changes in dividend announcements on corporations with high O/C ratios, as opposed to those with low O/C ratios. To be consistent with our hypothesis, the latter group should exhibit a greater announcement effect for a given dividend change.

<sup>10</sup> High management ownership obviates the bonding of management behavior via dividends, so the inclusion of O as an independent variable in our regressions could weaken the relationship between O/C and dividends. In fact, adding O has no significant impact on our results. Moreover, the coefficient of O is neither statistically significant nor consistent in sign across regressions. Thus, the impact of high management ownership seems to be captured adequately through the O/C ratio.

<sup>11</sup> In line with Jensen's (1986) arguments on free cash flow, debt is an alternative to dividends in controlling agency problems, including those arising from a low O/C ratio within a group. These arguments suggest that, in developed capital markets, firms with a low O/C ratio should have relatively high levels of debt. However, debt might be used to facilitate expropriation in capital markets where it is not readily enforceable, as international lenders found to their cost in Thailand, Indonesia, and South Korea. Faccio et al. (2000) consider how to distinguish empirically

We hypothesize that the trade-off between the above two considerations depends on how tightly a corporation is controlled: if control is tight, so that the possibility of expropriation is highly visible to investors, then the second consideration should dominate and dividend rates should be negatively related to the O/C ratio; if control is loose, so that the possibility of expropriation is more obscure, then the first consideration should dominate and dividend rates should be positively related to the O/C ratio.

## II. 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 United Kingdom. In the Worldscope database of all listed corporations in these countries, we use the accounting data for 1992–1996, 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 A and B. 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 percent 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 percent of the control rights at each link.<sup>12</sup> Claessens et al. (2000) carried out this task using 1996 data for East Asian corporations, of which 2,603 have credible accounting data also; Faccio and Lang (2000) extend their work to Western Europe, identifying the ultimate ownership and control of 3,294

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between these two roles of debt. The present paper controls for the impact of debt by including the debt/asset ratio as an independent variable in the regressions.

<sup>12</sup> The same 5-percent cutoff was used by La Porta et al. (1999) and Claessens et al. (2000).

TABLE 1—OWNERSHIP AND CONTROL IN WESTERN EUROPE AND EAST ASIA

	20-percent cutoff			10-percent cutoff	
	Europe	Asia	LLS	Europe	Asia
A: Percentage of Corporations by Controlling Owner					
No one has $\geq$ cutoff percentage of control rights	39.01	43.60	36.48	15.60	20.28
Family	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
Miscellaneous (foreign-owned, reciprocal holdings)	2.06	0.00	5.19	3.91	0.00
B: Percentage of Corporations with Controlling Owner that Use Control Enhancements					
Top manager from controlling shareholder's family	68.12	57.10	68.59	66.04	54.55
No one else has $\geq$ 10 percent of control rights	54.69	67.80	75.48	54.91	62.26
C: Percentage of Corporations by Forms of Control					
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.
D: Mean Percentage Holding of Largest Shareholder of Corporations Where One Shareholder Holds at Least 5 Percent of the Control Rights					
Ownership rights	34.60	15.70			
Control rights	37.75	19.77			
Ownership/Control rights	0.877	0.746			

corporations with credible accounting data in 1996. Thus, our empirical results are based on 5,897 financial and nonfinancial 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 nonfinancial 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 con-

sider two cutoff levels: 20 percent and 10 percent. The 20-percent 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 investors. However, we also find evidence that weaker control links permit expropriation that is not recognized by investors. 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 that are widely held at the 20-percent or the 10-percent levels are typical in the United States, Table 1, Panel A, shows that such corporations are a minority in Asia (respectively 43.60 percent and 20.28 percent), and even more so in Europe (respectively 39.01 percent and 15.60 percent). 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-percent and the 10-percent

levels (controlling respectively 37.86 percent and 45.05 percent of corporations) and even more so in Europe (controlling respectively 43.13 percent and 55.90 percent).<sup>13</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 other ultimate owners each hold only a small proportion of the control rights, say less than 10 percent. Table 1, Panel B, 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 percent of the control rights.

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>14</sup> Table 1, Panel C, gives the percentages of corporations that are group affiliated at the 20-percent and the 10-percent 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 that 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-percent level, but a substantially lower percentage at the 10-percent

level. Lowering the cutoff level of control from 20 percent to 10 percent adds only 97 European corporations (2.94 percent) to those classified as group affiliated. This suggests that high levels of control rights (in excess of 20 percent) are generally needed for effective control in Europe. By contrast, lowering the cutoff level of control from 20 percent to 10 percent adds 402 Asian corporations (15.44 percent) to those classified as group affiliated, i.e., over one-seventh of Asian corporations are “loosely affiliated,” in that they are group affiliated at the 10-percent level but not at the 20-percent 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 1, Panel D, 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 percent vs. 15.70 percent), 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 shows that, at the 20-percent level of control, the size distribution of groups does not differ greatly between Europe and Asia; neither region has a group comprising more than 100 companies. However, at the 10-percent level, the typical European group is significantly smaller, and thus more transparent, which also reduces the scope for expropriation. At the 10-percent level, there are zero European groups, but three Asian groups, comprising more than 100 corporations. In Europe, the top five ultimate owners control 326 corporations (9.90 percent); the top 18 groups control 533 (16.18 percent). In Asia, the top six ultimate owners control 611 corporations (23.47 percent), including 313 (77.86 percent) of those that are loosely affiliated; the top 22 ultimate owners control 838 (32.19 percent), including 335 (83.33 percent) of those that are loosely affiliated. Our regressions will indicate that loosely affiliated corporations are most vulnerable to expropriation.

### III. Dividend Data

The rate at which corporations pay dividends provides a perspective on insider expropriation

<sup>13</sup> The percentages would be even higher if we exclude Japan and the United Kingdom, which have much less family control.

<sup>14</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). Tarun Khanna and Krishna Palepu (2000) use a different definition.

TABLE 2—GROUP SIZES IN WESTERN EUROPE AND EAST ASIA

Group size range	20-percent cutoff				10-percent cutoff				Loosely affiliated	
	Europe		Asia		Europe		Asia		Europe	Asia
	Groups	Corporations	Groups	Corporations	Groups	Corporations	Groups	Corporations	Corporations	
[100, 200)	0	0	0	0	0	0	3	359	0	229
[50, 100)	1	51	1	53	5	326	3	252	80	84
[20, 50)	6	175	7	221	3	78	2	45	11	1
[10, 20)	6	78	13	166	10	129	14	182	1	21
[5, 10)	34	201	21	165	46	304	36	256	1	8
[2, 5)		1,020		657		785		570	4	59
Total group affiliates		1,525		1,262		1,622		1,664	97	402
Total corporations		3,294		2,603		3,294		2,603		

Notes: The column headed "Groups" gives the number of groups with  $n$  affiliated corporations where  $n$  is in the size range specified. The column headed "Corporations" gives the total number of corporations affiliated to groups in the specified size range.

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.<sup>15</sup> The rate at which dividends are paid shall be measured by four ratios:

- (1) The dividend/cash-flows ratio ( $Div/cf$ ), where cash flows are defined as total cash from operations, net of noncash items from discontinued operations.
- (2) The dividend/earnings ratio ( $Div/earn$ ), where earnings are measured after taxes and interest but before extraordinary items.
- (3) The dividend/sales ratio ( $Div/sale$ ), where sales are net sales.
- (4) 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

<sup>15</sup> Preferred stock resembles debt in locking management into fixed obligations so, in principle, it could also serve to bind managers from expropriating shareholders. However, in both Western Europe and East Asia, the book value of preferred stock is extremely small, so this is not a significant consideration in practice.

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 five-year averages over 1992–1996, rather than annual figures, to smooth out noise and transitory factors. For corporations with incomplete data over the five-year period, we compute the average over the years with complete data to maximize the size of our sample.<sup>16</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 explains the construction of the variables used in our regression, which include those described above, plus corporation- and country-specific variables that 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, because (i) they must pay a higher

<sup>16</sup> Our conclusions would have been unchanged had we simply eliminated corporations with incomplete data.

TABLE 3—DESCRIPTION OF REGRESSION VARIABLES

Variable	Description
Div/cf	Five-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 noncash items from discontinued operations. Source: <i>Worldscope</i>
IADiv/cf	Industry-adjusted five-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	Five-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: <i>Worldscope</i>
IADiv/earn	Industry-adjusted five-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	Five-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: <i>Worldscope</i>
IADiv/sale	Industry-adjusted five-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	Five-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: <i>Worldscope</i>
IADiv/mkcap	Industry-adjusted five-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.
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 percent in Hong Kong, Indonesia, Malaysia, Philippines, Singapore, United Kingdom to 100 percent in Taiwan. Source: La Porta et al., 1997, 1998.
O/C	The ratio of ownership rights to control rights owned by the largest ultimate controlling shareholder, for corporations with an ultimate owner who owns at least 5 percent of the shares. Sources: Claessens et al., 1999a, plus the sources listed in Appendix B.
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 five-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: <i>Worldscope</i>
CRation	Credit-rationing dummy = 1 if the corporation's five-year average percentage growth of net sales is above the (overall) median and its five-year average increase of stock capital plus (financial) debt over sales is below the median, = 0 otherwise. Source: <i>Worldscope</i>
D/A	Ratio of total financial debt (including leasing) to net assets. Source: <i>Worldscope</i>
Ln(TA)	Natural log of the book value of total assets. Source: <i>Worldscope</i>
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 et al., 1997, 1998, 2000b.
Europe	European dummy = 1 if the corporation is from Western Europe; = 0 if it is from East Asia.

interest rate on their loans; (ii) creditors will seek to prevent the transfer of wealth to shareholders; (iii) debt and dividends are substitutes in controlling agency problems.<sup>17</sup> 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 internally. A capital-rationing dummy, *CRation*, controls for the rationing that 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 five-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 five-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 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-percent and 10-percent levels of control, and the means of the ownership/control ratio and of the (five-year average of the unadjusted) dividend ratios. At the 20-percent level of control, the percentage of group-affiliated corporations is highest in Indonesia (70.06 percent); at the 10-percent level, it is highest in the Philippines (76.79 percent); within Europe, it is highest in Italy at both levels (56.99 percent and 60.62 percent). As we lower the cutoff level of control from 20 percent to 10 percent, group affiliation increases only slightly in Europe but some Asian economies exhibit sharp increases: Taiwan's group affiliation rises from 12.98 percent to 48.09 percent, Singapore's from 17.02 percent to 65.98 percent, and Japan's from a high 58.81 percent to an even higher 73.72 percent. Note also that the difference between European and Asian rates of group affiliation is insignificant at the 20-percent level of control but is highly significant at the 10-percent 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.

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 nonaffiliated corporations at the 20-percent level of control, but the pattern is less consistent at the 10-percent 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-percent level of control, as well as for those affiliated at the 10-percent level. Regarding proposition (ii), note that for corporations with  $O/C < 1$ , significantly higher dividend rates are implied by group affiliation at

<sup>17</sup> This last point is in line with Jensen's (1986) arguments on free cash flow.

TABLE 4—GROUP AFFILIATION, OWNERSHIP/CONTROL, AND MEAN DIVIDEND RATES IN EUROPE AND ASIA

Country	Number of corporations	Percentage of corporations group affiliated at 10 percent	Percentage of corporations group affiliated at 20 percent	O/C	Div/cf	Div/earn	Div/mkcap	Div/sale
Panel A: Summary Statistics								
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	1,039	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
United Kingdom	1,350	47.48	46.15	0.864	31.99	39.11	2.56	6.82
All	5,897	55.72	47.26	0.832	23.41	33.99	1.88	3.57
Europe	3,294	49.24	46.30	0.877	26.48	35.87	2.30	4.72
Asia	2,603	63.93	48.48	0.778	20.11	32.16	1.49	2.43
Panel B: <i>T</i> -statistics for Differences Between Means								
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. nonaffiliated corporations at 20-percent 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. nonaffiliated corporations at 10-percent 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>

Notes: Dividend rates are unadjusted. The sample includes 5,897 corporations in 1996.

<sup>a</sup> Denotes significance at the 1-percent level.

<sup>b</sup> Denotes significance at the 5-percent level.

<sup>c</sup> Denotes significance at the 10-percent level.

the 20-percent level, but not at the 10-percent level.<sup>18</sup> This suggests that corporations must pay higher dividends to offset heightened investor concerns about expropriation when corporations are group affiliated at the 20-percent level, but not

when corporations are group affiliated *only* at the 10-percent level. This issue 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.

#### IV. 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

<sup>18</sup> Thus, Table 4, Panel B's, significantly higher overall rates of dividend for corporations affiliated to a group at the 20-percent level must be driven by corporations with O/C < 1; at the 10-percent 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-percent and 10-percent levels for the cases where O/C < 1 and where O/C = 1.

TABLE 5—MEAN DIVIDEND RATES ACROSS OWNERSHIP AND AFFILIATION CHARACTERISTICS

Variable	All corporations	Group-affiliated corporations at 20-percent level	Nonaffiliated corporations at 20-percent level	$T(Z)$ -statistic for difference	Group-affiliated corporations at 10-percent level	Nonaffiliated corporations at 10-percent level	$T(Z)$ -statistic for difference
IADiv/cf							
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>b</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)	
IADiv/earn							
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)	
IADiv/mkcap							
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> )	
IADiv/sale							
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> )	

Notes: Dividend rates are industry adjusted. The sample includes 5,897 corporations in 1996. Median and  $T(Z)$ -statistics are reported in brackets.

<sup>a</sup> Denotes significance at the 1-percent level.

<sup>b</sup> Denotes significance at the 5-percent level.

<sup>c</sup> Denotes significance at the 10-percent level.

the foregoing variables, plus (ii) the corporation- and country-specific factors. The coefficients of the variables (ii) generally have the sign anticipated in Section III 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-percent 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. However, Panel B shows that when group affiliation is defined at the 10-

percent 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, within groups that are tightly controlled at the 20-percent level, we have evidence that corporate managers must pay higher dividends to offset greater investor concerns about expropriation when the  $O/C$  ratio is lower; we have no such evidence for the broader range of corporations affiliated at the 10-percent level. We conclude that there is a significant difference between the dividend behavior of corporations that are group affiliated at the 20-percent level and those that are affiliated at the 10-percent level, but not at the 20-percent level. This difference is addressed next.

Table 7 reports regressions in which the sample is restricted to those corporations that are group affiliated or to those that are nonaffiliated; in each case, both the 20-percent and the 10-percent levels of control are considered. These regressions

confirm that the 20-percent level of control in groups is a significant threshold for insider expropriation. For corporations affiliated to a group at the 20-percent 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 6, Panel A, that, within groups that are tightly controlled at the 20-percent level, corporate managers must pay higher dividends to offset greater investor concerns about expropriation when the O/C ratio is lower. By contrast, for corporations *not* affiliated to a group at the 20-percent 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, investors 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 that are not affiliated to a group at the 10-percent level.

The findings reported in the last paragraph have an interesting implication. Partition the set of corporations that are not affiliated at the 20-percent level into two subsets: (a) those that are not affiliated at the 10-percent level; (b) those that are affiliated at the 10-percent level but not at the 20-percent 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 that are not affiliated at the 20-percent level was due mainly to subset (b), i.e., to loosely affiliated corporations.<sup>19</sup>

To summarize: investors appear alert to ex-

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

We next discuss differences in expropriation between Europe and Asia. Table 4, Panel B, 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, in the more developed capital markets of Western Europe, investors appear to anticipate more strongly the risk of expropriation in groups; in response, corporations pay dividends at a higher rate.<sup>20</sup>

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

<sup>19</sup> For corporations which are affiliated at the 10-percent 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-percent level, which dominates the positive relationship due to corporations which are affiliated at the 10-percent level, but not at the 20-percent level.

<sup>20</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.

TABLE 6—REGRESSIONS OF DIVIDEND RATES ON GROUP AFFILIATION AND THE OWNERSHIP/CONTROL RATIO

Dependent variable	Intercept	O/C	Group	O/C* Group	O/C* Europe	O/C*Group *Europe	Ln(TA)
Panel A: Group Affiliation Defined at the 20-Percent Level of Control							
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)
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)
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)
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)
Panel B: Group Affiliation Defined at the 10-Percent Level of Control							
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)
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)
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)
IADiv/sale	3.35 <sup>a</sup> (2.59)	0.223 (0.19)	-0.215 (-0.18)	0.002 (0.00)	-0.026 (-0.08)	1.545 <sup>a</sup> (4.07)	0.48 <sup>a</sup> (12.60)

corporations have multiple large owners with at least 10 percent 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-percent level of control, as the results for the 10-percent 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 multiple large owners indeed help limit 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

(Gordon S. Redding, 1995) suggest that the other large owners would typically be long-standing allies of the controlling shareholder, who could compensate them through other business dealings between their groups.

Table 9 presents country-level OLS regressions for group-affiliated corporations.<sup>21</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 in the more developed European capital markets, group-affiliated

<sup>21</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.

TABLE 6—Continued.

GSDecile	CRation	D/A	Legal Res	Europe	Civil	Adjusted R <sup>2</sup>	F
Panel A: Group Affiliation Defined at the 20-Percent Level of Control							
−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>
−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>
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>
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>
Panel B: Group Affiliation Defined at the 10-Percent Level of Control							
−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>
−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>
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>
0.03 (1.11)	−0.25 <sup>a</sup> (−8.52)	−12.19 <sup>a</sup> (−36.28)	−1.83 <sup>a</sup> (−4.10)	0.91 <sup>a</sup> (4.36)	−1.17 <sup>a</sup> (−6.77)	0.169	154.23 <sup>a</sup>

Notes: Dividend rates are industry adjusted. The sample includes 5,897 corporations in 1996. The regressions use ordinary least squares. *T*-values are reported in parentheses below the coefficient estimates.

<sup>a</sup> Denotes significance at the 1-percent level.

<sup>b</sup> Denotes significance at the 5-percent level.

<sup>c</sup> Denotes significance at the 10-percent level.

corporations with a greater discrepancy between ownership and control rights pay higher dividends. When group affiliation is defined at the 20-percent level,<sup>22</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>23</sup> which itself has a signif-

<sup>22</sup> To save space, we do not present the results for the 10-percent level of control: at the country level, reducing the cutoff level of control from 20 percent to 10 percent adds only a few firms; the only effect of this is a slight reduction in the statistical significance of the results reported below.

<sup>23</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  $-0.66$ .

icantly positive impact on dividends. Thus, the monitoring of other large shareholders makes it unnecessary for the German corporations to pay significantly higher dividends to offset greater investor concerns about expropriation, given 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-percent level of significance) corporations that are affiliated to groups at the 20-percent level exhibit a significantly *positive* relationship between O/C and one of the measures of the dividend rate. Thus, in these three countries, the controlling shareholders of corporations affiliated to groups at the 20-percent level that have a lower O/C ratio can pay lower dividends, leaving wealth within the corporation that they could expropriate by intragroup

TABLE 7—REGRESSIONS OF DIVIDEND RATES BY GROUP AFFILIATION

	Intercept	O/C	Ln(TA)	GSDecile	CRation	D/A	Legal Res	Europe	Civil Law	Adjusted R <sup>2</sup>	F
IADiv/cf as Dependent Variable											
Group affiliated at 20 percent	19.18 <sup>a</sup> (7.75)	-3.934 <sup>a</sup> (-4.25)	0.222 (1.19)	-0.364 <sup>a</sup> (-2.87)	-0.374 <sup>a</sup> (-3.00)	-13.611 <sup>a</sup> (-8.96)	-5.120 <sup>b</sup> (-2.01)	2.934 <sup>a</sup> (4.60)	-6.385 <sup>a</sup> (-8.02)	0.112	44.88 <sup>a</sup>
Nonaffiliated at 20 percent	14.154 <sup>a</sup> (4.96)	0.455 (0.31)	0.066 (0.33)	-0.445 <sup>a</sup> (-3.36)	-0.178 (-1.35)	-12.257 <sup>a</sup> (-7.86)	-6.133 <sup>a</sup> (-3.78)	0.697 (1.05)	-3.829 <sup>a</sup> (-5.06)	0.070	25.23 <sup>a</sup>
Group affiliated at 10 percent	17.96 <sup>a</sup> (8.02)	-3.824 <sup>a</sup> (-4.49)	0.19 (1.10)	-0.36 <sup>a</sup> (-3.16)	-0.31 <sup>a</sup> (-2.68)	-13.32 <sup>a</sup> (-9.61)	-5.37 <sup>a</sup> (-2.89)	3.40 <sup>a</sup> (5.93)	-5.92 <sup>a</sup> (-8.47)	0.110	51.74 <sup>a</sup>
Nonaffiliated at 10 percent	19.01 <sup>a</sup> (3.06)	-3.758 (-0.69)	0.14 (0.62)	-0.49 <sup>a</sup> (-3.26)	-0.24 (-1.60)	-12.67 <sup>a</sup> (-7.21)	-6.47 <sup>a</sup> (-3.20)	0.29 (0.38)	-3.79 <sup>a</sup> (-4.45)	0.067	19.91 <sup>a</sup>
IADiv/earn as Dependent Variable											
Group affiliated at 20 percent	-3.256 (-0.89)	-7.557 <sup>a</sup> (-5.52)	2.081 <sup>a</sup> (7.53)	-0.422 <sup>b</sup> (-2.25)	-0.185 (-1.00)	-21.363 <sup>a</sup> (-9.50)	6.442 <sup>c</sup> (1.68)	5.262 <sup>a</sup> (5.57)	-5.932 <sup>a</sup> (-5.03)	0.059	23.03 <sup>a</sup>
Nonaffiliated at 20 percent	-5.662 (-1.26)	-1.091 (-0.48)	1.180 <sup>a</sup> (3.77)	-0.209 (-1.00)	-0.900 <sup>a</sup> (-4.36)	-9.887 <sup>a</sup> (-4.04)	-11.489 <sup>a</sup> (-4.51)	1.209 (1.16)	1.520 (1.28)	0.021	7.85 <sup>a</sup>
Group affiliated at 10 percent	-3.74 (-1.09)	-6.858 <sup>a</sup> (-5.26)	1.94 <sup>a</sup> (7.39)	-0.43 <sup>b</sup> (-2.46)	-0.26 (-1.48)	-19.88 <sup>a</sup> (-9.36)	-2.20 (-0.77)	5.69 <sup>a</sup> (6.48)	-3.47 <sup>a</sup> (-3.24)	0.051	22.87 <sup>a</sup>
Nonaffiliated at 10 percent	13.39 (1.43)	-21.584 <sup>a</sup> (-2.62)	1.26 <sup>a</sup> (3.70)	-0.15 (-0.67)	-0.89 <sup>a</sup> (-4.02)	-8.56 <sup>a</sup> (-3.23)	-10.53 <sup>a</sup> (-3.46)	0.40 (0.35)	0.78 (0.61)	0.022	7.02 <sup>a</sup>
IADiv/mkcap as Dependent Variable											
Group affiliated at 20 percent	1.213 <sup>a</sup> (4.30)	0.032 (0.30)	-0.024 (-1.15)	0.003 (0.17)	-0.007 (-0.48)	-0.180 (-1.04)	-1.125 <sup>a</sup> (-3.82)	0.517 <sup>a</sup> (7.11)	-0.439 <sup>a</sup> (-4.84)	0.079	30.72 <sup>a</sup>
Nonaffiliated at 20 percent	0.358 (1.12)	0.537 <sup>a</sup> (3.29)	-0.012 (-0.52)	0.031 <sup>b</sup> (2.07)	-0.010 (-0.70)	-0.240 (-1.37)	-0.544 <sup>a</sup> (-3.00)	0.263 <sup>a</sup> (3.52)	-0.367 <sup>a</sup> (-4.33)	0.047	17.04 <sup>a</sup>
Group affiliated at 10 percent	1.05 <sup>a</sup> (4.24)	0.031 (0.33)	-0.02 (-1.30)	0.01 (0.80)	0.00 (-0.22)	-0.26 <sup>c</sup> (-1.67)	-0.76 <sup>a</sup> (-3.68)	0.60 <sup>a</sup> (9.48)	-0.45 <sup>a</sup> (-5.79)	0.088	40.48 <sup>a</sup>
Nonaffiliated at 10 percent	1.97 <sup>a</sup> (2.72)	-1.052 (-1.61)	-0.001 (-0.05)	0.02 (1.21)	-0.01 (-0.84)	-0.16 (-0.80)	-0.63 <sup>a</sup> (-2.70)	0.16 <sup>c</sup> (1.83)	-0.36 <sup>a</sup> (-3.66)	0.030	9.01 <sup>a</sup>
IADiv/sale as Dependent Variable											
Group affiliated at 20 percent	6.112 <sup>a</sup> (5.32)	0.620 (1.44)	0.578 <sup>a</sup> (6.67)	-0.039 (-0.66)	-0.329 <sup>a</sup> (-5.70)	-17.659 <sup>a</sup> (-25.04)	0.305 (0.25)	2.302 <sup>a</sup> (7.77)	-2.030 <sup>a</sup> (-5.49)	0.252	118.61 <sup>a</sup>
Nonaffiliated at 20 percent	3.445 <sup>a</sup> (3.01)	1.008 <sup>c</sup> (1.72)	0.437 <sup>a</sup> (5.47)	-0.039 (-0.73)	-0.239 <sup>a</sup> (-4.52)	-11.775 <sup>a</sup> (-18.84)	-1.458 <sup>b</sup> (-2.24)	0.812 <sup>a</sup> (3.04)	-1.165 <sup>a</sup> (-3.84)	0.148	57.52 <sup>a</sup>
Group affiliated at 10 percent	5.27 <sup>a</sup> (5.13)	0.590 (1.51)	0.56 <sup>a</sup> (7.18)	-0.01 (-0.26)	-0.31 <sup>a</sup> (-5.94)	-16.25 <sup>a</sup> (-25.57)	-0.62 (-0.73)	2.18 <sup>a</sup> (8.28)	-1.93 <sup>a</sup> (-6.03)	0.235	127.42 <sup>a</sup>
Nonaffiliated at 10 percent	5.42 <sup>b</sup> (2.17)	-0.518 (-0.24)	0.48 <sup>a</sup> (5.22)	-0.10 (-1.58)	-0.24 <sup>a</sup> (-4.13)	-12.87 <sup>a</sup> (-18.18)	-1.43 <sup>c</sup> (-1.76)	0.94 <sup>a</sup> (3.13)	-1.09 <sup>a</sup> (-3.17)	0.157	49.68 <sup>a</sup>

Notes: Dividend rates are industry adjusted. At the 20-percent level of control, the sample includes 2,787 group-affiliated corporations and 3,110 nonaffiliated corporations. At 10-percent level of control, the sample includes 3,286 group-affiliated corporations and 2,611 nonaffiliated corporations. The regressions use ordinary least squares. *T*-values are reported in parentheses below the coefficients estimates.

<sup>a</sup> Denotes significance at the 1-percent level.

<sup>b</sup> Denotes significance at the 5-percent level.

<sup>c</sup> Denotes significance at the 10-percent level.

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

	Intercept	Multiple Owners	O/C	Ln(TA)	GSDecile	CRation	D/A	Legal Res	Civil Law	Adjusted R <sup>2</sup>	F
IADiv/cf as Dependent Variable											
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>
IADiv/earn as Dependent Variable											
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>
IADiv/mkcap as Dependent Variable											
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>
IADiv/sale as Dependent Variable											
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)	-26.75 <sup>a</sup> (-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>

Notes: Dividend rates are industry adjusted. Group affiliation is defined at the 20-percent 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. *T*-values are reported in parentheses below the coefficient estimates.

<sup>a</sup> Denotes significance at the 1-percent level.

<sup>b</sup> Denotes significance at the 5-percent level.

<sup>c</sup> Denotes significance at the 10-percent level.

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>24</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

<sup>24</sup> In Italy, there is, for example, widespread collusion amongst large shareholders. Armando Gomes and Walter Novaes (1999) document that, at the end of 1996, 19.14 percent 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 tacuino dell'azionista" we learn that 39 corporations (18.75 percent) disclosed such agreements.

the major holders of ownership and control rights in many corporations.

Panel B of Table 9 reports that, at the 20-percent level of control, in three European countries (France, Germany, and the United Kingdom), 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.

## V. Conclusions

Our analysis of expropriation from the perspective of dividends, while narrow in scope,

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

	IADiv/cf	IADiv/earn	IADiv/sale	IADiv/mkcap	N
Panel A: Coefficient Estimates for the <i>O/C</i> Variable					
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
United Kingdom	-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
Panel B: Coefficient Estimates for the <i>Multiple Owners</i> Variable					
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

TABLE 9, PANEL B—Continued.

	IADiv/cf	IADiv/earn	IADiv/sale	IADiv/mkcap	N
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
United Kingdom	−0.346 (−0.20)	3.435 <sup>c</sup> (1.88)	0.437 (0.51)	0.023 (0.16)	623

*Notes:* Dividend rates are industry adjusted. Group affiliation is defined at the 20-percent 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> Denotes significance at the 1-percent level.

<sup>b</sup> Denotes significance at the 5-percent level.

<sup>c</sup> Denotes significance at the 10-percent level.

does provide quantitative evidence on the expropriation that 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-percent level and, at both the 20-percent and 10-percent 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 issue from the perspective of dividends, which remove corporate resources from the control of insiders. Overall, investors appear alert to the greater exposure to expropriation within tightly controlled groups; to offset their concerns, higher dividends are paid by corporations affiliated to such groups, especially those exhibiting a wider discrepancy between ownership and control. Thus, capital markets appear generally capable of policing expropriation within tightly controlled groups, although we identified some failures in Thailand and Indonesia.

By contrast, investors seem less alert to expropriation within corporations that are loosely affiliated to groups, i.e., whose control links all exceed 10 percent but do not all exceed 20 percent. We found that such corporations fail to pay higher dividends and that a wider discrepancy between ownership and control is associated with lower dividend rates. Table 2 indicates that such failures of capital market policing is of little consequence in Europe, where loosely affiliated corporations comprise only 2.94 percent of our sample; whereas in

Asia, they comprise a significant 15.44 percent. Furthermore, at the 10-percent level of control, the eight largest groups control one-quarter of all Asian corporations and three-quarters of those which are loosely affiliated. 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 intragroup transactions. The apparently weak formal group linkages may be reinforced by nontransparent linkages through nominee accounts (common in Asian markets) and through collusion with other large shareholders, who appear to abet expropriation in Asia.

To address 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 percentage 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 more transparent structures prevalent in Europe, that 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 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," that range over the entire continent's business groups and families, diffuse attention from an expropriation nexus that, in the nine most advanced Asian economies, can be traced to eight ultimate owners who control one-quarter of all corporations with credible accounting and ownership data and three-quarters 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 economic power.

*(Appendix follows)*

## APPENDIX A: DATA SOURCES FOR EAST ASIAN CORPORATIONS [FROM CLAESSENS ET AL. (2000)]

Country	Immediate ownership data	Dual-class shares	Business groups: pyramids and cross-holdings
Hong Kong	Worldscope (1998) <i>Asian Company Handbook</i> (1998) Hong Kong Stock Exchange (1997)	Datastream International (1998)	Chu, Yin-Wah and Hamilton, Gary, "Business Networks in Hong Kong," Mimeo, University of California, Davis, 1993  Taylor, Michael, "Have Cash, Will Travel," <i>Far Eastern Economic Review</i> , Special Section on the Li Ka-Shing Conglomerate, March 1998  Hong Kong Stock Exchange (1997)
Indonesia	Worldscope (1998) <i>Asian Company Handbook</i> (1998) Institute for Economic and Financial Research (1996)	Datastream International (1998)  Institute for Economic and Financial Research (1996)	Fisman, Ray, "Announcement Effects of Suharto's Illnesses on Related Companies," Mimeo, Harvard Business School, September 1998  W. I. Carr Banque Indosuez Group, <i>Indonesian Group Connections</i> , Jakarta, Indonesia, 1997  Indobusiness, "Ranking of the Largest Indonesian Conglomerates," 1995, 1998, available at <a href="http://indobiz.com/company/warta/cnglo/htm">http://indobiz.com/company/warta/cnglo/htm</a>
Japan	Worldscope (1998) <i>Japan Company Handbook</i> (1998)	Datastream International (1998)	Dodwell Marketing Consultants, "Industrial Groupings in Japan: The Anatomy of the Keiretsu," 12th Ed., Tokyo, Japan, 1996/1997  Sato, Kazuo, <i>The Anatomy of Japanese Businesses</i> , M. E. Sharpe, Ch. 4, 1984
Korea (South)	Worldscope (1998) <i>Asian Company Handbook</i> (1998)	Datastream International (1998)	Korean Fair Trade Commission, <i>List of the Largest 30 Chaebol</i> , Seoul, Korea, 1996, 1997  Lim, Ungki, "Ownership Structure and Family Control in Korean Conglomerates: With Cases of the 30 Largest Chaebol," Mimeo, Seoul University, Korea, 1998
Malaysia	Worldscope (1998) <i>Asian Company Handbook</i> (1998)	Datastream International (1998)  Kuala Lumpur Stock Exchange (1997)	Hiscock, Geoff, <i>Asia's Wealth Club</i> , Nicholas Brealey, 1998  <a href="http://www.ambg.com.my">http://www.ambg.com.my</a> for A-M Banking Group  <a href="http://www.berjaya.com.my">http://www.berjaya.com.my</a> for Berjaya Group  <a href="http://www.simenet.com">http://www.simenet.com</a> for Sime Darby Group  <a href="http://www.lion.com.my">http://www.lion.com.my</a> for Lion Group  <a href="http://www.hongleong-group.com.sg">http://www.hongleong-group.com.sg</a> for Hong Leong Group

## APPENDIX A—Continued.

Country	Immediate ownership data	Dual-class shares	Business groups: pyramids and cross-holdings
Philippines	Worldscope (1998)	Datastream International (1998)	Philippine Stock Exchange, <i>Investment Guide</i> , Manila, 1996, 1997
	<i>Asian Company Handbook</i> (1998)	Philippine Stock Exchange (1997)	Tan, Edita, "Interlocking Directorates, Commercial Banks, Other Financial Institutions, and Non-Bank Corporations."
	Philippine Stock Exchange (1997)		<i>Philippine Review of Economics and Business</i> , January 1993, 30(1), pp. 1–50
Singapore	Worldscope (1998)	Datastream International (1998)	Singapore Stock Exchange, <i>Singapore Company Handbook</i> , 1997
	<i>Asian Company Handbook</i> (1998)	Singapore Stock Exchange (1997)	Hiscock, Geoff, <i>Asia's Wealth Club</i> , Nicholas Brealey, 1998
Taiwan	Worldscope (1998)	Datastream International (1998)	China Credit Information Service, <i>Business Groups in Taiwan, 1996–1997</i> , Taipei, Republic of China, 1997
	<i>Asian Company Handbook</i> (1998)		Baum, Julian, "The Money Machine," <i>Far Eastern Economic Review</i> , August 1994, (for the corporate holdings of the Kuomintang)
Thailand	Worldscope (1998)	Datastream International (1998)	Tara Siam, <i>Thai Business Groups 1996–1997: A Unique Guide to Who Owns What</i> , Bangkok, Thailand, 1997
	<i>Asian Company Handbook</i> (1998)		
	Securities Exchange of Thailand (1997)	Securities Exchange of Thailand (1997)	<i>The Nation</i> , "Thai Tycoons: Winners and Losers in the Economic Crisis," Special Issue, July 1998
			Vatikiotis, Michael, "From Chickens to Microchips: The Story of Thai Conglomerates," <i>Far Eastern Economic Review</i> , January 1997

APPENDIX B: SOURCES OF OWNERSHIP AND CONTROL DATA FOR WEST EUROPEAN CORPORATIONS  
[FROM FACCIO AND LANG (2000)]

Country	Immediate ownership data	Dual-class shares	Business groups
France	<p><i>Herald Tribune</i> (1997), <i>French Company Handbook</i>, SFB-Paris Bourse</p> <p><i>Financial Times</i> (1997): “Extel Financial”</p> <p>Worldscope (1998)</p> <p><a href="http://www.bourse-de-paris.fr/fr/market8/fsg830.htm">http://www.bourse-de-paris.fr/fr/market8/fsg830.htm</a></p>	<p>Datastream (1999)</p> <p><i>Financial Times</i> (1997): “Extel Financial”</p> <p>Les Echos (1996)</p> <p>Christian K. Muus (1998)</p>	<p><i>Herald Tribune</i> (1997), <i>French Company Handbook</i>, SFB-Paris Bourse</p> <p><i>Financial Times</i> (1997): “Extel Financial”</p>
Germany	<p>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>)</p> <p><i>Financial Times</i> (1997): “Extel Financial”</p> <p>Worldscope (1998)</p>	<p>Datastream (1999)</p> <p><i>Financial Times</i> (1997): “Extel Financial”</p> <p>Die Welt (1996)</p> <p>Marco Becht and Ekkehart Boehmer (1998)</p>	<p>Commerzbank (1997): “Wer gehört zu wem”</p> <p><i>Financial Times</i> (1997): “Extel Financial”</p>
Italy	<p>CONSOB (1997): “Bollettino—edizione speciale n. 4/97—Compagnie 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>)</p> <p>Il Sole 24 ore (1997): “Il taccuino dell’azionista”</p>	<p>Datastream (1999)</p> <p>Il Sole 24 ore (1997): “Il taccuino dell’azionista”</p>	<p>Il Sole 24 ore (1997): “Il taccuino dell’azionista”</p> <p><a href="http://www.fiatgroup.com/it/informazioni/if2informaz-1.htm">http://www.fiatgroup.com/it/informazioni/if2informaz-1.htm</a></p> <p><a href="http://www.olivetti.it/group/">http://www.olivetti.it/group/</a></p> <p><a href="http://www.pirelli.com/company/index.htm">http://www.pirelli.com/company/index.htm</a></p>
Spain	<p>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>)</p>	<p>Datastream (1999)</p> <p><i>Financial Times</i> (1997): “Extel Financial”</p> <p>ABC (1996)</p> <p>Rafel Crespi-Cladera and Miguel A. Garcia-Cestona (1998)</p>	<p>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>)</p> <p><i>Financial Times</i> (1997): “Extel Financial”</p>

## APPENDIX B—Continued.

Country	Immediate ownership data	Dual-class shares	Business groups
United Kingdom	<p><i>Financial Times</i> (1997): “Extel Financial”</p> <p>London Stock Exchange (1997): “The London Stock Exchange Yearbook”</p> <p><i>Financial Times</i> (1996): “Extel Financial”</p> <p>Worldscope (1998)</p> <p><a href="http://www.hemscott.com/equities/company/">http://www.hemscott.com/ equities/company/</a></p>	<p>Datastream (1999)</p> <p><i>Financial Times</i> (1997): “Extel Financial”</p> <p><i>Financial Times</i> (1996): “Extel Financial”</p>	<p><i>Financial Times</i> (1997): “Extel Financial”</p>

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