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How to Eliminate Pyramidal Business Groups: The Double Taxation of Intercorporate Dividends and Other Incisive Uses of Tax Policy

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Executive Summary

Arguments for eliminating the double taxation of dividends apply only to dividends paid by corporations to individuals. The double (and multiple) taxation of dividends paid by one firm to another—intercorporate dividends—was explicitly included in the 1930s as part of a package of tax and other policies aimed at eliminating U.S. pyramidal business groups. These structures remain the predominant form of corporate organization outside the United States. The first Roosevelt administration associated them with corporate governance problems, corporate tax avoidance, market power, and highly concentrated economic power, and undertook a sustained program that rapidly broke up large American pyramidal groups.

The genius of you Americans is that you never make clear-cut stupid moves, only complicated stupid moves which make us wonder at the possibility that there may be something to them we are missing. Gamel Abdel Nasser

1. Introduction

America is a highly successful economy, and foreigners should exercise caution when criticizing odd American policies. One uniquely American tax policy is the double and multiple taxation of *intercorporate dividends*. No other major economy meaningfully taxes dividends paid by a controlled subsidiary to a parent company, though a few go through the motions or levy very light taxes. Indeed, the European Commission's Parent Subsidiary Directives explicitly forbid European Union member states from imposing such taxes. Intercorporate dividend taxes look like a complicated quirk in the American tax rules—precisely the sort of thing that irritated President Nasser. However,

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the United States intercorporate dividend tax was part of a carefully crafted and highly successful strategy in the 1930s aimed at rendering economically unviable certain corporate structures believed to facilitate governance problems, tax avoidance, market power, and dangerously concentrated political influence.

The structures were *business groups*, clusters of listed firms connected by complicated networks of intercorporate equity blockholdings. Most were organized as pyramids—a wealthy family or individual controlled listed firms, which held control blocks in other listed firms, each of which held control blocks in still more listed firms, ad valorem infinitum. Such pyramids could encompass hundreds of separate listed and private firms and be more than a dozen layers deep. Business groups of these sorts remain the predominant mode of corporate organization outside the United States. They are the structures that permit tiny elites to use public shareholders' wealth to control the greater parts of the corporate sectors of some countries.

Business groups may serve useful purposes in poor countries. Group firms that transact business with each other avoid dysfunctional arm's-length institutions and markets. However, the social purpose of business groups in developed economies is uncertain at best. The Roosevelt era New Dealers accepted the admonishments of President Woodrow Wilson:

No country can afford to have its prosperity originated by a small controlling class. The treasury of America does not lie in the brains of the small body of men now in control of the great enterprises,... It depends upon the inventions of unknown men, upon the originations of unknown men, upon the ambitions of unknown men. Every country is renewed out of the ranks of the unknown, not out of the ranks of the already famous and powerful in control.¹

The New Dealers convinced Congress to enact intercorporate dividend taxes, all but abolish consolidated tax filing for business groups, eliminate capital gains taxes on liquidated controlled subsidiaries, and explicitly ban large pyramidal groups from controlling public utilities companies. The explicit goal of these and other policies was to break up large U.S. business groups. The Securities and Exchange Commission, established at about this time as well, made professional management more accountable to public investors and probably reduced the value of pyramidal structures to corporate insiders.

The New Dealers were sweepingly successful for business groups all but disappeared from the U.S. corporate landscape. With the passage

of time, however, the economic rational underlying this particular aspect of dividend double taxation was forgotten. Early versions of the Bush tax reforms would have eliminated taxes on intercorporate dividends, but the Jobs and Growth Tax Relief Reconciliation Act (JGTRRA) enacted in 2003 ultimately left them unchanged.

Since the reduced tax rates in the JGTRRA expire over the next three to five years, and those pertaining to dividends lapse in 2009, a further reconsideration of U.S. dividend taxes is likely. As this unfolds, tax economists might note the original intent of Congress and the White House in applying double and multiple taxation to intercorporate dividends. Recent corporate finance, economic history, and political economy research on business groups in other countries affirms its economic importance, quite independently of the validity of arguments for or against the double taxation of dividends paid to individuals.

The structure of this paper is as follows. Section 2 describes pyramidal corporate groups, the structure of corporate ownership typical in most countries. Section 3 explains how the U.S. tax code, by subjecting intercorporate dividends to double taxation, renders such groups unviable. Section 4 describes how the U.S. tax reforms of the 1930s introduced double taxation of intercorporate dividends and other reforms explicitly to undermine pyramidal groups, which until then had been important in that country. Section 5 reviews the role of pyramidal corporate groups outside the United States and assesses corporate governance, tax avoidance, competition policy, and political economy implications of these structures. Section 6 reflects on past and future U.S. tax policy as regards intercorporate dividends. Section 7 concludes.

2. Examples of Pyramidal Corporate Groups

La Porta et al. (1999) show that pyramidal business groups dominate the large corporate sectors of most countries. Figure 1 illustrates a stylized pyramidal corporate group. A family firm owns 51 percent of firm A, which owns 51 percent of firm B, which owns 51 percent of firm C, and so on. In practice, the situation is usually more complicated, with non-voting and multiple-voting shares, golden shares, cross-holdings, and other additional ornaments. Figure 2 illustrates part of Canada's Hees-Edper Group. The full group, sixteen layers high and containing several hundred firms, is too big to graph easily. Smaller business groups can be illustrated in one diagram. Thus, Figure 3 sketches the Anglo-American Group of South Africa, looking

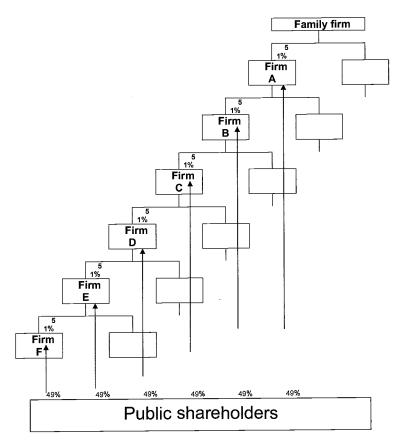
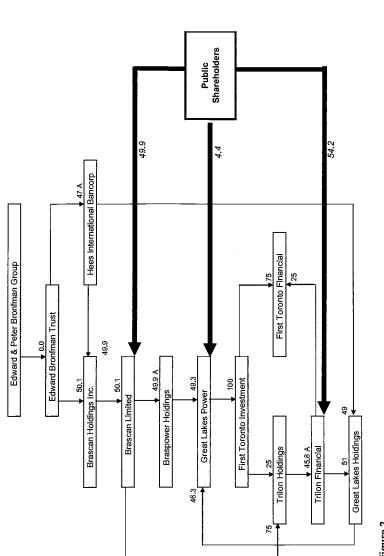


Figure 1
A Stylized Representation of a Pyramidal Business Group

down on the pyramid, Figure 4 describes Italy's Agnelli Group, and Figure 5 depicts Germany's Deutsche Bank Group. Each group contains a mix of listed and unlisted firms, with listed firms in tiers and controlled by firms in the tier above.²

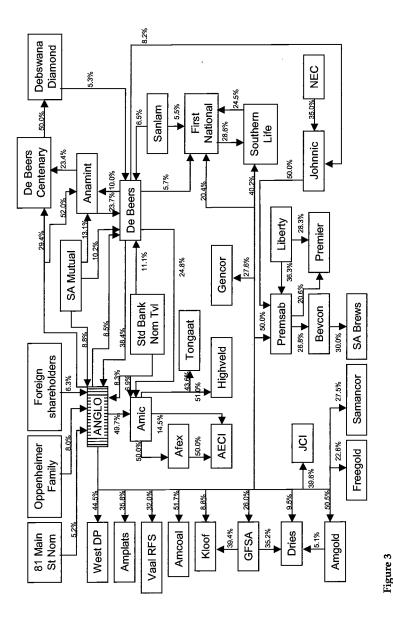
In contrast to all of the above structures, Figure 6 illustrates the much simpler structure typical of Minnesota based 3M, formerly Minnesota Mining and Manufacturing. 3M is more than 99 percent owned by public shareholders, including individuals and investment funds. Its most recent SEC proxy filing shows insiders with about 1.5 million of its approximately 390 million outstanding shares—a combined stake below 1 percent. Its largest shareholder is an investment firm with about 30 million shares, roughly 7.7 percent. 3M has no publicly traded



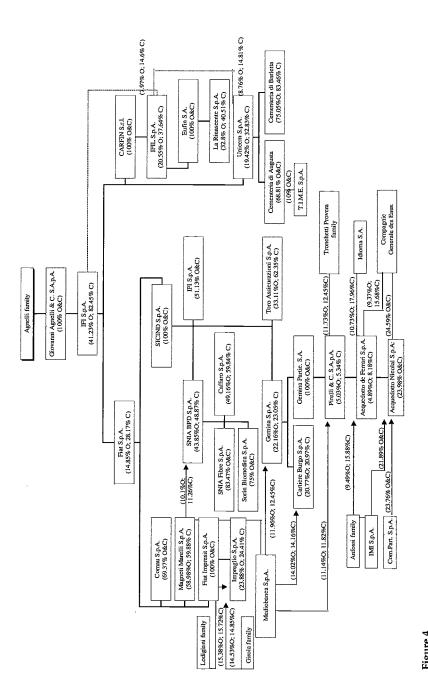
A Canadian Business Group

This diagram is a part of the Hees-Edper Corporate Group in Canada, which contains over 300 companies, some listed and some unlisted, arranged in a sixteen-tier pyramid. The complete business group is too large to graph legibly on a single page.

Firms not controlled via majority equity blocks are controlled via director interlock, dual class shares, or other Source: Directory of Inter-corporate Ownership, Statistics Canada (1997). 140 Morck



This diagram shows the Anglo-American Group, a South African pyramidal group, viewed from above. A South African Business Group Source: Financial Mail.



The Agnelli family's business group, a large Italian pyramidal group, viewed from the side. Source: Faccio and Lang (2001) An Italian Business Group

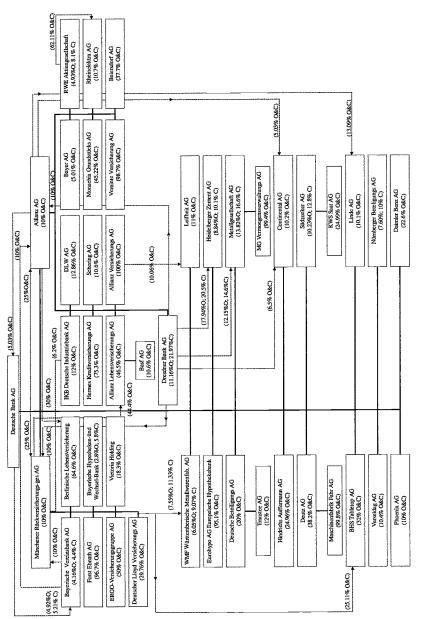


Figure 5 A German Business Group

small investors' holdings in many companies.

Source: Faccio and Lang (2001)

The Deutsche Bank Group, shown from the side here, is actually much more extensive because the bank controls proxies to vote

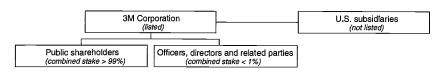


Figure 6
A Typical Large United States Corporation

Most large U.S. firms are freestanding and widely held. That is, they do not belong to business groups and are not controlled by any single shareholder.

U.S. subsidiaries. Its founding families have no governance role, and their remaining equity stakes are too minimal to trigger SEC reporting requirements. La Porta et al. (1999), Morck et al. (1988), and many others show all of this to be typical across large American corporations. Large American companies are thus atypical in two ways: they tend to have no controlling shareholders and are typically not organized into business groups.

Of course, many American firms do not fit this pattern. A few large American firms, like Cargill, remain unlisted and wholly controlled by their founding families. Holderness and Sheehan (1988) find that smaller U.S. firms are more likely to have a controlling shareholder. Morck et al. (1988), Holderness et al. (1999), and others report blockholders owning 20 percent or more of a significant number of U.S. firms. Anderson and Reeb (2003) find that many large U.S. firms retain connections with their founding families, even when those families control little or no stock. However, these findings mainly serve to highlight the contrast between the United States and other countries. La Porta et al. (1999) show that widely held firms are the rarest of curiosities in most countries. In the United States, they are the standard model of a large corporation, and although it is less rare than previously thought, concentrated corporate control comes as something of a surprise where it does occur.

American exceptionalism is starker when we consider business groups. While large fractions of the corporate sectors of many countries belong to business groups, these structures are essentially unknown in the United States. Some listed U.S. firms do hold blocks of stock in other listed U.S. firms. But these tend to be temporary arrangements—toeholds in preparation for complete takeovers, blockholdings left over from unsuccessful takeover bids, or blocks acquired by white knights to forestall hostile takeover bids. Firms establishing joint ventures occasionally acquire blocks of each other's shares for the

duration of the venture. Finally, some U.S. firms divest subsidiaries in stages—the parent first lists the subsidiary and sells out completely later, when the subsidiary's stock price is higher.³ The only approximation to a business group I know of in the United States is Thermo Electron, a small Massachusetts venture capital firm that retains stakes in the Cox media group listed high-tech firms as an intermediate step to spinning them off, and a few others. These groups are still much simpler than the those in other countries.⁴

Again, these exceptions underscore how atypical American corporations are. Finding anything approximating a business group in the United States is a painstaking labor. They are hard to miss elsewhere. La Porta et al. (1999) show that most large corporations in most countries are members of pyramidal groups. Högfeldt (2005) shows that so many of Sweden's listed firms belong to the Wallenberg family's pyramidal business group that it accounts for over half the market capitalization of the Stockholm Stock Exchange. Morck and Nakamura (1999) discuss how intercorporate holdings constitute a significant fraction of the assets of a typical large Japanese firm. Haber (1997) argues that business groups entrust control over much of many Latin American economies to a few wealthy families.

3. How Double Taxation of Intercorporate Dividends Crumbles Pyramids

The United States subjects dividend income to double taxation, in that dividends received are taxable income for their recipient and dividends paid are taxable income for the payer. This raises the true rate of taxation on dividends, an effect that has received considerable attention from tax economists. However, a second and lesser known aspect of U.S. double dividend taxation is that it also subjects dividends paid by one firm to another to double taxation—though at lower rates. This taxation of intercorporate dividends creates a tax penalty on pyramidal corporate groups.

To see this, contrast the current U.S. tax rules with those of Canada, which does not subject intercorporate dividends to double taxation. Table 1 shows how both countries tax dividends paid by a corporation to individuals and by one corporation to another. The Canadian tax rate on individual dividend income of 31.34 percent, though lower than the tax rate on general income of 46.41 percent, is much higher than the 15 percent rate levied by the United States under the JGTRRA. State taxes might typically add 5 percent to this. Thus, Canada taxes

	United St	tates		Canada		
Recipient's	Initial payer	Recipient	is	Initial payer	Recipient is	1
ownership of payer	Corpo- ration ^a	Indi- vidual ^a	Corpo- ration	Corpo- ration ^b	Indi- vidual ^{b,c}	Corpo- ration
0–10%	35%	15%	10.5%	38.62%	31.34%	38.62%
10-20%	35%	15%	10.5%	38.62%	31.34%	0%
20-80%	35%	15%	7%	38.62%	31.34%	0%
80%+	35%	15%	0%	38.62%	31.34%	0%

Table 1Intercorporate Dividend Taxes: Top Personal and Corporate Federal Tax Rates Payable on Dividend Income in the United States and Canada, as of 2002

Both countries' tax systems are considerably more complicated, but these rates are broadly representative. I am grateful to Guy Fortin for help in this regard.

dividends paid by corporations to individuals more heavily than does the United States.

In contrast, the United States taxes intercorporate dividends more heavily than does Canada. Although the U.S. tax rate on intercorporate dividends income is lower than that on dividend income received by individuals, it is positive unless the intercorporate stake is 80 percent or higher. In contrast, Canadian intercorporate dividends are entirely tax exempt if the intercorporate stake is 10 percent or more.⁶

To see the importance of this difference, return to Figure 1. If the pyramidal group depicted in that figure were in the United States, a dividend paid by firm F would be subject to a 35 percent tax as part of that firm's taxable income. As the dividend passed up through the pyramid, it would incur a 7 percent tax at each tier. Finally, the controlling shareholder of the apex firm would pay a 15 percent personal income tax on dividends received. The overall tax rate on dividends that the controlling shareholder receives from the firms in level F of its pyramid is $1 - (1 - 0.35) \times (1 - .07)^5 \times (1 - .15) = 61.6$ percent. The more tiers, the higher the overall tax. In contrast, were the dividend paid directly to an individual, the tax rate would be $1 - (1 - 0.35) \times (1 - .15) = 44.74$ percent. In essence, double taxation becomes multiple taxation, with the dividend subjected to taxation as it passes through each link

^aTop marginal rate, federal taxes only. State taxes vary considerably, but they are much lower than federal taxes for the most part.

^bCombined federal and Ontario rates. Ontario is chosen as a representative provincial tax system. Provincial taxes are a larger fraction of the total in Canada, and meaningful comparisons with other countries cannot exclude them.

^cAfter grossing up and dividend tax credit provisions are included.

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in the chain of companies from firm F to the controlling shareholder. This adds an extra 16.8 percent tax on the controlling shareholders' dividend income from Firm F.

In contrast, the same pyramid in Canada would subject the same dividend only to a corporate income tax of 38.62 percent when paid out by Firm F and a 31.34 percent personal income tax when received by the controlling shareholder. The combined rate is $1-(1-0.3862)\times(1-0.3134)=57.86$ percent. This combined rate does not depend on how many layers the pyramid contains. There is no tax penalty to the controlling shareholder in Canada for funneling the dividend through a long sequence of listed corporations, and multilayered pyramidal corporate groups are consequently commonplace in that country.

Table 2 lists effective intercorporate dividend tax rates for 1997, along with a *business groups indicator variable*. The latter is constructed as follows: for each country, data on the ownership of the top ten listed companies are obtained from La Porta et al. (1999), Morck and Nakamura (1999), and Baums (1996). If any of the top ten firms is controlled by another listed company, or by several other listed companies working in concert, the business groups variable is set to "yes." Otherwise it is "no."

Table 2 shows that, of the 33 countries for which data are available, only the United States levies an effective tax on intercorporate dividends. It also shows corporate groups, pyramidal or otherwise, controlling top firms in every country except the United States and the United Kingdom. The pattern in Table 2 is consistent with intercorporate dividend taxation in the United States, rendering pyramidal and other corporate groups economically infeasible.

The absence of corporate groups in the United Kingdom shows that business groups can be eliminated in more than one way. Jones (2000, Chapter 6) argues that the business group was actually invented in the United Kingdom in the nineteenth century. British investors sought to invest in the emerging markets of the day—Australia, Canada, China, Japan, the United States, and so on—but were poorly protected from stock market scams. Reputable British firms listed controlled subsidiaries doing business in these foreign markets on British stock exchanges to tap into this investor demand, and business groups resulted. British tax law facilitated this by exempting intercorporate dividends from taxation, beginning with its 1842 tax law and continuing to the present. Franks et al. (2005) show that business groups persisted

Table 2
Business Groups and Intercorporate Dividend Taxes: Effective Tax Rates on Intercorporate Dividend Income from 50% Controlled Listed Subsidiaries in Various Countries in 1997 and the Existence of Business Groups

Country	Intercor- porate dividend tax rate	Business group among top 10 firms	Country	Intercor- porate dividend tax rate	Business group among top 10 firms
Argentina	0%	Yes	Italy ^b	0%	Yes
Australia	0%	Yes	Japan	0%	Yes
Austria	0%	Yes	Korea ^c	?	Yes
Belgium ^a	0%	Yes	Malaysia	0%	Yes
Brazil	0%	Yes	Mexico	0%	Yes
Canada	0%	Yes	Netherlands	0%	Yes
Chile	0%	Yes	New Zealand	0%	Yes
Denmark	0%	Yes	Norway	0%	Yes
Finland	0%	Yes	Portugal ^b	0%	Yes
France ^a	0%	Yes	Singapore	0%	Yes
Germany	0%	Yes	Spain	0%	Yes
Greece ^b	0%	Yes	Sweden	0%	Yes
Hong Kong	0%	Yes	Switzerland	0%	Yes
India	0%	Yes	Thailand	0%	Yes
Indonesia	0%	Yes	United Kingdom	0%	No
Ireland	0%	Yes	United States	7.0%	No

Sources: Tax rates are from International Bureau of Fiscal Documentation summaries, Price Waterhouse Tax Information booklets, and telephone and other discussions with accountants in various countries. Group structure information is based on data provided by Rafael La Porta, annual reports, Morck and Nakamura (1999), and Baums (1996), as well as telephone and other discussions with accountants, bankers, and finance academics from various countries.

^a A small surcharge on intercorporate dividends contravenes the European Commission's Parent-Subsidiary Directives, which mandate tax-exempt intercorporate dividends. Belgium recently eliminated this surcharge. France is expected to do so as well.

^bAganin and Volpin (1998) note that Italy applied statutory intercorporate dividend taxes for a period as well, and that established group firms seem hardly to have noticed. (An earlier version of their paper, cited in an earlier draft of the present paper, found that higher intercorporate dividend taxes reduced the scale of business groups.) Greece and Portugal also had statutory intercorporate dividend taxes for a time.

^cKorea applies high statutory rates on intercorporate dividends; however, holding company listed subsidiaries, as per the Anti-monopoly and Fair Trade Act (FTA), are 90 percent exempt (implying an effective rate below 3 percent) if the parent holds 40 percent. If the parent holds 30 percent, a 60 percent exemption applies. The Corporate Income Tax Act and the FTA also refer to presidential decrees assigning special intercorporate dividend tax status to certain holding company structures. These complicate intercorporate dividend taxes, which the PriceWatrehouseCoopers 2002 Merger and Acquisition Asian Taxation Guide (p. 87) summarizes thus: "A qualified holding company under the FTA

Table 2 (continued)

that owns 50% of a subsidiary (or 30% of a cross listed subsidiary) can deduct 60% to 100% of dividends received. A normal company can deduct 30% to 50% of dividends received if certain conditions are met. In order to prevent the holding company and normal company from expanding control over subsidiaries through borrowings, the more the holding company and normal company have borrowing and interest costs, the less the deduction is allowed." Some chaebols, such as Samsung, are not organized fully as tiers of holding companies (pyramids). Intercorporate dividend taxes can also be minimized by minimizing intercorporate dividends. This is presumably precluded if the subsidiary plans to issue equity or has cash flows other group firms cannot access through tunneling. Chaebols also long attracted liberal subsidies (see Chang 2003), perhaps offsetting residual intercorporate dividend taxes.

in the United Kingdom until the 1970s, when they rapidly evaporated. They attribute this to pressure from British institutional investors, dismayed over corporate governance problems in business groups. The nemesis they set against British business groups was the London Stock Exchange Takeover Rule, applied in 1968, which mandates that any acquisition of 30 percent or more of a listed company be an acquisition of 100 percent. This effectively eliminates business groups by forcing parents either to own their subsidiaries fully or to attempt to control them with stakes below the 30 percent threshold. The latter strategy fails if a subsidiary is threatened with a hostile takeover. The parent either surrenders the company or takes it private. Franks et al. (2005) argue that the Takeover Rule was explicitly directed at breaking up business groups and was highly effective.¹¹

Further work on the viability of pyramidal groups in different countries at different points in time is clearly needed to inform tax reform discussions in the United States and elsewhere.

4. How the United States Eliminated Large Business Groups

Pyramidal corporate groups were introduced to the United States in 1889 and became commonplace by the 1920s. ¹² By then, the largest U.S. pyramids were built around utility companies, and they encompassed literally hundreds of firms in pyramids as many as ten layers high. ¹³ Means (1930) describes the development of these structures as part of a "remarkable diffusion of ownership from 1917 to 1921," which he attributes (p. 592) to the high income taxes imposed to finance World War I. These, Means argues, "concentrated the attention of the former owners of industry on the possibility of retaining control

without important ownership, either through the wide diffusion of stock or through various legal devices [footnote: non-voting common stock, voting trusts, pyramided holding companies etc.] and thereby accelerating that separation of ownership and control...." Means (1930) and Berle and Means (1932) argue that the controlling owners of these groups could derive benefits funded out of pretax corporate income, while public shareholders' dividends reflected after tax earnings.

The income tax law of 1913, which imposed a tax of 1 percent on corporate income, did not distinguish intercorporate dividends from other income, and thus penalized holding companies. However, the Revenue Act of 1918 made intercorporate dividends fully deductible, putting the taxation of United States business groups in line with that prevailing elsewhere.

In 1928, the Federal Trade Commission issued a report on the abusive practices of pyramids. Noting widespread instances of tunneling, poor governance, and monopolistic practices, the report stated that pyramidal groups were "frequently a menace to the investor or the consumer or both." Following the 1929 market crash, many of these pyramidal groups defaulted on their debts. Becht and Delong (2004) argue that these massive defaults created a public perception that business groups were unstable and thus were responsible for the crash of 1929 and the subsequent depression. Graham and Dodd (1934), whose work was regarded as a bible by generations of American investors, includes a section entitled "The Evils of Pyramiding," which condemns such structures on numerous grounds, including that "the possession of control by those who have no real capital investment is inequitable and makes for irresponsible and unsound managerial policies" (pp. 566–571) and describes one business group, the Insull pyramid, in detail (pp. 674–677).

In 1934, Senator William Borah proposed eliminating the deductibility of intercorporate dividends. The proposal arose again at a January 1935 White House conference called to discuss methods of attacking holding companies. On June 19, 1935, President Roosevelt called for the complete eradication of unnecessary holding companies by taxation. This entailed three changes to the tax laws: the taxation of intercorporate dividends, the elimination of consolidated group corporate income tax filings, and changes to the capital gains tax rules regarding the elimination of controlled subsidiaries. Other changes, such as securities laws reforms, which strengthened public shareholders' legal rights and made corporations more transparent, and the Public

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Utilities Holding Companies Act, which explicitly restricted pyramiding in utilities industries, certainly also mattered.

The Roosevelt administration's most voluble charge against pyramids was that they permitted big business to avoid taxes. This charge is made in detail in the 1935 Senate Finance Committee testimony of Robert Jackson, assistant general counsel to the Treasury Department:

The tax problems arising out of systems of holding companies, subholding companies, operating companies, and mixed companies, are very serious. For example, one such system as of December 31, 1933, contained approximately 270 companies of which 128 were public utility operating companies located in several and widely separated states, and at least 31 of which would be classed as subholding companies. The corporation filed consolidated returns showing no tax due in any of the years 1929 through 1933. The system was not so modest about its profits in its reports to stockholders, and the Bureau began the task of audit. The auditing to date has required the services of 108 field agents for an aggregate period of 11,488 days, the service of 16 auditors for a period of 2,640 days, as well as the services of the supervising staff. The task is not yet nearing satisfactory completion. The investigation is complicated by the great volume of security transactions among the different companies of the group. In some instances securities were transferred through as many as 10 intermediary companies on the way from starting point to destination. A dollar of earnings would likewise run through several companies before reaching a resting place.

Some of these holding companies have imposed charges upon underlying operating utilities for the income-tax liability which the operating companies would have paid if they had filed a separate return. Then by eliminating the profit through the consolidated return, no tax was paid to the government. The holding company had collected the tax and kept it for itself. One company collected from its subsidiaries between 1926 and 1929 in excess of one and one-half million dollars on this basis. This particular device is probably now defeated by withdrawing the privilege of filing consolidated returns.

Elimination of consolidated income-tax returns does not eliminate the necessity for auditing these gigantic systems, nor does it make the problem less difficult. Managements that are so disposed still find it possible to shift security transactions from one company to another for the purpose of allocating losses or profits so as to avoid taxes, and can still control and divert earnings from one to another unit in the form of service charges, accountancy tax consultant, and management fees, and by various other changes can so reduce taxable income of some units and increase net income of others that they can accomplish many of the results of consolidated returns.

It is almost impossible, with systems of this magnitude and complexity, to determine the tax status of many companies. And, after an audit is made, the situation is easily and rapidly changed, to avoid its results.

In 1929, a certain corporation recorded on its books a capital gain in security transactions of \$18,000,000 which was eliminated through a consolidated return. The Bureau found, however, that there was no lawful basis for the con-

solidated return, and the resulting tax was about \$2,000,000. However, it was then discovered that a letter, written in 1933, purported to confirm what was claimed to have been an oral agreement made in 1929, although it had for years been left unwritten. By its terms the two companies declared their transactions to be continuing and not to be finally fixed and determined until all taxes were finally paid. The object of the device was apparently to prevent the closing of the transactions in 1929 and to throw the profit in whatever year was found to be convenient.¹⁶

The income tax laws in force from 1918 through 1932 permitted closely affiliated companies to file a single consolidated corporate tax return. This let the group use the deductions of one member company to offset the profits of another. However, to qualify as *affiliated*, the companies had to be 95 percent owned by other group companies, and one of the consolidated companies had to be 95 percent owned by the controlling shareholder of the group. The Means (1930) argues that the purpose of pyramidal business groups was to let wealthy individuals and families control corporate assets worth vastly more than their own fortunes. This is difficult if public shareholder participation is limited to only 5 percent in each group company. Consequently, most large business groups probably could not file consolidated returns.

The tax avoidance strategies that Assistant General Counsel Jackson decries in the quote above are ways for business group firms that could not consolidate their tax returns to gain some of the relief that consolidated returns would have provided. The strategies they used to achieve this were akin to the transfer pricing and income shifting known to occur in modern multinational companies. Listed companies in a business group could trade with, finance, or insure each other at artificial prices, transferring taxable income from companies with few deductions to companies with many. In this way, they could approximate the tax bill that would result were the group to file a single consolidated tax return. Income shifting of this sort remains an issue in other countries, such as Canada, where firms in different industries are taxed quite differently. By transferring taxable income from high- to low-tax industries, business groups can reduce their overall tax bills.

Such income shifting no doubt picked up as the rules governing consolidated returns were steadily tightened. In 1932, consolidated group returns were subjected to a $\frac{3}{4}$ percent additional tax. This was raised to 1 percent in 1933 and 2 percent in 1934. The Revenue Act of 1934 restricted the filing of consolidated returns to railroads.

The Revenue Act of 1936 extended this right to urban and intercity railways, and eliminated the 2 percent tax.

Intercorporate dividends taxation was introduced in the United States in 1935 with the explicit objective of breaking up pyramidal groups. Blakey and Blakey (1935) summarize the Roosevelt tax reform of 1935, which proposed intercorporate dividend taxes at 15 percent of the normal dividend tax rate as a measure to "prevent the evasion through affiliates" of the corporate income tax. Since the tax authorities seemed unable to penetrate the complicated tax avoidance strategies employed by business groups, the Roosevelt administration elected to use the tax law to eradicate large business groups from the corporate landscape. The House initially rejected taxing intercorporate dividends at 15 percent of the regular rate, and the 1935 act contained a compromise of 10 percent. However, the 15 percent figure ultimately prevailed in 1936.

To further encourage the dismantling of large business groups, the administration offered a carrot as well as a stick. Lent (1968) argues that liquidating controlled subsidiaries was discouraged under the previous tax rules because it triggered the recognition of taxable capital gains. The Revenue Act of 1935 exempted from capital gains tax all dividends of property from the complete liquidation of a controlled subsidiary. This permitted companies in higher tiers of holding companies to absorb those in lower tiers without incurring capital gains taxes. The Revenue Act of 1936 eliminated the restriction—that the liquidating dividend had to be in *property*—and permitted the dissolution of controlled subsidiaries with no taxable capital gains regardless of the method of payment. 20

Yet another strike against pyramids was the Public Utilities Holding Company Act (PUHCA) of 1935, which subjected utilities to federal regulation and banned pyramids more than two layers high from holding public utilities such as power or water companies. ²¹ The Federal Trade Commission's 1928 report condemned pyramidal groups as "frequently a menace to the investor or the consumer or both," and part of the justification for the Roosevelt era attack on business groups was the fear that seemingly independent companies might be controlled by the same party and so could collude to raise prices.

Such concerns were especially evident in discussions regarding public utilities, which had been a "high tech" glamour industry during the 1920s stock market bubble. From 1920 on, the number of independent electric power firms declined dramatically because of extensive

pyramiding.²² Ultimately, utilities firms throughout the country came under the control of a small number of holding companies, which themselves were owned by other holding companies. As many as ten layers separated the top and bottom of some pyramids. By 1932, three groups controlled 45 percent of U.S. electricity generation.

In response to perceived abuses and the high profile collapses of several important highly leveraged utilities pyramidal groups following the 1929 crash, the Roosevelt administration enacted the PUHCA. It seems likely that concerns about the tunneling of funds out of utilities with cost plus pricing and regulated rates of return also played a role, but anti-trust concerns were most explicit at the time.

Finally, the establishment of the Securities and Exchange Commission and the increased transparency and strengthened shareholder rights it brought about also probably played a role. La Porta et al. (1997) and Burkart et al. (2003) argue that controlling shareholders are more likely to sell out if public shareholders are willing to pay higher prices for their shares. This, they propose, occurs if shareholders are better protected.

Lent (1968) reports a surge in stock liquidations in 1936. Finding no other unusual takeover activity in the industrial sector at this time, he concludes that the liquidations reflect the widespread dissolution of pyramidal groups. That is, companies liquidated their controlled subsidiaries and reorganized their operations as freestanding singleton corporations. He notes that "the taxation of intercorporate dividends and the liberalized provisions for the treatment of gains and losses in liquidation of controlled subsidiaries also encouraged the outright merger of affiliated companies" (p. 145).

Observers at the time noted the rapid dissolution of pyramidal groups in the United States and attributed this to the tax changes outlined above. A study by the Twentieth Century Fund's Committee on Taxation (1937), summarized in Table 3, lists 30 major U.S. companies of the day that eliminated holding company structures. Seven of these explicitly cite the tax changes as the impetus for these changes. The Twentieth Century Fund study notes that the others "would seem to have saved taxes as a result" (p. 547), though the companies do not explicitly mention this motivation.

The resulting difference between the structure of corporate America and the corporate sectors of other industrial countries is stark. Table 4 contrasts the corporate sectors of Canada and the United States. It shows that intercorporate dividends account for 20 to 40 percent of the

Table 3The Elimination of U.S. Holding Company Structures: Important United States Companies Listed in 1937 as Having Eliminated One or More Holding Company Structures in Recent Years

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Source: The Twentieth Century Fund, Committee on Taxation (1937, p. 547).

1able 4 Corporate Income from Dividends in Canada Versus the United States

	2001	2000	1999	1998	1997	1996	1995	1994
Canada Total dividend revenue Net profit Dividend revenue as fraction of net profit Investments in affiliates as fraction of net fixed assets	C\$21.95 C\$75.70 29% 72%	C\$20.83 C\$118.05 18% 64%	C\$20.43 C\$99.40 21% 69%	C\$19.65 C\$67.37 29% 64%	C\$19.65 C\$80.55 24% 59%	C\$14.34 C\$64.71 22% 58%	C\$11.46 C\$50.70 23% 59%	C\$20.12 C\$53.11 38% 53%
United States Dividend revenue from domestic corporations Dividend revenue from foreign corporations Total dividend revenue Net income		\$20.87 \$60.20 \$81.07 \$927.53	\$20.68 \$64.91 \$85.59 \$927.53	\$20.01 \$49.23 \$69.24 \$838.22	\$19.15 \$51.01 \$70.16 \$915.40	\$16.31 \$46.25 \$62.56 \$806.48	\$22.84 \$35.42 \$58.26 \$714.19	\$13.23 \$30.32 \$43.56 \$577.28
Dividend revenue from domestic corporations as fraction of net income Dividend revenue as fraction of net income		8.74%	9.23%	8.26%	7.66%	7.76%	8.16%	7.54%
The state of the s	Canal diam	Jollano: those	for the I'miter	d States are	n hillions of	II.S. dollars.	Canadian d	ata as from

Statistics Canada's Cansim database, and include firms in all industries except management of companies and enterprises and other funds and Financial figures for Canada are in billions of Canadian dollars; those for the United States are in billions of U.S. dollars. Canadian data as from financial vehicles. United States data are from the Internal Revenue Service's Statistics of Income database, and covers all active corporations.

income of the Canadian corporate sector, but only about 8 percent of that of the U.S. corporate sector. Most of the latter is dividends from foreign subsidiaries. Intercorporate dividends from other U.S. corporations amount to only 2 to 3 percent of the income of that country's corporate sector. Table 5 shows most of these dividends to be from corporations in which the recipient's stake is below 20 percent. This probably includes many toeholds preliminary to takeover bids, residual holdings after failed bids, and white knight holdings aimed at blocking takeovers. Dividends from firms in which the recipient has a stake of between 20 percent and 80 percent, magnitudes characteristic of intercorporate equity blockholdings in business groups in other countries, account for only about one-half of 1 percent of corporate net income, except in 1995, when the amount is somewhat larger.

Blakey and Blakey (1935) clearly describe the Roosevelt tax policies as instruments of social engineering, at least as much as devices to raise revenue. They sum up the administration's tax policy thus:

There can be no denying that the President's message was an attack upon wealth; he and his followers would say, not upon innocent wealth, but upon concentrated, monopolistic, tax-evading, unsocial wealth, and particularly upon that taken from the masses by the *vicious*, *pyramided*, *consciousless holding companies*. [italics added]

That this accurately reflected the view from the White House is also clear. Roosevelt (1942) writes in the *America Economic Review*:

Tax policies should be devised to give affirmative encouragement to competitive enterprise. Attention might be directed to increasing the intercorporate dividend tax to discourage holding companies....

Roosevelt (1942) clarifies his views:

Close financial control, through interlocking spheres of influence over channels of investment, and through the use of financial devices like holding companies and strategic minority interests, creates close control of the business policies of enterprises which masquerade as independent units.

That heavy hand of integrated financial and management control lies upon large and strategic areas of American industry. The small-business man is unfortunately being driven into a less and less independent position in American life. You and I must admit that.

Private enterprise is ceasing to be free enterprise and is becoming a cluster of private collectivisms; masking itself as a system of free enterprise after the American model, it is in fact becoming a concealed cartel system after the European model.

1994

1995

1996

1661

1998

1999

14Die 3 United States Corporations' Intercorporate Dividend Income

Panel A. Domestic intercorporate dividends and corporate net income, in billions of dollars	orate net incom	me, in billion	s of dollars				
Dividends received from domestic corporations, total	\$20.87	\$20.68	\$20.01	\$19.15	\$16.31	\$22.84	\$13.23
Less-than-20%-owned subject to 70% deduction	\$13.16	\$15.63	\$13.34	\$11.62	\$10.85	\$9.53	\$9.10
20%-or-more-owned subject to 80% deduction	\$5.21	\$3.57	\$4.47	\$5.52	\$4.32	\$12.55	\$3.16
Intragranto dividends qualifying for 100% deduction	\$2.06	\$1.10	\$1.81	\$1.56	\$0.72	\$0.41	\$0.45
Other intercorporate dividend income ^a	\$0.44	\$0.25	\$0.38	\$0.45	\$0.43	\$0.35	\$0.52
	\$927.53	\$927.53	\$838.22	\$915.40	\$806.48	\$714.19	\$577.28
Panel B. Domestic intercorporate dividends, as percentage of net income	ntage of net in	come					
Dividends received from domestic cornorations, total	2.25%	2.23%	2.39%	2.09%	2.02%	3.20%	2.29%
I ess-than-20%-owned subject to 70% deduction	1.42%	1.69%	1.59%	1.27%	1.35%	1.33%	1.58%
20%-or-more-owned subject to 80% deduction	0.56%	0.39%	0.53%	%09:0	0.54%	1.76%	0.55%
	0.22%	0.12%	0.22%	0.17%	0.09%	%90.0	0.08%
Other intercorporate dividend income ^a	0.05%	0.03%	0.05%	0.05%	0.05%	0.05%	0.09%
			:		E		

a Includes dividends from debt-financed stock of domestic corporations, certain preferred stock of less-than-20%-owned public utilities subject to a 42% deduction, and certain preferred stock of 20%-or-more-owned public utilities subject to a 48% deduction; plus amounts received from interest charge domestic international sales corporations (IC-DISCs) or former domestic international sales corporations (DISCs), and by small business investment companies qualifying for a 100% deduction. Certain intercorporate preferred equity holdings involving public utilities have special tax Source: Internal Revenue Service Statistics of Income data. Breakdown is from Table 20, total receipts are from Table 2. status, as do IC-DISCs and DISCs, which are exporters entitled to special tax status. We all want efficient industrial growth and the advantages of mass production. No one suggests that we return to the hand loom or hand forge. A series of processes involved in turning out a given manufactured product may well require one or more huge mass-production plants. Modern efficiency may call for this. But modern efficient mass production is not furthered by a central control which destroys competition between industrial plants each capable of efficient mass production while operating as separate units. Industrial efficiency does not have to mean industrial empire building.

And industrial empire building, unfortunately, has evolved into banker control of industry. We oppose that.

Such control does not offer safety for the investing public. Investment judgment requires the disinterested appraisal of other people's management. It becomes blurred and distorted if it is combined with the conflicting duty of controlling the management it is supposed to judge.

Interlocking financial controls have taken from American business much of its traditional virility, independence, adaptability, and daring—without compensating advantages. They have not given the stability they promised.

Business enterprise needs new vitality and the flexibility that comes from the diversified efforts, independent judgments and vibrant energies of thousands upon thousands of independent businessmen.

The individual must be encouraged to exercise his own judgment and to venture his own small savings, not in stock gambling but in new enterprise investment. Men will dare to compete against men but not against giants.

In summary, although the tax reforms of the mid 1930s were unquestionably populist measures aimed at big business, the attack was not without deliberation. A key part of the reforms was subjecting dividends passed through layers of firms in pyramidal groups to double and multiple taxation, thereby rendering such groups unviable. Spurred by the elimination of most consolidated tax filing for group companies and of the realization of capital gains upon the dissolution of controlled subsidiaries, as well as other factors described in Roe (1997, 2003), like the SEC and the PUHCA, American corporations dismantled their business groups and reinvented themselves as freestanding widely held companies. All this happened quite rapidly; Lent (1968) infers a burst of such activity in 1936. When Holderness et al. (1999) examine the detailed ownership of a large sample of U.S. corporations in the late 1930s, they find an even greater preponderance of widely held firms than exists at present-and make no mention of business groups.

5. Business Groups Elsewhere in the World

By the late 1920s, large pyramidal corporate business groups were probably the predominant form of large corporate organization throughout the world. Dismantling them—the Roosevelt administration's response to the Great Depression—was a uniquely American idea. Elsewhere in the world, 1930s governments were either indifferent to business groups or sought to control them and thus direct the economy.

Canada's Depression-era government focused on attacking deflation, and Morck et al. (2005) describe how it sought to raise prices by cartelizing the entire economy. Business groups do not seem to have attracted much official notice. Corporate governance problems arising from the 1920s boom and the 1930s bust did become a focus of attention in the United Kingdom and ultimately led to SEC-style disclosure rules in 1948. Ironically, according to Franks et al. (2005), these actually promoted a resurgence of pyramidal groups by making targets more transparent. Pyramiding generated the institutional investor pressure for a takeover rule that largely eliminated United Kingdom business groups. In Sweden, Högfeldt (2005) finds that the Wallenberg family's bank accepted equity blocks in a wide range of Swedish companies bankrupted by the Depression. Sweden's largest pyramidal group is thus a child of the Depression.

The only countries other than the U.S. that took official action against business groups during the 1930s were the Axis powers, and there the goal was to use them as tools for controlling the economy. Againin and Volpin (2005) describe how the Fascist government nationalized Italian banks and then reorganized bankrupt Italian companies into a huge pyramidal group topped by a state owned enterprise, the *Instituto per la Riconstruzione* (IRI) in 1933. Various postwar governments followed suit, establishing other pyramidal groups of sound firms with state-owned enterprises at their apexes. Some Canadian and French postwar governments also used this model to de facto nationalize large swathes of their economies at low cost.

Aganin and Volpin (2005) point out that postwar Italian governments levied intercorporate dividend taxes for a period and that this did not disrupt Italian business groups. This may be because other U.S. 1930s reforms, such as capital gains tax breaks, restrictions on tax consolidation, and securities law reforms, were critical ingredients of an effective antipyramid policy. Or Italian groups may have found means to avoid much or all of the tax, as is possible in some other countries with statutory intercorporate dividends taxes.²³

The National Socialist government of Germany and Japan's Military Government both attributed the Depression to large shareholders fixated on short-term performance. Fohlin (2005) describes how the

Führerprinzip explicitly "freed" German boards of their duty to share-holders and substituted a duty to all stakeholders—most important, the *Reich*. Party "observers" on all boards monitored corporate governance. Morck and Nakamura (2005) recount how Japan's military government likewise "freed" directors of their duty to allegedly myopic large shareholders, condemned profit maximization, restricted dividends, and extolled "patriotic" corporate governance. Thus, the entire German and Japanese large corporate sectors were de facto nationalized. They note that modern Japanese criticism of shareholder capitalism, mainly from the left, resurrected and perhaps exported this notion of the importance of overcoming pressure from irrationally myopic shareholders.

Prewar German business groups quickly reestablished themselves after 1945. The American occupation authority in Japan, staffed by Roosevelt New Dealers, broke up Japan's pyramidal groups—nationalizing and then widely disbursing both intercorporate and controlling families' equity holdings. By 1952, most large Japanese firms were widely held and freestanding. Two waves of takeovers ensued, and Japan's current *keiretsu* business groups emerged as firms sought friendly blockholders to forestall hostile raids.²⁴

All of this left most large businesses throughout most of the world organized into business groups in the postwar period. This means corporate finance work using data from countries other than the United States and the United Kingdom can shed light on the economic importance of the concerns raised by the Roosevelt New Dealers in the 1930s, which led them to dismantle U.S. business groups.

5.1 Corporate Governance

Berle and Means (1932) link pyramidal groups with corporate governance problems and describe how such groups induce a "separation of ownership from control." To see this, refer back to Figure 1. The apex firm controls all the firms in Figure 1, either directly or indirectly. However, its actual ownership stake in Firm F, for example, is only 1.76 percent (51 percent to the sixth power). Firm F is thus 98.24 percent owned by public shareholders, either directly or indirectly through parent and grandparent companies, but 51 percent controlled by the pyramid's controlling family. The controlling shareholder might thus be expected to favor firms in higher tiers in the pyramid, in which her actual ownership is greater, and use her control rights over firms near the pyramids' base to direct resources upward.²⁵ Johnson et al.

(2000) christen such income and asset shifting tunneling, document examples, and show that tunneling is perfectly legal in many developed economies.

Berle and Means (1932) note that a similar separation of ownership from control exists in widely held firms with professional managers. Grossman and Hart (1980) argue that atomistic shareholders cannot exercise their control rights because of fixed costs of monitoring and control, effectively delegating unchecked control to professional managers. However, the separation is plausibly worse in pyramidal groups because the apex shareholder's control rights are formal. The professional managers in widely held firms can be ousted via hostile takeovers, proxy fights, or rebellions by outside directors. Rare as such events might be in widely held freestanding firms, they are all impossible in firms such as those in Figure 1, where the apex shareholder votes a majority of shares in every firm's shareholder meeting and appoints every director.

In such situations, Stulz (1988), Morck et al. (1988), and others posit that the controlling shareholder becomes *entrenched*. This occurs if she cannot easily be dislodged because she derives *private benefits of control*, such as the diversion of corporate resources to her private use, political influence, or psychic utility from simply being in control.²⁶ The controlling shareholder might be more inclined to sacrifice the economic performance of firms nearer the base of the pyramid to obtain such private benefits because her actual ownership of these firms is lower.

A large empirical literature, surveyed in Morck, Wolfenzon, and Yeung (2004)²⁷, documents the importance of both tunneling and the private benefits of control in countries whose large corporate sectors are dominated by pyramidal and other business groups. In general, these problems are worse in more corrupt countries with less efficient judicial systems.

Morck et al. (2000) argue that entrenchment is a particular problem in "old money" family controlled pyramidal groups if the controlling shareholder owes her position to genetics rather than talent. Caselli and Gennaioli (2002) develop a theoretical framework to explain why untalented heirs might retain control to retain private benefits. An expanding empirical literature also links inherited corporate control both to poor firm performance and to poor economy performance. Morck et al. (1988), Morck et al. (2000), and others find depressed firm performance associated with heir-run firms. Smith and Amoako-Adu (1999) and Pérez-González (2001) detect sharp drops in share prices

when heirs assume corporate governance powers. More recent work by Anderson and Reeb (2003) contradicts previous studies; they report superior performance by family firms and—to a much lesser extent—heir controlled firms. However, Amit and Villalonga (2004) dispute this finding on several grounds, noting that Anderson and Reeb (2003) define a "family firm" as one whose founder or founding family has a role in management—making Microsoft, Dell, and other entrepreneurial firms "family firms". Anderson and Reeb likewise classify firms as heir managed if the founding family retains even a very tenuous tie. Amit and Villalonga (2004) reproduce the Anderson and Reeb result for entrepreneurial firms (i.e., "family firms" not run by heirs) but report that heir run firms underperform.

The above results all use either Canadian or U.S. data. Khanna and Rivkin (2001), Khanna and Palepu (2000), and others report superior firm performance for business group firms in a range of low income countries. But Morck et al. (2000) construct a measure of the importance of wealthy old families across countries and find a highly significant negative effect on economy growth. Why business groups might be the best performing firms in the worst performing economies is explored by Morck, Wolfenzon, and Yeung (2004) who recommend much further study.

5.2 Tax Avoidance

Pyramidal groups, like multinational firms, are composed of numerous separate corporate entities. In most countries, the individual firms in these groups are required to file separate corporate tax returns, for consolidated returns are only allowed where the parent controls all or almost all of a subsidiary's stock. If different firms have different profit rates and tax deductions, the controlling shareholder can reduce her taxes by shifting tax deductions upward within the pyramid or by reorganizing the pyramid to place firms with ample tax deductions near the apex. If different industries are subject to different tax regimes, it might also reduce taxes to use transfer pricing or other mechanisms to shift income laterally within pyramids from high- to low-tax subsidiaries. The public shareholders of firms losing tax deductions or income would certainly view these transactions as governance problems, but tax authorities might also view such dealings skeptically.

A large literature attests to the importance of transfer pricing and other forms of income shifting in multinationals.²⁸ However, little is known about the importance of similar phenomena in purely domestic

business groups, which usually consist of many separately taxed listed companies. This is surprising, given the stress that representatives of the Roosevelt administration placed on the problem of tax avoidance by domestic group firms and the high profile attention accorded analogous income shifting by multinational firms.

In addition, the sheer complexity of business groups may render group firms less transparent than freestanding firms to tax inspectors and shareholders alike. This might also permit a degree of tax avoidance.

5.3 Competition Policy

The Public Utilities Holding Company Act (PUHCA) of 1935, which outright banned pyramids more than two layers high from holding public utilities such as power or water companies, was justified as a response to excessive market concentration in utilities industries.

Utility companies are important elements of some pyramidal groups in other countries because they serve as useful cash cows to generate earnings for expansion into other industries via pyramiding. Surprisingly, their governments show few concerns about utilities abusing their access to regulated rates of return and cost plus pricing to gain advantage over freestanding companies in unregulated industries.

More generally, concerns about large pyramidal groups conferring market power must have occurred to politicians in other countries. However, the United States almost alone has a long history of enforcing antitrust laws. Canada and the European Union enacted such laws in the 1980s and 1990s, and most other countries either lack them entirely or have antitrust laws that were always essentially dead letters. The European Union's regulators are increasingly concerned about market power, yet the European Commission adamantly protects pyramidal groups from intercorporate dividend taxation with its increasingly strongly worded Parent-Subsidiary Directives. Business groups and competition policy have not yet been connected by Canadian politicians. Market power was the explicit reason the American occupation authorities cited for breaking up Japan's prewar pyramidal business groups; however, after the American withdrawal in 1952, successive Japanese governments permitted a rapid reconstitution of these groups, albeit in a different form. See Morck and Nakamura (2005).

Only India was concerned enough about business groups exerting undesirable market power to take legislative and regulatory action. A

series of government reports, most notably that by Hazari (1966), raised these concerns by documenting the extensive control a few large pyramidal groups held over whole sectors of the economy. However, Khanna and Palepu (2005) show that the Congress Party's response was widespread detailed regulation, rather than nuanced antitrust laws. This regulation ultimately degenerated into the License Raj, which Bhagwati (1993) calls "a maze of Kafkaesque controls" and which many economists argue stymied growth for a generation. ²⁹ Paradoxically, the large pyramidal business groups were probably better able to deal with the License Raj than were independents. Large Indian pyramids, like the Tata and Birla families' groups, had vast embassies in New Delhi, staffed with armies of lawyers who kept close track of whom to bribe for what regulatory favor. ³⁰ The License Raj is now being dismantled.

Recent work emphasizes dynamic, rather than static, costs and benefits of market power. Aghion and Howitt (1998) formalize Schumpeter's (1912) theory of creative destruction, in which innovative upstart firms fuel growth by bringing new technology into use and thereby destroying stagnant established firms. Since the enhanced productivity of the new technology more than compensates for the destruction of the old firms, the economy grows. In an economy of freestanding firms, the destruction of the old firms is an externality imposed upon their shareholders by the new upstart firm. However, Morck and Yeung (2004a) argue that large business groups internalize this cost, especially if the firms harmed are near pyramids' apexes. This internalization of the "destruction" in creative destruction slows growth if the controlling shareholders of large business groups block new technology to preserve the value of their existing capital.

5.4 Political Economy

The 1930s Roosevelt administrations that broke up U.S. business groups clearly worried about the political power of an entrenched wealthy business elite, and Blakey and Blakey (1935) describe its policies as "an attack upon wealth" consistent with a traditional American mistrust of concentrated economic or political power. While pyramidal groups clearly have antitrust implications, the political economy concerns surrounding them run much deeper. Pyramidal corporate groups allow wealthy individuals or families to control corporate assets worth vastly more than their actual wealth. Pyramids concentrate corporate control in the hands of small elites in many developing countries and in continental Europe.

To see how this occurs, return to Figure 1. Let each firm in the pyramid own real assets of \$1 billion plus 51 percent of the stock in two firms beneath it, except that firms in level F own only \$1 billion in real assets each. Each E level firm is worth \$1 billion plus $2 \times 0.51 \times \$1$ billion, or \$2.02 billion. Each D level firm is worth \$1 billion $+2 \times 0.51 \times \$2.02$ billion = \$3.06 billion. Firms in levels C, B, and A are similarly worth \$4.12 billion, \$5.20 billion, and \$6.31 billion each, respectively. The total value of the real assets in all the firms in the group is \$1 billion times the number of firms. There are two firms in Level A, four in level B, eight in level C, and so on, down to level F, which contains 64 firms. The number of firms is thus 2 + 4 + 8 + 16 + 32 + 64 = 126, and the total value of the corporate group is thus \$126 billion. However, the family firm need hold only 51 percent of each level A firm, at a cost of $2 \times 0.51 \times \$6.31$ billion = \$6.43 billion, to control the 126 firms in the group and their \$126 billion in real assets.³¹

Of course, concentrated control can be welfare enhancing if the controlling shareholder is altruistic or values her reputation. Khanna and Palepu (1997) and others invoke Coase (1937) and Williamson (1973) to argue that business groups run by such controlling shareholders substitute hierarchical intercorporate dealings for arm's-length market transactions rendered costly by endemic corruption. Consistent with this argument, business group firms perform no worse than independents in most low-income countries, and they perform significantly better in some.³² These arguments are persuasive, especially regarding low-income countries.³³

However, they are less plausible in explaining the prevalence of corporate groups in Canada, France, and Sweden. Morck, Wolfenzon, and Yeung (2004) argue that groups may arise naturally for the reasons listed above, but once established are hard to dismantle because of the political power they confer on their controlling shareholders, and thus persist after their economic purpose has faded away. Indeed, Haber (1997), Krueger (2002), Morck, Wolfenzon, and Yeung (2004), Rajan and Zingales (2003), and others argue that politically connected controlling shareholders of large business groups may deliberately impede the development of institutions that permit low-cost market transactions to preserve the status quo, and that this might retard economic development in many low-income countries. That is, the controlling shareholders of these groups become *entrenched*.

In an example of this, Högfeldt (2004) describes how Social Democratic politicians and the families that controlled Sweden's pyramidal groups overcame their initial hostility and ultimately came to support

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each other. The Social Democrats came to view phone calls to a few leading patriarchs as an efficient way to intervene in the economy, and the patriarchs learned the value of high taxes as a barrier to entry. He argues that this mutual admiration ultimately undermined the economic viability of the Swedish Model.

More generally, Krueger (1974) and others argue that extensive government intervention inhibits economic growth because lobbying for government favors easily becomes more profitable than investment in productivity enhancement. The result is a rising flood of capital invested in political connections (corruption) and a dearth of capital in research and development, capital spending, etc. Morck and Yeung (2004b) argue that the highly concentrated corporate control in pyramids facilitates such political rent seeking by limiting the number of actors in the bargaining game between politicians and corporate insiders.

6. Tax Policy in the United States

Defending the Roosevelt tax reforms aimed at breaking up America's great business groups, Blakey and Blakey (1935) concede that "the diverting of taxation from the primary purpose of raising revenue to other major purposes involves great hazards." However, writing in the American Economic Review, they argue that taxes help direct the development of institutions, and that statesmanship requires the conscious direction of this development:

Statesmanship requires that the Ship of State shall not be allowed to rot in a stagnant Sargasso Sea nor be rent asunder by explosions of dynamite in its hold nor be dashed upon the rocks by the tidal waves of radically revolutionary storms and earthquakes.

As the writing style in the *American Economic Review* deteriorated over the decades, so was the original intent of Congress and the White House forgotten.

The purpose of the intercorporate dividend tax was to discourage pyramiding, not to raise revenue. Indeed, the efficacy of the tax in fulfilling this original intent is apparent in the miniscule magnitude of intercorporate dividends in the United States, as shown in Table 4. Intercorporate dividends amount to 2.25 percent of the net income of active U.S. corporations in 2000, the most recent year for which data are available. This implies a miniscule contribution to the United States Treasury from intercorporate dividend taxes.

The elimination of business groups was not the only corporate governance objective of Roosevelt tax reforms. Calomiris and Hubbard (1995) study the undistributed profits tax (UPT) of 1936–1937, which they note "was passed as a means to discipline managers" (p. 446). Disciplining managers who excessively retain cash flow to fund unprofitable pet projects is a recurring theme in the periodic corporate governance crises of the past three centuries. For example, in the early 1600s, the shareholders of the Dutch East Indies Company, the world's first joint stock company, founded in 1602, unsuccessfully sued management to force a liquidating dividend, or at least higher dividends. Lobbying by younger firms with higher costs of capital forced the UPT's repeal. Intriguingly, Calomiris and Hubbard (1995) report that at least one larger firm, apparently acting altruistically, supported its smaller competitors' lobbying. An alternative interpretation is that its insiders had pet projects to fund.

The corporate governance aspects of the undistributed profits tax were neglected by subsequent generations of economists. For example, in a 200-page study on the UPT, Lent (1968) scarcely mentions its corporate governance purpose. Likewise, the intercorporate dividend taxes levied by the United States faded to a minor footnote in that country's many highly thoughtful tax studies. Yet the introductory quote by Nasser warns us not to dismiss apparently eccentric quirks in U.S. policy.

How dividends should be taxed is the subject of a high-powered academic debate, summarized by Zodrow (1991), Allen and Michaely (2004), and others.³⁵ A full review is beyond the scope of this study. However, the corporate governance implications of intercorporate dividend taxes escape mention. Thus, intercorporate dividends taxes received scant attention in recent U.S. debates of dividend taxation.

The statement outlining the Bush administration's plans to end double taxation, as circulated by the Treasury Department in 2003, reads:

Under the proposal, an excludable dividend received by a U.S. corporation will not be taxable. Excludable dividends received by a corporation will increase the recipient corporation's EDA (excludable dividend amount) and will, therefore, remain excludable when distributed by the recipient corporation. (2003 Blue Book, p. 20)³⁶

Had this proposal been enacted, Company E in Figure 1 could claim dividend income received from Company F as an *excludable dividend amount*, income on which Company E need pay no corporate income tax. In turn, Company E could forward the dividend income to

Company D without Company D incurring any tax liability, and so on, all the way up to the apex firm of the pyramid. That is, U.S. tax policy would come to resemble those of Canada and other countries in imposing no tax penalty on pyramidal business groups of listed companies. That the Treasury Department understood this is clear because the proposal further states, "These additions to EDA will ensure that multiple levels of corporate ownership do not result in more than one level of tax on income that has been previously taxed at the corporate level."³⁷

Had this proposal been enacted, tax and corporate finance economists would have been treated to a fascinating experiment about how important taxes are in shaping the structure of corporate ownership. Ultimately, the Bush administration and Congress agreed on a simple reduction of the individual tax rate on dividend income to 15 percent and left intercorporate dividend taxes unchanged, as in Table 1. These provisions in the JGTRRA are set to expire in 2009, necessitating a further reconsideration of U.S. dividend taxes at that time, or earlier. This paper explains the original intent of Congress and the White House in doubly and multiply taxing intercorporate dividends. Whether or not these taxes are retained requires reflection on the wisdom of reopening the United States to business groups.

7. Conclusions

The U.S. tax on intercorporate dividends was largely responsible for producing the country's highly exceptional large corporate sector composed of freestanding, widely held firms.

In the 1930s, the Roosevelt administration convinced Congress that pyramidal business groups wrought problems of corporate governance, tax avoidance, monopolies, and undesirably concentrated political influence. Their response was to tax intercorporate dividends, exempt the liquidations of controlled subsidiaries from capital gains taxes, and greatly restrict the ability of business groups to file consolidated returns. These policies, along with the Public Utilities Holding Company Act and the establishment of the Securities and Exchange Commission, induced a rapid dismantling of American business groups. Previously an important part of the large corporate sector, business groups seemingly all but vanished by the end of the 1930s.

These measures gave the United States a large corporate sector almost unique in the world. Elsewhere, business groups controlled by

handfuls of wealthy families govern vast sweeps of national economies. Empirical work studying these groups suggests that they might serve a useful purpose in early stages of economic development, by substituting corporate hierarchies for dysfunctional product, capital, and labor markets. However, other work suggests that business groups in many parts of the world are associated with the sorts of governance problems the Roosevelt administration feared. Further work is needed to evaluate the administration's parallel fears that business groups are adept at avoiding taxes, exerting market power, and undesirably concentrating political influence.

The United States recently enacted sweeping changes to the way it taxes dividends. Early proposals would have eliminated intercorporate dividend taxes; however, the final version of the reforms, the Jobs and Growth Tax Relief Reconciliation Act (JGTRRA) of 2003 ultimately left them unchanged. The sections of the JGTRRA pertaining to dividends lapse in 2009, so a further reconsideration of U.S. dividend tax policy is almost certain at that time or sooner. Tax economists have accumulated deep insights into the costs and benefits of various dividend tax policy alternatives. However, most of this thought concerns taxes on dividends paid by a corporation to its human shareholders. The potential double and multiple taxation of intercorporate dividends played little role in these discussions, and the original intent of Congress and the White House seems largely forgotten. But American intercorporate dividend taxes are not a random quirk in that country's tax code. They are part of a carefully crafted public policy.

Elsewhere, business groups permit tiny elites to control the greater parts of the large corporate sectors of many Latin American, Asian, and European countries. Increasingly, these business groups are attracting attention from both academics and institutional investors. For example, a high-profile governance scandal in 2004 involves the Hollinger Group, a pyramidal group controlled by Black (2003). The circumstances under which sound public policy facilitates business groups are beyond the scope of this study. But if any government weighs its policy alternatives and opts to eliminate business groups, the American experience might be instructive.

Intercorporate dividend taxes were certainly important in this experience; however, the American attack on pyramiding had many fronts. Capital gains tax exemptions for the liquidations of controlled subsidiaries and severe restrictions on consolidated business group returns also mattered. The Public Utilities Holding Company Act was

another front. However, most public utilities in the United States now operate in a single state and need not comply with the PUHCA. The unimportance of renewed pyramiding by utilities and in other industries underscores the importance of the tax fronts. The Securities and Exchange Commission was yet another front in the Roosevelt attack on business groups. By protecting public shareholders, the SEC slowly rebuilt public confidence in the stock market after the disastrous crash of 1929. Widely held freestanding firms are, of course, impossible without a multitude of small investors. They are also impossible if wealthy corporate insiders dare not diversify their stockholdings and become public portfolio investors.

Notes

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- 1. Quoted in Brandeis (1913, p. 223).
- 2. The Hees-Edper, Anglo-American, Agnelli, or Deutsche Bank Groups are known to be well governed, compliant regarding taxes, and politically ethical. For example, Daniels et al. (1995) find no evidence whatsoever of poor corporate governance or any other problems in Hees-Edper firms. These groups serve only to illustrate business groups' structures. The statistical evidence discussed below should be interpreted as describing other business groups.
- See, for example, Holderness and Sheehan (2000). See also Liu and Cornell (2001) and Lamont and Thaler (2003) for a discussion of how investors' valuations of subsidiary carve-outs and parents appear inconsistent.
- 4. I am grateful to Martin Feldstein for bringing Thermo Electron to my attention and to Belen Villalonga for information on the other groups.
- 5. See, for example, Feldstein (1969, 1970), Elton and Gruber (1970), King (1977), Bradford (1981), Auerbach (1981), Poterba and Summers (1983, 1984, 1985), Poterba (1987, 2004), La Porta et al. (2000), Desai et al. (2002), and others.
- 6. There are two main exceptions. The first is a complex set of rules for preferred shares and the second declares dividends paid to corporate investors who exercise no control (stake < 10 percent) to be taxable income for those investors.</p>

- 7. The precise rates depend on the province. Those shown are for Ontario. Rates are substantially lower in Alberta and much higher in Québec and the Atlantic provinces.
- 8. La Porta et al. (1999) kindly made their raw data available as a starting point for this exercise.
- Comparative tax summaries, such as those of Price Waterhouse, are designed for multinationals and need not fully describe the rules for domestic firms, as explained in the notes to Table 2.
- 10. An earlier draft of this paper inaccurately stated that the British tax law once did tax intercorporate dividends.
- 11. Other countries have analogous rules that are often dead letters because of a dearth of takeovers. Others, like Canada, require that bids for control blocks be open to all investors and, if oversubscribed, allotted prorata to the control block seller and public. The latter does not change the number of shares purchased. The United States has no comparable rule—acquirers may bid for any stake in target firms. However, some state anti-takeover laws require hostile bidders to acquire very large stakes. For example, Delaware requires a hostile bidder to acquire 80 percent of the target firm before it can replace the board or initiate any restructuring.
- 12. Twentieth Century Fund, Committee on Taxation (1937), p. 176.
- 13. Abel (1999).
- 14. FTC, Utility Corporation, Senate Document No. 92, 70th Congress, 1st session (1928).
- 15. Philips (1993), p. 239.
- 16. Senate Finance Committee Hearings, pp. 223-224.
- 17. See Revenue Act of 1932, §1419d, for details.
- 18. They note that "the tax would vary from 11/2 percent to 25/8 percent" for an individual company, but that "[i]n the case of pyramided complex holding companies, such taxes might amount to 8 or 10 percent."
- 19. Revenue Act of 1935, §112(b) 6.
- 20. Revenue Act of 1936 regs, 94 §112(b). The Twentieth Century Fund, Commission on Taxation (1937) argues that federal capital stock taxes and certain state taxes that might also have discouraged pyramidal groups were unlikely to have been effective. The federal capital stock tax could be avoided by manipulating the declared value of intercorporate equity blocks, and state taxes could be avoided by reincorporating in another state.
- 21. Title I, §11b (the "Death Sentence Clause") forbids holding companies more than twice removed from an operating subsidiary. See Phillips (1993) for further detail.
- 22. Abel (1999).
- 23. See notes to Table 2.
- 24. See Morck and Nakamura (2004) for further details.
- 25. See Bebchuk et al. (2000) and Morck et al. (2000) for more detail.
- 26. Nenova (2003) and Dyck and Zingales (2004) value private benefits of control in different countries and show them to be larger in more corruption prone countries, as measured by La Porta et al. (1997).

- 27. See Berle and Means (1932), Bertrand et al. (2002), Claessens et al. (2000, 2002), Faccio and Lang (2001), Faccio et al. (2001), and others.
- 28. See, for example, Harris et al. (1993), Hines and Rice (1994), Hines and Froot (1995), Hines (1995a, 1995b, 1997a, 1997b), Gresik (2001), and others.
- 29. Bhagwati (1993) sums up the License Raj thus: "Few outside India can appreciate in full measure the extent and nature of India's controls until recently. The Indian planners and bureaucrats sought to regulate both domestic entry and export competition, to eliminate product diversification beyond what was licensed, to penalize unauthorized expansion of capacity, to allocate and prevent the reallocation of imported inputs, and indeed define and eliminate virtually all aspects of investment and production through a maze of Kafkaesque controls. This all-encompassing bureaucratic intrusiveness and omnipotence has no rationale in economic or social logic; it is therefore hard for anyone who is not a victim of it even to begin to understand what it means." For more detail, see also Bhagwati and Desai (1970), Crook (1991), Sen (2000), Das (2002), Majumdar (1996, 2004), and others.
- 30. For more detail, see Sen (2000) and Das (2002).
- 31. If the family firm also contains real assets, the family firm itself is listed, or dual class shares, golden shares, and the like, are used. The family's actual wealth requirement is much smaller.
- 32. See Fisman and Khanna (2004), Khanna (2000), Khanna and Rivkin (2001), and Khanna and Palepu (1997, 1999, 2000, 2001, 2002). Morck, Wolfenzon and Yeung (2004) suggest lower rent-seeking costs as an alternative explanation.
- 33. Another argument, advanced by Hoshi et al. (1990), is that tunneling lets group firms insure each other, lowering bankruptcy costs. They support this with evidence from Japanese business groups. Daniels et al. (1995) provide corroborating evidence in a case study of a Canadian business group. However, Morck and Nakamura (1999) argue that the data are more consistent with increasingly weak firms propping each other up to avoid real restructuring.
- 34. See Frentrop (2002, 2003) for historical details about the Dutch East India Company and similar corporate governance crises over the subsequent three centuries. See Jensen (1986) for a modern view.
- 35. Key papers include Feldstein (1969, 1970), Elton and Gruber (1970), King (1977), Bradford (1981), Auerbach (1981), Poterba and Summers (1983, 1984, 1985), Poterba (1987, 2004), La Porta et al. (2000), Desai et al. (2002), and others.
- 36. United States Department of the Treasury, General Explanations of the Administration's Fiscal Year 2004 Revenue Proposals (2003 Blue Book) is available on-line at http://www.ustreas.gov/offices/tax-policy/library/bluebk03.pdf.
- 37. 2003 Blue Book, p. 14.

References

Abel, Amy (1999). "Electricity Restructuring Background: Public Utility Holding Company Act of 1935 (PUHCA)." Congressional Research Service, Environment and Natural Resources Policy Division, Library of Congress, Report for Congress RS20015 (January 7).

Aganin, Alexander, and Paolo Volpin (1998). "On the Origin and Evolution of Pyramidal Groups: An Empirical Evaluation." Harvard University. Working Paper.

Aganin, Alexander, and Paolo Volpin (2005). "The History of Corporate Ownership in Italy." In *The History of Corporate Governance Around the World: Family Business Groups to Professional Managers*, Randall Morck (ed.). NBER & U of Chicago Press. 2005. Forthcoming.

Aghion, Philippe, and Peter Howitt (1998). Endogenous Growth Theory. Cambridge, MA: MTT Press.

Allen, Franklin, and Roni Michaely (2004). "Payout Policy." In *Handbooks of Economics*, George Constantinides, Milton Harris, and René Stulz (eds.). Amsterdam: North-Holland.

Amit, Raffi, and Belén Villalonga (2004). "How Do Family Ownership, Management, and Control Affect Firm Value?" Harvard University. Working Paper.

Anderson, Ronald, and David Reeb (2003). "Founding-Family Ownership and Firm Performance: Evidence from the S&P 500." *Journal of Finance* 58(3):1301–1329.

Auerbach, Alan (1981). "Tax Integration and the 'New View' of the Corporate Tax: A 1980s Perspective." Proceedings of the National Tax Association, Tax Institute of America, pp. 21–27.

Baums, Theodor (1996). "Universal Banks and Investment Companies in Germany." In *Universal Banking: Financial System Design Reconsidered*, Anthony Saunders and Ingo Walter (eds.). Chicago: Irwin, pp. 124–160.

Bebchuk, Lucien, Reinier Kraakman, and George Triantis (2000). "Stock Pyramids, Cross Ownership and Dual Class Equity: The Mechanisms Aand Agency Costs of Separating Control from Cash Flow Rights." In *Concentrated Corporate Ownership*, R. Morck (ed.). Chicago, IL: University of Chicago Press. National Bureau of Economic Research Conference Volume.

Becht, Marco, and J. Bradford DeLong (2005). "Why Has There Been So Little Blockholding in America?" In *The History of Corporate Governance Around the World: Family Business Groups to Professional Managers*, Randall Morck (ed.). NBER & U of Chicago Press. 2005. Forthcoming.

Berle, Adolf, and Gardiner Means (1932). The Modern Corporation and Private Property, New York: Macmillan.

Bertrand, Marianne, Paras Mehta, and Sendhil Mullainathan (2002). "Ferreting out Tunneling: An Application to Indian Business Groups. Quarterly Journal of Economics 117(1):121–148.

Bhagwati, Jagdish (1993). *India in Transition: Freeing the Economy*. Oxford, England: Oxford University Press.

Bhagwati, Jagdish, and Padına Desai (1970). *India: Planning for Industrialization*. Oxford, England: Oxford University Press.

Black, Conrad (2003). Franklin Delano Roosevelt, Champion of Freedom. New York, NY: Public Affairs Press.

Blakey, Roy, and Gladys Blakey (1935). "The Revenue Act of 1935." American Economic Review 25(4):673–690.

Bradford, David (1981). "The Incidence and Allocation Effects of a Tax on Corporate Distributions." Journal of Public Economics 15:1–22.

Brandeis, Louis (1913). Other People's Money and How the Bankers Use It. New York: Stokes.

Burkart, Mike, Fausto Panunzi, and Andrei Shleifer (2003). "Family Firms." Journal of Finance 58(5):2167–2201.

Calomiris, Charles, and R. Glenn Hubbard (1995). "Internal Finance and Investment: Evidence from the Undistributed Profits Tax of 1936–37." *Journal of Business* 68(4):443–482.

Caselli, Francesco, and Nicola Gennaioli (2002). "Dynastic Management." Harvard University. Working Paper.

Chang, Sea-Jin (2003). Financial Crisis and Transformation of Korean Business Groups: The Rise and Fall of Chaebols. Cambridge, England: Cambridge University Press.

Claessens, Stjin, Simeon Djankov, Joseph Fan, and Larry Lang (2002). "Disentangling the Incentive and Entrenchment Effects of Large Shareholders in East Asia." *Journal of Finance* 57(6):2741–2772.

Claessens Stijn, Simeon Djankov, Larry H. P. Lang (2000). "The Separation of Ownership and Control in East Asian Corporations." *Journal of Financial Economics* 58(1–2):81–112.

Coase, Ronald (1937). "The Nature of the Firm." Economica Nov: 386-405.

Crook, Clive (1991). "India: Plain Tales of the Licence Raj." The Economist 319(7705):S9–S14.

Daniels, Ron, Randall Morck, and David Stangeland (1995). "High Gear: A Case Study of the Hees-Edper Corporate Group." In *Corporate Decision Making in Canada*, R. Daniels and R. Morck (eds.). Calgary: Industry Canada and the University of Calgary Press.

Das, Gurcharan (2002). India Unbound: The Social and Economic Revolution from Independence to the Global Information Age. New York: Anchor Books/Doubleday.

Desai, Mihir, Fritz Foley, and James Hines (2002). "Dividend Policy Inside the Firm." National Bureau of Economic Research Working Paper no. 8698.

Dyck, Alexander, and Luigi Zingales (2004). "Private Benefits of Control: An International Comparison." *Journal of Finance* 59(2):537–601.

Elton, Edward, and Martin Gruber (1970). "Marginal Stockholder Tax Rates and the Clientele Effect." Review of Economics and Statistics 52:68-74.

Faccio, Mara, and Larry Lang (2001). "The Ultimate Ownership in Western European Corporations." Journal of Financial Economics 65(3):365–382.

Faccio, Mara, Larry Lang, and Leslie Young (2001). "Dividends and Expropriation." American Economic Review 91(1):54–78.

Feldstein, Martin (1969). "The Effects of Taxation on Risk Taking." Journal of Political Economy 77(5):755–764.

Feldstein, Martin (1970). "Corporate Taxation and Dividend Behaviour." Review of Economic Studies 37(1):57–72.

Fisman, Raymond, and Tarun Khanna (2004). "Facilitating Development: The Role of Business Groups." World Development 32(4):609.

Fohlin, Caroline (2005). "The History of Corporate Ownership and Control in Germany." In *The History of Corporate Governance Around the World: Family Business Groups to Professional Managers*, Randall Morck (ed.). NBER & U of Chicago Press. 2005. Forthcoming.

Franks, Julian, Colin Mayer, and Stefano Rossi (2005). "Spending Less Time with the Family: The Decline of Family Ownership in the United Kingdom." In *The History of Corporate Governance Around the World: Family Business Groups to Professional Managers*, Randall Morck (ed.). NBER & U of Chicago Press. 2005. Forthcoming.

Frentrop, Paul (2002, 2003). A History of Corporate Governance 1602–2002. Amsterdam: De minor Press. A translation by Ted Alkins of Ondernemingen en hun aandeelhouders sinds de VOC, published in 2002 by Prometheus, Amsterdam.

Graham, Benjamin, and David Dodd (1934). Securities Analysis. New York: McGraw Hill.

Gresik, Thomas A. (2001). "The Taxing Task of Taxing Transnationals." Journal of Economic Literature 39(3):800-838.

Grossman, Sanford, and Oliver Hart (1980). "Takeover Bids, the Free Rider Problem, and the Theory of the Corporation." Bell Journal of Economics 11:42–69.

Haber, Stephen (1997). How Latin America Fell Behind: Essays in the Economic Histories of Brazil and Mexico, 1800–1914. Stanford, CA: Stanford University Press.

Harris, David, Randall Morck, Joel Slemrod, and Bernard Yeung (1993). "Income Shifting in U.S. Multinational Corporations." In *International Aspects of Taxation*, J. Slemrod et al. (eds.). Chicago, IL: University of Chicago Press. National Bureau of Economic Research Conference Volume.

Hazari, R. K. (1966). The Structure of the Corporate Private Sector: A Study of Concentration, Ownership and Control. Bombay: Asia Publishing House.

Hines, James (1995a). "Taxes, Technology Transfer, and the R&D Activities of Multinational Firms." In *The Effects of Taxation on Multinational Corporations*, Martin Feldstein, James R. Hines Jr., and R. Glenn Hubbard (eds.). Chicago, IL: University of Chicago Press, pp. 225–248.

Hines, James (1995b). "Taxes, Technology Transfer, and R&D by Multinational Firms." In *Taxing Multinational Corporations*, Martin Feldstein, James R. Hines Jr., and R. Glenn Hubbard (eds.). Chicago, IL: University of Chicago Press, pp. 51–62.

Hines, James (1997a). "International Taxation and Corporate R&D: Evidence and Implications." In Borderline Case: International Tax Policy, Corporate Research and Development, and Investment, James M. Poterba (ed.). Washington, DC: National Academy Press, pp. 39–52.

Hines, James (1997b). "Tax Policy and the Activities of Multinational Corporations." In *Fiscal Policy: Lessons from Economic Research*, Alan J. Auerbach (ed.). Cambridge, MA: MIT Press, pp. 401–445.

Hines, James, and Kenneth Froot (1995). "The Tax Treatment of Interest and the Operations of U.S. Multinationals." In *Taxing Multinational Corporations*, Martin Feldstein, James R. Hines Jr., and R. Glenn Hubbard (eds.). Chicago, IL: University of Chicago Press, pp. 81–93.

Hines, James, and Eric M. Rice (1994). "Fiscal Paradise: Foreign Tax Havens and American Business." Quarterly Journal of Economics 109(1):149–182.

Högfeldt, Peter (2005). "The History and Politics of Corporate Ownership in Sweden." In The History of Corporate Governance Around the World: Family Business Groups to Professional Managers, Randall Morck (ed.). NBER & U of Chicago Press. 2005. Forthcoming.

Holderness, Clifford, Randall Kroszner, and Dennis Sheehan (1999). "Were the Good Old Days That Good? Changes in Managerial Stock Ownership Since the Great Depression." *Journal of Finance* 54(2):435–471.

Holderness, Clifford, and Dennis Sheehan (1988). "The Role of Majority Shareholders in Publicly Held Corporations: An Exploratory Analysis." *Journal of Financial Economics* 20:317–346.

Holderness, Clifford, and Dennis Sheehan (2000). "Constraints on Large Block Share-holders." In Concentrated Corporate Ownership, Randall Morck (ed.). Chicago, IL: University of Chicago Press.

Hoshi, Takeo, Anil Kashyap, and David Scharfstein (1990). "The Role of Banks in Reducing the Costs of Financial Distress in Japan." *Journal of Financial Economics* 27:67–88.

Jensen, Michael (1986). "Agency Costs of Free Cash Flows, Corporate Finance and Takeovers." American Economic Review 76:323–329.

Johnson, Simon, Rafael La Porta, Florencio López-de-Silanes, and Andrei Shleifer (2000). "Tunneling." American Economic Review 90(2):22–27.

Jones, Geoffrey (2000). Merchants to Multinationals: British Trading Companies in the Nine-teenth and Twentieth Centuries. Oxford, England: Oxford University Press.

Khanna, Tarun (2000). "Business Groups and Social Welfare in Emerging Markets: Existing Evidence and Unanswered Questions." European Economic Review 44(4/6):748.

Khanna, Tarun, and Krishna Palepu (1997). "Why Focused Strategies May be Wrong for Emerging Markets." *Harvard Business Review* 77(4):125–135.

Khanna, Tarun, and Krishna Palepu (1999). "Policy Shocks, Market Intermediaries, and Corporate Strategy: The Evolution of Business Groups in Chile and India." Journal of Economics and Management Strategy 8(2):271–310.

Khanna, Tarun, and Krishna Palepu (2000). "Is Group Affiliation Profitable in Emerging Markets? An Analysis of Diversified Indian Business Groups." *Journal of Finance* 55:867–891.

Khanna, Tarun, and Krishna Palepu (2001). "Emerging Market Business Groups, Foreign Investors, and Corporate Governance." In Concentrated Corporate Ownership, R. Morck (ed.). Chicago, IL: University of Chicago Press. National Bureau of Economic Research Conference Volume.

Khanna, Tarun, and Krishna Palepu (2002). "The Future of Business Groups in Emerging Markets: Long Run Evidence from Chile." Academy of Management Journal 43(3):268–286.

Khanna, Tarun, and Krishna Palepu (2005). "The Evolution of Concentrated Ownership in India: Broad Patterns and a History of the Indian Software Industry." In *The History of Corporate Governance Around the World: Family Business Groups to Professional Managers*, Randall Morck (ed.). NBER & U of Chicago Press. 2005. Forthcoming.

Khanna, Tarun, and Jan Rivkin (2001). "Estimating the Performance Effects of Business Groups in Emerging Markets." Strategic Management Journal 22(1):45.

King, Mervyn (1977). Public Policy and the Corporation. London: Chapman and Hall.

Krueger, Anne (1974). "The Political Economy of the Rent-Seeking Society." American Economic Review 64(June):291–303.

Krueger, Anne (2002). "Why Crony Capitalism Is Bad for Growth." In Crony Capitalism and Economic Growth in Latin America, Stephen Haber (ed.). Stanford, CA: Hoover Press.

Lamont, Owen, and Richard Thaler (2003). "Can the Market Add and Subtract? Mispricing in Tech Stock Carve-Outs." Journal of Political Economy 3(2):227–269.

La Porta, Rafael, Florencio López-de-Silanes, and Andrei Shleifer (1999). "Corporate Ownership Around the World." Journal of Finance 54(2):471–517.

La Porta, Rafael, Florencio López-de-Silanes, and Andrei Shleifer (2000). "Investor Protection and Corporate Governance." *Journal of Financial Economics* 59(1–2):3–27.

La Porta, Rafael, Florencio López-de-Silanes, Andrei Shleifer, and Robert Vishny (1997). "Legal Determinants of External Finance." Journal of Finance 52(3):1131–1150.

La Porta, Rafael, Florencio López-de-Silanes, Andrei Shleifer, and Robert Vishny (2000). "Agency Problems and Dividend Policies Around the World." *Journal of Finance* 55:1–33.

Lent, George (1968). The Impact of the Undistributed Profits Tax, 1936–1937. New York: AMS Press.

Liu, Qao, and Bradford Cornell (2001). "The Parent Company Puzzle: When Is the Whole Worth Less Than One of the Parts?" Journal of Corporate Finance 7:341–366.

Majumdar, Sumit (1996). "Government Policies and Industrial Performance: An Institutional Analysis of the Indian Experience." Journal of Institutional and Theoretical Economics 152(2):380–411.

Majumdar, Sumit (2004). "The Hidden Hand and the License Raj: An Evalution of the Relationship Between Age and the Growth of Firms in India." Journal of Business Venturing 19(1):107–125.

Means, Gardiner (1930). "The Diffusion of Stock Ownership in the United States." Quarterly Journal of Economics 44(4):561-600.

Morck, Randall, and Masao Nakamura (1999). "Banks and Corporate Control in Japan." Journal of Finance 54(1):319-340.

Morck, Randall, and Masao Nakamura (2005). "A Frog in a Well Knows Nothing of the Ocean: A History of Corporate Ownership in Japan." In *The History of Corporate Governance Around the World: Family Business Groups to Professional Managers*, Randall Morck (ed.). NBER & U of Chicago Press. 2005. Forthcoming.

Morck, Randall, Michael Percy, Gloria Tian, and Bernard Yeung (2005). "The Rise and Fall of the Widely Held Firm: A History of Corporate Ownership in Canada." In *The History of Corporate Governance Around the World: Family Business Groups to Professional Managers*, Randall Morck (ed.). NBER & U of Chicago Press. 2005. Forthcoming.

Morck, Randall, Andrei Shleifer, and Robert Vishny (1988). "Management Ownership and Market Valuation: An Empirical Analysis." Journal of Financial Economics $20(\frac{1}{2})$:293–315.

Morck, Randall, David A. Stangeland, and Bernard Yeung (2000). "Inherited Wealth, Corporate Control, and Economic Growth: The Canadian Disease." In Concentrated Corporate Ownership, R. Morck (ed.). Chicago, IL: University of Chicago Press. National Bureau of Economic Research Conference Volume.

Morck, Randall, Daniel Wolfenzon, and Bernard Yeung (2004). "Corporate Governance, Economic Entrenchment and Growth." National Bureau of Economic Research Working Paper no. 10692, Nov 2004.

Morck, Randall, and Bernard Yeung (2004a). "Agency Problems in Large Family Business Groups." Entrepreneurship Theory and Practice 27(4):367–382.

Morck, Randall, and Bernard Yeung (2004b). "Family Control and the Rent-Seeking Society." Entrepreneurship Theory and Practice 28(4):391–409.

Nenova, Tatiana (2003). "The Value of Corporate Voting Rights and Control: A Cross-Country Analysis." Journal of Financial Economics 68(3):325.

Pérez-González, Francisco (2001). "Does Inherited Control Hurt Firm Performance?" Columbia University. Unpublished Manuscript.

Phillips, Charles (1993). *The Regulation of Public Utilities, Theory and Practice*. Arlington, VA: Public Utilities Reports, Inc.

Poterba, James, and Lawrence Summers (1983). "Dividend Taxes, Corporate Investment, and 'Q'." Journal of Public Economics 22(2):135–168.

Poterba, James (1987). "Tax Policy and Corporate Saving." Brookings Papers on Economic Activity 1987(2):455–575.

Poterba, James (2004). "Taxation and Corporate Payout Policy." American Economic Review 94(2):171–175.

Poterba, James, and Lawrence Summers (1984). "New Evidence That Taxes Affect the Valuation of Dividends." *Journal of Finance* 39(5):1397–1415.

Poterba, James, and Lawrence Summers (1985). "The Economic Effects of Dividend Taxation." In *Recent Advances in Corporate Finance*, Edward Altman and Marti Subrahmanyan (eds.). Homewood: R. D. Irwin.

Price Waterhouse Coopers (2002). "Merger and Acquisition Asian Taxation Guide." Price Waterhouse Coopers, New York, NY.

Rajan, Raghuram, and Luigi Zingales (2003). Saving Capitalism from the Capitalists: Unleashing the Power of Financial Markets to Create Wealth and Spread Opportunity. New York, NY: Crown Business.

Roe, Mark J. (1997). "The Political Roots of American Corporate Finance." Journal of Applied Corporate Finance 8.

Roe, Mark J. (2003). Political Determinants of Corporate Governance. Oxford, England: Oxford University Press.

Roosevelt, Franklin D. (1942). "Appendix A: Message from the President of the United States Transmitting Recommendations Relative to the Strengthening and Enforcement of

Anti-trust Laws." American Economic Review 32(2):119–128. Supplement, Papers Relating to the Temporary National Economic Committee.

Schumpeter, Joseph A. (1912). Theorie der Wirtschaftlichen Entwichlung. Leipzig: Dunker und Humbolt. Translation by R. Opie (1934), The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle. Cambridge, MA: Harvard University Press.

Sen, Amartya (2000). Development as Freedom. New York: Anchor Books/Doubleday.

Smith, Brian, and Ben Amoako-Adu (1999). "Management Succession and Financial Performance of Family Controlled Firms." Journal of Corporate Finance 5:341–368.

Statistics Canada (1997). "Directory of Inter-corporate Ownership." Ottawa, Ontario, Canada.

Stulz, René (1988). "On Takeover Resistance, Managerial Discretion and Shareholder Wealth." Journal of Financial Economics 20(1/2):25-54.

Twentieth Century Fund, Committee on Taxation (1937). Facing the Tax Problem. New York: Twentieth Century Fund.

Williamson, Oliver (1973). "Markets and Hierarchies: Some Elementary Considerations." American Economic Review May:316–325.

Zodrow, George (1991). "On the 'Traditional' and 'New' Views of Dividend Taxation." National Tax Journal 44:497–509.