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January 1995

In High Gear: A Case Study of the Hees-Edper Corporate Group

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Recommended Citation
Strangeland, D., Daniels, R. J., & Morck, R. (1995). In High Gear: A Case Study of the Hees-Edper Corporate Group. 223-240.
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Note: At the time of publication, the author Ronald Daniels was affiliated with the University of Toronto. Currently, he is Provost of the University of Pennsylvania.

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In High Gear: A Case Study of the Hees-Edper Corporate Group

Abstract
This study compares firms in the Hees-Edper Group with a number of other independent firms of similar size and in the same industries over a four-year period from 1988 to 1992, just prior to the first release of news that the Hees-Edper group was in financial trouble. During that period, HeesEdper firms recorded profitability levels comparable to (or below) those of the matched firms. The Hees-Edper firms were also shown to have been much higher risk investments well before the group's financial position began to deteriorate. They were more highly levered, but even after risk levels are adjusted for this, the risk levels of Hees-Edper firms remain much higher.

Our study shows that the extreme incentive-based compensation schemes used by Hees-Edper firms encouraged managers to adopt high-risk strategies, and that the intercorporate co-insurance (allowed by the interlocking ownership structure of the firms) made this possible by increasing the group's apparent debt capacity. Since this higher risk did not improve overall performance, it was arguably at an economically inefficient higher level. The higher leverage of Hees-Edper companies should have produced a sizable tax advantage because of the deductibility of interest at the corporate level. The mediocre performance of the companies thus raises the possibility that abnormally poor performance was masked by tax breaks.

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Comments
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In High Gear: A Case Study of the Hees-Edper Corporate Group

Introduction

THIS STUDY COMPARES FIRMS IN THE HEES-EDPER GROUP with a number of other independent firms of similar size and in the same industries over a four-year period from 1988 to 1992, just prior to the first release of news that the Hees-Edper group was in financial trouble. During that period, Hees-Edper firms recorded profitability levels comparable to (or below) those of the matched firms. The Hees-Edper firms were also shown to have been much higher risk investments well before the group's financial position began to deteriorate. They were more highly levered, but even after risk levels are adjusted for this, the risk levels of Hees-Edper firms remain much higher.

Our study shows that the extreme incentive-based compensation schemes used by Hees-Edper firms encouraged managers to adopt high-risk strategies, and that the intercorporate co-insurance (allowed by the interlocking ownership structure of the firms) made this possible by increasing the group's apparent debt capacity. Since this higher risk did not improve overall performance, it was arguably at an economically inefficient higher level. The higher leverage of Hees-Edper companies should have produced a sizable tax advantage because of the deductibility of interest at the corporate level. The mediocre performance of the companies thus raises the possibility that abnormally poor performance was masked by tax breaks.

The Economics of Conglomerates

DURING THE 1960S AND 1970S CONGLOMERATES WERE "the glamour investment on the stock market" (Firth, 1980) and financial markets reacted to the news of diversifying acquisitions by sending stock prices of acquiring firms skyward (Matsusaki, 1993). The resulting mob psychology infected managers and investors alike, and diversifying acquisitions did enormous damage to many firms that would otherwise have remained healthy and prosperous. Eventually, the corporate world realized the diversification was excessive and

there was a return to "core" lines of business. Today, the conglomerate merger wave of the 1960s seems like a mania.

In Defence of Conglomerates

Are these judgements precipitous? There are arguments in favour of conglomerates that make economic sense. Indeed, some of them are reasonably persuasive, at least superficially.

First, Caves (1982) and Rugman (1994) argue that certain intangible assets have higher returns when used on a larger scale. These are thought to include R&D, marketing expertise, and good management. The intuition is that a new product or advertising campaign has fixed up-front costs, but its return depends on the size of the operation to which it is applied. Similarly, a good manager in charge of a large operation generates more wealth than the same good manager in charge of a small operation. The implication is that good managers should be put in charge of operations that are as large in scope and scale as possible.

These arguments are a widely accepted justification for international horizontal expansion, but they also appear to have some applicability to domestic firms. Montgomery & Wernerfelt (1988) and Panzar & Willig (1981) utilize them analogously to explain why the wave of corporate diversification made by conglomerates in the '60s and '70s make sense.

Second, to some extent a conglomerate structure is a substitute for capital markets. If capital markets were hopelessly myopic or otherwise grossly inefficient, it would make sense to circumvent them. However, most of the academic work on this issue suggests that markets are not that inefficient and those, including Keynes (1933), who do argue for such a degree of inefficiency also argue frequently that corporate managers are afflicted by the same mood swings that affect investors. Nonetheless, even in an economy with efficient capital markets, there are reasons to circumvent them. Two such reasons (that also dovetail into an argument in support of conglomerates) are the "lemon" problem and the "free-cash" problem.

The lemon problem is characterized by a firm that has good investment projects but no spare cash; it must therefore raise funds by issuing securities. Myers & Majluf (1984) point out that this is not costless. Firms should issue new shares when their outstanding shares are overpriced. Securities, like used cars, are difficult to value, and buyers are always inclined to suspect that there is something wrong with the product – otherwise, (they ask) why is it for sale now? Is it a lemon? Investors might rationally view the news of a new securities issues as a signal that outstanding securities are overvalued. In fact, share prices do tend to fall when firms announce they are issuing more shares. Lesser analogous effects are also observed for bond issues. This lemon problem in capital markets means that firms should use a "pecking order" approach when financing new projects – that is, they should use funds obtained from internal

cash flow whenever possible, and raise external capital only when internal funds are not available and when the benefits of the new project outweigh the cost of depressing the prices of the firm's outstanding securities. By transferring funds between divisions, a conglomerate structure side-steps the lemon problem; it can act like a financial intermediary in the sense of Diamond (1991).

Jensen (1986) argues that firms in stable, low-growth industries often invest in money-losing projects. The free-cash problem is characterized by a firm in a low-growth industry with no profitable investment projects; it should pay out its free cash to shareholders as dividends. But, retaining funds within the firm often serves managers in other ways; it enables firms to expand and thus to build up the size of managers' empires and/or it allows for labour peace or it cements ties with politicians. Such "over-investment" by cash cows is called the free-cash problem. Conglomerates that span both low-growth cash-rich industries and high-growth cash-starved industries neatly solve both the free-cash problem and the lemon problem in one easy step. A conglomerate can invest internal funds in the best of all its divisions' projects, and thus better serve shareholders.

Third, diversification reduces risk at the corporate level (Gahlon & Stover, 1979). Financial academics never tire of arguing that diversification brings no benefits to shareholders because shareholders could achieve the same risk reduction by holding a more diversified portfolio themselves. This argument is suspect because it assumes that diversification at the corporate level and at the individual investor's portfolio level are perfect substitutes. They are not. Reducing risk at the corporate level might allow for more credible long-term commitments to workers, suppliers and customers. It might also reduce the need to forego a return on part of the firm's capital in order to maintain the financial slack necessary to insure liquidity. Lower level corporate risk might also attract better workers and managers at lower wages, since a risk premium need not accompany any investment in firm-specific skills (Aron, 1988). It might also encourage managers to undertake more risky corporate investments than their innate aversion to risk would otherwise preclude, thereby encouraging a greater alignment of managers' interests with those of shareholders. Diversification at the corporate level may well not benefit shareholders, but the case is not as open-and-shut as many believe.

Fourth, diversification reduces corporate taxes by making a more highly levered capital structure optimal. By insuring each other through intercorporate transfers of earnings, the divisions of a conglomerate each lower the other's probability of defaulting on its debt relative to that of a free-standing one-industry firm. This makes a higher over-all leverage more feasible for a conglomerate than for a portfolio of independent one-industry firms. Of course, if the firm elects to lever up in order to take advantage of the co-insurance to increase its debt-related tax deductions, the risk reduction that corporate diversification can provide is limited. The benefits of lower corporate taxes to investors as a whole are mitigated by the higher personal taxes on debt, but in

a world where tax-free investors – like pension funds – are playing an ever greater role, it is not clear that there would be a wash in securities prices in general. Moreover, shareholders are paying for bailouts they would otherwise walk away from because of the limited liability granted the owners of stock. The size of this reduction in dividends, in the absence of tax gains, would exactly compensate for the better terms the firm could get from creditors and it would be a wash. The tax deductibility of interest, but not dividends, shifts the balance in favour of diversification.

The Failure of the Conglomerate Form

THE POOR PERFORMANCE OF CONGLOMERATES casts doubt on the universal validity of the arguments noted above. Berger & Ofek (1995) find a 13 percent to 15 percent discount in the values of conglomerates relative to comparable portfolios of stand-alone firms. Comment & Jarrell (1995) find a positive link between firm focus increases and stock returns. John & Ofek (1995) find that asset sales improve firm performance when they also increase the firm's focus. In the 1980s, firms that announced acquisitions in their own lines of business saw their stock prices rise, while those that announced takeovers in other industries saw their stock prices decline (Morck *et al.*, 1990). Wernerfelt & Montgomery (1988) find a "positive focus effect" in an empirical study of the determinants of firms' values. Many firms that diversified aggressively in earlier years spent the 1980s shedding unrelated operations and re-establishing their commitments to core businesses (Donaldson, 1990).

Why did Conglomerates Fall so Far Out of Favour?

FIRST, THE IDEA THAT CONGLOMERATES COULD EXPLOIT the intangible assets of their component firms on a large(r) scale was always more strained than the analogous theory justifying multinationals. Arguably, R&D and marketing skills are considerably less transferable to operations in unrelated industries than they are to operations in the same industry but in another country. Thus, attention was centred on management skills as the intangible asset that would increase the values of all the assets combined with the conglomerate. Conglomerates, it was believed, had "... dynamic, entrepreneurial management ... [which were] injected into firms which were taken over, [and] greatly increased efficiency and profits ... which would be reflected in higher share price performance" (Firth, 1980). Management skills are now viewed as much less portable; today, managers who are acknowledged experts at finding oil are not as likely to be considered to have an advantage in running a brewery too. Moreover, even good managers can be guilty of *hubris*.

Second, conglomerates were seen as being plagued by corporate governance problems. They were over-centralized (Baker, 1992). Many degenerated into little more than exercises in empire-building. Shareholders who would

have had considerably more influence and better information about the financial decisions being made in smaller, one-industry firms were unable to monitor or discipline the managers of large complex conglomerates who had more opportunity to run amok. Amihud & Lev (1981) find that manager-run firms are much more likely to establish diversified conglomerate structures than owner-run firms; they argue that conglomerates themselves may be a manifestation of corporate governance problems.[1] Certainly, the reduced risk in a conglomerate should be attractive to managers. Rose & Shepard (1994) find that salaries of managers of conglomerates are 10 percent to 12 percent higher and total compensation is 13 percent to 17 percent greater than that of their peers in otherwise comparable one-industry firms of similar size. However, they also find that this premium is not related to tenure and argue that this implies it might be due to the fact that a higher level of skill may be required to manage a conglomerate.

Although the gains to be made through better use of internal funds, lower corporate risk, and higher debt capacity may be real, it appears they are largely swamped by the corporate governance problems that emerge in conglomerates.

An Amalgam of Conglomerates and Free-Standing Firms?

Despite these findings, conglomerates might still be a valid corporate form, useful in some circumstances. Roe (1994) makes the case that the failure of the U.S. conglomerate, despite its potential advantages, was due (in part) to the fact that in conglomerates owning 100 percent of their subsidiaries, managers were deprived of market signals that provided valuable feedback to managers in free-standing companies. Instead, conglomerate managers received feedback through a command-and-control system based mainly on accounting information. Roe goes on to say that "an amalgam of partial control, market signalling and partial integration of finance and industry (or of different levels of Industry)" might have been superior to both the conglomerate form and the market-disciplined free-standing firms.

However, in the United States, conglomerates with large numbers of partially owned subsidiaries are discouraged by the *Investment Company Act* of 1940.[2] Once 40 percent of the portfolio of a U.S. conglomerate is devoted to the partial ownership of other firms, the company is presumed to be an investment company and must therefore pay taxes on dividends it receives from its partially owned subsidiaries. Since one of the main reasons underlying the existence of a conglomerate is its ability to reallocate capital efficiently, this is a serious barrier. The only escape is for the conglomerate to become a mutual fund, but this entails restrictions on portfolio composition and on intercompany dealings.

In Canada, the federal *Investment Companies Act*[3] does not constitute a barrier to conglomerate formulation comparable to that posed by the U.S. legislation. This act requires federally incorporated companies that use debt

capital to finance equity or debt investments to comply with certain reporting obligations (administered by the Office of Superintendent of Financial Institutions – the regulator of federal financial institutions). The Act also requires companies to comply with restrictions on sundry related-party transactions. The embrace of this statute can be easily avoided through provincial incorporation or reincorporation, because there are no comparable legislative schemes in the provinces.

Federal tax legislation has a more important regulatory influence on the structure and performance of Canadian conglomerates. In contrast to the United States, Canada permits tax-free dividends to be paid within a corporate group, thereby permitting internal capital transfers to be effected on a more tax-efficient basis. However, the comparative benefits of this difference in dividend treatment should not be overstated. In contrast to the scope permitted by consolidated reporting of conglomerate earnings in the United States, the Canadian tax statute does not allow consolidation. Presumably, this makes it more difficult for Canadian conglomerates to maximize the tax-avoidance value of losses incurred by member corporations. The more liberal availability of the deduction for interest payments in Canada further complicates matters, particularly in respect of debt incurred on foreign assets. Interest deductibility provides an implicit subsidy for debt, and this encourages corporate managers to use high levels of debt to finance asset acquisitions. Thus, in tandem, a cursory review of tax legislation in Canada and the United States does not supply unequivocal evidence that the size and durability of the Canadian conglomerate is necessarily related to differential taxation standards. Which effects dominate is an empirical question.

Looking beyond tax policy, however, there is a range of distinctive regulatory policies in Canada that, while not providing targeted incentives for conglomerate formation, create scope for Canadian controlling shareholders and their appointed managers to engage in opportunistic behaviour *via* the conglomerate vehicle. For instance, it is arguable, generally, that the commitment of successive Canadian governments to mercantalist industrial policies has reduced the bargaining power of Canadian shareholders who invest(ed) in securities of Canadian corporations. The foreign-property rule of the *Income Tax Act* is an example. This rule caps the permissible level of tax favoured retirement investments at 20 percent of the value of the portfolio (10 percent until recently). Thus, Canadian investors have fewer alternative investments to choose from when they wish to move their money because they disagree with the policies of corporate managers. This may have allowed inefficient conglomerate holding structures to survive, and may also have prolonged wealth-reducing redistribution from investors to Canadian corporate insiders.[4]

The same arguments can be made in the context of Canadian corporate and securities law. Here it is arguable that the lack of a vigorous, privately enforced securities disclosure regime in Canada reduces the transparency of internal corporate transactions to external shareholders and heightens the

attractiveness of the conglomerate form of organization to opportunistic corporate insiders.[5] Similarly, the lack of a clearly articulated corporate law fiduciary duty from majority to minority shareholders in Canada is also significant – at least historically – in explaining the attraction of conglomerates to opportunistic managers and shareholders (Daniels & MacIntosh, 1991). In the absence of legislated fiduciary duties, controlling shareholders in Canada and their appointed management enjoy much greater scope for unfair self-dealing transactions than if their companies were incorporated in the United States.[6]

We also believe that the mercantalist industrial policies adopted by successive Canadian governments encouraged conglomerate formation. High levels of external trade protection, restrictions on the export of domestic capital, and favourable tax treatment of certain types of domestic equity investment all contributed to an inward-looking industrial economy in which Canadian corporations focused on producing a broad range of goods and services for the protected Canadian market rather than on a narrow range of competitive products for the international market. In this setting, the diversified conglomerate served as a natural vehicle to achieve corporate growth.

In sharp contrast to the United States, in Canada a more congenial political environment for the concentration of economic power provided further support for the formation of conglomerates. Whereas American political traditions have coalesced around a deep and abiding mistrust of concentrated economic power, the Canadian political environment has been much more sanguine. In Canada, the development and preservation of a fragile national identity easily outweighs concerns over the concentration of corporate power. So, to the extent that economic concentration is the inexorable result of state protectionism, Canadians regard this as a price worth paying to promote collectivist goals (Benidickson, 1993).

A respectable case can be made, therefore, that Canadian laws and customs do encourage just the sort of amalgam Roe (1994) visualizes. The largest example of corporate concentration in recent years is the Hees-Edper group, controlled by Edward and Peter Bronfman, to which we now turn.

The Hees-Edper Group

In 1952 Sam Bronfman, the entrepreneur who built Seagram's into a liquor empire during Prohibition in the United States, informed his nephews, Edward and Peter, that, while his sons would inherit the family business, a trust would be established to provide for them. By the early 1990s, with the help of South African financial strategist Jack Cockwell and ignoring the trend against diversification, that trust – the brothers' nest egg – had grown into a corporate empire of more than 100 companies spanning industries from merchant banking to forestry. At its apex, the group of Bronfman companies made up 15 percent of the total capitalization of the Toronto Stock Exchange. When it was eventually liquidated the trust yielded more than C$ 100 million in Seagram's stock.

Cockwell's strategy was based on pyramids of control. A privately held company would own a controlling stake in a firm that would hold a controlling stake in another firm that would hold a controlling stake in yet another firm, and so on. Using this strategy, control could be leveraged. The Bronfmans could fully control a firm in which they held only 51 percent of 51 percent of ... of 51 percent of the stock. By crossing the layers of the pyramid and liberally using restricted-voting or non-voting shares for outsiders and super-voting shares for Bronfman insiders, the equity stakes needed to exert control were further reduced.

This pyramid ownership structure meant that publicly traded rumps of stock existed throughout the group. Thus, the group's organizational structure was an amalgam of a conglomerate (with decisions coordinated by the central, privately held companies) and public ownership (with traded stock, shareholder meetings, boards of directors, financial statements, and institutional ownership).

A number of the Hees-Edper companies were added to the group *via* workouts organized by the brothers' merchant bank, Hees International Bancorp Inc. A typical example was the takeover by Hees of Versatile Corporation in May 1987. Versatile, a farm equipment maker, had expanded into the energy sector, and then into ship building through the purchase of Davie in 1985. By 1987 the firm was bankrupt and Hees assumed control in a workout, eventually holding an equity stake of over 40 percent. Another example is the 1989 workout of National Business Systems, in which Hees bought $80 million of the failed firm's debt from U.S. institutional investors and assumed control. Critics may now refer to this as "vulture capital", but Hees was arguably acquiring an expertise in organizing the affairs of troubled firms. This falls into the category of special management skills similar to those claimed for the managers of U.S. conglomerates in the 1960s and 1970s.

In other cases, the Hees-Edper group expanded by acquiring major players in specific industries, such as Noranda Forests and MacMillan Bloedel. The group's real estate firms, Carena Development and Bramalea, the energy firm Norcen, and the publishing company Pagurian, all played dominant roles in their respective industries throughout the 1980s.

Another feature of the Hees-Edper group that deserves comment is its practice of using exaggerated incentive-based compensation schemes to pay managers and (in some cases) employees. Top managers received salaries that were low by industry standards, often in the neighbourhood of only $100,000 per year, but were allowed (and expected) to borrow up to ten times their annual salary from the group – interest free – to buy stock in its member firms.[7] However, based on anecdotal information describing the compensation arrangements used in one group firm, Royal Trust, it appears that there was asymmetric sharing of risk and return by management and shareholders; implicit promises were allegedly made to key managers that they would be protected from any downside losses resulting from leveraged equity investments,

but that they would retain all upside gains. This system was in place for the better part of a decade. Certainly, these arrangements provided strong incentives for conglomerate managers to take risks. However, the existence of incentive-based compensation does not in itself mean that agency problems in the design of these schemes were obviated.

How did the Hees-Edper group take advantage of its hybrid structure? Did it reduce risk by setting up a network of co-insurance between group firms? Or did it use this co-insurance to lever up to a higher debt level and convert the risk reduction into a tax advantage? Did the publicly traded rumps of stock lead to better corporate governance than would have been the case in a pure conglomerate? We now turn to these issues by comparing various financial measures for Hees-Edper group firms with those for comparable independent firms.

Data and Methodology

PUBLICLY TRADED COMPANIES IN THE HEES-EDPER GROUP were identified each year using Statistics Canada's *Directory of Intercorporate Ownership*. The period from 1988 through 1991 was selected because these years saw the group's largest extent. The sample period begins with 1988 to avoid including the October 1987 crash in the data; the end of the sample period just predates the real estate problems that triggered the decline of the Bronfman group.

Total debt and total assets were taken from the CD-ROM *Canadian Compustat*. Daily stock returns were taken from the TSE-Western CD-ROM. Companies are classified by industry using three- and four-digit standard industrial classification (SIC) codes. Size is measured using 1990 total assets.

Each Bronfman company is matched with an independent control company in the same industry and of roughly the same size. However, because of the lack of suitable control companies (*i.e.*, companies that are not member firms of other corporate groups such as the Reichmann brothers' Olympia and York), most large real estate companies and some financial firms had to be dropped from the study. This left 19 companies spanning four years – a total of 76 firm-year observations. Six firm-year observations were deleted as outliers, defined as having beta (ß) or variance estimates more than three standard errors from the mean estimates for that company or its control match, or having a debt-to-assets ratio greater than one. This left 70 firm-year observations. The distribution of the data over time is as follows: 19 observations in 1988, 19 in 1989, 17 in 1990 and 15 in 1991.

Findings

THE MAIN RESULTS ARE DISPLAYED IN TABLE 1. Tables 2 through 5 contain statistical test results that determine the reliability of the differences between the results obtained for the Hees-Edper firms and those obtained for the control firms shown in Table 1.

TABLE 1

UNIVARIATE STATISTICS FOR ALL VARIABLES FOR ALL FIRM-YEARS STUDIED

ROW	VARIABLE	SAMPLE	MEAN	MEDIAN	MINIMUM	MAXIMUM	STANDARD DEVIATION
1)	Operating	Edper Firms	7.1	8.7	−95.0	22.5	14.7
2)	Income/Assets (%)	Control Firms	7.7	9.5	−49.7	25.7	9.9
3)	Levered Equity	Edper Firms	0.694	0.645	−0.22	2.03	0.454
4)	Beta	Control Firms	0.303	0.043	−0.048	1.35	0.402
5)	Leverage (%)	Edper Firms	33.1	32.6	0	70.8	17.2
6)		Control Firms	26.3	18.5	0	95.1	24.6
7)	Unlevered Asset	Edper Firms	0.473	0.436	−0.129	1.74	0.337
8)	Beta	Control Firms	0.215	0.025	−0.005	1.07	0.293

Note: Sample size is 70 Bronfman firm-years and 70 control firm-years, except for operating income, where data are only available for 65 firm-year pairs.

Rows 1) and 2) of Table 1 give a measure of overall corporate profitability, operating income-per-dollar of assets, expressed as a percentage return. Hees-Edper firms have slightly worse performance by this measure than do comparable independent firms. However, these differences are not sufficiently clear-cut to pass the statistical tests shown in Table 2. Analogous tests using other accounting-performance ratios yield similar results. We conclude that Hees-Edper firms did not perform better than comparable independent firms. Their performance was, at best, comparable to that of the matched control firms.

Rows 3) and 4) of Table 1 compare levered equity ßs for the two groups of firms. A firm's ß is a standard measure of risk used by portfolio managers.[8] A high ß indicates a high-risk investment, while a low ß indicates a relatively safe investment. The ßs for Bronfman firms are substantially higher than those of the control firms. Table 3 shows that these differences are statistically highly significant. We conclude that the stock of Bronfman firms is much riskier than that of comparable independent firms.

Rows 5) and 6) of Table 1 compare the leverage of Hees-Edper firms with those of the matched control firms. Bronfman firms have much higher financial leverage than comparable independent firms, and Table 4 shows that this difference is statistically highly significant. We conclude that Bronfman firms have taken on much higher debt loads than comparable independent firms.

Rows 7) and 8) of Table 1 show a comparison of unlevered ßs. Unlevered asset ßs are theoretical ßs that companies would have if they had no debt.[9] This risk measure is used by financial economists as a measure of the underlying risk in the firm's operations. Even after making this adjustment, Hees-Edper companies continue to have higher risk levels than the control firms. We conclude that the higher risk of the Bronfman companies is not due solely to

TABLE 2

STATISTICAL TESTS COMPARING OPERATING INCOME PER DOLLAR OF ASSETS OF BRONFMAN FIRMS (DEBT/ASSETS) TO THAT OF MATCHED CONTROL FIRMS

	MEAN	MEDIAN
Bronfman Companies (%)	7.11	8.72
Industry/Size-Match Companies (%)	7.74	9.48
Difference between Bronfman and Matching Companies (%)	0.63	0.100
p-Value for Differences (t-Test for Means, Wilcoxon Signed Rank Test for Medians)	0.468	0.811
Number of Observations (Firm Years)	65	65

TABLE 3

STATISTICAL TESTS COMPARING LEVERED EQUITY BETAS OF BRONFMAN FIRMS WITH THOSE OF MATCHED CONTROL FIRMS

	MEAN	MEDIAN
Bronfman Companies	0.694	0.645
Industry/Size-Match Companies	0.303	0.043
Difference between Bronfman and Matching Companies	0.391	0.360
p-Value for Differences (t-Test for Means, Wilcoxon Signed Rank Test for Medians)	0.0001	0.0001
p-Value for Weighted t-Test	0.0001	
Number of Observations (Firm Years)	70	70

high debt loads. The underlying business operations of the Hees-Edper firms appear to entail more risk than other Canadian companies of similar size in the same industries. They have higher operating leverage as well as higher financial leverage.

Missing from Table 1 are stock market performance measures. A proper analysis of stock price performance is complicated for firms like the Hees-Edper group. Their involved and interlocking ownership structure with multiple classes of differential voting stock, some privately held, make it difficult to apply the standard tools of firm valuation and stock return measurement. We are pursuing further research in this area, examining a broader range of performance measures, including some that are market-value based.

TABLE 4

STATISTICAL TESTS COMPARING LEVERAGE IN BRONFMAN FIRMS (DEBT/ASSETS) TO LEVERAGE IN MATCHED CONTROL FIRMS

	MEAN	MEDIAN
Bronfman Companies (%)	33.1	32.6
Industry/Size-Match Companies (%)	26.3	18.5
Difference between Bronfman and Matching Companies (%)	6.8	6.6
p-Value for Differences (t-Test for Means, Wilcoxon Signed Rank Test for Medians)	.0033	.0009
Number of Observations (Firm Years)	70	70

TABLE 5

STATISTICAL TESTS COMPARING UNLEVERED ASSET BETAS OF BRONFMAN FIRMS WITH THOSE OF MATCHED CONTROL FIRMS

	MEAN	MEDIAN
Bronfman Companies	.473	.436
Industry/Size-Match Companies	.215	.025
Difference between Bronfman and Matching Companies	.259	.261
p-Value for Differences (t-Test for Means, Wilcoxon Signed Rank Test for Medians)	.0001	.0001
p-Value for Weighted t-Test	.0001	
Number of Observations (Firm Years)	70	70

CONCLUSIONS

OUR OVERALL RESULTS SUPPORT THE FOLLOWING CONCLUSIONS. First, our data show no clearly superior performance in terms of average return on assets for Hees-Edper firms over comparable independent firms. This suggests that the conglomerate structure did not improve overall economic efficiency by enabling member firms to exploit each other's intangible assets and thereby achieve new synergies. For example, employing superior management techniques developed at one firm to invigorate another should have produced higher

performance. Therefore Canadian public policy that directly or indirectly encourages the formation of conglomerates cannot be justified on the grounds of increased economies of scale or scope in applying such assets, at least in this case, or if such advantages were achieved, they were offset by other negative factors.

Second, our data do not provide evidence that the Hees-Edper group allocated capital internally in ways superior to those accomplished by financial markets or financial institutions. This should also have produced evidence of better performance in group firms than in comparable independent firms. The fact that it did not casts doubt on the benefits of centralized managerial control over a diverse range of industries. Quite simply, senior Hees-Edper managers failed to confer tangible economic gains on member firms through superior capital allocation. Indeed, quite the opposite may be true. Hees-Edper management may have used a small stable of cash cows to support earlier investments in chronically under-performing firms. In this respect, the lack of vigorous market pressure may have allowed the conglomerate's management systematically to persist in maintaining irrational and idiosyncratic commitments to dog companies.

Third, Hees-Edper management did not use the co-insurance their conglomerate structure allowed to reduce overall risk levels in the corporation. Instead, they used the group's risk-sharing potential to increase overall levels of risk beyond what would have been permitted by debt markets for comparable independent firms. This was accomplished in part through increased financial leverage, and in part it appears to stem from higher operating leverage, *i.e.*, riskier overall business practices. To the extent that Canadian business is hampered by excessive innate risk aversion on the part of Canadian managers, encouraging conglomerates may have an invigorating effect.

This line of argument is valid only if the managers of the conglomerate use the risk-sharing potential of intercorporate co-insurance to justify investments that would otherwise be regarded as too speculative. The riskier management decisions made in the Hees-Edper group were facilitated by the group's conglomerate structure, but they might not have occurred without the extreme incentive-based compensation schemes Bronfman managers and employees were given. Furthermore, high relative levels of firm risk should have been accompanied by higher levels of relative returns if the risk-taking was of an economically efficient sort. Perhaps the incentive-based compensation scheme the group used actually encouraged excessive and overly speculative risk-taking.

Fourth, Hees-Edper companies were more highly levered than comparable independent firms, and this likely produced a tax advantage. The fact that this is not reflected in higher earnings casts a somewhat harsher light on the mediocre accounting performance of the firms in the group. Also, since the higher debt in group firms was accompanied by risk-sharing, there need be no improvement in managerial incentives of the sort Jensen (1989) envisions.

Jensen essentially argues that an imminent threat of bankruptcy encourages better management in highly levered firms. Thus, to the extent that the group used the increased debt capacity created by its intercorporate risk sharing to avoid taxes, its social benefits are more questionable.

Public Policy Implications

How can public policy accentuate the desirable features of corporate groups like Hees-Edper and mitigate their undesirable features? As argued elsewhere, vibrant and open capital and product markets are probably the strongest antidote against the growth of seemingly perverse organizational structures (Morck, 1995; Daniels & Halpern, 1995). With vigorous markets, the ability of managers to devise and maintain inefficient organizational forms is constrained. In this respect, we believe that further relaxation of the foreign property rule, a continued liberalization of external trade barriers, and reduced protectionism of domestic capital market suppliers are all necessary steps. However, we believe that other policy instruments are also in order.

Nuanced reforms to securities regulations that give private investors both the ability and the incentive to prosecute alleged breaches of disclosure obligations would be useful, particularly at a time when resources for public enforcement are so limited. Reforms to corporate and securities proxy rules that impair institutional shareholders' voices (such as the shareholder communication rules that require shareholders to bear the costs of a dissident proxy circular in the event of a disagreement with management) would also be useful (Pound, 1991). Both of these reforms would bolster the capability of shareholders to monitor and to intervene as required, with the result that less reliance would be placed on the putative superiority of internal *versus* external systems of capital allocation. Also, federal regulators should recognize that some variation on section 9.1 of the Ontario Securities Commission Regulations (which forces disclosure about intercorporate transactions in such groups) is critically important in preventing abuse in groups like Hees-Edper. A regulation of this nature should be a key part of any federal securities law if Ottawa asserts its jurisdiction in that area.

Another set of reforms to securities regulation focuses on tax distortions that implicitly favour debt over equity instruments by allowing the deduction of interest. Removing the interest subsidy on debt would remove an incentive to share risk across companies in a corporate group like Hees-Edper solely in order to to reduce corporate taxes. The effect of the change would be to reduce the desirability of strained capital structures such as those in levered buyouts (LBOs). On the whole, such a change could also be expected to reduce the general corporate tax rate. If it is desirable to subsidize debt because high leverage encourages more careful management decisions (as Jensen, 1989, argues) it should be recognized that conglomerates can and do circumvent this. Intercorporate risk-sharing in such groups allows for higher leverage

without a perspective-enhancing increased chance of bankruptcy. Perhaps intercorporate dividends should therefore be taxed more vigorously, and overall corporate tax rates be reduced.

Finally, although more amorphous in character, we believe that changes to the political climate in which Canadian corporations operate are appropriate. It is perplexing that the substantial concentration of economic power that was amassed in the Hees-Edper group received so little attention from the regulators and the financial community. It strikes us as odd that a single group was able to assemble control over more than 15 percent of the market capitalization of the country's premier stock exchange with scarcely a hint of criticism by regulators, politicians or the press. In this respect, we suggest that increased scrutiny, more analysis and, indeed, reform of the economic and political institutions that could accept such potentially destabilizing economic power are in order. However, concerns about vertical equity should not be used to thwart the creation of optimal organizational arrangements. Specifically, we fear that deep-seated concerns about vertical equity will limit the capacity of shareholders to devise workable incentive-based compensation arrangements that could, in turn, spawn incentives for managers to use firm-level diversification rather than explicit pay differentials to guard their firm-specific human capital investments. The Hees-Edper group provides solid evidence of the ability of strong incentive schemes to increase risk taking. It would be a pity if such incentives were disallowed simply because of concern that successful managers might earn too much.