

# **Impact of Tax Policy on Coverage and Funding of Occupational Pension Plans**

**Prepared for  
The Ontario Expert Commission on Pensions**

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## **Abstract**

This Report examines the extent to which tax policy has contributed to the decline in coverage of defined benefit (DB) plans and the under-funding of DB plans in the private sector. It discusses the extent to which tax rules potentially affect the coverage of DB plans. These rules include the integrated treatment of DB plans, defined contribution (DC) plans and RRSPs, tax-deductible contribution limits, and tax rates. In the absence of empirical evidence, the Report concludes that tax policy plays a role in encouraging the expansion of RRSPs and DC plans, but it is not clear how much of such expansion has occurred at the expense of decline in DB coverage. On the DB funding issue, the Report focuses on the so-called “10 per cent surplus rule”, the lack of flexibility in funding DB plans, and foreign property limitation rules. Again, in the absence of conclusive empirical evidence, the Report draws a normative conclusion that the tax rules may have exacerbated the under-funding problem, but are not the direct cause of this problem. While further empirical study is needed to establish the extent of impact of tax policy on corporate pension plans, it is nevertheless important to consider ways of making the tax rules more flexible in order to assist DB plans to better manage the uncertainties inherent in funding these plans and to allow for innovative plan design.

## **Executive Summary**

Corporate-sponsored defined benefit (DB) plans and defined contribution (DC) plans are referred to as “registered pension plans” (RPPs) under the *Income Tax Act*. The decline in DB coverage and the underfunding of DB plans have been well reported elsewhere. This Report examines the extent to which tax policy has contributed to these problems in the case of corporate-sponsored DB plans. It relies primarily on existing empirical data and secondary literature.

Part 2 of this Report discusses whether the decline of the coverage of corporate DB plans is related to, or caused by, major changes in tax policy, such as the universal contribution limit for all tax-assisted retirement saving plans, the contribution limits, and reductions in tax rates for individuals and corporations.

The Report concludes that the 1991 tax reform has clearly reduced the relative advantage for DB plans by integrating the tax treatment of DB plans, DC plans and RRSPs and by increasing the tax-sheltered contributions to DC plans and RRSPs. Empirical data show an increase in DC plans and RRSP coverage during the era of decline in DB coverage. It is clear that tax policy has encouraged the expansion of RRSPs and DC plans. However, it is not clear whether, or if so, to what extent, such expansion has occurred at the expense of DB plans. It is true that small DB plans have tended to disappear, and some may have been replaced by a DC plan or group RRSP, but the question remains whether these DB plans would have disappeared regardless of the option of DC plans or group RRSPs. RRSP contributions made by individuals who are not covered by DB plans (e.g., new workers, part-time workers, the self-employed, and workers in smaller firms) are not the result of shifting from DB plans. Therefore, the growth of RRSPs and DC plans may represent additional retirement savings, especially in cases where individuals with higher earnings tend to contribute to both RPPs and RRSPs.

Lowering marginal tax rates for individuals and corporations can be a double-edged sword. Lower tax rates result in more after-tax income, and thus more funds available for making contributions. On the other hand, the value of the tax assistance is determined by the marginal tax rate. Lower rates mean less value for the tax assistance, and thus, less tax incentive. There is no conclusive empirical evidence, however, on the extent of the decline in DB coverage being related to the lowering of tax rates.

Part 3 discusses the role of tax policy in respect of the funding of DB plans. More specifically, it examines the role of the 10 per cent surplus rule, the lack of flexibility in funding DB plans, and the foreign property rule.

The effect of the 10 per cent rule is to deny corporate sponsors their tax deductions for the contributions to “over-funded” plans, resulting in a “tax cost” to the employer (the amount is dependent on the applicable corporate income tax rate). The purpose of this rule is to allow a moderate amount of surplus to be retained in a plan while limiting the government revenue cost associated with deferrals of tax on amounts over and above those required to fund the promised pension benefits. One study of a limited data set found:

- It is not clear that the 10 per cent rule is the sole, or major, cause of contribution holidays taken by corporate sponsors in the late 1990s;
- there is no observable relationship between the number of contribution holidays taken by plan sponsors and plan funding ratios;
- the percentage of under-funded plans that did not take contribution holidays was sometimes greater than those that did take contribution holidays between 1994 and 2003;
- 45 per cent of under-funded plans would have completely eliminated their current actuarial deficit if contribution holidays had not been taken.

Overall, the 10 per cent rule is counter-intuitive: it does not encourage companies to “save for rainy days”; it, thus, negates an effective “smoothing” mechanism.

The Income Tax Act currently recognizes DB plans and DC plans and provides limits on various aspects of a DB plan that can be registered for tax purposes. It does not encourage any innovation in designing corporate pension plans, such as “cash balance plans” recognized by the US Pension Protection Act of 2006. A cash balance plan may violate the benefit accrual requirements for DB plans.

Part 4 of the Report suggests a re-evaluation of the pension tax policy in light of the changing environment for corporate pension plans. Although no exact data can pinpoint the impact of the 10 per cent surplus rule on the funding status of DB plans, this rule is too rigid and fails to function as a buffer for companies whose financial position changes dramatically from year to year. The surplus limit might be raised. In light of the increasing popularity of DC plans and remaining relative advantages of DB plans in managing

pension risks, it is also worth considering other reforms to the tax rules so that they can accommodate “cash-balance” plans that have features of both DB plans and DC plans and other innovative designs.

## 1. Introduction

Occupational pension plans are referred to as “registered pension plans” (RPPs) under the *Income Tax Act* (ITA). RPPs are tax-assisted retirement savings plans because contributions to an RPP are tax deductible and investment income accumulated within a plan is exempt from tax. Income tax is deferred until pensions are paid to plan members. There are two major types of RPPs: defined benefit (DB) plans and defined contribution (DC) plans.<sup>1</sup> DB plans are by far the largest category of RPPs in terms of membership – according to earlier research, about 80% of coverage is in DB plans.<sup>2</sup> 90 per cent of RPPs are in the private sector, covering about 50% of all RPP members (the remaining members are covered by RPPs in the public sector).<sup>3</sup>

Recently, DB plans have been considered to be a “mess”,<sup>4</sup> seriously under-funded,<sup>5</sup> vulnerable,<sup>6</sup> and to suffer from “fundamental flaws”.<sup>7</sup> Although the funded status of DB plans appears to have improved in 2006 and 2007,<sup>8</sup> coverage continues to decline in the private sector (see Table A).<sup>9</sup>

The recent problems of DB plans may be attributed to the “perfect storm” of 2000-2003 (weak stock markets, falling interest rates, and tightening of actuarial assumptions),<sup>10</sup> and the difficulty in managing inherent risks of the DB plans in a changing competitive environment faced by firms.<sup>11</sup> Some observers<sup>12</sup> and the Governor of Bank of Canada consider tax policy as a possible contributing factor.<sup>13</sup>

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<sup>1</sup> In this paper, the term “DC plans” generally refers to DC plans that are registered pension plans. Generally speaking, DC plans are a type of capital accumulation plan and the benefits under such plans are determined by the amount of contributions and investment earnings accumulated within the plan. They are different from defined benefit plans as pension benefits under the latter are pre-determined. RRSPs, group RRSPs and deferred profit sharing plans (DPSPs) are also capital accumulation plans. Group RRSPs and DPSPs may be considered as substitutes of DC-RPPs. This paper measures DB plans against DC RPPs and Group RRSPs in particular as they are the next nearest type of pension saving arrangement to a DB plan.

<sup>2</sup> Schembari (2003).

<sup>3</sup> These coverage statistics are based on Canada-wide rates of coverage, and may vary for the Ontario jurisdiction and in more recent studies. Other research projects conducted for the OECP are examining membership and coverage rates for the Ontario jurisdiction, and the statistics presented above should be compared to that research accordingly.

<sup>4</sup> Ambachtsheer (2004); Ambachtsheer (2007).

<sup>5</sup> Anderson (2006); CGAC (2005); DBRS (2007).

<sup>6</sup> Selody (2007).

<sup>7</sup> Laidler and Robson (2007).

<sup>8</sup> DBRS (2007); OSFI (2007).

<sup>9</sup> Table A and these coverage data are provisional and may vary for the Ontario jurisdiction; see note 3 above and notes to Table A.

<sup>10</sup> DBRS (2007).

<sup>11</sup> Dixon and Monk (2007); Clark and Monk (2006). As shown in Appendix A, the RPP coverage has been declining since 1990 in the private sector. The factors mentioned by the researchers relate to recent short-term market fluctuations and changes in the business environment.

This Report examines the extent to which tax policy has contributed to the decline of coverage of DB plans and the under-funding of DB plans in the private sector. It does not address DB plans sponsored by public-sector employers because the employer is tax exempt and does not generally react to tax policy changes.<sup>14</sup> Nor does the Report single out DB plans in Ontario because of a lack of available data<sup>15</sup> and because the relevant tax policies affect DB plans at a national basis.

Following this brief introduction, Part 2 of this Report discusses whether the decline of the coverage of corporate DB plans is related to, or caused by, major changes in tax policy, such as the universal contribution limit for all tax-assisted retirement saving plans, the amount of contribution limit, and reductions in tax rates for individuals and corporations. Part 3 discusses the role of tax policy in respect of the funding of DB plans. More specifically, it examines whether corporate sponsors of DB plans were “forced” by the ITA to take contribution holidays during the 1990s, and whether such contribution holidays exacerbated the under-funding problems. Part 4 concludes the Report with some general observations.

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<sup>12</sup> For example, Laidler and Robson (2007); CGAA (2005); Andrew A. Luchak, Fang and Gunderson (2004).

<sup>13</sup> Daw (2007).

<sup>14</sup> According to some studies, RPP coverage rate in the public sector (in Canada) has been over 90% for men and 80% for women since 1990; Horner, *infra* note 16, at 32. Other studies indicate that coverage between males and females is now about equal. Employees who do not meet the eligibility test are temporary workers.

<sup>15</sup> See note 3 above.

## **2 Tax Policy and Declining Coverage of Corporate DB Plans**

### **2.1 Overview**

The national RPP coverage rate for men in the private sector has been declining, by some measures from 43% in 1985 to 33% in 2005, while the coverage rate for women has increased slightly from 20.5% in 1985 to 21.5% in 2005.<sup>16</sup> The proportion of plan members in DBs of the total RPPs declined from 90% in 1985 to 77% in 2005.<sup>17</sup> Again, by some measures, in Ontario the RPP rate has declined as a percentage of paid workers in the private sector from 30% in 1992 to 25% in 2006 and the DB coverage rate declined from 27% in 1992 to 20.7% in 2006.<sup>18</sup> According to preliminary data produced for the OECP, the rate of occupational pension plan coverage in the private sector labour force has also declined over time, to just under 40% in 2006.<sup>19</sup> The rates of male and female participation in private sector occupational pension plans have converged over time, but remain different, with males declining from 50% in 1977 to about 30% in 2006, and females covered at about 25% in 2006.

Despite limitations of available data, what seems clear is that there has been a decline in occupational pension plan coverage in the private sector. This decrease in DB coverage may be explained by the shift to DC plans as well as the fact that “so few new ones are being created”.<sup>20</sup> Why are employers not motivated to create new DB plans or extend DB to new members? In addition to the non-tax factors,<sup>21</sup> there are three main hypotheses about the influence of tax policy:

- the “equalization” treatment of contributions to all tax-assisted retirement savings plans (i.e., DB RPPs, DC RPPs, as well as registered retirement savings plans or RRSPs);
- the effect of contribution limits; and

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<sup>16</sup> Horner (2007), at 31-2.

<sup>17</sup> Baldwin (2007); Horner 2007.

<sup>18</sup> Schembari (2003) notes that the decline in RPP membership in small plans was due entirely to a decrease in the number of private sector plans, while the decline in membership in large plans was the result of declining membership in public sector plans (at 56-57). The number of other types of RPPs (such as deferred profit sharing plans, hybrid plans) grew from 1986-2006; Strauss (2007). Again, it must be noted that the available public data on coverage rates has important limitations, and should be compared to studies on coverage rates conducted for the OECP.

<sup>19</sup> This coverage is based on residents of Ontario who are members of a pension plan. This population includes Ontario residents and workers who are members of a federally-regulated industry.

<sup>20</sup> Laidler and Robson (2007), at 3. Schembari (2003) notes that the decline in RPP membership in small plans was due entirely to a decrease in the number of private sector plans, while the decline in membership in large plans was the result of declining membership in public sector plans (at 56-57).

<sup>21</sup> For a survey of the possible factors (the perfect storm, changes in labour market, globalization of the Canadian economy, changes in the regulatory regime), see DBRS Report (2007); Dixon and Monk (2006), and Clark and Monk (2006).

- the effect of reductions in tax rates.

## 2.2 Integrated Tax Treatment of DB plans, DC plans and RRSPs

### 2.2.1 Reducing Tax Advantage for DB plans

Prior to the 1991 tax reform, tax policy played a crucial role in encouraging DB plans. According to Trossman:<sup>22</sup>

Tax policy under the *Income Tax Act* has been crucially important in advancing this increased coverage goal. Indeed, current coverage levels would never have been achieved without the tax preferences currently provided for RPPs.

The ITA treated DB plans more favorably.<sup>23</sup> The maximum pension benefit that could be provided by a DB plan was \$60,000 in 1990.<sup>24</sup> Contributions to a DB plan that were considered by an actuary to be rationally required to fund promised benefits were fully tax deductible. There was no specific dollar limit on the contributions to DB plans. On the other hand, contributions were capped at \$7,000 for DC plans (combined employer and employee contributions) and \$7,500 for RRSPs.<sup>25</sup> On average, an annual contribution to a money purchase plan of \$15,500 per year for 35 years was required in order to purchase an annual retirement income of \$60,025.<sup>26</sup> However \$15,500 was \$8,000 more than the RRSP contribution limit and \$8,500 more than the contributions limit for DC plans (or money purchase RPP). Furthermore, “a cash-rich employer might be tempted to employ an actuary who is known for her “conservative” assumptions and thereby take advantage of extremely large contributions well beyond what is rationally required to fund promised benefits”.<sup>27</sup> Employers could deduct contributions to DB plans that generate “surplus” assets in the plan. Higher-paid employees (managers and officers) had a greater incentive to

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<sup>22</sup> Trossman (1989), at 753.

<sup>23</sup> Employee contributions to these plans were deductible from income (s.8(1)(m) and (m.1)). Employer contributions were also deductible (s.20(1)(q) and (s)). The RPP trust was tax exempt (s.149(1)(o)). Until 1991, the RRSP contribution limit was different for RPP participants and non-RPP participants. For RPP non-participant, the limit was the lesser of 10% of income or \$2,500; for RPP participant, it was the lesser of 10% of income or \$1,500 minus the employee’s contribution.

<sup>24</sup> This limit was not specified in the ITA or the *Income Tax Regulations*, but in the administrative guidelines governing the registration of a DB plan (Information Circular 72-13R7). No pension plan could be registered if the defined benefit it provided was “too generous”. The most generous formula allowed is: pension = 2% x (average 3 best years’ income) x years of service. The maximum income base allowed was \$85,750, and years of service could not exceed 35 in the formula. Therefore, the maximum pension benefit is about \$60,000.

<sup>25</sup> For a table of the history of RRSP limits, see Fougere (2002), at 528.

<sup>26</sup> For a discussion of the history of the reform, see Avis (1990).

<sup>27</sup> Trossman (1989) at 756.

support the establishment of DB plans because tax deductions were worth more to those in higher income tax brackets. Moreover, higher paid employees tend to have considerable bargaining power.<sup>28</sup>

The ITA was amended effective as of 1991<sup>29</sup> to equalize the contribution limit on DB plans, DC plans, deferred profit sharing plans (DPSPs), RRSPs, or any combination of these plans.<sup>30</sup> The reform was prompted by concerns that the existing income tax treatment of retirement plans did not give all taxpayers access to the same amount of retirement income.<sup>31</sup>

In order to meet this objective of equalizing the tax assistance provided to each type of plan, the benefits earned by membership in a DB plan in a year were converted into an amount of annual contributions to a money purchase plan which would provide similar retirement benefits. The new system, when mature, was designed to provide full tax assistance on retirement savings up to 2.5 times the average wage (which was \$23,500 in 1991). Hence, the maximum pension was approximately \$60,000, which was the same as the existing DB benefit. The maximum pension that could be earned in respect of any year starts at \$1,722.22 and would be indexed to the average wage commencing in 1995. This meant that an individual would earn his/her maximum pension over 35 years ( $35 \times \$1,722.22 = \$60,277.70$ ). Technically, a mechanism used to equate money purchase (DC) plans with DB plans is the factor of 9: regardless of the age of the beneficiary, a \$9 contribution is assumed to provide a pension of \$1 per annum upon retirement. Thus, nine times the benefit earned in a DB plan produces the DC equivalent. Since the existing system provided for a maximum pension of 2 per cent of earnings per year of service, the 18 per cent of earnings contribution limit was chosen in order to be consistent. The money purchase limit was defined to be \$15,500 in 1995.<sup>32</sup>

The RRSP contribution limit is defined by a formula under subsection 146(1) of the ITA. It is essentially the unused RRSP in previous years plus 18% of the taxpayer's "earned income" up to the specified dollar limit (\$11,500 in 1991),<sup>33</sup> minus the pension adjustment for the preceding year. The concept of "pension

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<sup>28</sup> *Ibid.*, at 754.

<sup>29</sup> The Government of Canada, Bill C-52, *An Act to Amend the Income Tax Act and Related Acts*.

<sup>30</sup> The DB plans, DC plans, and RRSPs are integrated by way of "pension adjustment".

<sup>31</sup> Avis (1990).

<sup>32</sup> This limit has been raised in subsequent years. See Table B.

<sup>33</sup> Over the years, the maximum annual RRSP contribution permitted under the ITA has been increased several times. The limit is set to be the lesser of two amounts: a specified percentage of earned income and a dollar amount. In 1957, the limit was the lesser of 10% of income or \$2,500; a lower dollar amount was set for participants in RPPs and DPSPs to take into account the tax assistance provided to these programs. In 1965, the limit for non-RPP participants was raised to the lesser of 20% of income and a specified dollar amount (\$2,500 in 1965, \$4,000 in 1972, \$5,500 in 1976, and \$7,500 in 1986).

adjustment” (PA) is the linchpin between RRSPs and DB RPPs. For RPP members, the PA reduces the RRSP deduction “room”. The PA for a DB benefit is nine times a calculated benefit accrual in the previous year and the benefit accrual is based on the benefit formula and the member’s service. The PA for a DC plan is the total of employer and employee (if any) contributions.

The 1991 tax reform has clearly reduced the relative advantage for DB plans by increasing the tax-sheltered contributions to DC plans and RRSPs. As discussed in more detail in Part 3, DB plans may not be able to take advantage of their contribution limits each year in the same way that DC plans can. This is because DB plans are subject to the 10 per cent surplus rule which does not permit DB plans to deduct any contributions when it is funded at 110% of liabilities (or contains a 10% surplus to liabilities). DC plans are not subject to this rule and contributions up to the specified limit can be deducted each year. Nonetheless, some tax advantages remain for DB plans. For example, contributions to DB plans are deductible, even if they exceed the specified limits for DC contributions, as long as such contributions are required by an actuarial evaluation of a DB plan. The cost of funding ancillary benefits (such as early retirement benefits, bridge benefits, survivor benefits, or indexing) is not counted in pension adjustment limits or translated into the “money purchase limit” for DC plans.<sup>34</sup>

### *2.2.2 Shift to RRSPs and DCs*

In theory, the integrated treatment of DB plans, DC plans, and RRSPs could cause a shift away from DB plans for several reasons.<sup>35</sup> First, the previous tax advantage to DB plans was removed. Second, sponsors seeking more predictable cost of financing employee pensions would be encouraged to convert existing DB plans to DC plans or create new DC plans. Moreover, younger employees for whom retirement is several decades away would not pressure their employers into implementing a DB plan.<sup>36</sup> More importantly, the “factor of 9” operates to attribute a larger PA than is really appropriate in the early years. When retirement is in the distant future, the present value of an accruing benefit will in fact be lower than the PA will indicate.<sup>37</sup> Thus, the RRSP room will be reduced by a greater amount than is really appropriate. As such, the new rules created a “particularly significant incentive for younger employees to avoid DB plans in favour the RRSPs and DC plans. “Younger employees are being advised by tax planners to avoid

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<sup>34</sup> For a case study for this, see Gros, Barry and Pat Suzuki (1998).

<sup>35</sup> The ITA allowed tax-free transfers of funds from DB plans to RRSPs and/or DC plans.

<sup>36</sup> Trossman (1988), at 776.

<sup>37</sup> This is partially addressed by past-service pension adjustments.

DB plans to maximize their contribution room”.<sup>38</sup> Trossman predicted that “putting MP [money purchase] plans and RRSPs on an “equal footing” with DB plans will undoubtedly discourage the DB format”.<sup>39</sup>

The above prediction is backed up by empirical data showing the rise of RRSPs and DC plans and the fall of corporate DB plans. Horner’s 2007 research led him to conclude that the tax reform “led to further strong growth in RRSP contributions but undoubtedly encouraged the closure of some RPPs as well.”<sup>40</sup>

RRSP contributions peaked in the mid 1990s.<sup>41</sup> Fourgere found that after 1990, RRSP contributions as a share of wages and personal disposable income grew at a much faster pace.<sup>42</sup> Over the period of 1992 to 2004, there was a 25% increase in the number of taxfilers contributing to RRSPs, and a 12% increase in the average contribution.<sup>43</sup> The steady increase in RRSP contributions is also clear from the data on tax expenditures associated with contributions to RRSPs and RPPs (see Table B below).

A portion of the increase in RRSP contributions may be attributable to group RRSPs, although the available data do not separate individual RRSPs from group RRSPs. There is some evidence that employers, especially smaller companies, substituted contributions to group RRSPs for their RPPs (especially DB plans).<sup>44</sup> Given a choice between a DB and a DC or RRSP, younger workers are generally more interested in the latter.<sup>45</sup> Low-to-middle-income earners (\$20,000 to \$40,000) generally find RRSPs more attractive than RPPs because RRSPs have the “income smoothing” feature (participants can withdraw funds from RRSPs to purchase a home or to meet unexpected income needs in the years before retirement) while DB benefits are locked in to retirement age.<sup>46</sup> Furthermore, mobile workers generally favour RRSPs or DC plans for their portability. Horner observes that “there is not very much evidence of

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<sup>38</sup> *Ibid.*

<sup>39</sup> *Ibid.*

<sup>40</sup> Horner (2007) at 33. Earnings and RRSP contributions from CRA, Income Statistics (formerly Taxation Statistics); RPP contributions from Statistics Canada, Pension Plans in Canada (CANSIM Table 2800026, variable v31211883). Note: as RPP information is reported as of January 1, RPP contributions reported for a year in the CANSIM data are actually contributions made in the preceding calendar year. RRSP rate for 2005 based on interim data from Statistics Canada.

<sup>41</sup> The decline in RRSP contributions may be caused, in part, by a shift in savings from RRSPs to home equity in the wake of the stock market decline in the late 1990s; Horner, *ibid.*, at 34.

<sup>42</sup> At 528. She attributed the RRSP savings increase to demographic reasons as well (the aging of the baby boom generation).

<sup>43</sup> Schembari (2007), at 2.

<sup>44</sup> Horner (2007), at 34; Luchak and Fang (2005); Baldwin (2007).

<sup>45</sup> Trossman, note 36, above. In addition to tax reasons, the slow wage growth and high investment returns over the past 30 years also made it easier to meet earnings replacement targets and made DC plans look more attractive than DB plans: Horner, *supra* note 39, at 39.

<sup>46</sup> Horner, *ibid.*, found that at income of \$30,000, about 30% of C/QPP contributors are RPP members while about 45% contributed to RRSPs.

any demand for RPP coverage on the part of employees without plans or of private sector initiatives to provide pension plans to the small business sector in a way that benefits from scale economies.<sup>47</sup>

There has been an increase in the number of DC plans in Canada. For example, according to some measures DC RPP members as a proportion of all RPP members increased from approximately 6% to 15% between 1986 and 2006,<sup>48</sup> and most of the increase occurred in the private sector. The increase in DC RPP coverage almost mirrors the decrease in DB coverage, thus it is considered to represent a shift from DB to DC plans.<sup>49</sup> The increase in DC coverage is presumably matched by an increase in the proportion of contributions to DC-RPPs, although the available data as shown in Table B do not separate contributions to DC plans and DB plans.<sup>50</sup>

From the perspective of workers, DC plans are excellent vehicles because they are easily understood and this familiarity makes them an easy sell to potential key employees who tend to be more mobile. Key employees are attracted to DC because they understand how to transport it if they decide to leave the sponsoring company.<sup>51</sup> For corporate sponsors, establishing a DC plan is cheaper than a DB plan because of the cost associated with the administration and inherent risks of the pension promise under DB plans.<sup>52</sup> Such additional costs make DB plans unattractive to Canadian controlled private corporations (CCPCs). Furthermore, owner-managers of CCPCs are allowed to establish a “one-person RPP”, often referred to as an individual pension plan (IPP), for themselves or certain key employees.<sup>53</sup> Almost 65% of companies in the S&P/TSX index reported that they had no traditional DB plan for their executives.<sup>54</sup>

In the United States, the tax reform in the 1980s provided generous tax assistance to individual retirement accounts (IRA) and 401(k) plans. Bloom and Freeman<sup>55</sup> found that these tax changes led to a massive increase in the number of taxpayers claiming IRA deductions and participation in 401(k) plans, which might account for a substantial portion of the 1980s’ fall in pension coverage. Clark and Monk found that

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<sup>47</sup> Horner (2007), at 52.

<sup>48</sup> Strauss (2007).

<sup>49</sup> *Ibid.*, at 26.

<sup>50</sup> Horner (2007); Baldwin (2007).

<sup>51</sup> Colquhoun (2002).

<sup>52</sup> Ghilarducci and Sun (2006).

<sup>53</sup> There has also been a significant number of RPPs providing benefits only to the executives. See Baldwin 2007.

<sup>54</sup> McFarland (2007).

<sup>55</sup> Bloom and Freeman (1992), at 544.

large corporate sponsors sought to close DB plans to new entrants while offering matching contributions to DC plans as well as retirement savings plans, such as company stock options.<sup>56</sup> They observed that:<sup>57</sup>

Indeed, those companies not subject to unionisation, operating in industries where labour turnover has been relatively high, and subject to significant cost pressures in terms of market competition have not offered DB pensions preferring, instead, a mix of DC and savings plans that fall far short of the value of traditional DB pensions.

Overall, the “tax system has reduced the desirability of defined benefit plans relative to defined contribution plans” (Turner 1994). Compared with DB plans, DC plans and RRSPs have some drawbacks from a policy perspective. They are more “optional” and people may not be disciplined enough to contribute enough to secure their target level of pensions. People may not have adequate financial and investment training in managing the investments on their own or have to pay high fees for financial services. In other words, while the employer-sponsor bears the mortality risks and investment risks in DB plans, these risks are shifted to members of DC plans and holders of RRSPs.

### **2.3 Contribution Limit**

Since 1991, tax reforms aimed at encouraging retirement savings have focused on increasing the contribution limit (See Table C). The contribution limits have been increasing for DC plans and RRSPs, with the exception of 1996-2002 during which the limits were frozen.<sup>58</sup>

In theory, increasing the contribution limit for DC plans and RRSPs provides greater tax incentives to individuals by sheltering a larger proportion of taxable income from tax. Because the tax subsidy takes the form of a deduction for contributions and non-taxation of investment income, the amount of tax savings (or incentive) is determined by the marginal tax rate of the taxpayer. Therefore, taxpayers benefit the most if their marginal tax rate is high. Empirically, the tax policy changes are linked to the increase in the number of taxfilers contributing to RRSPs and in the average amount of contributions.<sup>59</sup> They may have also encouraged the increase in DC coverage. On the other hand, they may have discouraged the expansion of

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<sup>56</sup> Clark and Monk (2007b), at 18.

<sup>57</sup> Ibid.

<sup>58</sup> The contribution limits for DC plans and RRSPs covering up to \$75,000 annual earnings had been capped at \$13,500 between 1995 and 2003.

<sup>59</sup> See, for example, Fougere (2002).

DB plans by reducing tax incentives for higher-paid workers (key employees) who have more bargaining power with the employer to create new DB plans or expand existing plans.

In contrast, the maximum annual accrual rate in DB plans had been limited to \$1,722 from 1990 to 2005 (covering earnings of about \$86,111 per year). These limits did not keep pace with the increase in earnings, which may have made DB plans unattractive to employees whose earnings exceed the sheltered amount.<sup>60</sup> In order to attract and retain highly skilled employees, the use of supplemental executive retirement plans (SERP)<sup>61</sup> has been growing in popularity as the pension plan entitlements for owner-managers and highly skilled employees often exceed the maximum pension benefits that are payable under a DB plan. SERPs are bona fide pension plans that do not qualify as RPPs under the ITA, but instead as a form of retirement compensation arrangement. They allow the employees to build up retirement benefits beyond the income tax maximums. There is a “significant compensation trend –the creation of increasingly large pension plans to supplement the salaries, bonuses, stock options and shares granted to an elite group of top executives.”<sup>62</sup> It was predicted that SERPs will soon become almost universal – by 2010, virtually all employers will be forced to sponsor a SERP to fulfill their pension promises.<sup>63</sup> Moreover, SERPs will be secured and DB SERPs may re-emerge in response to poorly functioning DC SERPs, where participants suffer from some of the difficulties in managing DC plans. Presumably, when executives are protected by SERPs, they are less motivated to create DB RPPs for lower-wage employees.

While it is clear that tax policy has encouraged the expansion of RRSPs and DC plans, it is not clear about the extent to which such expansion has occurred at the expense of DB plans. Establishing DC plans or group RRSPs by companies may result in a shift away from DB plans, but only to the extent that the company would otherwise create a DB plan. It is true that small DB plans have tended to disappear,<sup>64</sup> and

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<sup>60</sup> Where ancillary benefits are provided under a DB plan, the same limits may still result in more tax benefit to plan members because of the cost of funding such ancillary benefits is not converted into money purchase limit.

<sup>61</sup> There are some tax disincentives for funded SERPs when they are taxed as retirement savings arrangements. Retirement Compensation Arrangements or RCAs are defined in the ITA and include any arrangement under which contributions are made by the employer to a third-party custodian in connection with benefits to be received by the employee upon retirement or termination from employment (s. 248(1) of the ITA). When contributions are made to an RCA, the contributions are deductible to the employer and not taxable to the employee. However, a separate tax is levied at the rate of 50 per cent of all contributions made to the RCA. This tax is refundable when the custodian makes payments out of the RCA to the beneficiaries. There is another refundable special tax on the income earned in the RCA, which is 50 per cent of income less 50 per cent of all amounts paid as distributions. The tax is refundable (payable back to the trust), but collectible only when distributions are made from the RCA or certain elections are made. Payments made to an RCA beneficiary are taxed as income (s. 56(1) of the ITA).

<sup>62</sup> Campbell (2003), at 33.

<sup>63</sup> *Ibid.*

<sup>64</sup> Baldwin (2007), at 37.

some may have been replaced by a DC plan or group RRSP, but the question remains whether these DB plans would have disappeared regardless of the option of DC plans or group RRSPs. RRSP contributions made by individuals who are not covered by DB plans (e.g., new workers, part-time workers, the self-employed, and workers in smaller firms) have not resulted from shifting from DB plans. The growth of RRSPs and DC plans may represent additional retirement savings, especially in cases where individuals with higher earnings tend to contribute to both RPPs and RRSPs.<sup>65</sup>

## **2.4 Tax Rates**

Since 1986, both the marginal tax rates for individuals and corporate tax rates have declined significantly. For example, the federal marginal tax rate was reduced from 34 per cent to 29 per cent in 1988, and the threshold for this rate was raised from \$55,000 in 1988 to \$100,000 in 2001 and \$120,888 in 2007.<sup>66</sup> The basic federal corporate tax rate (after provincial abatement) was reduced from 36 per cent to 28 per cent in 1988, then to 27 per cent in 2001, and 21 per cent in 2004.<sup>67</sup>

In theory, declining marginal tax rates is a double-edged sword. On one hand, lower tax rates increase the amount of after-tax and disposable income, thereby leaving more funds for making contributions. This may have contributed to the increase in RRSP contributions. On the other hand, lower tax rates decrease the value of the tax assistance, thereby reducing the tax incentive. The progressive structure of personal income tax rates, that is, levying higher marginal tax rates as income increases, makes the benefits of the tax preferences for RPPs and RRSPs relatively greater for higher-income workers who pay higher marginal tax rates than for lower-income workers. Therefore, these tax preferences provide an incentive for owners and executives of companies to sponsor a RPP for themselves and their higher-income employees. In turn, because sponsors may also want to provide pension benefits for other workers in the firm, and because pension regulations encourage plan sponsors to extend pensions broadly to their work force, these tax incentives may result in increased worker coverage. This may have been the case in the 1960-1980s.

Reducing corporate tax rates may have a similar effect. Corporations have less savings from the tax deduction for contributions to pension plans when the tax rate is lower. On the other hand, they may have

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<sup>65</sup> In 1999, while 57 percent of RPP members contributed to RRSPs, only 30 percent of non-RPP members did so. Statistics Canada (1999), at 31.

<sup>66</sup> S.117(1) of the ITA.

<sup>67</sup> S.123 of the ITA.

more funds available for making the contributions, which may encourage them to expand existing DB plans or create new ones.

There is no conclusive empirical evidence, however, on the extent of the decline in DB coverage being related to the lowering of tax rates. In the United States, Reagan and Turner studied the pattern of marginal rates during the 1980s to determine whether decreases in marginal tax rates have reduced pension coverage.<sup>68</sup> They found that, on average, a decrease of one percentage point in the marginal tax rate is consistent with a decline of 0.4 percentage points in the worker coverage rate. Thus, they conclude that declines in tax rates appear to have lessened the incentives for plan sponsorship. However, Kiker and Rhine found “no relation between marginal tax rates and the demand for pension contributions.”<sup>69</sup>

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<sup>68</sup> Reagan and Turner (2000).

<sup>69</sup> Kiker and Rhine (1990).

### **3. Tax Policy and Funded Status of Occupational DB Plans**

#### **3.1 Overview**

The problem of under-funding of DB plans<sup>70</sup> has many possible causes.<sup>71</sup> Tax policy potentially affects the funding situation of DB plans by imposing a limit on the amount of contributions and the investment of pension funds. As explained below, tax policy may exacerbate an under-funding problem, but cannot be said to have caused it in the first place.

#### **3.2 The 10 Per Cent Surplus Rule**

Contributions made by an employer to a DB plan are deductible under the ITA.. Because this deduction is viewed as a “tax subsidy” or “tax expenditure”, its amount is subject to statutory limitations. Paragraph 20(1)(q) of the ITA permits an employer to deduct RPP contributions as an expense from business income in such amount as is permitted by subsection 147.2(1). Subsection 147.2(1) sets out various requirements that must be met in order for an employer to deduct the contribution. The key requirement is that the contribution is an “eligible contribution” (defined under s.147.2(2)). In general terms, a contribution is an eligible contribution only if it is required to fund promised benefits, it is calculated in accordance with specified conditions and it is made pursuant to an actuarial recommendation<sup>72</sup> that has been approved by the Minister of National Revenue.

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<sup>70</sup> Laidler and Robson (2007) at 3-5; CGA report, ch.3.

<sup>71</sup> The liabilities of DB plans increase or appear to increase due to changes in discount rates and related actuarial assumptions, the increase in life expectancy of workers, increase in administrative costs, and/or a change in the accounting conventions applied to pension plans’ balance sheets involving a shift to mark-to-market valuations. The assets of the plans decreased as a result of low rates of return on investments of pension funds and changes in accounting practices, Laidler and Robson, *supra* note 72, at 5. Ultimately, the root of the problem is the nature of DB promises and the overall economic environment. Liabilities of DB plans are sometimes characterized as “unmanageable debts” and “uninsurable risks”. Clark and Monk (2006) argue that pension liabilities are not like other debts because “they are not reliably quantifiable, not legally tradeable, not cheaply retireable, and not easily transferable”. Pension risks are elusive and “unhedgeable”. When sponsors became less profitable, honouring the pension debts naturally becomes more difficult. This seems to be the case with big, mature corporations in the steel, airline, manufacturing, and automotive industries. The globalization of the Canadian economy has the effect of “squeezing” Canadian companies into a narrow middle ground, with companies from China and other low-cost countries out-producing Canadian companies at the lower end and the companies from the United States out-pacing Canadian firms in productivity and innovation.

<sup>72</sup> The actuary's recommendation must be based on an actuarial valuation carried out in accordance with the following conditions: (i) no more than four years may elapse between the effective date of the valuation and the day the contribution is made; (ii) the actuarial funding method used to compute actuarial liabilities and current service costs must produce a reasonable matching of contributions and accruing benefits; (iii) all assumptions made must be reasonable both at the time the valuation is prepared and at the time the contribution is made; (iv) the valuation must be prepared in accordance with generally accepted actuarial principles; (v)

Under paragraph 147.2(2)(d), an actuary's recommendation with respect to contributions to be made by an employer may disregard the actuarial surplus in respect of the employer to the extent of the lesser: (a) 20 per cent of the actuarial liabilities apportioned to the employer, and (b) the greater of (i) twice the current service contributions required to be made by the employer and its employees for the 12 months following the date of the actuarial valuation, and (ii) 10 per cent of the actuarial liabilities apportioned to the employer. In general cases, it is this 10 per cent that is the working limit. That is why this surplus limit is referred to as the “10 per cent rule”.<sup>73</sup> Where the actuarial surplus exceeds the specified limit, the excess must be applied to reduce deductible employer contributions for current service, or used to improve benefits (and thereby increase liabilities, reducing the actuarial surplus).<sup>74</sup>

The effect of the 10 per cent rule is to deny sponsors their tax deductions for the contributions to “over-funded” plans, resulting in a “tax cost” to the employer (the amount is dependent on the applicable income tax rate).<sup>75</sup> The purpose of this rule is to allow a “moderate amount of surplus to be retained in a plan while limiting the government revenue cost associated with deferrals of tax on amounts over and above those required to fund the promised pension benefits.”<sup>76</sup>

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the valuation must comply with prescribed conditions (in respect of designated plans per s.8515 of the *Income Tax Regulations*); (vi) if there are two or more participating employers, there must be a reasonable apportionment among the employers of assets and actuarial liabilities in respect of their employees and former employees.

<sup>73</sup> For DB plans that have implemented funding arrangements requiring participating employers and members to share entitlement to surplus and liability for actuarial deficiencies, effective for contributions made after 2002, s.8516(4) permits employer contributions to be made to such a plan as follows where the contributions would not otherwise be allowed by subsection 147.2(2) because the plan's funding ratio exceeds 110%:

Funding ratio	Total employer and employee current service contributions
>110% and <=115%	75% of current service costs
>115% and <=120%	50% of current service costs
>120% and <=125%	25% of current service costs
>125%	Nil

<sup>74</sup> The Canada Revenue Agency takes the view that the over-contribution must be returned to the employer and considered as income in the year received: CRA, “Compliance Bulletin No.3, February 3, 2006. Available at <http://www.cra-arc.gc.ca/tax/registered/newsletters/bulletin-032.html>. Such double “economic taxation” of the over-contribution, while technically required by the ITA, certainly violates a fundamental principle that income tax is a tax on income, which represents an accretion to wealth during the year. The returned over-contribution is not in the nature of “income”.

<sup>75</sup> It should be noted that there may be other non tax policy reasons affecting the accumulation and use of surplus, notably pension regulation and the effect of trust law on DB plans impressed with “exclusive benefits” clauses.

<sup>76</sup> Department of Finance (2005).

The 10 per cent rule has been criticized as being “arbitrary” -- a round number suggests an arbitrary choice.<sup>77</sup> Laidler and Robson argue that this rule forces plans to run in deficit.<sup>78</sup>

A degree of asset-liability mismatch that, in other respects, is well within accepted practice will produce fluctuations outside a range of 10 percentage points of balance on a regular basis, so forbidding contributions whenever a plan has a surplus of more than that amount will force plans, on average, to run in deficit.

The above view is shared by the CGAA in its report entitled *State of Defined Benefit Pension Plans in Canada: An Update* (2005) (at 44):

Retrospectively and prospectively, we can expect that the 10% rule does in some instances force a sponsor to take contribution holidays when the sponsor may not otherwise do so.

Ambachtsheer also concurs:<sup>79</sup>

The relatively low 10 per cent cap that the federal government has historically placed on DB balance sheet surpluses has impeded the proper management of balance sheet risk.

In its White Paper, Towers Perrin observes that “DB plans would no doubt be in better funding positions today had their sponsors been able to contribute more during stronger parts of the business cycle.”<sup>80</sup> In their submissions to the Ministry of Finance about strengthening the legislative and regulatory framework for DB plans, about thirty individuals, firms, and organizations mentioned tax rules as having an impact on the state of DB plans in Canada.<sup>81</sup> David Dodge, the Bank of Canada Governor, opined that the tax rules

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<sup>77</sup> Laidler and Robson (2007) at 9.

<sup>78</sup> Ibid.

<sup>79</sup> Ambachtsheer (2004) at 9-10.

<sup>80</sup> Towers Perrin (2004) at 10.

<sup>81</sup> These include: Air Line Pilots Association, Association of Canadian Pension Management, Bell Pensioner’s Group Inc., CARP, CAW, CBA, Canada Post, Canadian Association of Counsel to Employment, Canadian Institute of Actuaries, Canadian Labour Congress, Canadian Life and Health, Insurance Association, Canadian Media Guild, Canadian National Pensioners Association, Canadian Press/Broadcast News Ltd., CN, KPA Advisory Services Ltd., Malcolm Kern, Marine Athletic, Mercer Human Resources Consulting, NAV Canada, Blakes Pension and Employee Benefits Group, Pensions Task Force of FEI Canada, RBC Financial Group, Stikeman Elliott, TB Bank Financial Group, TELUS, Toronto Board of Trade, Towers Perrin, Watson Wyatt. See [http://www.fin.gc.ca/activty/consult/PPBnfts\\_e.html](http://www.fin.gc.ca/activty/consult/PPBnfts_e.html).

“discourage companies from building up more than a 10 per cent surplus or contingency fund”<sup>82</sup> and are thus “tax penalties on fund surpluses”, and should be eased.<sup>83</sup>

It is unclear about the extent to which the above view of the negative impact of the 10 per cent rule is based on empirical evidence. How many DB plans are under-funded because of this rule? In *Taking a Holiday: The Impact of Employer Contribution Holidays on the Funding of Defined Benefit Plans*, Yaron (2005, 21) analyzes a fairly limited data set reported in the OSFI 2003-3004 Annual Report and concludes that: 60 per cent of all federally registered DB plans took at least one contribution holiday between 1994 and 2003; and among the plans that took contribution holidays, 13 per cent were extremely under-funded, 30 per cent were significantly under-funded and 57 per cent were moderately under-funded. However, Yaron concludes there is “no observable relationship between the number of contribution holidays taken and plan funding ratios” (*ibid*) even though 45 per cent of the under-funded plans would have completely eliminated their current actuarial deficit if contribution holidays had not been taken (*ibid*, 6). Yaron also notes that the percentage of underfunded plans that did not take contribution holidays was sometimes greater than those that did take contribution holidays between 1994 and 2003 (*ibid*, 22). He also reports that some sponsors took contribution holidays not when the plan had a surplus, but when the plan was under-funded already. Nevertheless, Yaron concludes that (*ibid*)

[T]he findings do reveal that current funding shortfalls for underfunded pension plans could have been significantly ameliorated by lost revenue from missed contributions and interest over this 10 year period. Of the 42 significantly or extremely underfunded pension plans in the study, 45 per cent would have completely eliminated their current actuarial deficit if contribution holidays had not been taken.

The fact that contribution holidays were taken in the 1990s by many sponsors of DB plans is also reported by Statistics Canada: there was a 73 per cent increase in employer contributions to pension plans from about \$7.3 billion in 2000 to \$12.6 billion in 2002, which is attributed to “the recognition by many plan managers that contributions had to increase, or start again, after a period of a contribution holiday, to avoid or at least reduce their unfunded liabilities.”<sup>84</sup> This significant jump in contributions is evidenced by the

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<sup>82</sup> Daw (2007).

<sup>83</sup> Beauchesne (2007). While there are some widely-held views that the 10% rule be eased, it appears that the policy reason behind the 10% limit is concern over the unjustifiable accumulation of surplus on a tax-deferred basis by very small RPPs, also known as individual pension plans. One solution would be to have two surplus rules for individual pension plans and for larger pension plans.

<sup>84</sup> Statistics Canada (2004).

estimated value of tax expenditures associated with employer contributions to RPPs: the amount increased from \$4.9 billion in 2000 to \$8.3 billion in 2004 (see Table C below).<sup>85</sup>

There is no clear evidence showing that contribution holidays were “forced” or “required” by the 10 per cent rule. It is true that this rule denies the tax-deduction for excess contributions, and making impermissible contributions may cause the deregistration of a DB plan. In some cases, however, this rule provides a “feeble excuse and not a reason for the taking of the contribution holidays.”<sup>86</sup> In *P.S.A.C. v. A.E.U.* (2002),<sup>87</sup> for example, the collective agreement between the employer and the union provides that while the plan is ongoing, no surplus funds arising from time to time shall revert to the employer or be used by the employer for purposes other than the exclusive benefit of members of the plan. When the plan had an actuarial surplus, the employer took contribution holidays, arguing that it was required by s.147.2(2)(d) of the ITA to take such a contribution holiday.<sup>88</sup> Yaron (2005, 16) observes that the common restrictive interpretation of the 10 per cent rule “is more likely a consequence of mandatory language in many plan trust agreements that often requires the plan sponsor to withhold contributions under the conditions prescribed by the ITA”.

Corporate sponsors take contribution holidays for various reasons. First, contribution holidays allow employers to reallocate the funds to other areas of the company’s operations, such as research and development. Second, the employer wishes to retain ownership of the funds whereas the ownership of surplus is uncertain or clearly assigned to the members of the plan. Third, the employer suspends contributions because it is in financial difficulties or when it cannot benefit from the tax deductions. The tax deduction is “valuable” to a corporation only when it can reduce its tax liability.

Because the 10 per cent rule is dependent upon actuarial assumptions, corporate sponsors can, to some degree, “manage” this rule when a plan is healthy. For example, in the valuation of plan liabilities the surplus can be reduced by assuming very conservative discount rates, thereby inflating liabilities relative to prevailing market assumptions.

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<sup>85</sup> Department of Finance, *Tax Expenditures and Evaluations Reports* (1997-2006).

<sup>86</sup> *Aegon Canada In. and Transamerica Life Canada. V. ING Canada Inc.*, [2003] O.J. No.448 (S.C.J.) at 12.

<sup>87</sup> 2002 Carswell, ON 3859, 104 L.A.C. (4<sup>th</sup>) 349, 35 C.C.P.B. 253 (O.A.B.).

<sup>88</sup> The issue in this case is whether the employer must use the surplus to improve other benefits of the plan members as opposed to taking contribution holidays pursuant to the terms of the Collective Agreement, which provided that if premiums paid by the employer for any employee benefits were reduced as result of any legislative change or action, the amount of saving had to be used to increase other benefits available to employees. The Ontario Arbitration Board found that “contributions” to pension plans were not “premiums” and the contribution holidays “required” by the ITA were transitory in nature and its duration depends on variety of factors, including performances of financial markets and the point at which the valuation of plan is filed.

Finally, the 10 per cent rule is not new. S.147.2(2)(d) came into force in 1990. It was largely a revised version of administrative rules found in paragraph 39 of Information Circular 72-13R8, which had been in effect since 1977. Under those rules, employers had been refused a deduction for current service contributions where a plan's actuarial surplus exceeded two years' employer current service costs. While the surplus limit is not calculated in exactly the same manner, the surplus rule was well-understood. It was during the bull market of the 1990s that companies took advantage of this rule by taking contribution holidays. Unfortunately, there are no data linking the proportion of contribution holidays taken as a direct result of the 10 per cent rule or voluntarily for other reasons.

The 10 per cent rule is counter-intuitive; it does not encourage companies to “save for rainy days” by over-contributing during profitable years and under-contributing in years when they do not have taxable profit. Because the actuarial surplus determination is dependent on the performance of capital markets and the point in time at which valuation is made, the 10 per cent rule does not permit the accumulation of surplus to act as an effective “smoothing” mechanism.

Overall, the impact of the 10 per cent rule on the funding status of DB plans does not seem to be very significant. This view is supported by the fact that the rise of the under-funding problem and the recent ease of the problem all occurred while the rule remained the same. To the extent that the 10 per cent rule has any impact, the impact is limited to circumstances where a corporate employer was unable to “smooth” their contributions, that is, they would have contributed to over-funded plans in the absence of the 10 per cent limitation during the years of high profit and to cover years when they were unable to contribute during years of financial difficulties.

### **3.3. Rigid Funding Rules**

The Income Tax Act currently recognizes DB plans and DC plans and provides limits on various aspects of a DB plan that can be registered for tax purposes. The most generous formula for determining a defined benefit is “2 per cent x years of services x the best 3 consecutive years’ earnings”. The benefits in 2005 could not exceed \$2,000<sup>89</sup> per year of service and the \$2,000 figure is a 2 per cent accrual rate on \$100,000 of earnings. An existing DB plan has some flexibility in managing its actuarial surplus (e.g., by using conservative assumptions or upgrading benefits). It can also be converted into a DC plan, but not other types of plans, such as the US style “cash balance plans”. A cash balance plan may violate the benefit

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<sup>89</sup> This figure has been indexed to average wage increases since 2005.

accrual requirements for DB plans. The ITA has not encouraged much innovation in designing occupational pension plans.<sup>90</sup>

Under the United States' *Pension Protection Act* of 2006,<sup>91</sup> a cash balance plan is a plan under which the accrued benefit is calculated as the balance of a hypothetical account maintained for the participant or as an accumulated percentage of the participant's final average compensation. Under a typical cash balance plan, a percentage of compensation (a pay credit) is credited to a hypothetical account for each participant. Those amounts are then credited with guaranteed interest (an interest credit) until the account is paid out, typically as a lump sum at termination of employment. The design is similar to a typical DC plan. However, a cash balance plan is a DB plan because interest credits are determined without regard to the performance of fund assets. The Pension Protection Act of 2006 clarifies the treatment of such plans. When a traditional DB plan is converted to a cash balance plan, each participant's accrued benefit under the terms of the plan after the amendment must be at least the sum of (a) the participant's accrued benefit for years of service before the effective date of the amendment, determined under the terms of the plan as in effect before the amendment, plus (b) the participant's accrued benefit for years of service after the effective date of the amendment, determined under the terms of the plan as in effect after the amendment.

### **3.4 Other tax rules**

The Income Tax Act does not allow an employer to deduct on an amortizable basis any actuarial shortfall in the funding of its pension plan, even though this may be done for financial accounting purposes.<sup>92</sup> Actual contributions made in accordance with actuarial recommendations are deductible. As such, the Income Tax Act accommodates the funding requirements under the pension regulations.<sup>93</sup> This aspect of tax policy cannot be criticized for affecting the funding status of DB plans.

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<sup>90</sup> The *Income Tax Regulations*, ss. 8501, 8502 and 8503 set forth conditions for registration of a pension plan. Due to their nature, it is not possible to register a cash balance plan under the current regulation.

<sup>91</sup> The *Pension Protection Act, 2006* (P.L. 109.. 109.280,8/1706). For commentary, see Baum (2006).

<sup>92</sup> CRA Views, November 1991-113: Amortization of Pension Surplus –Income Tax Treatment to Employer”, dated November 1991.

<sup>93</sup> The Pension Benefit Standard Regulations require special payments to eliminate the going-concern deficiency over 15 years. In general, the payments that a plan sponsor must remit to a plan in a given year include the amount necessary to cover the ongoing current service costs associated with the plan, plus any "special payments" required in that year to pay down a funding deficiency over the relevant time period. Plan sponsors are permitted to consolidate solvency payment schedules and extend the period for making solvency funding payments to 10 years from five years

Until 2005 when it was eliminated, the foreign property rule required that no more than 30 per cent of the assets<sup>94</sup> held in RPPs and RRSPs that could be invested in foreign property. Presumably, if the rate of return on investments in foreign properties is higher than domestic properties, the foreign property rule may have reduced the earnings of DB plans, which could contribute to the under-funding problem. For large plans, the small size of the Canadian capital markets may limit their investment choices and diversification needs, thereby causing financial insecurity. However, there is no empirical study on this matter.

#### **4. Conclusions**

From 1986 to 2006, there were significant changes in tax policy in terms of equal treatment of DB plans, DC RPPs and RRSPs, the amount of tax-deductible contributions, tax rates, and the foreign property rules. However, the 10 per cent surplus rule which has been singled out as a possible cause of the under-funding problem has remained more or less the same since 1977. Overall, tax policy seems to have a greater impact on the declining coverage of corporate DB plans than on the under-funding problem. The extent of the impact on either the coverage or funding of DB plans is difficult to ascertain and not much empirical data is available. However, normatively speaking, tax policy changes encourage individuals who are not covered by an existing DB plan to opt for RRSPs or employer-sponsored DC plans. Tax policy does nothing to discourage sponsors from converting existing DB plans into DC plans. In fact, tax policies that allow tax-free transfers from DB plans to DC plans or RRSPs tend to encourage the conversions. Since 1991, there has been no specific tax policy that favors the creation or expansion of DB plans.

In terms of recommendations for tax reform, it would be difficult to re-introduce tax policies that specifically favour DB plans on grounds of equity and neutrality. Even if DB-specific tax preferences were introduced, it is difficult to imagine that such policies would actually lead to an increase in the coverage, or improvement in the under-funding problem, of DB plans. One exception is the surplus limitation rule. Although no exact data can pinpoint its impact on the funding status of DB plans, the current 10 per cent rule is too rigid and fails to function as a buffer for companies whose financial position changes dramatically from year to year. The 10 per cent limit might be raised to 30 per cent or higher (except perhaps for individual pension plans where there is a more pressing policy concern). The idea of “greater

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<sup>94</sup> The original limit was 10 percent in 1971, later raised to 20 percent in 1990.

deduction for good years” has been suggested by observers and scholars<sup>95</sup> as well as the OECD.<sup>96</sup> Another idea might be to accommodate “cash-balance” plans or other innovations now disallowed that have features of both DB plans and DC plans. The Department of Finance and the Bank of Canada Governor appear to be open to such changes.<sup>97</sup>

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<sup>95</sup> Such suggestion has been made by CGAA (2005); Ambachtsheer (2004); Laidler and Robson (2007); Kent (2003).

<sup>96</sup> OECD (2003), at 16-17.

<sup>97</sup> Department of Finance (2005).

**Table A:****RPP Coverage Rate for the Private Sector\***

Year	% of Canada's Labour Force	% of Ontario's Labour force**
1988	19.4%	22.5%
1989	n/a	n/a
1990	20.0%	23.4%
1991	n/a	n/a
1992	19.3%	22.5%
1993	18.7%	21.3%
1994	18.2%	20.6%
1995	18.0%	20.3%
1996	18.0%	20.0%
1997	17.9%	20.0%
1998	17.6%	19.7%
1999	17.5%	19.8%
2000	17.9%	20.0%
2001	18.3%	20.6%
2002	17.8%	19.9%
2003	17.5%	19.8%
2004	17.4%	19.3%
2005	n/a	n/a
2006	n/a	n/a

Source: CD-ROM and CANSIM tables 051-0001 and 282-0002.

\*This data drawn from CANSIM tables using the Pension Plans in Canada survey tool. There are some limitations to these data when examining coverage rates in the Ontario jurisdiction. Membership is defined as residents of Ontario who are members of pension plans registered in Canada (i.e., any jurisdiction). Users should compare these data to those produced for the OECP.

\*\*Ontario labour force is defined using "Ontario workers", which includes workers in the federally-regulated industries who are resident in Ontario or who are employed in Ontario. Coverage rates for the Ontario labour force excluding federally-regulated workers are not available from CANSIM.

**Table B: Tax expenditure associated with contributions to RPP and RRSP**

Year	RPP (\$millions)	RRSP (\$millions)
1992	4990	3685
1993	5205	4490
1994	4890	4785
1995	4925	5290
1996	4930	5940
1997	5170	6635
1998	4490	6560
1999	5030	6965
2000	4895	7155
2001	4575	6225
2002	5325	5915
2003	6615	6000
2004	8270	6655
2005	8395 (Projected)	7030 (Projected)
2006	8700 (Projected)	7520 (Projected)
2007	9015 (Projected)	8030 (Projected)
2008	9325 (Projected)	8555 (Projected)

Source: Department of Finance's *Tax Expenditures and Evaluations Reports* for 1997-2006.

**Table C: Tax-Deductible Contribution Limits for DC and RRSP**

	<b>PA<sup>98</sup></b>	<b>Money purchase limit</b>	<b>RRSP limit</b>
1989		nil	\$7500 <sup>99</sup>
1990		\$11,500	\$7500
1991	\$11,500	\$12,500	\$11,500
1992	\$11,500	\$12,500	\$12,500
1993	\$12,500	\$13,500	\$12,500
1994	\$13,500	\$14,500	\$13,500
1995	\$14,500	\$15,500	\$14,500
1996-2002	\$14,900	\$13,500	\$13,500
2003	\$14,900	\$15,500	\$14,500
2004	\$15,900	\$16,500	\$15,500
2005	\$17,400	\$18,000	\$16,500
2006	-	\$19,000	\$18,000
2007	-	\$20,000	\$19,000
2008	-	\$21,000	\$20,000

<sup>98</sup> Data for this PA column is from Millard and Theroux (2005).

<sup>99</sup> Over the years, the maximum annual RRSP contribution permitted under the ITA has been increased several times. The limit is set to be the lesser of two amounts: a specified percentage of earned income and a dollar amount. In 1957, the limit was the lesser of 10% of income or \$2,500; a lower dollar amount was set for participants in RPPs and DPSPs to take into account the tax assistance provided to these programs. In 1965, the limit for non-RPP participants was raised to the lesser of 20% of income and a specified dollar amount (\$2,500 in 1965, \$4,000 in 1972, \$5,500 in 1976, and \$7,500 in 1986).

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