
Dividends and Corporate Governance: The Effect of Canadian Tax Reforms*

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PRÉCIS

Profitant de deux changements importants apportés à l'imposition des gains en capital au Canada, cet article examine l'interaction entre l'imposition, les distributions de dividendes de société et la gouvernance d'entreprise. Globalement, nos résultats suggèrent que l'imposition a une incidence sur les distributions de dividendes de société. Plus particulièrement, nous constatons que les sociétés publiques canadiennes ont augmenté leurs distributions de dividendes après la réduction de l'exemption pour gains en capital en 1987 et après son élimination en 1994. Nous démontrons comment la gouvernance d'entreprise affecte le niveau de distribution de dividendes suivant un changement apporté à l'imposition. Plus particulièrement, nous remarquons que les entreprises dont la gouvernance est faible ont augmenté leurs distributions de dividendes après l'élimination de l'exemption pour gains en capital en 1994, alors que celles dont la gouvernance est forte n'ont pas modifié leurs distributions. À l'instar de récentes études américaines, nous observons nous aussi que la réponse des entreprises canadiennes aux changements à l'imposition dépend de la structure de propriété de l'entreprise et de l'identité des actionnaires de contrôle (familles vs investisseurs institutionnels). Nos résultats empiriques démontrent également que la réduction à grande échelle de l'exemption pour gains en capital en 1987 et son élimination en 1994 ont incité des entreprises qui ne versaient pas de dividendes à commencer à le faire.

ABSTRACT

This article takes advantage of two important changes in the Canadian taxation of capital gains, to examine the interaction between taxation, corporate dividend payouts,

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and corporate governance. Overall, our results suggest that taxation influences corporate dividend payouts. In particular, we find that Canadian public companies increased their dividend payout after the reduction of the capital gains tax exemption in 1987 and after its elimination in 1994. We also show that firms with weak corporate governance increased their dividend payout after the elimination of the capital gains exemption in 1994, while those with strong corporate governance did not change their dividend payout. Consistent with recent US studies, we report that the response of Canadian firms to tax changes is influenced by the firm's ownership structure and the identity of the controlling shareholders (that is, family versus institutional investors). Our empirical results also show that the large-scale reduction of the capital gains tax exemption in 1987 and its elimination in 1994 prompted non-dividend-paying firms to initiate dividend payments.

KEYWORDS: DIVIDEND ■ TAXATION ■ TAX REFORM ■ CANADA ■ CAPITAL GAINS ■ CORPORATE DISTRIBUTION

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INTRODUCTION

This article examines the interaction between taxation, corporate dividend payouts, and corporate governance. Despite extensive research, there is still debate about the effect of dividend taxation on corporate payout policy. We help in solving this puzzle by taking advantage of two major changes in the taxation of capital gains in Canada: the reduction of the capital gains tax exemption in 1987 and its elimination in 1994. Such changes provide natural experiments that allow us to examine the impact of taxation on dividends. We also consider the effect of concentration of control and corporate governance practice, which have recently been shown to influence corporate financial and investment decisions. Our overall findings suggest that taxation does influence corporate dividend payouts, and that corporate governance affects the dividend payout decision following a change in taxation.

The 1987 and 1994 Canadian reforms present an opportunity to assess how responsive Canadian public firms are to shareholders' tax characteristics. A similar

opportunity arose in the United States following the enactment of the Jobs and Growth Tax Relief Reconciliation Act of 2003¹ (“the Jobs Act”). Because the Jobs Act introduced tax cuts for direct retail investors and institutions held by retail investors (such as mutual funds), one would expect firms with relatively important retail investor holdings to have initiated or increased dividend payouts. However, the overall results suggest that US public firms set a dividend payout that best fitted the interests of their controlling/influential shareholders.² That is, even in the United States, where public firms are widely held and the legal environment offers the strongest legal protection from expropriations by managers and controlling shareholders, the interests of minority shareholders (in this case, retail investors) are still undermined. Hence, it is interesting to see how taxation affects dividends in a context that differs from that of the United States.

The fact that features of the Canadian context—specifically, high ownership concentration and relatively lower investor protection, compared with the United States—are generally the norm rather than the exception around the world (though not in the United Kingdom) makes the present study of general interest as well. In a recent comprehensive survey of dividend literature, DeAngelo et al. conclude that “the influence of controlling stockholders on payout policy—particularly in non-US firms, where controlling stockholders are common—is a promising area for future research.”³

Our findings can be briefly summarized as follows. On average, Canadian firms did increase their dividend payout after the reduction of the capital gains tax exemption in 1987 and its elimination in 1994. In particular, the average payout ratio increased from 40.6 percent in 1985-1986 to 45 percent in 1988-1989, and from 39 percent in 1992-1993 to 45.1 percent in 1995-1996. Moreover, firms with weak corporate governance increased their dividend payout following the reduction in the capital gains exemption, while those with strong corporate governance did not change their dividend payout. The response of Canadian firms to tax changes is influenced by their ownership structure (closely held versus widely held) and the identity of the controlling shareholders (family or institutional). Finally, we find that the large-scale reduction of the capital gains tax exemption in 1987 prompted non-dividend-paying firms to initiate dividend payments. In fact, *ceteris paribus*, the probability of dividend

1 Pub. L. no. 108-27.

2 See Raj Chetty and Emmanuel Saez, “Dividend Taxes and Corporate Behavior: Evidence from the 2003 Dividend Tax Cut” (2005) 120:3 *Quarterly Journal of Economics* 791-833; and Alon Brav, John R. Graham, Campbell R. Harvey, and Roni Michaely, “Managerial Response to the May 2003 Dividend Tax Cut” (2008) 37:4 *Financial Management* 611-24.

3 Harry DeAngelo, Linda DeAngelo, and Douglas J. Skinner, “Corporate Payout Policy” (2008) 3:2-3 *Foundations and Trends in Finance* 95-287, at 100. In the discussion that follows, similar to DeAngelo et al. (among other studies), our observations with respect to controlling stockholders apply with equal force to owners of large minority share blocks who have sufficient power to determine payout policy. Accordingly, we use the terms “controlling,” “influential,” “dominant,” and “majority” interchangeably in referring to such shareholders.

initiation increased by 19.1 percent in 1988. Conversely, the elimination of the capital gains exemption in 1994 did not influence the likelihood of dividend initiation.

The remainder of this article proceeds as follows. We first present a review of the related literature, followed by a description of the Canadian context. We then describe our sample and research methodology, and discuss our empirical findings. Finally, we summarize those findings in a brief concluding section.

REVIEW OF RELATED RESEARCH

Tax Rate Changes and Dividend Payout Policy

Several studies have investigated the dividend-tax relationship by examining substantial changes in the tax regime. Each tax reform presents an opportunity to examine the influence of taxes on dividend policy. The Tax Reform Act of 1986⁴ (“the TRA”) and the Jobs Act were the tool of several studies examining whether taxation matters to dividend policy.

1986 Tax Reform Act

Earlier studies used the TRA as a natural experiment to analyze the connection between changes in US taxes and dividend policy. Before the TRA, tax rates favoured long-term capital gains taxed at a maximum marginal rate of 20 percent, compared with a maximum rate of 50 percent for dividends. After the TRA, the tax rate on both dividends and capital gains was 28 percent. Thus, the TRA substantially reduced the tax preference for long-term capital gains. Studies dealing with this event typically focused on the impact of taxes on stock price, not its effect on dividend policy.

Two studies, however, did focus on the anticipated dividend policy response of firms to the passage of the TRA. Ben-Horim et al.⁵ found that the TRA affected securityholders and firms differently, depending on whether their marginal tax rates increased or decreased. The authors predicted that firms should increase their payout ratios in response to the TRA. Abrutyn and Turner⁶ used a survey to forecast the effect of the TRA on corporate dividend policy. They surveyed chief executive officers (CEOs) of 550 of the largest 1,000 corporations in the United States, and found that only 11 percent of the respondents expected an increase in the dividend payout ratios as a result of the TRA, while 85 percent expected no change. Their study also reveals a surprising result about the importance of shareholders’ tax rates in determining dividend policy. Specifically, the authors report that

[o]nly 18 percent of the firms included any explanation based on shareholders’ tax rates in their top two explanations; a full 58 percent of the respondents claimed not to

4 Pub. L. no. 99-514.

5 Moshe Ben-Horim, Shalom Hochman, and Oded Palmon, “The Impact of the 1986 Tax Reform Act on Corporate Financial Policy” (1987) 16:3 *Financial Management* 29-35.

6 Stephanie Abrutyn and Robert W. Turner, “Taxes and Firms’ Dividend Policies: Survey Results” (1990) 43:4 *National Tax Journal* 491-96.

know the tax status of their shareholders. Thus the tax clientele hypothesis received the weakest support.⁷

Bolster and Janjigian⁸ were the first to explicitly examine the effect of the TRA on dividend policy. Using a sample of 883 non-financial firms, they found that the mean payout ratio for the pre-TRA years was virtually identical to the comparable value for the post-TRA years, indicating that the tax reform did not affect dividend policy. Means et al.⁹ found that dividend yields trended downward over the period 1984-1986 but started trending upward after the TRA's passage. They concluded that firms changed their dividend payout policy in response to the tax changes.

Papaioannou and Savarese¹⁰ used a sample of 283 firms drawn from the Fortune 500 and Fortune 50 to test for differences in the dividend payout ratios for the pre- and post-TRA periods. Applying one-tailed matched-pairs *t*-tests to the sample of 243 industrial firms and 40 utility firms, the authors found no statistically significant difference between the pre- and post-TRA dividend payout ratios. When applying the same test to the 243 industrial firms classified into five quintiles, according to their pre-TRA average dividend payout ratios, they found evidence of significant

7 Ibid., at 495. Joseph P. Ogden, Frank C. Jen, and Philip F. O'Connor, *Advanced Corporate Finance: Policies and Strategies* (Upper Saddle River, NJ: Prentice Hall, 2003), at 479, define clientele effects as relating to "a set of investors who are attracted to the stocks of firms that have the dividend policy they prefer, based on their tax or liquidity circumstances." They argue that managers can enhance the share price via the clientele effect by adopting a dividend policy that appeals to investors whose preferences are not met by other firms currently in the stock market. The existence of tax-induced dividend clienteles can influence corporate dividend policy in several ways. For example, if the tax differential between capital gains and dividends affects the stock price, this could lead to an alteration of corporate dividend policy. Levying income taxes on investors who receive dividend payments is likely to reduce the demand for dividends, and thus prompt corporations to retain a larger share of their profits. On the other hand, an increase in the tax on capital gains relative to the tax on dividends should enhance the demand for dividends and prompt corporations to increase their dividend payout. Alternatively, the existence of clientele effects could give a firm the opportunity to increase its market value by adopting a dividend policy that appeals to investors whose preferences are not satisfied by other firms in the market. More recent studies, however, suggest that the preferences of controlling shareholders may influence a firm's response to tax changes (Chetty and Saez, *supra* note 2; Brav et al., *supra* note 2), an inference that is inconsistent with the clientele theory (see DeAngelo et al., *supra* note 3) and calls for consideration of the issue of corporate governance when examining the impact of taxation on dividends. We discuss the effect of controlling shareholders below, under the heading "The Role of Dominant Shareholders and Corporate Governance."

8 Paul J. Bolster and Vahan Janjigian, "Dividend Policy and Valuation Effects of the Tax Reform Act of 1986" (1991) 44:4, part 2 *National Tax Journal* 511-18.

9 Dwight B. Means, Charlie Charoenwong, and Young-Kwon Kang, "Changing Dividend Policies Caused by the Tax Reform Act of 1986: An Empirical Analysis" (1992) 16:3 *Journal of Economics and Finance* 153-60.

10 George J. Papaioannou and Craig M. Savarese, "Corporate Dividend Policy Response to the Tax Reform Act of 1986" (1994) 23:1 *Financial Management* 56-63.

changes in dividend payout ratios after passage of the TRA. A more recent study by Casey et al.¹¹ used a modified version of Rozeff's model¹² to examine the impact of the TRA on corporate dividend policy. The authors found that the TRA had no significant impact on the aggregate level of dividends.

2003 Jobs Act

The Jobs Act reduced the tax on dividends to 15 percent from the top ordinary income tax rate of 38.6 percent. This dividend tax reform, which eliminated the tax differential between capital gains and dividend income, represents the lowest US federal tax rate on dividends in almost 90 years. The passage of the Jobs Act has presented a new opportunity for economists to examine how dividend payout policy responds to shareholders' tax characteristics.

Chetty and Saez¹³ find a link between the dividend tax cut of the Jobs Act and an increased number of dividend initiations by non-financial and non-utility firms. Julio and Ikenberry¹⁴ argue, however, that taxes could not be the main factor leading to the "reappearance of dividends," since this trend started in late 2000, before discussion of the 2003 tax reform. Chetty and Saez¹⁵ contend that Julio and Ikenberry's conclusion suffers from sample selection bias. Extending their 2005 study, they show that the dividend trend reversal started on the first quarter of 2003, just before the introduction of the tax reform, not in 2001, and accelerated after the enactment of the reform. More recently, Brav et al.¹⁶ use a survey to examine managerial response to the effects of the Jobs Act in making dividend payout decisions and find that the tax cut has a second-order influence on firms to initiate or increase dividends.

Canadian Tax Reforms

Studies taking advantage of important tax changes to examine the interaction between taxation and dividend policy are not limited to the US market. In Canada, Khoury and Smith¹⁷ use Lintner's¹⁸ model to test the effect of the Canadian tax

11 K. Mike Casey, Dwight C. Anderson, Hani I. Mesak, and Ross N. Dickens, "Examining the Impact of the 1986 Tax Reform Act on Corporate Dividend Policy: A New Methodology" (1999) 34:3 *Financial Review* 33-46.

12 Michael Rozeff, "Growth, Beta and Agency Costs as Determinants of Dividend Payout Ratios" (1982) 5:3 *Journal of Financial Research* 249-59.

13 Chetty and Saez, *supra* note 2.

14 Brandon Julio and David L. Ikenberry, "Reappearing Dividends" (2004) 16:4 *Journal of Applied Corporate Finance* 89-100.

15 Raj Chetty and Emmanuel Saez, "The Effects of the 2003 Dividend Tax Cut on Corporate Behavior: Interpreting the Evidence" (2006) 96:2 *American Economic Review* 124-29.

16 Brav et al., *supra* note 2.

17 Nabil Khoury and Kevin V. Smith, "Dividend Policy and the Capital Gain Tax in Canada" (1977) 8:2 *Journal of Business Administration* 19-37.

18 John Lintner, "Distribution of Income of Corporations Among Dividends, Retained Earnings, and Taxes" (1956) 46:2 *American Economic Review* 97-113.

reform of 1972 (TR72) on dividend payouts. The authors report that the introduction of the capital gains tax in 1972 induced an increase in dividend payouts by Canadian firms. However, it is appropriate to qualify their findings because of the asymmetry between the length of the pre-TR and post-TR periods. Owing to lack of data, Khoury and Smith use 2 years for the post-TR72 period (1972 and 1973) but 10 years for the pre-TR72 period (1962-1971).

Adjaoud and Zéghal¹⁹ follow the same methodology as Papaioannou and Savarese to examine the impact of the introduction of the \$500,000 capital gains exemption in 1985 on Canadian dividend policy. They show that this tax change influenced Canadian firms to lower their dividend payouts. More recently, Zeng²⁰ finds that Canadian firms reduced their dividend yields following the introduction of the 1985 capital gains exemption.

The Role of Dominant Shareholders and Corporate Governance

Under the “classic” corporate governance paradigm (that is, asymmetric information and divergence of interests between managers and owners), controlling shareholders can act as a corporate governance mechanism and monitor managerial activities. Accordingly, firms with a substantial presence of influential shareholders do not need to pay dividends to gain the confidence of shareholders if there are positive net present value projects for investment. Also, controlling shareholders may not need to rely on dividend payments to discipline managers, because they have strong voting positions or board representations. Consistent with this view, Hu and Kumar²¹ find that the likelihood of dividend payments and dividend yields are negatively related to the fraction of total shares owned by the largest outside shareholders. A competing viewpoint predicts a positive relationship between the ownership of influential shareholders and dividend payments. According to Shleifer and Vishny,²² controlling shareholders have greater incentives to monitor management. However, active involvement by dominant shareholders in monitoring managers is expensive and extends free-rider benefits to other shareholders. Accordingly, Zeckhauser and Pound²³ maintain that influential shareholders such as institutional holders are unlikely to monitor managers directly, but instead force managers to pay dividends.

19 Fodil Adjaoud and Daniel Zéghal, “Fiscalité et Politique de Dividende au Canada : Nouveaux résultats” (1993) 3:2 *Finéco* 141-54.

20 Tao Zeng, “Corporate Dividend Yields and the Lifetime Capital Gains Exemption” (2002) 50:4 *Canadian Tax Journal* 1307-19.

21 Aidong Hu and Praveen Kumar, “Managerial Entrenchment and Payout Policy” (2004) 39:4 *Journal of Financial and Quantitative Analysis* 759-90.

22 Andrei Shleifer and Robert W. Vishny, “Large Shareholders and Corporate Control” (1986) 94:3 *Journal of Political Economy* 461-88.

23 Richard J. Zeckhauser and John Pound, “Are Large Shareholders Effective Monitors? An Investigation of Share Ownership and Corporate Performance,” in Glenn Hubbard, ed., *Asymmetric Information, Corporate Finance and Investment* (Chicago: University of Chicago Press, 1990), 149-80.

Regular dividend payments compel managers to rely on external markets for additional funds, subjecting them to external scrutiny.

Although the classic corporate governance paradigm suggests that the interests of controlling shareholders are aligned with those of minority shareholders, more recent corporate governance literature shows that such alignment does not always hold. Indeed, the widely supported evidence of ownership concentration around the world has shifted attention from the classic agency conflict between shareholders and managers to agency conflicts between minority shareholders and controlling shareholders. Controlling shareholders usually exert full control over managers and frequently hold control power in excess of their cash flow rights, providing them with strong incentives to extract private benefits at the expense of minority shareholders—for example, in the case of family-controlled firms, by distributing no or low dividends.²⁴ Accordingly, as DeAngelo et al. conclude, “influential or controlling stockholders’ idiosyncratic preferences may lead a firm to adopt payout policies that do not maximize the wealth of outside investors.”²⁵

Several studies support this view. Eckbo and Verma²⁶ use a sample of large Canadian public firms to examine the impact of both relative ownership and voting power of institutional shareholders and managers on dividend payout policy. They find that the magnitude of the cash dividend increases with the voting power of corporate and institutional shareholders and decreases with the voting power of managers. For German firms, Gugler and Yurtoglu²⁷ find that the power of the largest equity holder reduces the dividend payout ratio.

In many countries, including the United Kingdom and Canada, large institutional investors receive favourable tax treatment of dividend income. Thus, such investors prefer dividends to retention. Renneboog and Trojanowski²⁸ find that UK

24 Shleifer and Vishny, supra note 22; and Mike Burkart, Denis Gromb, and Fausto Panunzi, “Large Shareholders, Monitoring, and the Value of the Firm” (1997) 112:3 *Quarterly Journal of Economics* 693-728. As noted by DeAngelo et al., supra note 3, a controlling shareholder (such as a family shareholder) may prefer to overretain free cash flows in order to fund suboptimal investments in pet projects that provide consumption to the controlling shareholder, or to “tunnel” the retained funds directly to that shareholder via asset sales, transfer pricing, excess compensation, and/or favourable loan guarantees. For empirical evidence, see Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny, “Agency Problems and Dividend Policies Around the World” (2000) 55:1 *Journal of Finance* 1-33; Mara Faccio, Larry H.P. Lang, and Leslie Young, “Dividends and Expropriation” (2001) 91:1 *American Economic Review* 54-78; and Ivalina Kalcheva and Karl V. Lins, “International Evidence on Cash Holdings and Expected Managerial Agency Problems” (2007) 20:4 *Review of Financial Studies* 1087-1112.

25 Supra note 3, at 212.

26 B. Espen Eckbo and Savita Verma, “Managerial Share Ownership, Voting Power, and Cash Dividend Policy” (1994) 1:1 *Journal of Corporate Finance* 33-62.

27 Klaus Gugler and B. Byrcin Yurtoglu, “Corporate Governance and Dividend Pay-Out Policy in Germany” (2003) 47:4 *European Economic Review* 731-58.

28 Luc Renneboog and Grzegorz Trojanowski, *Patterns in Payout Policy and Payout Channel Choice of U.K. Firms in the 1990s*, Working Paper no. 70/2005 (European Corporate Governance Institute, 2005) (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=664982).

firms in which tax-exempt institutions hold more voting power are more likely to pay dividends and/or repurchase stock. In the same vein, Short et al.²⁹ examine the possible link between dividend payments and institutional ownership in a sample of 211 UK firms, and report a significant positive relation between dividend payout policy and institutional ownership. They attribute these findings to the preferential tax treatment given to institutional shareholders in the United Kingdom. Similarly, Bond et al.³⁰ posit that the high level of dividends paid could reflect the tax exemption on dividends that institutional investors such as mutual funds enjoy in most developed countries. In the UK context, they conclude that

[t]o the extent that tax-exempt shareholders such as pension funds are now the most influential investors in many UK companies, their tax preference for dividend income is likely to result in significantly higher dividend payout ratios than would be chosen by companies in the absence of this tax bias.³¹

In the US context, Perez-Gonzalez³² finds that tax reforms influence payout policy only for firms whose controlling shareholders are affected by these reforms. More recent studies by Chetty and Saez and by Brav et al. suggest that, in response to 2003 tax changes, US public firms set dividend payouts that best fitted the interests of their influential shareholders.³³ Holmen et al.³⁴ show that following tax changes, firms with dominant shareholders adjust their dividend payouts in a way that reduces the tax burden for large shareholders.

As noted by DeAngelo et al., the growing evidence suggesting that the preferences of dominant shareholders influence a firm's response to tax changes is actually inconsistent with tax clientele theory. In fact, they state:

Given the observations that firms in the aggregate deliberately choose not to supply a broad spectrum of dividend heterogeneity either across or within industries, and that firms have consistently failed to do so for many decades, we conclude that pressure to satisfy heterogeneous investor tax clientele demands does not exert a major influence on corporate payout policies. Investor preferences may nonetheless be a major determinant of payout policies for some firms—most plausibly, . . . at firms where the

29 Helen Short, Hao Zhang, and Kevin Keasey, "The Link Between Dividend Policy and Institutional Ownership" (2002) 8:2 *Journal of Corporate Finance* 105-22.

30 Stephen Bond, Lucy Chennells, and Michael Devereux, "Company Dividends and Taxes in the UK" (1995) 16:3 *Fiscal Studies* 1-18.

31 *Ibid.*, at 17.

32 Francisco Perez-Gonzalez, *Large Shareholders and Dividends: Evidence from U.S. Tax Reforms*, NBER Working Paper (Cambridge, MA: National Bureau of Economic Research) (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=337640).

33 Chetty and Saez, *supra* note 2; Brav et al., *supra* note 2.

34 Martin Holmen, John D. Knopf, and Stefan Peterson, "Inside Shareholders' Effective Tax Rates and Dividends" (2008) 32:9 *Journal of Banking and Finance* 1860-69.

preferences of a controlling or influential stockholder for consumption flows over time (and other personal portfolio characteristics) are almost inevitably intertwined with the firm's time profile of equity payouts.³⁵

Although, according to Julio and Ikenberry, Brav et al., and DeAngelo et al.,³⁶ taxation has, at most, a second-order influence on a firm's dividend policy, it has a major impact on the shape of corporate ownership structure around the world. Morck³⁷ argues that intercorporate dividend taxation is a major obstacle to the formation of pyramidal groups. In a related paper, Morck et al.³⁸ examine the evolution of corporate ownership in Canada during the 20th century. They report that the emergence of family-controlled pyramidal groups is the outcome of government policies through the limitation of competition and the introduction of generous tax reform favouring wealthy families. They show that the absence of intercorporate dividend taxation coupled with the abolition of inheritance taxes in the early 1970s led to the re-emergence of family pyramids in Canada.

In the wake of earnings manipulation scandals and evidence of managerial opportunism in the business community, several studies have documented an explicit relation between corporate governance and dividend payout policy.³⁹ However, there is an ongoing debate with respect to the nature of the interaction between corporate governance and corporate dividend payouts: Are dividend payouts positively or negatively associated with corporate governance? Advocates of the "outcome model"⁴⁰ argue that the weaker (stronger) the corporate governance, the lower (higher) the dividend payouts. However, advocates of the "substitute model"⁴¹ stipulate that dividend payouts are inversely related to the strength or quality of

35 *Supra* note 3, at 207.

36 Julio and Ikenberry, *supra* note 14; Brav et al., *supra* note 2; DeAngelo et al., *supra* note 3.

37 Randall Morck, *How To Eliminate Pyramidal Business Groups—The Double Taxation of Inter-Corporate Dividends and Other Incisive Uses of Tax Policy*, NBER Working Paper no. 10944 (Cambridge, MA: National Bureau of Economic Research, 2004).

38 Randall Morck, Daniel Wolfenzon, and Bernard Yeung, *Corporate Governance, Economic Entrenchment, and Growth*, NBER Working Paper no. 10692 (Cambridge, MA: National Bureau of Economic Research, 2004).

39 See, among others, La Porta et al., *supra* note 24; Klaus Gugler, "Corporate Governance, Dividend Payout Policy, and the Interrelation Between Dividends, R & D and Capital Investment" (2003) 27:7 *Journal of Banking and Finance* 1297-1321; Gugler and Yurtoglu, *supra* note 27; and Marc Goergen, Luc Renneboog, and Luis da Silva, "When Do German Firms Change Their Dividends?" (2005) 11:2 *Journal of Corporate Finance* 375-99.

40 For example, La Porta et al., *supra* note 24; and Todd Mitton, "Corporate Governance and Dividend Policy in Emerging Markets" (2004) 5:4 *Emerging Markets Review* 409-26.

41 For example, Pornsit Jiraporn and Yixi Ning, "Dividend Policy, Shareholder Rights, and Corporate Governance" (Fall 2006) *Journal of Applied Finance* 24-36; and Kose John and Anzhela Knyazeva, *Payout Policy, Agency Conflicts, and Corporate Governance*, Working Paper (New York: New York University, 2006) (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=841064).

corporate governance; that is, the weaker the corporate governance, the higher the dividend payouts.

THE CANADIAN CONTEXT

The Canadian market presents a very interesting case in the study of the effect of taxation on dividend payouts.

First, the Canadian tax system differs from the US system with respect to the treatment of investment income. Whereas, until the introduction of the Jobs Act, the United States imposed double taxation on dividend income, the Canadian tax system is partially integrated, employing the “gross-up and credit” approach for dividends since 1949.⁴² The tax on capital gains was first imposed in 1972. In May 1985, a \$500,000 capital gains exemption was introduced. This tax reform widened the tax differential between capital gains and dividends. Considered too generous, the capital gains exemption was reduced to \$100,000 in 1987 and eliminated in 1994. This article considers the reduction and the elimination of the capital gains exemption as natural experiments that can shed more light on how taxation affects dividend payouts.

Second, Canada and the United States differ in several features of corporate governance. Morck et al. assert that the Canadian and US economies have broadly “similar factors endowments, and employ virtually identical technology and human capital in [a] similar institutional framework” except for their ownership structure.⁴³ Indeed, ownership is highly concentrated in Canadian public firms but widely diffused in US public firms. In Canada, a small group of large blockholders, or affiliated groups of investors, dominate the ownership scene, where wealthy families maintain some influence over public officials through different control mechanisms, such as pyramidal holdings, cross-holdings, and multiple-class shares. In fact, Morck et al. report that 254 of the 500 largest Canadian companies represent privately held firms. The remaining 246 are public firms, of which only 53 have broad ownership. Attig and Gadhoum⁴⁴ extend Morck et al.’s analysis and find that more than 80 percent of all Canadian public firms have controlling shareholders, with 40 percent being controlled by wealthy family groups. Attig and Gadhoum also report that 33 percent of public firms are controlled through pyramidal structures, while 16 percent are controlled through shares with superior voting rights. These control mechanisms

42 Larry Bauer, Steve Beveridge, and Ranjini Jha, “The Dividend Puzzle: The Influence of Taxes, Tick Size and Short-Term Trading on Ex-Dividend Day Prices in Canada” (2008) 2:2 *Great Lakes Herald* 55-78, provide an excellent summary of Canadian tax regimes for the period 1982-2000.

43 Randall Morck, David A. Stangeland, and Bernard Yin Yeung, “Inherited Wealth, Corporate Control, and Economic Growth: The Canadian Disease?” in Randall Morck, ed., *Concentrated Corporate Ownership* (Chicago: University of Chicago Press, 2000), 319-69, at 327.

44 Najah Attig and Yoser Gadhoum, *The Governance of Canadian Traded Firms: An Analysis of the Ultimate Ownership Structure*, Working Paper (Montreal: University of Quebec, 2003) (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=434160&).

and the resulting excess of control enable the ultimate owners to internalize only a part of the financial costs related to their expropriation behaviour, yet they are able to gain the larger part of the generated private benefits.

Recent allegations of corporate wrongdoing in Canada, such as those involving Hollinger Inc. and Royal Group Technologies Inc., typify the use of control pyramids and multiple-class shares in expropriating minority shareholders. These governance failures allegedly involved related-party transactions and large fund transfers in the form of management agreements and improper “non-compete” fees from affiliated firms to their ultimate owners. Clearly, the corporate ownership and control structure in Canada is quite the opposite of the freestanding widely held firm prototype customary in the United States and the United Kingdom. Furthermore, while the US corporate governance regime is mandatory, the Canadian regime is largely voluntary.⁴⁵ High concentration of ownership coupled with the voluntary aspect of Canadian corporate governance may exacerbate managerial opportunism, as reflected in our study, to the extent that firms adjust their dividend payouts in response to changes in taxation, in a manner that may not align with the interests of minority shareholders but rather reflects the preferences of controlling shareholders.⁴⁶ In the United States, Brown et al.⁴⁷ find that firms with large executive stock ownership initiated or increased dividends in response to the 2003 dividend tax cut, while firms with large executive stock option holdings did not do so, since stock options are not dividend-protected. In a recent survey examining managerial response to the effects of the Jobs Act on dividend payout decisions, Brav et al. report

45 See Anita Indira Anand, “An Analysis of Enabling vs. Mandatory Corporate Governance: Structures Post-Sarbanes-Oxley” (2006) 31:1 *Delaware Journal of Corporate Law* 229-52. Under the Sarbanes-Oxley Act, several aspects of the US regime have become mandatory. In Canada, however, the corporate governance regime (effective since 1995) consists of a list of best-practice guidelines issued by the Toronto Stock Exchange (TSX) that firms may but are not obliged to adopt: Toronto Stock Exchange, *TSX Company Manual* (Toronto: Toronto Stock Exchange) (http://tmx.complinet.com/en/display/display_main.html?rbid=2072&element_id=255), part IV, section 473. All listed firms, however, are required to disclose, in the proxy circular or annual report, the extent of their compliance with the guidelines and where the firm’s governance system differs from those guidelines. The TSX best-practice guidelines address issues dealing with the board’s mandate, board independence and composition (including minority shareholder representation), independence of board committees, board approval, procedures for recruiting new directors and assessing board performance, measures for receiving shareholder feedback, and the board’s expectations of management.

46 Anand et al. examine the governance practices of Canadian firms listed on the TSX from 1999 to 2003, and find that the presence of executive blockholders or a majority shareholder is negatively associated with voluntary adoption of the corporate governance regime: Anita I. Anand, Frank Milne, and Lynette D. Purda, “Voluntary Adoption of Corporate Governance Mechanisms,” paper presented at the 2006 meetings of the American Law and Economics Association of Law Schools (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=921450).

47 Jeffrey R. Brown, Nellie Liang, and Scott Weisbenner, “Executive Financial Incentives and Payout Policy: Firm Responses to the 2003 Dividend Tax Cut” (2007) 62:4 *Journal of Finance* 1935-65.

that managers of US public firms gave little importance to changes in the tax characteristics of retail investors after the 2003 tax reform.⁴⁸ Since Canada ranks behind the United States with respect to law enforcement, mandatory disclosure, illegal insider trading, and other aspects of the regulatory regime,⁴⁹ we expect higher deviation from the objectives of minority shareholders.

RESEARCH METHODOLOGY AND DATA

Research Methodology

As stated above, the \$500,000 capital gains exemption introduced in 1985 was reduced to \$100,000 in 1987 and then eliminated in 1994. These two events provide natural experiments for examining the relationship between taxation and dividend payouts. We employ univariate and multivariate analyses to investigate the impact of these tax changes on corporate dividend payouts by Canadian public companies. In the univariate analysis, we use a parametric test (*t*-test) and a non-parametric test (Friedman test) to examine the statistical significance of differences in the average dividend payout before and after each event. We apply a two-tailed test of the null hypothesis that the mean of the pair-wise differences before and after each event is equal to 0, against the alternative hypothesis that this mean is greater than 0. In the multivariate analysis, we estimate the following model, based on Lintner's⁵⁰ framework, for two periods, 1985-1989 and 1992-1996:⁵¹

$$DPY_{i,t} = \beta_0 + \beta_1 DPY_{i,t-1} + \beta_2 EPS_{i,t} + \beta_3 D_{1987(1994)} + \varepsilon_{i,t} \quad (1)$$

where $DPY_{i,t}$ is the payout ratio of firm i in year t , measured as common stock dividends divided by net income minus preferred dividends. $DPY_{i,t-1}$ is the lagged value of the payout ratio. $EPS_{i,t}$ is the earnings per share in year t , measured as net income before extraordinary items divided by the number of outstanding ordinary (common) shares. $D_{1987(1994)}$ is a dummy variable that is equal to 1 after 1987 for the period 1985-1989, equal to 1 after 1994 for the period 1992-1996, and 0 otherwise.⁵² It is noteworthy that the variable $DPY_{i,t}$ should capture the effect of omitted

48 Brav et al., *supra* note 2.

49 See, for example, William J. McNally, Brian F. Smith, and Thomas Barnes, "The Price Impacts of Open Market Repurchase Trades" (2006) 33:5-6 *Journal of Business Finance and Accounting* 735-52; and Arturo Bris, "Do Insider Trading Laws Work?" (2005) 11:3 *European Financial Management* 267-312.

50 *Supra* note 18.

51 It is noteworthy that, in terms of tax-based preference, over the 1985-1989 period capital gains were preferred to dividends, while the opposite was true for the 1992-1996 period: see Bauer et al., *supra* note 42.

52 To see whether the increase in dividend payout occurred in the first, second, or both years following the event, we then split the dummy $D_{1987(1994)}$ into two dummies. The first dummy variable, $YEAR_{1988(1995)}$, is equal to 1 for 1988 (1995) and 0 otherwise; the second, $YEAR_{1989(1996)}$, is equal to 1 for 1989 (1996) and 0 otherwise.

variables that could influence a firm's dividend variable, such as size, profitability, growth opportunity, and leverage. Moreover, unlike the dividend payout ratio, a firm's dividend yield incorporates market perceptions and pricing effects that are often beyond the control of management.⁵³ Thus, the use of dividend payout is more appropriate to address our research question, which focuses on firms' (or managers') reactions to changes in dividend taxation, in contrast to the use of dividend yield in studies that are concerned with market (or investors') reactions.

We expect that both the reduction and the elimination of the capital gains tax exemption would have a positive impact on the demand for dividends. In the dividend clientele framework, we expect that Canadian firms would react by increasing their dividend payouts. This hypothesis is tested by estimating equation 1 and examining the coefficient of $D_{1987(1994)}$ for each period. A positive and statistically significant coefficient will support our expectations. It should be noted, however, that since the two tax events are different, we do not expect the same magnitude of reaction from all firms.

Because we expect that Canadian firms would increase the level of their dividend payout in response to the 1987 and 1994 tax reforms, we also expect that firms that had never paid dividends would start to do so following the reduction or elimination of the capital gains exemption. Using a probit model, we examine the likelihood that a non-dividend-paying firm would initiate dividends following the 1987 and 1994 tax reforms. We examine each tax reform separately using the periods 1985-1989 and 1992-1996. Our probit model, which is derived from recent studies by, among others, Li and Zhao⁵⁴ and Alzahrani and Lasfer,⁵⁵ is as follows:

$$\Pr(d_{i,t} = 1) = F[\beta_0 + \beta_1 YEAR_{1988(1995)} + \beta_2 D/E_{i,t} + \beta_3 M/E_{i,t} + \beta_4 ROA_{i,t} + \beta_5 \text{Log}(TA)] \quad (2)$$

where $d_{i,t}$ is an indicator function for the decision to initiate dividends, which is equal to 1 if firm i makes the decision to initiate paying dividends at time t , and 0 otherwise. We define a firm as a dividend initiator if it has a non-zero dividend per share at year t while having a zero dividend per share at year $t - 1$. $YEAR_{1988(1995)}$ is a dummy variable equal to 1 for 1988 (1995) and 0 otherwise. Recent dividend literature shows that a firm's size, profitability, growth opportunity, and leverage are

53 See, for instance, Nalinaksha Bhattacharyya, Amin Mawani, and Cameron K.J. Morrill, "Dividend Payout and Executive Compensation: Theory and Canadian Evidence" (2008) 34:8 *Managerial Finance* 585-601.

54 Kai Li and Xinlei Zhao, "Asymmetric Information and Dividend Policy" (2008) 37:4 *Financial Management* 673-94.

55 Mohammed Alzahrani and Meziane Lasfer, *The Impact of Taxation on Dividends: A Cross-Country Analysis*, Working Paper (London: Cass School of Business, 2009) (www.efmaefm.org/0EFMAMEETINGS/EFMA%20ANNUAL%20MEETINGS/2008-athens/Alzahrani.pdf).

the main determinants of its dividend payout policy.⁵⁶ Growth opportunity and profitability are estimated by the market value of equity divided by the book value of equity ($M/E_{i,t}$) and return on assets ($ROA_{i,t}$), respectively. $\log(TA)$ is the natural logarithm of total assets, and a proxy for size. We control for leverage effect through $D/E_{i,t}$, which is measured as long-term debt divided by the market value of equity. We expect that the likelihood to initiate dividends would increase with firm size and firm profitability, and decrease with leverage and growth opportunity. We expect that large and profitable firms would pay high dividends, while firms with high leverage would not have enough financial flexibility to do so; also, firms with high growth opportunities would retain more earnings to finance their investments.

As discussed above, the extant theoretical and empirical studies make a direct link between ownership structure, corporate governance, and dividend payouts. Under the agency model framework, dividends are paid to mitigate agency problems between managers and owners. But the payout level and the extent to which a firm is responsive to its shareholders' interests depend on, among other factors, ownership structure (dispersed or highly concentrated) and the level of separation between ownership and control (which is usually used as a proxy for likelihood of expropriation by excess control). To control for the ownership and control effect, we split the sample for each period into two equal subsamples according to the median level of control concentration. This level is first measured by the variable *CONTROL* provided by the Stock Guide database.⁵⁷ The variable is defined as the percentage of votes attached to the voting shares of a company held by the directors of the company and by other individuals or companies that own more than 10 percent of the equity shares of the company, and/or exercise control over more than 10 percent of all voting rights.

Some Canadian companies have adopted a pyramidal ownership structure in order to enhance the separation between ownership and control rights. This type of structure increases the firm's opacity, and hence its ability to hide expropriation behaviour and secure the implementation of self-enriching plans. We therefore also assess the level of control concentration using the variable *MAXCONTROL*, defined as follows:

$$\begin{aligned} \text{MAXCONTROL} &= \text{Max}(\text{MAJORCONTROL}; \text{ULTIMATECONTROL}), \\ \text{if PYRAMIDAL} &= 1; \text{ and MAJORCONTROL if PYRAMIDAL} = 0 \end{aligned} \quad (3)$$

where *MAJORCONTROL* is the voting rights held by the major shareholder, *ULTIMATECONTROL* is the percentage of voting rights held by the ultimate owner, and *PYRAMIDAL* is a dummy variable that is equal to 1 if a firm's ownership structure is pyramidal

56 Eugene F. Fama and Kenneth R. French, "Disappearing Dividends: Changing Firm Characteristics or Lower Propensity To Pay?" (2001) 60:1 *Journal of Financial Economics* 3-43; and Harry DeAngelo, Linda DeAngelo, and Douglas J. Skinner, "Are Dividends Disappearing? Dividend Concentration and the Consolidation of Earnings" (2004) 72:3 *Journal of Financial Economics* 425-56.

57 *Stock Guide* (Montreal: Stock Guide Publications) (CD ROM database).

and 0 otherwise. Following, among others, La Porta et al.⁵⁸ and Claessens et al.,⁵⁹ we define a firm as being affiliated to a pyramidal holding if it is controlled through at least one intermediary corporation. We collected detailed ownership structure data needed to construct the dummy variable *PYRAMIDAL* from companies' proxy statements available on the SEDAR website.⁶⁰ If a firm turns out to be affiliated with a control pyramid (that is, *PYRAMIDAL* = 1), we use its proxy statements to trace block holdings up the chain of pyramid group companies to their ultimate owners.

As depicted by equation 3, we compute the variable *MAXCONTROL* as follows. If a firm is not affiliated with a control pyramid (that is, *PYRAMIDAL* = 0), the variable *MAXCONTROL* is equal to the percentage of voting rights held by the major shareholder. But if a firm is affiliated with a control pyramid (that is, *PYRAMIDAL* = 1), then we compare the percentage of voting rights held by the major shareholder (*MAJORCONTROL*) and the percentage held by the ultimate owner (*ULTIMATECONTROL*), and assign the higher of the two values to the variable *MAXCONTROL*.

As a further step, to see whether the identity of controlling shareholders matters, we consider closely held firms and create two subsamples based on whether the firm is controlled by a family or by institutional investors.

To control for the quality of corporate governance, we use a corporate governance score developed by The Globe and Mail Inc. (G&M),⁶¹ supplemented by three hand-collected corporate governance variables available from the SEDAR website (which we discuss in the results section below). First introduced in 2002, the G&M score attributes a maximum of 100 points for a company, and it is obtained by summing the ratings obtained in four subcategories: board composition (maximum score of 40 points), shareholdings and compensation policy (maximum score of 23 points), shareholder rights policy (maximum score of 22 points), and corporate governance

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

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

60 The system for electronic document access and retrieval (SEDAR) can be accessed at www.sedar.com.

61 Corporate governance scores are published annually in the Report on Business section of the *Globe and Mail*. The G&M governance scores have been used in prior Canadian studies to examine the relationship between corporate governance and firm performance. See Yvan Allaire and Mihaela Firsirotu, *Changing the Nature of Governance To Create Value*, C.D. Howe Institute Commentary no. 189 (Toronto: C.D. Howe Institute, 2003); Peter Klein, Daniel Shapiro, and Jeffrey Young, "Corporate Governance, Family Ownership and Firm Value: The Canadian Evidence" (2005) 13:6 *Corporate Governance: An International Review* 769-84; and Paraveen P. Gupta, Duane B. Kennedy, and Samuel W. Weaver, "Corporate Governance Scores, Tobin's Q and Firm Performance: Evidence from Canadian Capital Markets" (2009) 6:3 *Corporate Ownership and Control* 293-307. Flora F. Niu, "Corporate Governance and the Quality of Accounting Earnings: A Canadian Perspective" (2006) 2:4 *International Journal of Managerial Finance* 302-27, also uses the G&M annual rankings to investigate the association between corporate governance and the quality of accounting earnings disclosed by Canadian firms.

disclosure policy (maximum score of 15 points). According to the G&M rating system, firms with better governance practices should achieve higher scores. For our analysis, we split the sample into two equal subsamples according to the median level of the variable SCORE as a proxy for a firm's corporate governance practice measured in 2002. Equation 1 is then estimated for each of the above subsamples.

Data Selection and Summary Statistics

Since our study examines dividend payout policy around the 1987 and 1994 tax events, the study sample consists of two subsets: the first subset includes all the firms that regularly paid an annual cash dividend over the period 1985-1989; the second subset consists of all the firms that regularly paid an annual cash dividend over the period 1992-1996. All firms in our sample are Canadian companies that were listed on the Toronto Stock Exchange (TSX) during the two study periods. Figure 1 presents the number and percentage of dividend-paying firms during the periods 1985-1989 and 1992-1996 for all firms trading on the TSX as well as those listed in the Standard and Poor (S&P)/TSX composite index. Consistent with the US evidence,⁶² the percentage of dividend-paying firms in Canada exhibits a downward slope over time. As shown in figure 2, we identified 92 dividend initiators during the period 1985-1989 and 129 for the period 1992-1996.

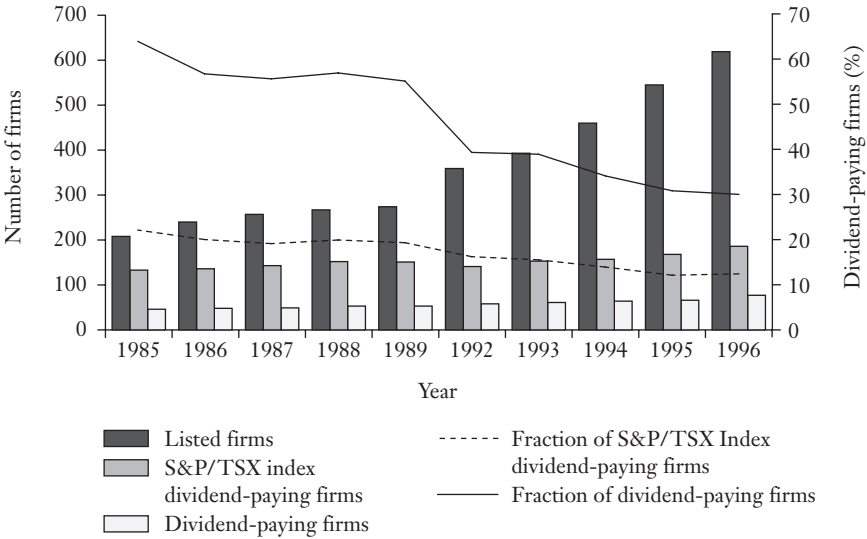
After considering all Canadian public firms from the Stock Guide database, we set the following requirements for a firm to be included in our sample, for each of the two periods of study:

1. The firm operated in a non-regulated industry.
2. The firm maintained the same corporate identity and industrial classification throughout the study period.
3. The firm did not file for bankruptcy during the test period.
4. Data on common dividends, earnings, and number of shares are available for the firm throughout the particular study period (that is, 1985-1989, or 1992-1996). We excluded firms with missing data in any year in the study period. We also excluded firms that had never paid a dividend while reporting positive net profits.
5. The firm had a non-negative payout (that is, the firm paid dividends while having negative earnings per share).

The data on dividends, earnings per share, and control are available from the Stock Guide database. Panel A of table 1 provides summary statistics for dividend payouts for the two periods, while panel B presents summary statistics for earnings per share. The sample covering 1985-1989 consists of 295 firm-year observations with a median (mean) payout ratio of 34 percent (43 percent) and a median (mean) EPS of \$0.63 (\$0.87). Dividend-paying firms over the subsequent period, 1992-1996,

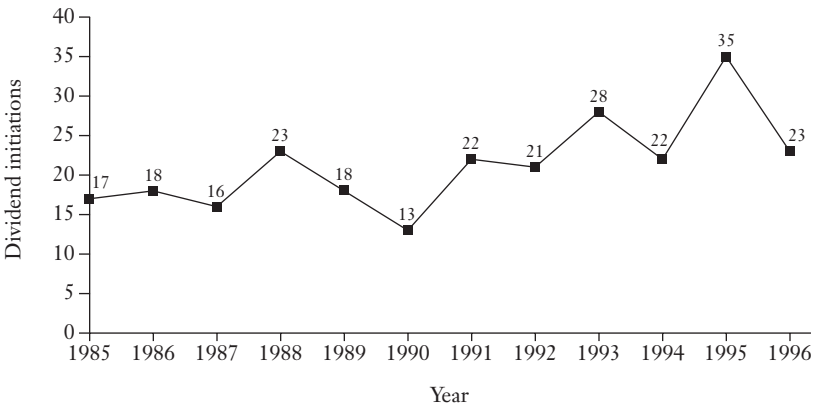
62 For example, Fama and French, supra note 56.

FIGURE 1 Summary Statistics for the Study Sample



Source: Data gathered from *Stock Guide* (Montreal: Stock Guide Publications) (CD ROM database) for 1985-1989 and 1992-1996.

FIGURE 2 Number of Dividend Initiations, 1985-1996



Note: A firm is defined as a dividend initiator if it has a non-zero dividend per share at year t while having a zero dividend per share at year $t - 1$.

Source: Data gathered from *Stock Guide* (Montreal: Stock Guide Publications) (CD ROM database) for 1985-1996.

TABLE 1 Summary Statistics

	N	Median	Mean	Standard deviation
Panel A <i>DPY</i> (%)				
1985-1989	295	34.4	42.8	29.4
1992-1996	265	27.2	42.1	42.6
Panel B <i>EPS</i> (\$)				
1985-1989	295	0.63	0.87	0.96
1992-1996	265	0.56	0.78	0.87
Panel C <i>SCORE</i>				
1985-1989	174	64.0	63.2	17.4
1992-1996	151	56.0	61.5	17.1
Panel D <i>MAXCONTROL</i> (%)				
1985-1989	229	52.0	42.5	33.2
1992-1996	190	27.2	40.1	33.8
Panel E <i>CONTROL</i> (%)				
1985-1989	295	54.8	50.4	31.1
1992-1996	265	60.4	51.9	31.1
Panel F Stock repurchase (\$000)				
1985-1989	69	22,008	1,100	54,335
1992-1996	79	14,376	295	51,309
Panel G Repurchase/total assets (%)				
1985-1989	69	2.30	0.12	9.07
1992-1996	79	0.56	0.03	1.24

Notes: This table provides summary statistics for the dividend payout, ownership, and corporate governance variables, as described in the accompanying text, for the periods 1985-1989 and 1992-1996. Stock repurchase measures the expenditure on the purchase of common stocks.

Sources: Authors' calculations based on data obtained from *Stock Guide* (Montreal: Stock Guide Publications) (CD ROM database), the SEDAR website (www.sedar.com), and corporate governance scores published annually in the Report on Business section of the *Globe and Mail*.

exhibit a lower *EPS* with a median (mean) *EPS* of \$0.56 (\$0.78), which may explain the lower payout ratio, with a median (mean) of 27 percent (42 percent) compared with the 1985-1989 period.

To estimate equation 3, we hand-collected data on ultimate control and major shareholder control using companies' proxy statements available on the SEDAR website. Panels C, D, and E provide descriptive statistics for, respectively, the G&M corporate governance index (*SCORE*), maximum control (*MAXCONTROL*), and voting rights (*CONTROL*), as defined above. The data on governance and ownership are for 2002.⁶³ As noted above, the G&M index ranges from 0 to a maximum of 100, with a

63 We chose 2002 because that is the earliest year for which the G&M corporate governance scores are available. We assume that a firm's ownership and control structure remain constant over the period of study. This assumption is not overly restrictive, especially in a country like Canada, where ownership is highly concentrated. Andrei Shleifer and Robert W. Vishny, "A Survey of

higher value associated with higher governance quality. However, this index is provided only for firms that are included in the S&P/TSX composite index. Given that these firms are large and mature ones, the average governance index for firms that meet the selection criteria in our sample is relatively high. In fact, for the 1985-1989 period, the median (mean) index is 64 (63); for 1992-1996, it is 56 (61). The summary statistics for *MAXCONTROL* (panel D in table 1) and *CONTROL* (panel E) are consistent with the view that corporate ownership is highly concentrated in Canada. For instance, the median (mean) of voting rights for firms that paid regular dividends over the period 1992-1996 is 60 percent (52 percent). We note that the first quartile (third quartile) for the variable *CONTROL* is 17.7 percent (73.8 percent) and 23.1 percent (73.9 percent) for 1985-1989 and 1992-1996 respectively. Figure 3 illustrates how *CONTROL*, *MAXCONTROL*, and *SCORE* variables differ between dividend initiators and non-initiators for the period 1992-1996. Interestingly, dividend initiators tend to have higher control concentration as well as better corporate governance quality.

It is noteworthy that the number of firm-year observations reported for *DPY* in table 1 declines from 295 for 1985-1989 to 265 observations for 1992-1996. This is consistent with the “dividend disappearance” documented by Fama and French for the United States⁶⁴ (see also figure 1).

Because stock repurchase is another channel of payout to shareholders that is directly affected by changes in capital gains taxation, we collect data on stock repurchase over each of the study periods.⁶⁵ Panels F and G of table 1 present the summary statistics for stock repurchase and the ratio of repurchase to total assets, respectively. It is clear that few firms engaged in buyback activities during the periods 1985-1989 and 1992-1996. Indeed, only 14 firms (69 observations) repurchased fractions of their outstanding shares between 1985 and 1989, and 16 firms (79 observations) did so between 1992 and 1996. Furthermore, we report a decline in stock repurchase in dollar amount paid out by a firm and as a percentage of total assets over time. In table 3 (panel B), discussed in the “Results” section below, we test whether the 1987 and 1994 changes in the taxation of capital gains influence stock repurchase.

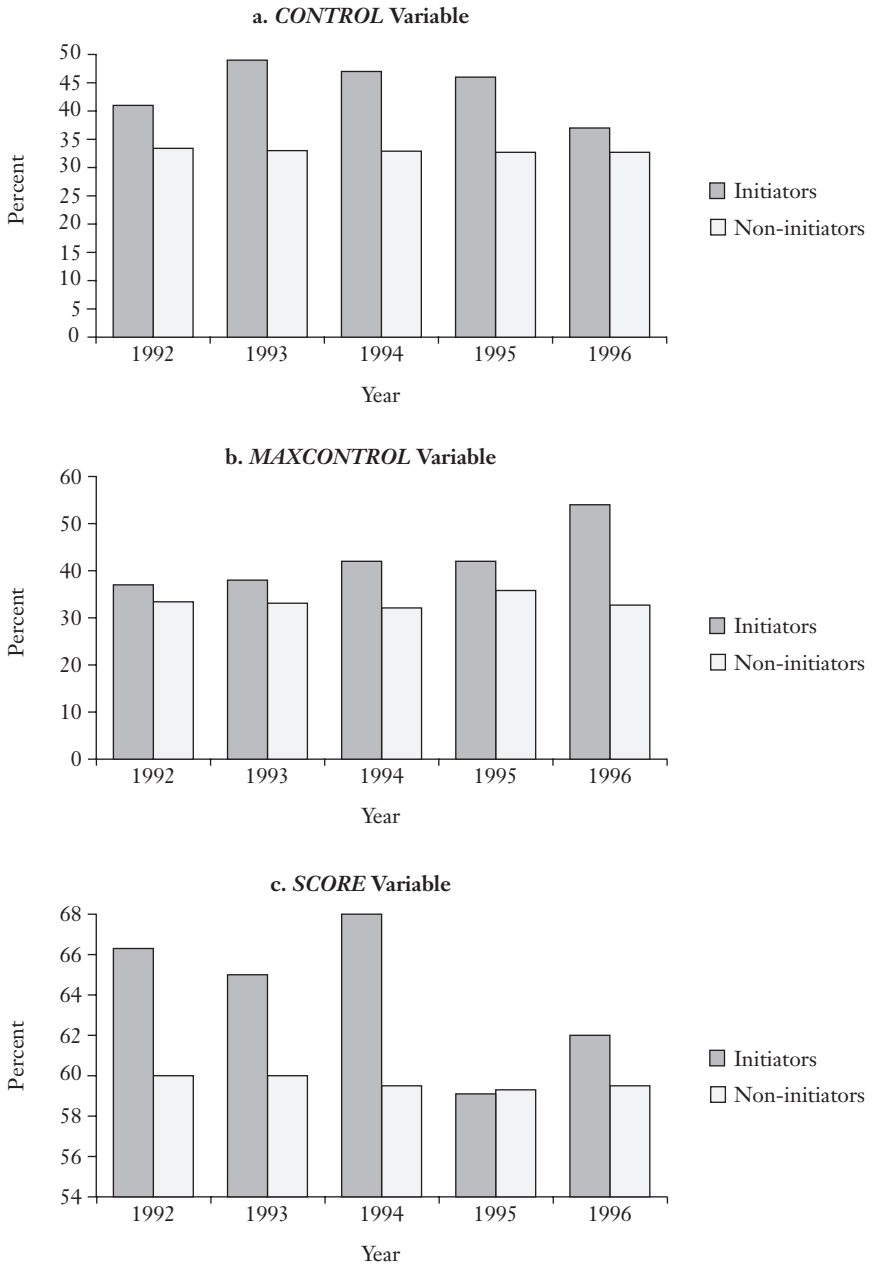
The correlation matrix is presented in table 2. Both of the ownership structure proxies, *CONTROL* and *MAXCONTROL*, are negatively correlated with dividend payout, and this holds for 1985-1989 and 1992-1996, suggesting that the higher the

Corporate Governance” (1997) 52:2 *Journal of Finance* 737-83, show that, in many countries, firms’ controlling shareholders change little over time. La Porta et al., supra note 58, at 475, add that “ownership patterns tend to be relatively stable.”

64 Supra note 56.

65 Canadian regulations pertaining to repurchase activity are more stringent than those in the United States. In Canada, regulations affect all stages of share repurchase: the initial announcement of repurchase programs, the execution of purchases, and the announcement of actual purchases. Firms in Canada cannot buy on upticks and can buy only up to 5 percent of outstanding shares. Regulation also prohibits firms from raising new equity while implementing a share repurchase plan. In addition, firms must report the number of shares repurchased each month. The TSX periodically publishes these repurchases. See McNally et al., supra note 49, for more details about Canadian regulations with respect to share repurchase and how they differ from those of the United States.

FIGURE 3 Control Concentration and Corporate Governance Quality: Dividend Initiators Versus Non-Initiators, 1992-1996



Sources: Based on data obtained from *Stock Guide* (Montreal: Stock Guide Publications) (CD ROM database), the SEDAR website (www.sedar.com), and corporate governance scores published annually in the Report on Business section of the *Globe and Mail*.

TABLE 2 Pearson Correlation Matrix

Variable	<i>DPY</i>	<i>EPS</i>	<i>MAXCONTROL</i>	<i>SCORE</i>	<i>CONTROL</i>
Panel A 1985-1989					
<i>DPY</i>	1.000				
	-0.017				
<i>EPS</i>	(0.833)	1.000			
	-0.222	0.012			
<i>MAXCONTROL</i>	(0.005)	(0.878)	1.000		
	0.285	-0.052	-0.631		
<i>SCORE</i>	(0.001)	(0.515)	(0.000)	1.000	
	-0.311	-0.088	0.839	-0.667	
<i>CONTROL</i>	(0.000)	(0.269)	(0.000)	(0.000)	1.000
Panel B 1992-1996					
<i>DPY</i>	1.000				
	-0.115				
<i>EPS</i>	(0.199)	1.000			
	-0.309	0.015			
<i>MAXCONTROL</i>	(0.000)	(0.866)	1.000		
	0.444	-0.038	-0.532		
<i>SCORE</i>	(0.000)	(0.669)	(0.000)	1.000	
	-0.242	-0.032	0.787	-0.556	
<i>CONTROL</i>	(0.006)	(0.724)	(0.000)	(0.000)	1.000

Notes: This table provides correlation coefficients between the variables used in equation 1, as described in the accompanying text. *P*-values are in parentheses.

Sources: Authors' calculations based on data obtained from *Stock Guide* (Montreal: Stock Guide Publications) (CD ROM database), the SEDAR website (www.sedar.com), and corporate governance scores published annually in the Report on Business section of the *Globe and Mail*.

ownership concentration, the lower the dividend payout. We measure quality of corporate governance using the variable *SCORE*. As discussed above, empirical evidence provided mixed results on whether dividend payouts are positively or negatively associated with strong corporate governance. The preliminary evidence from the correlation matrix suggests that dividend payout is positively correlated to corporate governance, a conclusion that supports the outcome model.

RESULTS

Panel A of table 3 reports test results for the univariate analysis where we test for differences in mean between average dividend payout ratios before and after reduction (in 1987) and before and after elimination (in 1994) of the capital gains exemption. The results from row 1 indicate whether the reduction of the capital gains exemption from \$500,000 to \$100,000 in 1987 had any impact on dividend payouts of Canadian firms. When we compare the average *DPY* over the two years after the event (1988-1989) and the average *DPY* over the two years before the event (1985-1986), the *t*-test and the Friedman test suggest that there was a significant increase of 4.4 percent (45 percent minus 40.6 percent) in the average *DPY* following the

TABLE 3 Univariate Analysis

Period	Mean difference (percent)	<i>t</i> (<i>p</i> -value)	Friedman (<i>p</i> -value)
Panel A Dividend payout (<i>DPY</i>)			
1988-1989 versus 1985-1986	4.43	2.81 (0.005)	5.69 (0.01)
1995-1996 versus 1992-1993	6.14	1.73 (0.09)	10.16 (0.01)
1995 versus 1993	9.57	3.46 (0.01)	4.87 (0.02)
Panel B Stock repurchase			
Repurchase 1988-1989 versus 1985-1986	31.26	2.48 (0.03)	3.77 (0.05)
Repurchase to total assets 1988-1989 versus 1985-1986	4.66	1.68 (0.11)	6.23 (0.01)
Repurchase 1995-1996 versus 1992-1993	14.90	2.73 (0.02)	16.00 (0.00)
Repurchase to total assets 1995-1996 versus 1992-1993	0.99	3.18 (0.01)	16.00 (0.00)

Notes: Panel A compares the average dividend payout ratio (*DPY*) of firms before the reduction of the capital gains exemption in 1987 and the average *DPY* after the elimination of the exemption in 1994. All statistical tests are two-sided. Panel B compares the average expenditure on the purchase of common stocks and the average ratio of stock repurchase to total assets for the same periods.

Source: Authors' calculations based on data obtained from *Stock Guide* (Montreal: Stock Guide Publications) (CD ROM database).

1987 tax reform. Canadian firms reacted similarly to the 1994 tax reform by increasing their average *DPY* by about 6.1 percent (45.1 percent minus 39 percent) over the two years following the reform, though the increase is significant at the 10 percent level only, according to the *t*-test. The change is, however, more pronounced when we compare the average *DPY* in the year before and the year after the 1994 tax reform. In fact, Canadian firms, on average, increased their dividend payout by 9.6 percent in the year following the elimination of the capital gains exemption (1995), and this is significant at the 0.1 percent level.

Panel B provides the results for a similar univariate test as in panel A, but for the average expenditure on the purchase of common stocks as well as the ratio of stock repurchase to total assets. Results for both measures of stock repurchase suggest that Canadian firms that engaged in stock buyback activities reduced the repurchase of their own stocks following the reduction of the capital gains exemption in 1987. More interestingly, the decline in stock repurchase is even more pronounced in the years following the elimination of the capital gains exemption in 1994. This could be explained by the fact that, in term of tax-based preference, capital gains were

preferred to dividends over the period 1985-1989, while the opposite is true for the period 1992-1996.⁶⁶ This is consistent with de Jong et al.,⁶⁷ indicating that stock repurchase in Canada is driven by shareholders' tax preferences.⁶⁸

Table 4 presents the results of the multivariate analysis for equation 1. First, we observe that for all model specifications, the coefficient of DPY_{t-1} is positive and highly significant (p -value < 0.001). The coefficient of EPS_t is negative and significant at the 5 percent level. The results for equation 1 over the period 1985-1989 are consistent with those of the univariate analysis. The coefficient of D_{1987} is positive and significant at the 1 percent level, suggesting that, ceteris paribus, the reduction of the capital gains exemption from \$500,000 to \$100,000 led Canadian public firms to boost their average dividend payouts over the two years following the tax reform. To see whether this observation holds for the first, second, or both years, we split D_{1987} into two dummy variables. The first dummy variable, $YEAR_{1988}$, is equal to 1 for 1988 and 0 otherwise; the second, $YEAR_{1989}$, is equal to 1 for 1989 and 0 otherwise. The results shown in table 4 suggest that the dividend increase continued through the first and second years following the 1987 tax reform. Our findings are coherent with those of Adjaoud and Zéghal,⁶⁹ who found that Canadian firms lowered their dividend payouts following the introduction of the \$500,000 capital gains exemption in 1985.

The results for equation 1 over the period 1992-1996 suggest that Canadian firms did not alter their dividend payout over the two years following the elimination of the capital gains exemption (that is, 1995 and 1996). To see whether this observation holds for each of the two years, we replaced D_{1994} in equation 1 by two dummy variables. The first, $YEAR_{1995}$, is equal to 1 for year 1995 and 0 otherwise; the second, $YEAR_{1996}$, is equal to 1 for year 1996 and 0 otherwise. The results shown in the table suggest that Canadian public firms did increase their dividend payout, but just in 1995 (the year following the elimination of the capital gains exemption). In fact, unlike the coefficient for $YEAR_{1996}$, the coefficient for $YEAR_{1995}$ is positive and significant. This may explain why D_{1994} in equation 1 is insignificantly different

66 See Bauer et al., *supra* note 42.

67 Abe de Jong, Ronald Van Dijk, and Chris Veld, "The Dividend and Share Repurchase Policies of Canadian Firms: Empirical Evidence Based on an Alternative Research Design" (2003) 12:4 *International Review of Financial Analysis* 349-77.

68 Results from panel B and the low frequency of repurchase activities documented during our two study periods may suggest that share repurchases are not a substitute for regular dividends. This is in line with, among others, Fama and French, *supra* note 56; see also Murali Jagannathan, Clifford P. Stephens, and Michael S. Weisbach, "Financial Flexibility and the Choice Between Dividends and Stock Repurchases" (2000) 57 *Journal of Financial Economics* 355-84, who show that firms use stock repurchases as an additional channel for distributions, rather than as a substitute for cash dividends. That said, a formal empirical test of whether share repurchases and dividends are substitutes is beyond the scope of our study.

69 *Supra* note 19.

TABLE 4 Results for Equation 1

Variable	Prediction	1985-1989		1992-1996	
		1988	1989	1995	1996
DPY_{t-1}	+	0.573*** (5.736)	0.570*** (5.653)	0.224** (2.380)	0.236** (2.408)
EPS_t	-	-3.159** (-2.352)	-3.158** (-2.357)	-4.348*** (-2.887)	-3.894** (-2.547)
D_{1987}	+	8.723** (2.600)			
$YEAR_{1988}$	+		7.917** (2.314)		
$YEAR_{1989}$	+		9.517** (2.023)		
D_{1994}	+			4.689 (0.947)	
$YEAR_{1995}$	+				13.754* (1.8565)
$YEAR_{1996}$	+				-4.497 (-0.988)
Intercept		18.499*** (4.796)	18.592*** (4.747)	32.849*** (5.873)	31.862*** (5.546)
F stat.		30.367***	22.715***	9.892***	8.868***
R -adj.		0.272	0.270	0.092	0.108
N		236	236	262	262

Notes: This table provides estimation results for equation 1, as described in the accompanying text. Heteroskedastic-consistent t -statistics are reported in parentheses. *, **, and *** indicate significance at the 10, 5, and 1 percent levels, respectively. All statistical tests are two-sided.

Source: Authors' calculations based on data obtained from *Stock Guide* (Montreal: Stock Guide Publications) (CD ROM database).

from 0, since it captures the average change of dividend payout over the period 1995-1996.⁷⁰

Table 5 presents the results from estimating the probit model defined in equation 2. Our goal is to examine whether the 1987 and 1994 tax reforms led non-dividend-paying firms to initiate dividend payments. The probit model also allows us to identify the characteristics of a firm that influence its propensity to pay dividends.

70 As a robustness check, we re-estimated equation 1 using dummy variables for the two years preceding the reduction and the elimination of the capital gains exemption (that is, 1985, 1986, 1992, and 1993) to test whether the dividend payout changes are not typical of routine annual changes. The results (not reported but available upon request) show no significant change of dividend payout during those years. We thank an anonymous referee for suggesting this additional analysis.

TABLE 5 Results for Equation 2

Variable	Prediction	1985-1989	1992-1996
<i>YEAR</i> ₁₉₈₈	+	0.191* (1.735)	
<i>YEAR</i> ₁₉₉₅	+		0.201 (1.620)
<i>D/E</i> _{<i>i,t</i>}	-	0.037 (0.642)	-0.032 (-0.907)
<i>M/E</i> _{<i>i,t</i>}	-	-0.071 (-1.600)	-0.064** (-2.200)
<i>ROA</i> _{<i>i,t</i>}	+	0.075*** (2.633)	0.106*** (5.039)
<i>Log(TA)</i>	+	0.034*** (3.136)	0.016*** (3.238)
Intercept		-2.587*** (-6.602)	-2.940*** (-9.815)
Model fit		22.644***	54.221***
<i>N</i>		920	1,985

Notes: This table provides estimation results for equation 2, as described in the accompanying text. Heteroskedastic-consistent *t*-statistics are reported in parentheses. *, **, and *** indicate significance at the 10, 5, and 1 percent levels, respectively. All statistical tests are two-sided.

Source: Authors' calculations based on data obtained from *Stock Guide* (Montreal: Stock Guide Publications) (CD ROM database).

Our empirical results show that the reduction of the capital gains tax exemption in 1987, from \$500,000 to \$100,000, prompted non-dividend-paying firms to initiate dividend payments. In contrast, the 1994 reform did not have a significant effect on non-dividend-paying firms. This is perhaps due to the lower scale of the reduction in 1994 (\$100,000) compared with the one in 1987 (\$400,000). We also find that firm size and profitability increase the likelihood of dividend initiation. Growth opportunity seems to have negative influence on the likelihood of dividend initiation, mainly for period 1992-1996.

Both the univariate and the multivariate analyses so far show that taxation has an impact on dividend payouts of Canadian public firms. In what follows, we seek to examine how corporate governance and ownership structure influence the relationship between taxation and dividend payout. We gauge ownership structure using two proxies, *CONTROL* and *MAXCONTROL*, as defined in the text above.

To examine how ownership structure affects the interaction between taxation and dividend payout, we introduce a dummy variable, *CLOSE*, which is equal to 1 if the firm's level of ownership concentration is higher than the median of the variable *CONTROL*, and 0 otherwise. *CONTROL* uses voting rights instead of equity rights because of the frequent use of multiple-class shares by Canadian firms,⁷¹ which makes

71 Attig and Gadhoum, supra note 44.

equity rights a misleading measure of the power of controlling shareholders. Table 6 reports the regression results based on the sample repartition by level of control structure. We note that, following the 1987 tax reform, closely held firms increased their dividend payout in 1988 and 1989. However, they reacted to the 1994 tax reform by reducing their dividend payout in 1996.⁷² It is interesting to see that closely held firms may react differently to the same type of tax reform. This evidence is consistent with the recent trend of studies showing that a firm's reaction to change in taxation depends on influential shareholder preference.⁷³

Our findings with respect to closely held firms could have some interesting implications for future research: The absence of statistical significance could simply be the resultant of contrasting reactions to a change in taxation by closely held firms; that is, one subset of closely held firms increase their dividend payouts, while another subset of closely held firms decrease their dividend payouts. Thus, the lack of statistical significance does not necessarily mean an absence of significant association between taxation and dividend payout. Our results also call for a closer look at the identity of the large/dominant shareholders.

To further explore the role of control structure, we introduce the variable *MAXCONTROL* as defined in equation 3. This is motivated by the fact that several Canadian firms have been shown to use a pyramidal ownership structure to increase the firm's opacity and hide their expropriation of minority shareholders. The empirical results presented in panel A of table 7 suggest that firms with low *MAXCONTROL*, as well as firms with high *MAXCONTROL*, did not change their dividend payout following the 1994 tax reform.⁷⁴ To see whether the identity of controlling shareholders matters, we consider closely held firms and create two subsamples based on whether a firm is controlled by a family or by institutional investors. The results presented in panel B of table 7 suggest that firms controlled by families increased their dividend following the elimination of the capital gains exemption. However, firms controlled by institutional investors did not alter their dividend payout. Given that institutional investors are usually tax-exempt entities, there was no incentive for them to ask for higher dividend payouts. However, other large shareholders, such

72 It should be noted that our sample of firms over the period 1985-1989 is not exactly identical to that over 1992-1996. Some firms included in the 1985-1989 sample are not present in the 1992-1996 sample because they did not pay dividends in that period. Similarly, some firms that were not included in the 1985-1989 sample because they did not pay dividends in that period may appear in the 1992-1996 sample if they paid dividends during that period.

73 See Chetty and Saez, *supra* note 2; Brown et al., *supra* note 47; and Brav et al., *supra* note 2. To check the robustness of our results, we replicated the analyses in table 6 using top and bottom quartiles for the variable *CONTROL* instead of its median. Our results (not tabulated but available upon request) remain qualitatively unchanged. We thank an anonymous referee for suggesting this additional analysis.

74 Since our measures of *MAXCONTROL*, *SCORE*, and the major shareholder identity are for the year 2002, and even though (as discussed earlier) those variables are not expected to change significantly over the years, in the remaining tests we choose to focus on the period 1992-1996.

TABLE 6 Results for Equation 1 Including CONTROL

Variable	1985-1989	1992-1996
DPY_{t-1}	0.559*** (5.455)	0.226** (2.354)
EPS_t	-3.570** (-2.498)	-3.606** (-2.295)
$CLOSE \times YEAR_{1988}$	9.355* (1.769)	
$CLOSE \times YEAR_{1989}$	8.860* (1.842)	
$CLOSE \times YEAR_{1995}$		9.636 (1.151)
$CLOSE \times YEAR_{1996}$		-13.648** (-3.081)
Intercept.....	21.569*** (5.574)	34.391*** (6.325)
F stat.....	22.172***	8.381***
R -adj.....	0.285	0.115
N	236	262

Notes: This table provides estimation results for equation 1 as modified by the introduction of the *CONTROL* variable (described in the accompanying text). Heteroskedastic-consistent t -statistics are reported in parentheses. *, **, and *** indicate significance at the 10, 5, and 1 percent levels, respectively. All statistical tests are two-sided.

Sources: Authors' calculations based on data obtained from *Stock Guide* (Montreal: Stock Guide Publications) (CD ROM database) and the SEDAR website (www.sedar.com).

as families, would have been affected by the 1994 tax reform; hence they would have required an increase in dividend payouts. Thus, consistent with Perez-Gonzalez, Chetty and Saez, Brav et al., Holmen et al., and DeAngelo et al.,⁷⁵ the results in panel B suggest that in the presence of influential family shareholders, managers and boards of directors may choose a dividend payout policy that is biased toward the preferences of these shareholders.

To examine how firms reacted to the elimination of the capital gains exemption in 1994 conditional on the quality of their corporate governance, we introduce a dummy variable, *STRONG*, which is equal to 1 if the firm's G&M governance score is higher than the sample median, and 0 otherwise. The results are reported in the first column of table 8. Though the interaction terms of *STRONG* with $YEAR_{1995}$ and $YEAR_{1996}$ are both positive, they are not statistically significant. This lack of statistical significance could be due to the fact that we employ a score dated from 2002 (the year in which the G&M introduced its corporate governance index) to examine

75 Perez-Gonzalez, supra note 32; Chetty and Saez, supra note 2; Brav et al., supra note 2; Holmen et al., supra note 34; and DeAngelo et al., supra note 3.

TABLE 7 Results for Equation 1 Including *MAXCONTROL* and Identity of the Major Shareholder

Variable	Panel A <i>MAXCONTROL</i>		Panel B Major shareholder	
	Low	High	Family	Institutional investors
DPY_{t-1}	0.140 (1.195)	0.151 (1.271)	0.258 (1.567)	0.027 (0.697)
EPS_t	-4.262* (-1.695)	-3.159* (-1.819)	-14.348*** (-3.003)	-3.455* (-1.791)
$YEAR_{1995}$	12.589 (1.183)	10.209 (1.226)	7.259** (2.278)	13.490 (1.052)
$YEAR_{1996}$	-1.074 (-0.126)	1.195 (0.268)	-0.800 (-0.271)	2.909 (0.414)
Intercept.....	36.535*** (4.365)	22.817*** (5.851)	23.979*** (4.474)	29.062*** (4.881)
<i>F</i> stat.....	1.993	2.222*	7.278***	0.799
<i>R</i> -adj.....	0.043	0.048	0.306	0.043
<i>N</i>	90	97	58	76

Notes: This table provides estimation results for equation 1 as modified by the inclusion of the *MAXCONTROL* variable (defined in equation 3) and the identity of the major shareholder (family or institutional investors). Heteroskedastic-consistent *t*-statistics are reported in parentheses. *, **, and *** indicate significance at the 10, 5, and 1 percent levels, respectively. All statistical tests are two-sided.

Sources: Authors' calculations based on data obtained from *Stock Guide* (Montreal: Stock Guide Publications) (CD ROM database) and the SEDAR website (www.sedar.com).

a tax reform that occurred in 1994. Moreover, the G&M score tends to fluctuate over time. To deal with the timing problem, we hand-collected some corporate governance data from companies' proxy statements available on the SEDAR website. The first proxy statements that are available relate to 1995. Accordingly, we have constructed the following three indicator variables for that year:

1. *DUALITY*, which is equal to 1 if the CEO is also the chair of the board, and 0 otherwise;
2. *INDEPENDENCE*, which is equal to 1 if the percentage of independent directors is equal to or less than 50 percent, and 0 otherwise; and
3. *DIVERGENCE* (of ownership and control), which is equal to 1 if the total voting rights are higher than the total ownership rights, and 0 otherwise.

Interestingly, the results from table 8 show that the interaction between $YEAR_{1995}$ and each of the three indicators of corporate governance quality is positive and statistically significant. Thus, for the period 1992-1996, firms with lower corporate governance boosted their dividend payout a year after the elimination of the capital gains exemption, while firms exhibiting higher corporate governance did not alter their dividend payout. Our findings support the substitute model.

TABLE 8 Results for Equation 1 by Different Measures of Corporate Governance

Variable	G&M SCORE	DUALITY	INDEPENDENCE	DIVERGENCE
DPY_{t-1}	0.205*** (4.618)	0.181*** (3.394)	0.285*** (3.697)	0.218*** (4.873)
EPS_t	-1.803* (-1.809)	-5.670** (-2.463)	-5.569** (-2.488)	-3.815** (-2.410)
$STRONG \times YEAR_{1995}$	4.177 (1.618)			
$STRONG \times YEAR_{1996}$	3.984 (1.590)			
$DUALITY \times YEAR_{1995}$		19.024* (1.900)		
$DUALITY \times YEAR_{1996}$		-8.845 (-1.482)		
$INDEPENDENCE \times$ $YEAR_{1995}$			21.737* (1.698)	
$INDEPENDENCE \times$ $YEAR_{1996}$			-13.334 (-1.011)	
$DIVERGENCE \times$ $YEAR_{1995}$				12.916** (2.050)
$DIVERGENCE \times$ $YEAR_{1996}$				-3.510 (-0.732)
Intercept.	25.166*** (0.437)	33.541*** (5.601)	30.562*** (5.489)	36.030*** (6.413)
F stat.	6.017***	4.603***	6.451***	8.072***
R-adj.	0.120	0.077	0.141	0.111
N.	148	173	169	262

Notes: This table provides estimation results for equation 1 as modified by the inclusion of four alternative measures of corporate governance—*STRONG*, *DUALITY*, *INDEPENDENCE*, and *DIVERGENCE* (of ownership and control)—described in the accompanying text.

Heteroskedastic-consistent *t*-statistics are reported in parentheses. *, **, and *** indicate significance at the 10, 5, and 1 percent levels, respectively. All statistical tests are two-sided.

Sources: Authors' calculations based on data obtained from *Stock Guide* (Montreal: Stock Guide Publications) (CD ROM database), the SEDAR website (www.sedar.com), and corporate governance scores published annually in the Report on Business section of the *Globe and Mail*.

CONCLUSION

Even though corporate dividend policy has been subject to intense theoretical and empirical investigation for over 50 years, there are still many questions and issues that remain unresolved. One of these questions is whether there is a relationship between taxation and corporate dividend payouts. This issue continues to be controversial in dividend policy theory. While some studies argue that taxation has a

strong impact on corporate dividend payouts, others indicate that it has little, if any, effect. The present study takes advantage of two important changes in the taxation of capital gains to examine the interaction between taxation and corporate dividend payouts: the reduction of the \$500,000 capital gains tax exemption in 1987, and the elimination of the exemption in 1994.

Our empirical results suggest that, on average, Canadian firms increased their dividend payout after both the reduction of the capital gains exemption in 1987 and the elimination of the exemption in 1994. Our analyses also suggest that corporate governance affects the dividend payout decision following a change in taxation. In fact, we find that firms with weak corporate governance increased their dividend payout following the elimination of the capital gains exemption, while those with strong corporate governance did not change their dividend payout (a finding that supports the substitute model). Moreover, we find that Canadian firms' response to tax changes is influenced by their ownership structure and the identity of the controlling shareholders. In particular, we report that a firm's reaction to a change in taxation depends on large shareholder preference. Our empirical results also show that the large-scale reduction of the capital gains tax exemption in 1987 prompted non-dividend-paying firms to initiate dividend payments, though this was not the case for the 1994 tax reform. Finally, we find that firm size and profitability increase the likelihood of dividend increase and dividend initiation.

