

Report to the Civil Rules

Committee on rules 53.09

and 53.10

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1 Executive Summary

1. Our subcommittee has conducted the quadrennial review mandated by s. 66(4) of the *Courts of Justice Act*¹. That section requires the Rules Committee to review the following:
 - a) “the discount rate to be used in determining the amount of an award in respect of future pecuniary damages” (s. 66(2)(p));
 - b) “the method of calculating the amount to be included in an award of damages to offset any liability for income tax on income from investment of the award” (s. 66(2)(v)); and
 - c) “the prejudgment interest rate with respect to the rate of interest on damages for non-pecuniary loss” (s. 66(2)(w)).
2. This report of the subcommittee was finalized on March 16, 2020. Within days though, the incipient threat of Covid-19 exploded with full force. The government had declared a state of emergency, the courts had suspended operations and the meeting of the Civil Rules Committee, scheduled for April, 2020, had been cancelled.
3. The unprecedented economic and social upheaval that has followed has not made our task any easier. This report has been updated slightly, to reflect the current economic data and conditions. But the conclusions that we had reached in March remain the same.

1.1 Discount rate

4. The greatest part of this subcommittee’s time—by far—has been devoted to the first of these: the discount rate, contained in r. 53.09(1) of the Rules of Civil Procedure. In part, that is because our review followed soon after a similar process in the United

¹ RSO 1990, c C.43.

Kingdom that culminated in two sets of major changes to the corresponding provisions in that country. We have been able to observe both the process that led to the UK's reforms and some of the consequences of those reforms.

5. The main problem that we have had to deal with in relation to the discount rate has been what rate of return on investment plaintiffs should be assumed to receive. The second ingredient of the discount rate—inflation—was thought by all to be fairly stable at 2% per annum. As discussed in § 2.3 below though, a great deal of uncertainty about inflation has been introduced by Covid-19 since mid-March, 2020. The present rate has plunged and many analysts expect rates to remain low or even become deflationary in the near term, possibly rising to very high levels after that. The paradox of future inflation has only added to the difficulty of coming up with an appropriate discount rate.
6. After taking into account the UK experience, detailed submissions of Ontario stakeholders, the approach that has historically been taken to the discount rate problem in this province and the input of our own experts, we have come to the conclusion that establishing a discount rate that will operate fairly in personal injury cases is a challenging task, probably more so than has been recognized in the past. The difficulty mainly arises from the nature of the problem: it requires that the Civil Rules Committee predict the economic future of Ontario and Canada. Past attempts to do so have not been successful (through no fault of any of the Rules Committees over the years). Rates of return on investments have sometimes outpaced those provided for in r. 53.09(1) (such as during the 1980s) and sometimes have been less (now, for example).
 - 1.1.1 A new approach
7. We are recommending that consideration be given to a new approach to quantifying damages for what are inherently uncertain losses: ones in the future. Possible

candidates for such an approach include structured settlements or periodic reviews of awards of damages for future losses. There might be other approaches—or some combination of approaches—that would work.

8. Such changes are probably beyond the mandate of the Civil Rules Committee and would require legislative change. We have not attempted to formulate specific proposals for those changes because our five-person subcommittee has nothing like adequate resources to study the various options.

1.1.2 *Pro tempore* changes to r. 53.09(1)

9. We recognize that such change, if it happens, will take time. In the first half of 2020, the Ontario government already has its hands more than full, dealing with the fallout of Covid-19.

10. In the meantime, we must consider how r. 53.09(1) can be improved. The input that we have received has made it clear that there is a fundamental policy question that must be addressed: is the discount rate, established by r. 53.09(1), meant to reflect estimated returns that plaintiffs will *actually* be able to achieve from investments of their awards of damages or to provide a mechanism for discounting damages to present value on the basis of a *notional* rate of return, such as that of real return Government of Canada bonds? If the latter, a large number of plaintiffs are likely to be overcompensated. But if the present value is computed on the basis of returns that a “prudent investor” should be able to realize, some plaintiffs will be undercompensated. The higher the assumed rates of return, the larger the number of undercompensated plaintiffs is likely to be.

11. The answer to this policy question will then affect the other aspects of the discount rate problem.

12. In our view, it was never contemplated that the present value calculation provided for by r. 53.09(1) would be based on plaintiffs assuming a certain level of risk in investing their damages awards. We believe that the philosophy underlying the rule has been and remains one of *restitutio in integrum*, such that discounting to present value should assume that plaintiffs will take on only a very low level of risk in investing their awards.
13. We recommend that the present two-tier discount rate return to a single tier. We think that the discount rate should be established using a somewhat modified version of the present first-tier system (the first 15 years after trial), which is based on an average of yields from Government of Canada real return bonds for a six-month period in the year before the trial.
14. We would eliminate both the present ½% reduction of the rate (from what it would otherwise be) and the prohibition against negative discount rates.
15. We do not favour using different discount rates for different types of damages, as some stakeholders have suggested. The point has been made with us, that the cost of certain types of damages, such as medical services, inflates at a rate faster than that of goods. While we accept that the cost of services tends to inflate more than the cost of goods, we do not feel that that warrants separate treatment of damages made up of the cost of “services”, for reasons set out in § 2.11.5 below. (Although inflation, one of the few aspects of this issue that had not seemed to present much of a problem throughout the course of our work, has, in the first half of 2020, emerged as a significant issue. Accordingly, the section of this report that addresses inflation has been rewritten since the earlier draft of March, 2020, to reflect the new developments.)
16. We have also suggested some revised language to make r. 53.09(1) clearer.

17. Finally, we mean to discourage, as much as possible, departure from the discount rate established by r. 53.09(1). We worry that any “threshold” that is set for fixing a different discount rate in a particular case, no matter how high, will be viewed as an invitation, in all cases, to try to set the discount rate on the basis of evidence. Largely for that reason, we are inclined to introduce a provision in r. 53.09(1) that makes the application of the rule mandatory.

1.2 Prejudgment interest on non-pecuniary general damages

18. Rule 53.10 provides that the “prejudgment interest rate on damages for non-pecuniary loss in an action for personal injury is 5 per cent per year”. The purpose of that rule, when it was introduced in 1990, was to ensure that prejudgment interest on damages for non-pecuniary loss would be calculated at a rate *lower* than the one for other damages, in recognition of the fact that damages for non-pecuniary loss are indexed to inflation. (In 1990, the rate of prejudgment interest provided for under s. 128 of the *Courts of Justice Act*, for other types of damages, was in the range of 12–13 percent per annum.)

19. We recommend that rule 53.10 be reworded to set the rate of prejudgment interest as provided for under s. 128 of the *Courts of Justice Act*, minus inflation, the latter as determined by reference to the Consumer Price Index.

20. The rate of prejudgment interest on non-pecuniary damages in personal injury actions arising out of motor vehicle accidents has already been withdrawn from r. 53.10 by s. 258.3(8.1) of the *Insurance Act*, R.S.O. 1990, c. I.8. However, entitlement to non-pecuniary damages in those types of cases is subject to some specific statutory provisions that warrant special treatment. We feel that there is no reason for prejudgment interest on non-pecuniary damages in other types of cases to be awarded on the basis of what has become a preferential rate (contrary to the original

purpose) and one which, because the underlying damages are effectively indexed to inflation, results in double compensation.

1.3 Gross-up

21. If r. 53.09(1) [discount rate] is modified as we have recommended, r. 53.09(2) should also be updated. In that case, that would mean adjusting the language of that rule to correspond with the language of r. 53.09(1).

2 Discount rate (r. 53.09(1))

2.1 How r. 53.09(1) works now

22. This section of our report will look at the nature of the “discount rate” problem.

Then, in the following section, we will summarize and discuss the significant changes that the British government chose to make to the discount rate used in England and Wales (known there as the “Ogden rate”) in 2017 and again in 2019. We will describe why we do not believe that that approach is one that we should follow in Ontario.

23. Our report will then discuss the submissions that were made to us by various Ontario stakeholders and the advice received from the two experts engaged to assist our subcommittee.

24. We will then set out our recommendations.

2.1.1 Introduction

25. In order to evaluate what changes, if any, should be made to r. 53.09(1), it is important to understand how that rule works now.

26. Under the present system, damages for future loss are discounted to present value² using one rate for the first 15 years after trial and another rate for post-15 year losses.

27. The present rate for the second period (after 15 years) is 2.5 percent. (The history of how we came to use a rate of 2.5% is outlined in § 2.7 below.)

28. The rate for the first period or “tier” (i.e., the first 15 years after trial) is more complicated. It is discussed in the next section.

2.1.2 The rate for the first tier (the first 15 years after trial)

29. The present wording of the rule used to determine the “first-tier” rate is as follows:

² The concept of “present value” is discussed in § 2.2.

53.09 (1) The discount rate to be used in determining the amount of an award in respect of future pecuniary damages, to the extent that it reflects the difference between estimated investment and price inflation rates, is,

(a) for the 15-year period that follows the start of the trial, the greater of,

(i) the average of the value for the last Wednesday in each month of the real rate of interest on long-term Government of Canada real return bonds (Series V121808, formerly Series B113911), as published in the Bank of Canada's *Weekly Financial Statistics* for the period starting on March 1 and ending on August 31 in the year before the year in which the trial begins, less ½ per cent and rounded to the nearest 1/10 per cent, and

(ii) zero.

30. As discussed in § 2.12 below, the phrase “estimated investment” in the first part of r. 53.09(1) is somewhat inexact or even ambiguous. We have suggested new wording. But in practice, the general idea is that the discount rate will reflect the difference between (a) the estimated *return* on investment (of the award of damages) and (b) the estimated price inflation rate. (“Price inflation rate” is measured, in Ontario, by the Consumer Price Index. The concept of inflation is discussed in § 2.3 below.)

31. The rate set out in r. 53.09(1)(a)(i), before adjustment, is “the average of the value for the last Wednesday in each month of the real rate of interest on long-term Government of Canada real return bonds (Series V121808, formerly Series B113911), as published in the Bank of Canada's Weekly Financial Statistics for the period starting on March 1 and ending on August 31 in the year before the year in which the trial begins”.

32. “Real return bonds” are a form of bond, issued by the Government of Canada. They are discussed in more detail in § 2.4 below but generally speaking, they, like other government bonds, represent a form of loan³ made to the federal government. The

³ Technically, a “loan”, other than one that is securitized, such as a mortgage, is different from a “bond”. Non-securitized loans are not readily “traded” or transferred to others, as bonds are. Still, a

bond promises a certain rate of return or “coupon”. (The most recent real return bond, maturing in 2050, has a coupon of 0.5 percent per annum. The one that is, at present, used for purposes of establishing the first-tier discount rate matures in 2044 and has a coupon of 1.5 percent.) That fixed rate of return is paid periodically, over the life of the bond.

33. The other component of government bonds (not just real return bonds), apart from the coupon, is the “yield”, which is a proportion of the price of the bond.
34. “Yield” is the amount paid to the holder when the bond matures. (Technically, the yield is the quotient of the coupon divided by the price paid for the bond. The coupon remains fixed, for a particular bond issue, but the yield varies with price.) There is an inverse relationship between the *price* of a bond and the *yield* of that bond. The higher the price paid (even for investors purchasing at the time of issuance), the lower the yield. This will be discussed further below. It is an important concept because the discount rate that is derived by the procedure set out in r. 53.09(1)(a) is based on yield.
35. “Value”, as used in r. 53.09(1)(a)(i), is probably also a poor choice of words. Its meaning, in this context, is not obvious. But in practice, what r. 53.09(1)(a)(i) is referring to as “value” is the *yield* on bonds in the specified series.⁴ Yield varies from day to day (with fluctuations in market price) but r. 53.09(1)(a)(i) provides that the discount rate will be set on the basis of a six-month average yield (referred to in the rule as “value”), using the period from March to August of the year before the trial.

bond is like a loan, in that the investor gives the government the use of money for a specified period of time in exchange for a specified return on the investment.

⁴ As discussed in § 2.8.3.1, it does appear that the Robins subcommittee, which first used the word “value” in r. 53.09(1)(a), was referring to the average yield of these bonds over a specified period.

36. The distinguishing feature of a real return bond is that unlike other long-term government bonds, its coupon is indexed to inflation. The coupon (and therefore, the yield) of such bonds tends to be less than those of other government bonds, even after inflation is taken into account. (See paragraph 100 below for a brief discussion of one of the possible explanations for this: the “insurance premium” paid for the inflation-indexing feature of real return bonds.)
37. As mentioned above, there is an inverse relationship between a bond’s market price and its yield. For example, right now (late April, 2020, during the coronavirus emergency, which might fairly be thought to produce some anomalous results), the most recent yield on the real return bond maturing in 2044, as of April 23, 2020, was 0.33 percent. That means that the price that being paid for that particular real return bond was about 4 ½ times its face value. ($1.5 \text{ coupon} \div 0.33 \text{ current yield} = 4.545$).
38. In other words, a \$1,000 bond with a coupon of 1.5% pays interest of \$7.50 semi-annually until maturity. For the bond referred to in r. 53.09(1)(a)(i), maturity is in 2044. The principal of the bond (\$1,000) would then be repaid to the investor.
39. But with a yield of 0.33, that means that while the \$1,000 principal will still be repaid on maturity, the “effective” repayment is only roughly one-quarter of \$1,000 or \$250.00.
40. At the time of writing, the bond market (and the stock market) are in a state of extreme agitation, not seen in at least a century.
41. Bond prices rose dramatically in the first half of March, 2020 because of greatly increased demand, producing very low and even negative yields, in which investors would receive *less* money than they originally paid for the bond. Even yields on the “gold standard”, US Treasury bonds, dropped well below 1% for the first time. During the week that this report was being updated, in April, 2020, US oil prices

dropped below zero for the first time in history. That, in turn, caused a three-point drop in the yield of US Treasury 10-year bonds. All of that implies rising prices and, therefore, increased demand for bonds.

42. The reason for such high demand for bonds (with the concomitant upward pressure on price and downward pressure on yields) is that government bonds have traditionally been seen as a very safe or “low risk” form of investment. (Although that proposition is starting to be questioned in this era of negative yield bonds.) The demand comes not so much from individuals as from financial institutions such as banks and insurance companies, which are required to have substantial amounts of liquid capital.
43. At present, r. 53.09(1)(a)(i) employs the yield (“value”, to use the word that appears in the rule itself) on real return bonds as the basis for setting the discount rate for the first 15 years after trial. Rather than the yield for the 2044⁵ real return bond on a particular day, the first-tier discount rate is derived from an average of yields, taken over a specified six-month period (the last Wednesday in each month for the period from March 1 to August 31 in the year before the year in which the trial begins). A particular series of bonds is specified (“series V121808, formerly Series B113911”).
44. So, to summarize, the first-tier discount rate is based on an average of the *yields* or *effective* rates of return on that bond (the series of the Government of Canada’s real return bonds that matures in 2044) over a particular six-month period for the year before the trial. The yield, in turn, is a reflection of the market’s treatment of the specified bond, during that period.

⁵ See paragraph 36; the real return bond maturing in that year is the one used by the rule to set the first-tier discount rate.

45. It must also be remembered that it is not necessary to do a second calculation to subtract inflation in order to arrive at the “real return”: that adjustment is already built into the coupon (and therefore, the yield) for the real return bond.
46. The last step in the calculation mandated by r. 53.09(1)(a) is to apply the $\frac{1}{2}\%$ *per annum* reduction provided for by the rule, unless to do so would produce a rate less than zero. Although formerly, there was nothing to prevent negative discount rates (the r. 53.09(1)(a) rate was, in fact, negative in 2013), the present wording of the rule establishes a “floor” of 0% per annum, below which the rate cannot fall. We recommend that that “floor” be removed (see § 2.11.4 below).
47. Why reduce the first-tier rate even more, potentially to a negative number, by applying the $\frac{1}{2}\%$ reduction? The rationale for that reduction is an historical one, outlined in paragraphs 170 and 171 below. The reduction was originally set at 1% by the Robins subcommittee⁶, to address some perceived negative features of real return bonds. That reduction was then halved in 2013 and now stands at $\frac{1}{2}$ percent.
48. A number of stakeholders’ submissions (on the defence side) have pressed for the complete elimination of the r. 53.09(1)(a) reduction. It can be argued that the reduction makes some sense if the aim is to try to remove as much risk for plaintiffs as possible. But if that is the objective, the rate itself could probably be calculated in a way that achieves that policy. Otherwise, there is no obvious reason to retain it. We recommend that it be eliminated (see § 2.11.6 below).

⁶ See § 2.7.3.

2.1.2.1 What information can be gleaned from the yield on real return bonds that is of general application?

49. It is not entirely clear what inferences can be drawn about the future of investment returns *other than* real return bonds from historical data about the yield of that particular type of bond.

50. As explained above, the bond yield is the quotient of the coupon (1.5% for the real return bond maturing in 2044) divided by the current price. So, knowing the yield for, say, March, 2019 (0.40 percent per annum) allows us to infer that in that month, the market price of this bond was 3.75 times its coupon ($1.5 \div 0.40 = 3.75$). Thus, to buy a \$1,000 real return bond at face value would then have cost \$3,750. By August, 2019, when the yield had fallen to 0.15, that would mean that the price had risen tenfold from the time of issuance, so a bond that originally cost \$1,000 would have cost \$10,000 then. The coupon would remain the same throughout: 1.5 percent.

51. The progress of yields on this series of real return bonds from March, 2019 to date is shown below:

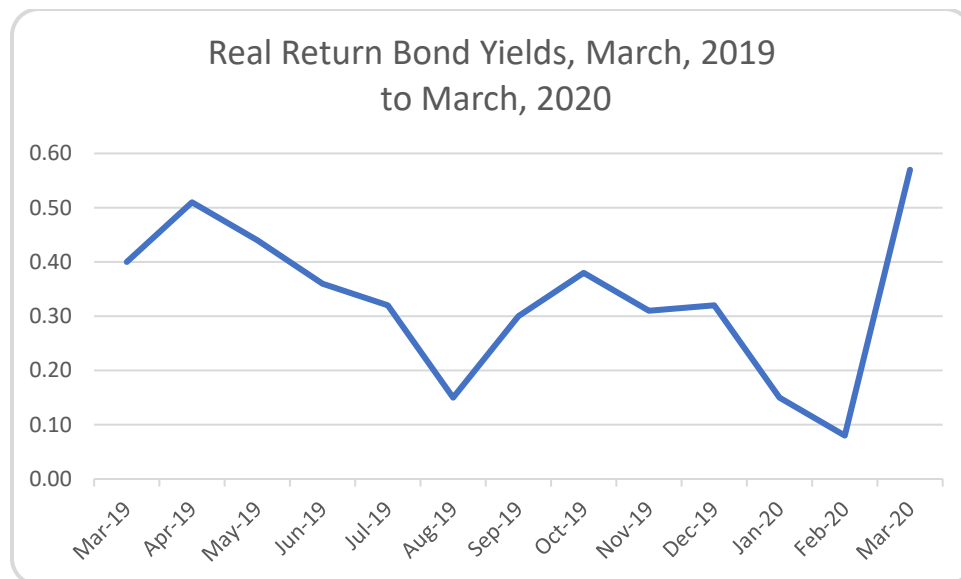


Figure 1

52. As can be seen, the yield trended generally downward for the period shown. It dropped to its lowest amount (0.08) in February, 2020. In March, 2020, it shot upwards, to 0.57, the highest value for the period.
53. We are in a period of extreme volatility. The very low yield for February, 2020 (0.08) means that the price of the bond was at its highest, implying very high demand. That yield implies a price of almost 19 times the coupon. But the very next month (March), the yield rose to its *highest* value for the previous 12 months: 0.57. Demand dropped. That yield is only a little more than two and a half times the coupon.
54. The February rise in price (and drop in yield) is probably explicable as a “flight to safety” during the first days of the coronavirus scare. But what does the next month’s very *high* yield indicate? It at least implies a big drop in *price*, which, in turn, implies low demand. Seemingly, investors no longer saw “safety” in long-term bonds.
55. The point of all of this is that the yield of bonds, including real return bonds, provides some information about how the market views the economic future. It is less clear what it tells us about the distant future.
- 2.1.3 The second tier (beginning 15 years after trial)
56. As mentioned above, the discount rate for the second tier, post-15 years from trial, is much simpler: it is currently set at 2.5 percent. That rate is not based on real return bonds or indeed, on any external source. No matter what economic circumstances might exist at the time of trial and no matter what the coupon or yield of real return bonds might then be, the second tier rate established by r. 53.09(b) will be 2.5 percent. Conceptually, that rate represents the expected “real rate of return” on the investment of plaintiffs’ awards of damages: the amount by which their returns from the investment of their damages for future losses will exceed inflation.

57. Like much of r. 53.09(1), the use of 2.5% as a discount rate has a long history, going back to r. 267a, enacted on October 1, 1980: see paragraphs 126 ff. below.
58. The 1992 Osborne discount rate subcommittee justified the continued use of the 2.5% rate on the basis of its expectations of what the returns on various long-term Government of Canada bonds were likely to be, as discussed in paragraph 136 below. Ever since, that rationale has underlain the use of 2.5% as a discount rate: that the economy will always eventually return to what has been considered the “normal” spread between returns and inflation: 2.5 percent.
59. Of course, right now, even leaving aside real return bonds, the yields of long-term Government of Canada bonds are less than 1½%. (The yield on April 23, 2020 for a long-term Government of Canada bond with a coupon of 2.75%, was 1.20 percent.)
60. The rate of inflation in February, 2020 was 2.2% such that the “real return” on such long-term bonds would be negative if the current yield were used. Therefore, at present, there is quite a discrepancy between the assumed “normal” amount by which returns have historically been expected to outpace inflation and the *actual* relationship between the two in 2020. That fact brings into question the use of 2.5% per annum as a discount rate if the rationale for that rate is meant to be what it originally was: to reflect the amount by which the return on long term Government of Canada bonds will exceed the rate of inflation.
61. We have recommended that the “second tier” rate be eliminated: see § 2.11.2 below.

2.2 Present value

2.2.1 What is “present value”?

62. Rule 53.09(1) provides a mechanism by which future losses can be discounted to “present value”. That, in turn, allows a trial judge to make a lump sum award that will compensate the plaintiff for those future losses, taking into account both the

erosion of the award by inflation and the income that investment of the award can be expected to generate.

63. In the submission made to our subcommittee by the Canadian Institute of Actuaries, an American case was quoted as to the rationale underlying a present value calculation:

Exact actuarial computation should result in a lump-sum, present-value award which if prudently invested will provide the beneficiaries with an investment return allowing them to regularly withdraw matching support money so that, by reinvesting the surplus earnings during the earlier years of the expected support period, they may maintain the anticipated future support level throughout the period and, upon the last withdrawal, have depleted both principal and interest.⁷

64. Whether a present value calculation is really an “actuarial” (let alone an “*exact* actuarial”) one is debateable. But otherwise, this passage probably at least represents a valid aspirational approach to the problem.

65. Present value is one example of the “time value” of money.

66. Discounting a stream of payments over a given period in the future involves a calculation of the amount that, paid now, will equal that stream of payments and that will be exhausted at the end of the specified future period. It is meant to take into account two things: (1) the income or “return” on the investment of a capital sum; and (2) the erosion of the value of that return and of the capital, caused by inflation.

67. The difference between the gross rate of return on the investment (“the nominal rate”) and the rate of inflation is the “real rate of return”.

68. Through its history, the subcommittees that have reviewed r. 53.09 (and r. 267a before it) have approached this calculation (at least in part) on the assumption that

⁷ *Canavin v. Southwest Airlines* (1983) 148 Cal. App. 3d 512, 521 [196 Cal. Rptr. 82], quoted at pp. 11–12 of CIA submission.

the nominal rate of return assumed to be achievable will exceed the rate of inflation, on average, by about 2.5% per annum.⁸ That assumption has been carried forward into the present version of the r. 53.09 discount rate for losses after 15 years: they are to be discounted to present value at a rate of 2.5% per annum. Given the Government of Canada's inflation-targeting policy, in effect since 1991, the assumption implicit in that provision is that nominal rates of return for the long term (post-15 years) will be about 4.5 percent (2.5% return plus inflation of 2 percent).

69. (As discussed in §§ 2.7.1 and 2.7.2 below, the rate of return originally used was that on long-term Government of Canada bonds. That was in the days before the introduction of real return bonds in 1991, although the latter have never been used to establish the discount rate for the period beginning 15 years after trial.)

2.2.2 PV function in Microsoft Excel

70. To calculate the present value of a future stream of payments, those payments must be "discounted". That is the role of the discount rate.

71. In order to discount to present value, so that a lump sum award can be made, it is necessary to know:

- a) the time period over which the future stream of payments will be made;
- b) the amounts of the periodic payments to be made in the future; and
- c) the discount rate.

72. The discount rate, in turn, is made up of the difference between the assumed rate of return on an investment today over the specified period (the "nominal rate") and the erosion of that return by inflation, over the same period.

⁸ See historical discussion in § 2.8 as well as the discussion in § 2.1.1.2.

73. Present value is readily calculated using software. Microsoft's spreadsheet program, Excel, is undoubtedly the one most frequently used.
74. Excel has a built-in "function" called "PV" which calculates present value based on inputs from the user. As an example, the following would discount an annual future loss of \$37,500 for 22 years, at a discount rate of 2.5 percent. The result (\$628,703) is the amount that, paid today, would equal the value of that future loss.

The screenshot shows the 'Function Arguments' dialog box for the PV function in Excel. The dialog is titled 'PV' and contains the following fields and values:

Argument	Value	Unit
Rate	2.5%	= 0.025
Nper	22	= 22
Pmt	-37500	= -37500
Fv		= number
Type		= number

Below the input fields, the dialog displays the calculated result: = 628702.9965. A descriptive text reads: 'Returns the present value of an investment: the total amount that a series of future payments is worth now.' A note specifies: 'Rate is the interest rate per period. For example, use 6%/4 for quarterly payments at 6% APR.' At the bottom, the 'Formula result' is shown as \$628,703.00. There are 'OK' and 'Cancel' buttons at the bottom right, and a 'Help on this function' link at the bottom left.

Figure 2

75. (If the discount rate in the above example were lowered from 2.5% to minus 0.75%, as was done in the UK in 2017⁹, the present value would become \$900,634, an increase of more than 40 percent. So, the choice of discount rate can make a big difference to the result.)

⁹ See § 3.5.

Function Arguments

PV

Rate	-0.75%	↑	= -0.0075
Nper	22	↑	= 22
Pmt	-37500	↑	= -37500
Fv		↑	= number
Type		↑	= number

= 900633.8284

Returns the present value of an investment: the total amount that a series of future payments is worth now.

Rate is the interest rate per period. For example, use 6%/4 for quarterly payments at 6% APR.

Formula result = \$900,633.83

[Help on this function](#) OK Cancel

Figure 3

76. Thus, *calculating* present value is very easy, provided that the variables are all known. In the case of awards of damages for future pecuniary loss, trial courts decide on the length of the future period and the amounts of the periodic losses to be compensated. The trier of fact also decides which the losses are to be compensated and in what amounts.
77. As discussed in § 2.3 below, estimating inflation has not been difficult for the last 25 years or so (although it might not be entirely safe to assume that inflation will remain stable or even that that it will be continue to be measured in the same way, as discussed in the following section). But for most of that time (until now, perhaps), the trickiest part of the calculation has been deciding what assumptions should be made with respect to the nominal rate of return.

2.3 Inflation

78. At the time that r. 267a (the predecessor to the present r. 53.09) was first enacted, on October 1, 1980, inflation was an important aspect of western economies.
79. “Inflation” refers to increases in the cost of goods and services. It can readily be seen that it would be important to assess the impact of inflation on an award of damages to compensate for future losses. If the cost of goods and services were expected to

increase by, say, 15% in twenty years, the purchasing power of a dollar awarded at trial would be correspondingly less if it were meant to cover losses incurred at that future point. For that reason, an award of damages at trial, covering that twenty-year period, would have to be adjusted upwards, to ensure that the plaintiff received the appropriate level of compensation for his or her losses, recognizing that the cost of the various items to be purchased will rise.

80. “Deflation”, of course, is the opposite: a decline in the cost of goods and services over time. Were that to happen, a dollar awarded at trial would have *greater* purchasing power in the future, requiring a *downward* adjustment in an award of damages to compensate for future losses.

81. In Canada, inflation is tracked by the Consumer Price Index. Detailed information is available from Statistics Canada on its website. The following general description appears on that page:

The Consumer Price Index (CPI) is an indicator of changes in consumer prices experienced by Canadians. It is obtained by comparing, over time, the cost of a fixed basket of goods and services purchased by consumers. Since the basket contains goods and services of unchanging or equivalent quantity and quality, the index reflects only pure price change.

The CPI is widely used as an indicator of the change in the general level of consumer prices or the rate of inflation. Since the purchasing power of money is affected by changes in prices, the CPI is useful to virtually all Canadians. Consumers can compare movements in the CPI to changes in their personal income to monitor and evaluate changes in their financial situation.¹⁰

82. We are not going to discuss inflation or CPI in detail in this report, for two reasons. First, in 1991, the Government of Canada (“GOC”) and the Bank of Canada adopted an inflation-targeting policy aimed at keeping the medium-term growth of CPI at about 2% per annum. That policy has been largely successful and has been renewed

¹⁰ Consumer Price Index, Description

<<https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=2301>>

several times since. Other western economies have also adopted inflation-targeting policies, with similar results. Thus, over the last 25 years, inflation in Canada has not been the volatile variable that it had sometimes been before inflation-targeting.¹¹

83. Secondly, some commentators have questioned whether the “basket of goods and services” used to determine CPI reflects current economic reality. (Recall the comment by the Bank of Canada, quoted in paragraph 81 above, that “the basket contains goods and services of *unchanging or equivalent quantity and quality*” [Emphasis added]. As discussed below, that proposition is not necessarily valid in 2020.)

84. In other words, is CPI measuring the right things and is it measuring them accurately? The Economist magazine, in a special edition on the global economy, published in October, 2019, had a section about inflation that was entitled, “The End of Inflation? Inflation is losing its meaning as an economic indicator”. A related article¹² in the same issue quoted a study by Stanford University that had “found that even excluding clothing, for which tastes are fickle, 44% of online sales in a database produced by Adobe Analytics, a computing company, were of goods that did not even exist in the previous year.”¹³

85. Likewise, some have questioned the distortion of CPI produced by the number of services that are now provided for free, such as Google and Facebook.¹⁴ The following observation was made in the same October, 2019 special edition of the Economist:

¹¹ But see paragraphs 80 to 82.

¹² “Alexa, how much is it? Technological progress is making inflation statistics an unreliable guide to the economy”.

¹³ The Economist, October 10, 2019, “The world economy’s strange new rules”.

¹⁴ Although a frequently-heard Internet trope is that “If you’re not paying for it, you’re not the customer, you’re the product.”

The explosion in the provision of free services is usually cited as a reason to doubt the accuracy of GDP. But it is as big a problem for inflation. First, free services sometimes replace ones that were previously paid for, which puts new-product bias on steroids. Second, if consumers derive a greater share of their well-being from things that come free, inflation ceases to be a good measure of the cost of living or of the purchasing power of incomes.¹⁵

86. Solving the problems of whether inflation-targeting is a policy that should continue and whether CPI is still a valid way to measure inflation are obviously far beyond what our subcommittee can hope to accomplish. For the time being, it can be said that the GOC's 1991 policy has resulted in the rate of inflation having stabilized at or close to 2% since then (until very recently, perhaps). The February, 2020 report of the University of Toronto's Policy and Economic Analysis Program ("PEAP"), entitled "Long term Outlook for the Canadian Economy: National Projection Through 2050", predicted inflation holding steady at 2.0% for the entire future period covered by the report, starting in 2021 and ending in 2050.
87. When this report was completed for the first time, in March, 2020 (in anticipation of a Rules Committee meeting in April), this section said that "establishing a discount rate in deflationary times would present its own set of problems and that subject has not been addressed in this report."
88. That remains true. However, once again, things have changed over the last month. In an April 21, 2020 article, a New York Times columnist attempted to analyze the implications of the collapse in oil prices that had occurred that day. The column noted the unprecedented arrest in demand throughout the economy and concluded, "[a]ll of that points to a deflationary collapse — a glut of supply of goods and services, and consequently falling prices — that surpasses anything seen in most people's lifetimes."¹⁶

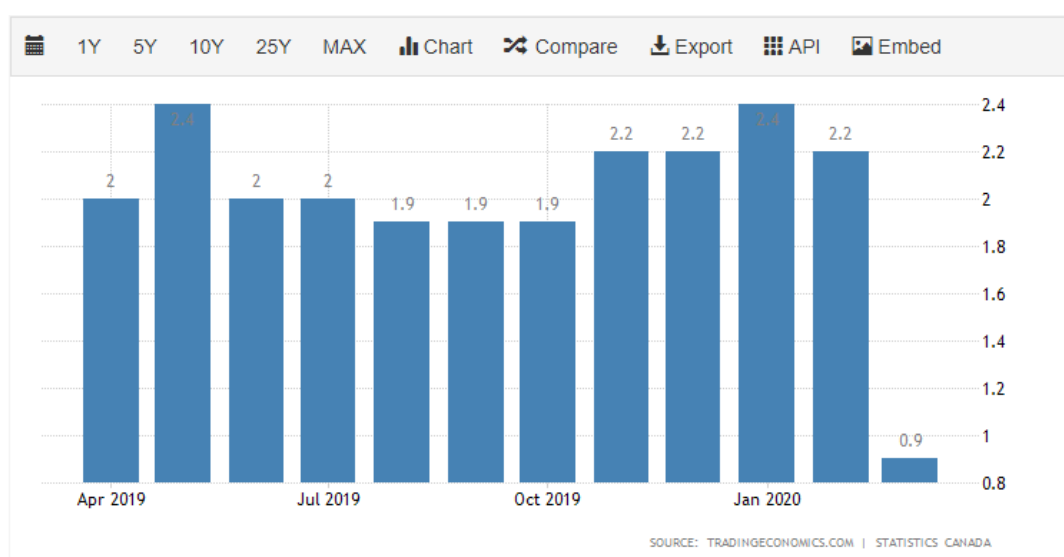
¹⁵ *Supra*, footnote 13.

¹⁶ Irwin, Neil, "What the Negative Price of Oil Is Telling Us", New York Times, April 21, 2020.

89. The column went on to infer the future rate of inflation from the yields on US inflation-indexed bonds:

The price of inflation-protected government bonds suggests inflation will be only 0.58 percent a year over the coming five years, and the Consumer Price Index fell 0.4 percent in March.¹⁷

90. Likewise, in Canada, the rate of inflation fell to 0.9 percent in March, 2020. That is the sharpest decline since inflation began to be tracked in 1992.¹⁸ The magnitude of that drop can be seen in the chart below:



91. A column in the April 26, 2020 edition of the Financial Times addressed the issue.¹⁹

It noted the sharp fall in prices in many sectors, including restaurants, hotels, airlines, housing and energy. The article went on to say:

Headline US inflation will, therefore, fall markedly below the Federal Reserve's 2 per cent target, while the eurozone and Japan will record negative inflation in a matter of months.

¹⁷ *Ibid.*

¹⁸ CBC News, "Canada's inflation rate fell at the fastest monthly pace on record in March, StatsCan says", April 22, 2020: <https://www.cbc.ca/news/business/inflation-march-covid-1.5540801>

¹⁹ Davies, Gavyn, "The deflation threat from the virus will be long lasting", Financial Times, April 26, 2020.

92. That article postulated a rate of inflation of 0.3% for the “coming months”.
93. Likewise, the April 18, 2020 edition of *The Economist* included an interesting discussion of inflation. It noted that although inflation “seemed a fixture of the economic landscape in the 1970s, changes to policy and the structure of the global economy since have ushered in four decades of ever meeker growth in prices,”²⁰ various factors could result in a sharp inflationary spike. Those include the return to production of a variety of goods and services not being produced now, “massive stimulus programmes”, possible eventual increases in taxes on the wealthy, leaving more disposable income in the hands of the less well-off and the possibility that governments will no longer give the same priority to keeping inflation at a steady—and low—rate.
94. By the time the Rules Committee is considering the discount rate issue at its meeting in May, its members will probably have gotten used to seeing the word, “deflation” to describe our current circumstances.²¹
95. Thus, to predict the long-term future, we would need to recognize that very low inflation or even deflation might occur for several years, perhaps to be followed by high rates of inflation not seen since the 1970s.
96. Neither the subcommittee nor the experts retained to advise it tried to come to grips with what a discount rate would look like if inflation were to drop far below the government’s 2% target, become deflationary or rise far higher than the traditional

²⁰ “Covid-19 could lead to the return of inflation—eventually”, *The Economist*, April 18, 2020. Both *The Economist* and the *Financial Times* articles referred to a paper entitled “Macroeconomic Implications of COVID-19: Can Negative Supply Shocks Cause Demand Shortages?” by Veronica Guerrieri, Guido Lorenzoni, Ludwig Straub and Iván Werning (April 2, 2020): https://cpb-us-w2.wpmucdn.com/voices.uchicago.edu/dist/6/2265/files/2020/04/covid19_supply_demand1.pdf. That article postulated that a shock to supply, such as that experienced during a pandemic, can lead to reduced demand. (Of course, so can consumers having no money to spend.)

²¹ See already, Bellfus, Lisa, “Report Shows Signs of Deflation”, *Barron’s*, April 10, 2020; Nohara, Yoshiaki, “Why Deflation Is Poison for Virus-Plagued Economies”, *Bloomberg*, April 19, 2020.

2% rate. Since we are recommending a transition to a different system, we have not gone back to our experts or stakeholders to ask them for their comments about a discount rate in a low-inflationary, deflationary or high inflationary world. But it might be the world in which we will be living.

97. Whether “all bets are off” because of the deflationary effect of plummeting demand for all sorts of goods, it is too soon to say. But obviously, that is what is happening right now and if this situation continues for years, the economic foundation of Ontario’s discount rate will need to be re-examined. The lower the rate of inflation is assumed to be, the higher the discount rate should be. And the reverse, of course, is also true.

2.4 Real return bonds

98. Real return bonds have already been discussed, to some extent, in § 2.1.2 above.

They are used to establish the discount rate under r. 53.09(1)(a), for the first 15 years following the trial. Such bonds, issued by the Government of Canada, are indexed to inflation, so the specified “real” rate of return is protected against inflationary devaluation, whatever the rate of inflation might be until maturity of the bond.

Because of that feature, real return bonds are sometimes described as a “very low risk” or even “no risk” form of investment.²² (Dr. Douglas Hyatt, one of the advisors to our subcommittee, does not subscribe to that view. However, his disagreement has more to do with the variability in the *yield* of RRBs that are bought in the market sometime after issuance. He does not suggest that there is any real risk of default by the GOC on payment of the coupon, the specified rate of return.)

²² See, for example, MacQueen, Alexandra, “No defined benefit pension? How to save for retirement”, The Globe and Mail, December 14, 2017: <https://www.theglobeandmail.com/globe-investor/how-should-those-without-db-pensions-save-for-retirement/article37236202/>

99. As will be seen in § 2.8 below, in the UK, the discount rate had previously been set on the basis of its own sovereign, inflation-indexed bonds, known as “index-linked gilts” or “ILGs”. Those were explicitly recognized by the UK government as a “very low risk” form of investment in establishing its own approach to the discount rate. The UK has since chosen a different methodology, in which it bases its discount rate on the rate of return produced by a particular assumed portfolio of “low risk” (but not “*very* low risk”) investments, over a defined investment period.
100. A more detailed explanation of real return bonds is available at a website entitled “Real Return Bonds”.²³ (Although the Bank of Canada has information on its own website about real return bonds, the above web page was the one to which the Bank itself directed us.) That site mentions that there is an “insurance” component built into real return bonds on account of the inflation-indexing benefit that the product includes. In effect, the rate of return on such bonds is not just net of inflation, but also net of what is, in effect, an insurance premium paid for the inflation protection:

RRB [“real return bond”] yield = regular bond yield - anticipated inflation - insurance against inflation changes.

The insurance component thus *decreases* RRB yields compared to regular bonds. This insurance component, also known as the inflation risk premium, is hard to precisely estimate, but may be in the vicinity of half a percent.²⁴

101. That is a consideration seldom referred to in discussions of real return bonds and their use in establishing the discount rate. If real return bonds are to be used as a measurement of future real returns, it might be arguable that this “insurance premium” should be backed out. But since no one has raised this issue with us²⁵, we do not intend to address it further.

²³ https://www.finiki.org/wiki/Real_Return_Bonds

²⁴ *Ibid.*

²⁵ Although in its submissions, IBC’s consultant expressed the view that real return bonds are misleading about the rate of inflation: see paragraphs 283, 296 ff.

102. It was also in 1991 that the Government of Canada targeted the rate of inflation,²⁶ a policy that has resulted in inflation in this country stabilizing (until recently, at least) at about 2% per annum since. Inflation has already been discussed in § 2.3 above.

2.4.1 C.D. Howe Institute report

103. William B.P. Robson of the C.D. Howe Institute prepared a report for the federal government, entitled “Ottawa’s Pension Abyss: The Rapid Hidden Growth of Federal-Employee Retirement Liabilities”. It was released in December, 2012. It contains a practical application of real return bonds for purposes of setting a discount rate.

104. The report is relevant to the r. 53.09(1)(a) issue because in it, Robson said that the Government of Canada’s future pension liabilities are badly undervalued. He attributed this to the government’s use of an inappropriately high discount rate in order to arrive at present values for those liabilities. He said that the rate that *should* be used is that of real return bond yields:

Because their pension promises are guaranteed by taxpayers and indexed to inflation, the appropriate discount rate is the yield on federal-government real-return bonds, which is much lower than the assumed rate in official figures.

105. Later in the report, Mr. Robson pointed out, in a similar vein, that “[o]n March 31, 2012, the RRB yield was not the 3.1 percent rate used in the Public Accounts, but a mere 0.5 percent.”²⁷

106. And finally, he noted that “government pension plans should have to report using market-based discount rates, as private-sector plans must now do.”²⁸

²⁶ See Bank of Canada Review, March, 1991: <https://www.bankofcanada.ca/wp-content/uploads/2011/12/bocreview-mar1991.pdf>

²⁷ C.D. Howe Commentary 370, p. 4.

²⁸ *Ibid.*, p. 9.

107. We feel that a similar criticism can be levelled at the use of 2.5% as a discount rate. It probably misrepresents the returns that plaintiffs will achieve by investing their awards.

2.5 Consequences of setting discount rate

108. It is important to keep in mind that what the Rules Committee decides to do with the discount rate issue might have significant effects, not just for the personal injury community but for the Ontario and even national economy. When the UK government lowered its discount rate (the “Ogden rate”) in March, 2017, overnight, from 2.5% to minus 0.75%, the effects were significant. Insurers were instantly under-reserved and were required to restate their earnings. Insurance premiums rose.

109. Somewhat the same thing happened in the UK during the summer of 2019, when the Ogden rate was raised. It had been expected to be increased from minus 0.75% to a rate between 0% and 1% and instead, it moved up to minus 0.25 percent. Again, share prices of insurers fell and premiums rose. (Even though the discount rate had been raised, which would reduce insurers’ damages payments, the increase was less than the companies had been expecting.)

2.6 Will the future be like the past?

110. Our predecessors were told (see § 2.1.2.1 above) that over the longer term, nominal interest rates were likely to exceed inflation by about 2.5 percent. Today, we are still living with that view of the world, for post-15 year losses. We do not believe that experience has borne out the predictions that were provided to past subcommittees.²⁹

²⁹ In an interesting article in the New Yorker on April 21, 2020, Nassim Nicholas Taleb—he of “Black Swan” fame—was interviewed. He heaped scorn on those who believe that the future will resemble the past: “if Taleb is chronically irritated, it is by those economists, officials, journalists, and executives—the ‘naïve empiricists’—who think that our tomorrows are likely to be pretty much like

111. Even before coronavirus was on the horizon, various articles and books have suggested that economists have been quite mistaken in their macroeconomic assessments since World War II. For instance:
- a) “The Boom Was A Blip: Getting Used to Slow Growth” (Ruchir Sharma, May/June, 2017 Foreign Affairs). In his article, Mr. Sharma said that economic growth that was seen in the decades after the Second World War occurred because of conditions that will not be reproduced: “Between the end of World War II and the financial crisis of 2008, the global economy was supercharged by explosive population growth, a debt boom that fueled investment and boosted productivity, and an astonishing increase in cross-border flows of goods, money, and people. Today, all three trends have begun to sharply decelerate: families are having fewer children than they did in the early postwar years, banks are not expanding their lending as they did before the global financial crisis, and countries are engaging in less cross-border trade.”
 - b) *The Rise and Fall of American Growth: The U.S. Standard of Living Since the Civil War* (Robert J. Gordon). In this widely-discussed 2016 book, Prof. Gordon theorized that the explosive economic growth from the 19th century to the mid-20th century was a one-time phenomenon that will never happen again.
 - c) *The Economists’ Hour* (Binyamin Appelbaum). Mr. Appelbaum is an editorial writer at the New York Times who has covered economic issues for about ten years. His 2019 book’s thesis can be gleaned from the title of a review in the

our yesterdays. He explained in a conversation that these are the people who, consulting bell curves, focus on their bulging centers, and disregard potentially fatal ‘fat tails’—events that seem ‘statistically remote’ but ‘contribute most to outcomes, by precipitating chain reactions, say.” In the same article, Taleb rejected the notion that Covid-19 is a “black swan”, claiming that he, Bill Gates and others predicted it. (Avishai, Bernard, “The Pandemic Isn’t a Black Swan but a Portent of a More Fragile Global System”, The New Yorker, April 21, 2020.)

Financial Times: “From financial crisis to inequality — how economists got it wrong.” Economists were also taken to task severely by one of their own in *How Economics Professors Can Stop Failing Us: The Discipline at a Crossroads*.³⁰

d) “The World Economy’s Strange New Rules: The Economist Special Report on the World Economy” (October 12, 2019) That edition of the Economist magazine, referred to above at paragraph 84, focused mainly on inflation losing its meaning as a concept and the factors that have contributed to that. For example, the “Phillips curve” was thought to show an inverse relationship between the rate of unemployment and the rate of inflation: when one went up, the other went down. The article said that at present, both unemployment and inflation are low and economists (and central banks) are not sure why.

e) Two recent books have postulated that the “population bomb” that was discussed in Paul Ehrlich’s 1971 book³¹ is now reversing.³² If true, this is likely to affect the entire system of capitalism, which is based on growth: more consumers, more investment, more productivity. Perhaps that is now changing.

112. On top of those issues has come Covid-19. More than any other single economic factor in our lifetimes, it has introduced huge uncertainty.

113. An April 19, 2020 article in the Financial Times, “Coronavirus creates biggest economic uncertainty in decades”,³³ underscored the hazy picture for the economic future. The following graph, which appeared in the article, shows the spread between the 25th and the 75th percentiles of forecasts of GDP growth. Until recently,

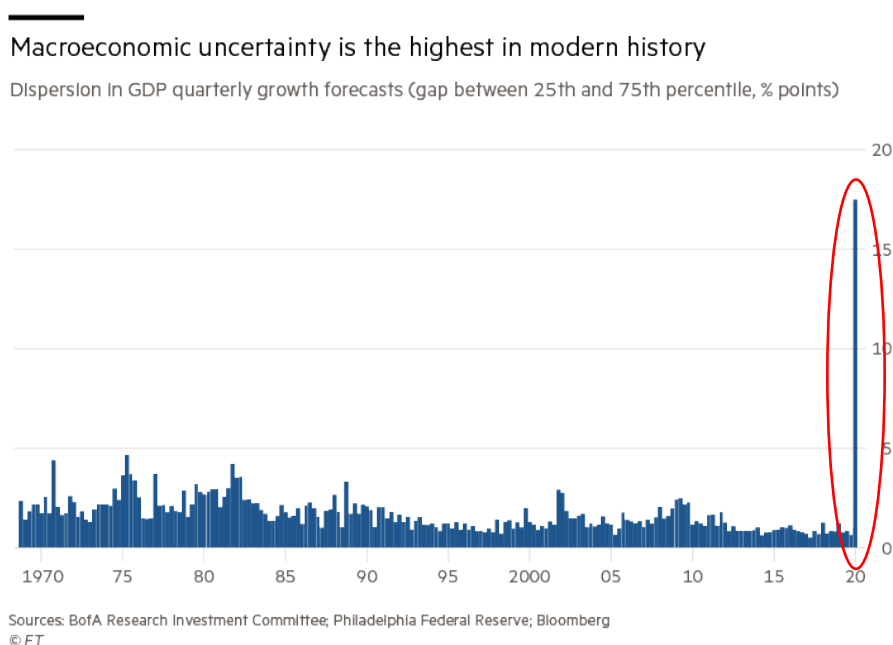
³⁰ Payson, Steven, (2018), Lexington Books.

³¹ Ehrlich, Paul, *The Population Bomb* (1971), MacMillan.

³² The two books, *The Human Tide: How Population Shaped the Modern World* by Paul Morland (2019), PublicAffairs and *Empty Planet: The Shock of Global Population Decline* by Darrell Bricker and John Ibbitson (2019), Signal, are discussed in Karabell, Zachary, “The Population Bust Demographic Decline and the End of Capitalism as We Know It”, *Foreign Affairs*, September/October, 2019.

³³ Wigglesworth, Robin.

the dispersion was very narrow. Now, it is vastly wider, indicating a much bigger range from the top to the bottom of analysts' predictions of the future:



114. As of late April, 2020, the yield on 10-year GOC bonds was 0.6%, down by 117 basis points (“bp”)³⁴ from a year ago. In the UK, the yield for such bonds is 0.4%, a reduction of 81 bp from the previous year. And in the United States, the 10-year bond yield was 0.6%, down by 196 bp from last year.³⁵ The yield on such bonds in various European countries (Austria, France, Germany, Denmark, Switzerland and Sweden, for instance) is negative at present.
115. The “real” rates of return of even those 10-year bonds that are still in positive territory have sometimes become negative lately: see paragraph 40 above.
116. In January, 2020, the Bank of England published a paper entitled, “Eight centuries of global real interest rates, R-G, and the ‘suprasecular’ decline, 1311–2018”.³⁶ The author undertook the ambitious task of evaluating global “real” rates of

³⁴ A “basis point” is one one-hundredth of a percent.

³⁵ Taken from *The Economist*, April 25, 2020.

³⁶ By Paul Schmelzing.

interest (i.e., net of inflation) from medieval times to the present. He disagreed with the conventional wisdom, that while “real rates” might display eccentricities in the short term, they stabilize back to “normal” over the long term. Rather, he found that “currently depressed sovereign real rates are in fact converging ‘back to historical trend’ — a trend that makes narratives about a ‘secular stagnation’ environment entirely misleading, and suggests that — irrespective of particular monetary and fiscal responses — *real rates could soon enter permanently negative territory.*”³⁷

[Emphasis added]

117. The following rather startling table illustrates Mr. Schmelzing’s findings about real interest rates over history, beginning in the year 1310 (!) and ending in 2018:

³⁷ “Secular stagnation” is a term popularized by Larry Summers, former U.S. Treasury Secretary. In a 2016 article in *Foreign Affairs*, entitled “The Age of Secular Stagnation: What It Is and What to Do About It”, he described the concept this way: “The economies of the industrial world...suffer from an imbalance resulting from an increasing propensity to save and a decreasing propensity to invest. The result is that excessive saving acts as a drag on demand, reducing growth and inflation, and the imbalance between savings and investment pulls down real interest rates.” However, Mr. Summers thought that secular stagnation was a problem that could be overcome by the appropriate “expansionary fiscal policy”.

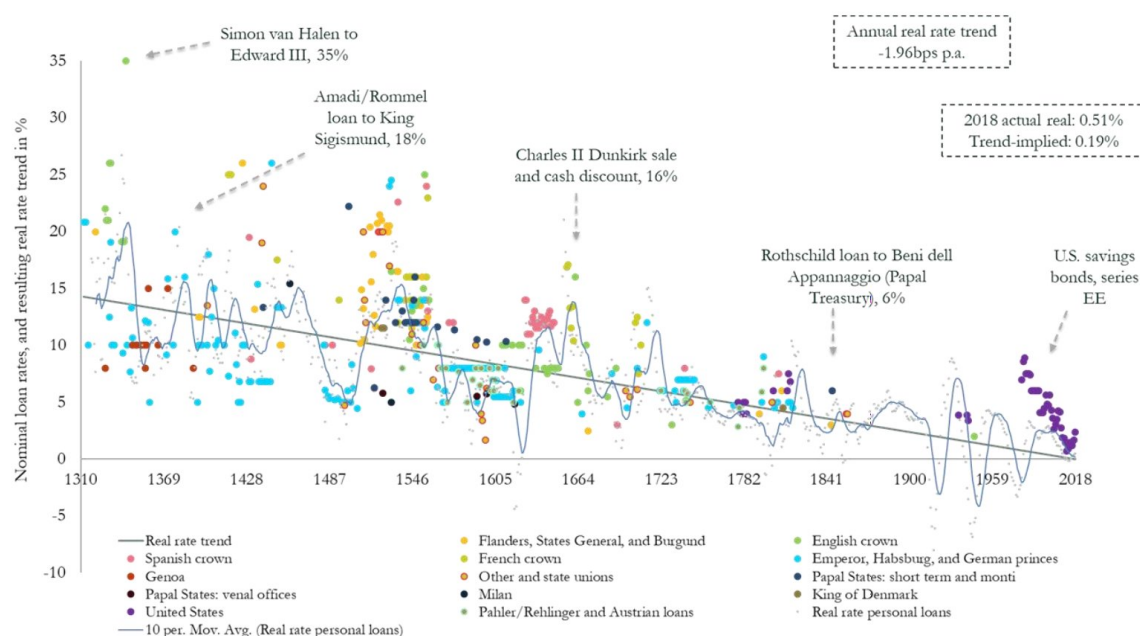


Figure 4

118. The Schmelzing paper has already generated a lot of comment in the media. The Irish Times, for instance, referred to it as “a statistical tour-de-force” and added that “[i]f Schmelzing is right, Larry Summers, promoter of the ‘secular stagnation’ thesis, is also wrong. Anyone expecting bond yields to ‘normalise’ is also wrong because their definition of normal is wrong.”³⁸

119. Likewise, in January, 2020, The Economist ran a story about Schmelzing’s work:

Mr Schmelzing’s conclusions pose an even starker challenge to central bankers. If the historical trend continues, by the late 2020s global short-term real rates will have reached permanently negative territory. By the late 21st century, long-term rates will have joined them. Even unconventional monetary policies, which rely on driving down long-term rates, would then lose traction. Any hopes for nominal rates of 2% or more, in the long term, may prove to be a pipe dream.³⁹

³⁸ Johns, Chris, “Relax Paschal, stop trying to run a budget surplus” (Irish Times, January 12, 2020).

³⁹ “Capital in the 14th century: New research suggests that secular stagnation is centuries old”, The Economist, January 9, 2020.

120. Once again, neither our subcommittee nor the Civil Rules Committee as a whole can determine whether long-term real interest rates will ever return to anything like 2.5% or whether “negative [real] interest rates are the ‘new normal’ with 30% of the world’s government bonds trading at sub-zero yields”, as some have suggested.⁴⁰ That is the point: no one can possibly know. And compensating Ontario plaintiffs on the basis of a 2.5% discount rate—or really, *any* forecast of the future—risks an incorrect valuation of the damages meant to compensate for future losses.

2.7 Previous r. 53 subcommittees

121. It is instructive to look at the work done by previous r. 53.09 and 53.10 subcommittees.

122. We have at least some of the papers (including the final reports) of the subcommittees that were chaired by Justice Coulter Osborne, whose report was dated May 15, 1992, and Justice Sydney Robins, whose report was issued in February, 1998.

123. We also have a little information about what we believe was the first r. 53 subcommittee: the one chaired by Associate Chief Justice Morden in 1980. (Although at that time, it would have been the r. 267a subcommittee.) However, that information comes from the later reports of Justices Osborne and Robins. We do not have Associate Chief Justice Morden’s own report.

2.7.1 Morden subcommittee (1980)

124. We do not have any documents from this period, but the work of Associate Chief Justice Morden is mentioned in the reports of Justices Osborne (1992) and Robins (1998), discussed below. The Morden report was apparently entitled something like,

⁴⁰ White, James and Haghani, Victor, “Negative Interest Rates and the Perpetuity Paradox”, (November 19, 2019). Available at SSRN: <https://ssrn.com/abstract=3489992> or <http://dx.doi.org/10.2139/ssrn.3489992>.

“Report of the Special Committee on Fixing Capitalization Rates in Damages Actions”.⁴¹

125. The following summary of the work of the Morden Committee is taken from Justice Osborne’s report in 1992.

126. The former r. 267a of the Rules of Practice came into force on October 1, 1980. It provided for a legislated discount rate of 2.5% per year. That approach was the result of the recommendations of what Justice Osborne referred to as “the 1980 special committee”, made up of Jack Carr, an economics professor, and Murray Segal and Ronald M. Walker, both of whom were actuaries.

127. The following is Justice Osborne’s summary of what led to the enactment of r. 267a:

The 1980 special committee compared the rate of interest on long-term riskless investments, as measured by the average yield to maturity on long-term Government of Canada bonds, with the annual percentage increases in prices and wages and salaries over the 50-year period from 1930 to 1979.

The 1980 special committee concluded that the real rate of interest in Canada (i.e. the excess of the rate of interest on long-term Government of Canada bonds over the long-term rate of price increases) would be in the range of 2% to 3% per year for the foreseeable future. The committee’s “best single point estimate” was 2½% per year.

The 1980 special committee specifically recommended that “Provision should be made for reconsidering and possibly changing any rule that is struck at regular intervals in the future—such as every 5 years or so—in the light of emerging experience and evolution in economic and actuarial forecasting techniques and methods.”⁴²

128. Justice Osborne noted that “[w]ith minor changes in language, Rule 267a was carried forward as Rule 53.09 in the 1985 Ontario Rules of Civil Procedure.” The original wording of r. 53.09 was:

⁴¹ The Morden report was referred to in the Robins and Osborne reports using different but fairly similar titles.

⁴² Pages 3–4.

The discount rate to be used in determining the amount of an award in respect of future pecuniary damages to the extent that it reflects the difference between estimated investment and price inflation rates is 2½% per year.

2.7.2 Osborne subcommittee (1992)

129. The subcommittee used to be quite a bit larger than it is now. The 1992 version was made up of the following nine individuals, in addition to Justice Osborne, who acted as Chair:

Mr. Justice Wilson D. Griffiths

Mr. Justice Joseph W. O'Brien

Madam Justice Jean L MacFarland

Earl A. Cherniak, Q.C.

Kenneth E. Howie, Q.C.

R. Bruce Lawson, Q.C.

John I. Laskin

Craig Perkins

W.S. Wigle, Q.C.

130. The subcommittee was appointed by then-Associate Chief Justice Morden (who, as noted above, chaired the 1980 subcommittee and also served as a member of the 2013 subcommittee).

131. The 1992 subcommittee was not only twice the size of the 2019 version, it also had much more expert assistance:

Jack L. Carr (Professor in the Department of Economics, University of Toronto)

Robert Collins (An actuary with Actrex Partners)

James Pesando (Professor at the Institute for Policy Analysis, University of Toronto)

Douglas E. Purvis (Professor in the Department of Economics, Queen's University)

Murray Segal (An actuary with Eckler Partners)

132. This “advisory committee” delivered a report to the members of the 1992 subcommittee. It was dated December 19, 1990. Mr. Carr delivered his own “minority” report.

133. Interestingly, the advisory committee recommended the adoption of a two-tier discount rate such as we have now (see ¶ 2.1 above) but the subcommittee unanimously rejected that recommendation. In its view, “such an approach is not practical because of its complexity”. (Prof. Carr had opposed the two-tier system.)
134. Justice Osborne noted that “no one member of the advisory committee thought it [a two-tier system] was a good idea,” which seems rather surprising, given that the majority of the advisory committee apparently *did* recommend it.
135. Justice Osborne noted that the majority report of the advisory committee was the product of some significant internal disagreements. He said that “[i]ndeed, the report candidly acknowledged that ‘the conclusions mentioned in this report do not necessarily represent the individual views of each one of us but rather, in those areas where we did differ, the best compromises that we could arrive at in such a manner that none of us would be so uncomfortable as to prevent signing the report.’”⁴³
136. Justice Osborne summarized the conclusions in the majority report. In so doing, he mentioned that actual economic experience in the 1980s had not accorded with the projected discount rate. Real interest rates had exceeded the estimate of 2½% per year—by a considerable margin—and at the time, it appeared that that situation would continue. But Justice Osborne said that in the longer term, rates would return to “normal”:

In dealing with the discount rate, the advisory committee report recognized that in hindsight the 1980 projected rate⁴⁴ of 2½% per year has been too low for the 1980’s in which the rate averaged out at 5.20% per year. The report concluded that on balance the best projection that can be made now is that the real rate of interest in Canada will likely continue to exceed its long-term historical average (2.42% per year during the 60-year period from 1930 to 1989) for a limited number of years in the future, but that in the longer term there are insufficient grounds to indicate a substantial change. The report then recommended that Rule 53.09 be amended to provide a “two-tier excess of

⁴³ Report of Osborne subcommittee (1992) (“Osborne report”), p. 8.

⁴⁴ This seems to be a reference to the real rate of return, which was the basis of the discount rate.

investment over price inflation rates at the levels of 4½% per year up to and including December 31, 1999 and 3% per year thereafter”.⁴⁵

137. Prof. Carr was said to have “recommended a discount rate in the range of 2½% to 3%—giving equal weight to the historical 60-year average, a 2.5% rate was warranted; concentrating on the last 20 to 30 years argued for a 3% rate. He had a slight preference for the 3% rate.”⁴⁶
138. Because of the disagreement within the advisory committee, the r. 53 subcommittee sought input from each of the various individual members. One group argued for a discount rate as high as 5% but was willing to settle for 3 percent. Another preferred a rate of 2.5%, on the basis that “while the discount rate may well fluctuate considerably from year to year and even from decade to decade, ‘it will most likely still average out in the long-term future at its long-term past average of around 2½% per year.’”⁴⁷ The latter reasoning was accepted by the 1992 subcommittee.
139. As noted above, the 1992 subcommittee agreed with one group of the advisory committee, that the discount rate should be set at 2.5 percent. In doing so, it was opting for the more conservative of the two opinions expressed by members of the advisory committee: that is to say, the one that projected a lower rate of return on the investment of damages awards. The subcommittee’s own analysis of the discount rate issue was extremely brief: only two paragraphs.
140. Justice Osborne concluded his report by voicing the subcommittee’s disapproval of “the practice of some trial judges of departing from the legislated discount rate in

⁴⁵ Osborne report, p. 8.

⁴⁶ *Ibid.*, pp. 8–9.

⁴⁷ *Ibid.*, p. 9.

the exercise of their discretion. This only serves to undermine the purpose of a fixed rate.”⁴⁸

141. The latter undoubtedly still represents the prevailing view, at least among the judiciary: see § 2.11.1 below. It is certainly the view of our subcommittee.
142. It does not appear that the issue of whether the discount rate should be based on the investments that would actually be made by plaintiffs or should be derived from a very low-risk external rate, was even discussed. (At least not in the context of the discount rate: it *was* discussed in relation to the gross-up factor (which the 1992 subcommittee was also considering).) Interestingly, Justice Osborne’s report said, of the latter issue, “[a]ll members of the Sub-Committee were firmly of the view that plaintiffs should not be exposed to the risks of equity investments even to the extent of one-third of an award for future care costs.”⁴⁹ Applying that reasoning to the discount rate would suggest that the rate is not meant to reflect *actual* anticipated returns.
143. Thus, it would appear that the 1992 subcommittee would have been philosophically inclined to afford to plaintiffs as much protection against risk as possible. This is a key issue that the 2020 Rules Committee will have to confront in considering what to do about the discount rate.
144. The majority of the advisors to the Osborne subcommittee noted that the discount rate had been set at 2.5% on the basis of the 1980 subcommittee’s analysis, which had looked at “the excess of the rate of interest as measured by the average yield to maturity on long-term Government of Canada bonds over the annual percentage increases in the Consumer Price Index in this country for each of the 50

⁴⁸ *Ibid.*, pp. 14–15.

⁴⁹ *Ibid.*, p. 13.

years from 1930 to 1979 inclusive...and annual averages of those excesses over various groupings of 5, 10, 25 and 50 year periods.”⁵⁰ So, the rate of 2.5% was based on an historical analysis. (The government bonds used for the purpose were not real return bonds, as that product was only introduced in 1991. It deals with both the rate of return and the rate of inflation. The approach taken in 1980 would have involved looking at the “average yield to maturity” of long-term GOC bonds⁵¹ and, as a second calculation, reducing those rates by an assumed factor for inflation to arrive at a “real return”.)

145. It was noted that the predictions that led to the discount rate being set at 2.5% in 1980 had turned out to be off the mark, by a lot. The rate should have been higher because actual returns were higher:

With the advantage of perfect hindsight at this point in time, it is obvious that unforeseen emerging events have proven the 1980 projection of a net discount rate of 2½% per year to have been too low by a significant margin for the decade of the 1980's in which it averaged out at 5.20% per year or slightly more than 4% per year more than the 1970's average of 1.11 % per year after a drop in that previous decade of about 2% per year from the 1960's average of 3.13% per year. A shift of such magnitude and more over a 10 year period has, however, also happened in the past.⁵²

146. The authors of the majority advisory report to the Osborne subcommittee went on to make an observation that is as relevant now as it was then:

By definition it is impossible to make advance predictions of unexpected future changes in the relationship between such key economic factors as interest and inflation rates.⁵³

147. Recognizing the impossibility of predicting the future, the majority said that assumptions would have to be made (and obviously, that remains true). That group believed that the real rate of interest would likely continue to exceed its long-term

⁵⁰ Page 3 of majority advisory committee report.

⁵¹ Over the period 1930 to 1979: p. 3 of majority advisory committee report.

⁵² *Ibid.*

⁵³ *Ibid.*, p. 4.

historical average “for a limited number of years in the future”. But its members did not think that there was evidence warranting “a substantial change in the more long-term future expectations.”⁵⁴

148. It was for that reason (an anticipated short-term aberration in the spread between returns and inflation, followed by a longer-term reversion to more historically “normal” figures) that a two-tier approach was recommended. The majority recommended a discount rate of 4½% for the initial period (only about a year), followed by a rate of 3 percent.

149. The majority noted that the Canada Pension Plan had employed a two-tier approach, in which it had been “assumed that the real rate of interest would grade from 6.1% per year in the first year following the effective date of that valuation down to 2½% per year in the tenth and subsequent years.”⁵⁵

150. One other interesting historical point: it appears to have been in the majority’s advisory report that the phrase, “excess of investment over price inflation rates” was first used. That phrase found its way into r. 53.09. We have proposed that it be changed slightly (see § 2.12 below).

151. The minority report, written by Jack Carr (who had been one of the architects of the establishment of the 1980 rate) rejected a proposed increase in the discount rate to 4½% in the short-term, followed by a reduction to 3 percent. As the majority had done, Dr. Carr emphasized the uncertainty inherent in predicting the future:

The fact of the matter is that there is no quantifiable measure today of the real interest rates on investments with maturities of 10, 20 or 30 years. In addition, even if one thought the real interest rate was ‘high’ now, there is no objective evidence (presented in the majority report) to suggest it will stay high for the next 10 years and then decrease. To justify a rule to be used for the next 4 or 5 years one needs clear-cut

⁵⁴ Osborne report, p. 8.

⁵⁵ *Ibid.*, p. 5.

evidence to support this rule. If all one has is the considered opinion of experts, unsupported by evidence, then I feel there is no basis for the application of a rule.⁵⁶

152. Dr. Carr reviewed the historical data and noted their “substantial volatility”. He said though, that “[l]ooking at 10 year averages it can be seen that each succeeding decade always reverses the trend of the preceding decade.” [Emphasis in original] For that reason, he doubted the validity of basing the discount rate on actual rates of return. He said that “[f]or a discount rule to be established real interest rates should exhibit stability.” [Emphasis in original]⁵⁷

153. Dr. Carr felt that looking at the last ten years of data would produce unreliable and aberrant results. He favoured using a single rate that was based on historical data over a much longer period (he recommended 20 to 30 years although he said that 60 years could be used).⁵⁸ On that basis, he recommended that the rate be set somewhere in the range of 2.5% to 3 percent.

2.7.2.1 Comment

154. As can be seen from the above, both the majority and the minority of the advisory committee to the 1992 rule 53.09 subcommittee thought that the future, while unpredictable, would eventually resemble the past. The two camps differed on the weight to be given to the experience of the late 1970s and the 1980s, which both seemed to view as aberrations.⁵⁹

155. It is also noteworthy that when the 1992 subcommittee and their advisors looked back over the previous decade, they concluded that the discount rate of 2.5% that had been established in 1980 had been much too low. Actual real rates of return

⁵⁶ Page 1 of minority report.

⁵⁷ *Ibid.*, pp. 2–3.

⁵⁸ Dr. Carr might have balked at looking at data as far back as medieval times, as was done in the Schmelzing study, referred to at paragraph 118.

⁵⁹ That period, of course, pre-dated the Government of Canada’s inflation-targeting policy which began in 1991. This is discussed in § 3.2.

were considerably higher over that period. The necessary conclusion is that during the 1980s, defendants routinely paid more in damages for future losses than they should have.

2.7.3 Robins subcommittee (1998)

156. The 1998 subcommittee was also appointed by Associate Chief Justice Morden.

That group was chaired by Justice Sydney L. Robins. The members were:

Colin L. Campbell, Q.C. (later, Justice Campbell)

Douglas W. Goudie, Q.C.

Barry Percival, Q.C.

Peter Kryworuk

157. The Robins subcommittee sought input from stakeholders, which the Osborne subcommittee appears not to have done. The submissions were attached as appendices to Justice Robin's report but unfortunately, they were not included with the version of the report that we have been able to retrieve.

158. The 1998 subcommittee consulted two experts: Dr. Thomas Wilson, described as "a Professor with the Institute of Policy Analysis, University of Toronto" and Ian Durrell, "an actuarial/pension consultant with Dion, Durrell & Associates Inc." They too prepared a memorandum that was attached as an appendix to Justice Robins' report, but we do not have it either.

159. That subcommittee seems to have been the first to review the use of 5% per annum as the rate to be used for prejudgment interest on non-pecuniary general damages (rule 56.10). The latter rule was enacted in 1990, but it had not been mentioned in Justice Osborne's 1992 report. (The prejudgment interest issue is dealt with in § 3 below.)

160. Justice Robins' report makes for interesting reading, for two reasons. First, it is apparent that his subcommittee encountered very much the same sorts of issues and

problems that we are now seeing in 2020. Secondly, it would appear that it was the 1998 subcommittee that developed the language of rule 53.09(1). Later changes only tinkered a bit with that language, but did not depart from it very much.

161. Justice Robins noted that “there is a split in opinion on whether Rule 53.09(1) should be changed. Some of those who made submissions were firmly of the view that the discount rate of 2.5% per year should be continued while others were equally firm in the view that recent economic experience dictates that this rate be changed.”⁶⁰ Although Justice Robins did not identify, in the report itself, the stakeholders who had made submissions (that information would have appeared in the missing appendices to his report), it seems very likely that the opinions divided along partisan lines, as happened in 2013 and 2020.

162. Justice Robins said that there was a consensus among those who had made submissions that although a 2.5% discount rate might have been justified in 1980 by the historical real rate of return from 1930–1979, “the economic data demonstrates that the original 1980 projection of a net discount rate of 2.5% for the period 1980 to date has been low by a significant margin.”⁶¹

163. As a result, the Robins subcommittee concluded that “the current rule generates an inequity and should be changed”. The two choices that were considered were: (a) an increase to the existing fixed rate; or (b) “seek to develop a flexible method of calculating the discount rate on a periodic basis, so as to provide a reasonable level of certainty to litigants and yet be responsive to changing economic conditions.”⁶²

164. The subcommittee concluded that raising the rate would be only a short-term solution to “the unfairness created because recent real rates of interest have been

⁶⁰ Report of the Robins subcommittee (1998) (“Robins report”), p. 7.

⁶¹ Robins report, p. 6.

⁶² *Ibid.*, p. 8.

significantly greater than 2.5%". The reason was that that unfairness "could be repeated should real rates of interest fall below any new discount rate selected."⁶³

So, the subcommittee decided to recommend a two-tiered approach.

165. A big influence on that decision was the 1991 introduction by the Government of Canada of real return bonds. Justice Robins said that that product had improved the ability to estimate future real rates of return. He added that "these bonds can serve as a benchmark for determining real rates of return."⁶⁴

166. Real return bonds have been discussed in more detail in § 2.4 above. How they are used, at present, in r. 53.09(1)(a) is dealt with in § 2.1.2 above. Despite Justice Robins' hopefulness, it is not really clear that real return bonds afforded any better way of estimating future real rates of return than had long term bonds and estimated inflation.

167. Ultimately, the Robins subcommittee did recommend a two-tier discount rate, with the rate for the first 15 years being set by reference to Government of Canada real return bonds.

168. The two consultants to the Robins subcommittee recommended a two-tier rate with the first one being for a period of 25 years. (Thomas Schinbein, an Ontario actuary who has also provided some input to our subcommittee, recommended a 15-year period "switching point" (as the UK Government Actuary calls the point of transition to the second tier) instead and that is what the Robins subcommittee ultimately chose.)

169. The consultants recommended that the real rate of return for the initial period be determined by the yield for real return bonds (some consultants suggested a period

⁶³ *Ibid.*

⁶⁴ *Ibid.*

of 25 years and others 15 years), “reduced by a quarter point and then rounded down to the nearest eighth of a point”.

170. It was noted that there were “economic and risk factors” associated with real return bonds. The latter were said to include illiquidity, an “overstated rate” and “unfavourable tax treatment”. The subcommittee concluded that a reduction of one percent from the real rate would be an appropriate adjustment to adjust for these “economic and risk factors”. (Given that real return bonds were already “very low risk” investments, the Robins subcommittee’s downward adjustment to the discount rate appears to have been aimed at removing risk altogether.)

171. It would perhaps be useful to quote the specific concerns, expressed by the Robins subcommittee, that led to the one-percent downward adjustment, since the latter has been something of a bone of contention:

However, the use of real return bonds for the purpose of fixing the discount rate raises a number of concerns. These relate to certain economic and risk factors involved in their use which may be summarized as follows:

- (1) While real return bonds are fully linked to changes in the Consumer Price Index, the real interest rate contains a significant premium to reflect the economically insufficient status of the bonds to individual investors, due to the fact that:
 - (a) real return bonds are not traded as frequently or in as many denominations as other bonds, thereby resulting in a relative degree of illiquidity and an overstated rate; and
 - (b) the return from these bonds receives unfavourable tax treatment.⁶⁵
- (2) Real return bonds would not likely be an appropriate investment vehicle in their current form for most plaintiffs receiving a pecuniary award.
- (3) The published yields on real return bonds are based on a large volume of trades which cannot be achieved by an individual “retail investor”.⁶⁶

⁶⁵ We believe that this refers to the fact that coupon payments and inflation compensation must be included annually as income, even though the inflation compensation will not be paid until maturity. If inflation were to be high, there could be significant tax owing by the holder even though the inflation compensation has not yet been paid.

⁶⁶ *Ibid.*, p. 9.

172. For the second tier (i.e., after 15 years), the Robins subcommittee concluded that since “long-term historical data indicates real returns of 2% to 3%, the existing 2.5% per year discount rate should be used.”⁶⁷

173. Justice Robins’ report contained a section that dealt with “productivity”.

Interestingly, his subcommittee concluded that:

[T]he empirical evidence confirms that average wages and salaries have consistently increased at a faster pace than general price inflation when measured over extended periods of time in the past. Mr. Murray Segal, in his submissions expressed the opinion that the average remuneration of the average worker will continue to outpace general price inflation by the long-term historical average rate of about 1% to 2% per year in the long-run future.⁶⁸

174. Ultimately, the Robins subcommittee accepted a recommendation made by Dr. Jack Carr (who was presumably one of those who had made submissions to the subcommittee), that productivity was too specific to individual plaintiffs to justify a change formulating a rule for general productivity.

175. Our subcommittee has received some submissions to the effect that the cost of some services (health care expenses, for instance) will increase at a rate faster than that of the Consumer Price Index (and faster than that of wage growth). Justice Robins dealt briefly with that head of damages too. (Evidently, it had also been suggested that the discount rate should be adjusted to take into account health care costs increasing at a rate faster than that of the CPI.) He declined to do so, saying, “[a]t this stage, it is not feasible to mandate any type of general productivity factor in respect of the component of future care claims that involve human services.”⁶⁹

176. The issue of whether discount rates should vary with the type of damages is dealt with in §§ 2.9.1.6 and 2.11.5.

⁶⁷ *Ibid.*, p. 10.

⁶⁸ *Ibid.*, p. 17.

⁶⁹ *Ibid.*, p. 19.

177. As will be discussed in § 2.8 below, in setting its discount rate, the UK has taken into account “damages inflation” which it has quantified at 1% per annum.

However, that adjustment applies across the board, to all types of damages.

2.7.3.1 Comment

178. As can be seen, the recommendations of the Robins subcommittee formed the basis of the approach that is still used today for r. 53.09. Unfortunately, because we do not have the appendices that were originally attached to the report, it is not always clear exactly what led to the decisions that were made.

179. There are several noteworthy aspects to the report though.

180. First, the text of the Robins report said that “the use of real return bonds constitutes an appropriate basis by which to measure the real rate of interest”.⁷⁰ The report also noted that “real return bonds would not likely be an appropriate investment vehicle in their current form for most plaintiffs receiving a future pecuniary award”.⁷¹ Those statements suggest that the Robins subcommittee was looking to real return bonds as a basis for drawing conclusions about real interest rates generally, not on the assumption that such bonds would *actually* be purchased by plaintiffs.

181. On the other hand, the downward adjustment of 1% that the subcommittee chose to recommend was to compensate for the risk factors listed in paragraph 171 above. That might mean the opposite: that the subcommittee *was* thinking in terms of actual investment in real return bonds.

⁷⁰ *Ibid.*, p. 10.

⁷¹ *Ibid.*, p. 9.

182. Overall, we think that the Robins subcommittee did not proceed on the basis of actual purchase of real return bonds, although it probably also did not assume that *no* plaintiffs would actually enter into such an investment.
183. Secondly, the Robins subcommittee used the phrase, “the yield rate on real return bonds”. Although the report contains no analysis of the meaning of the “yield” versus the “coupon” of real return bonds,⁷² it did refer to “the published yields on real return bonds” being “based on a large volume of trades which cannot be achieved by an individual investor”.⁷³ The reference to “published yields” does tend to suggest that the subcommittee had in mind the sort of information about bond yields that is outlined in § 2.1.2 above (which, in turn, reflects the market price for those bonds, divided into the coupon). However, the suggestion that the yield is something that could be “achieved” by an investor might represent a misunderstanding of the information that “bond yields” conveys.
184. Still, the wording of r. 53.09(1) that was proposed by the Robins subcommittee does tend to suggest that the subcommittee intended that the first-tier of the discount rate be set based on *yield* of real return bonds because the report referred to “the average of the month end values of the real rate of interest on long-term Government of Canada real return bonds”.⁷⁴
185. The Robins subcommittee proposed that the first-tier rate be set using a 12-month average for the period ending August 31 of the year preceding the year in which the trial commences. It did not explain why that period was chosen. The period was later shortened to six months, as discussed in the next section.

⁷² As to which, see § 2.1.1.1.

⁷³ *Ibid.*, p. 9.

⁷⁴ *Ibid.*, p. 11.

2.7.4 Cavanagh subcommittee (2013)

186. Associate Chief Justice Dennis O'Connor struck the subcommittee that reported in 2013. He asked Stephen Cavanagh to chair that subcommittee. Bringing the work of the r. 53.09 subcommittees full circle, former Associate Chief Justice John Morden was a member of the 2013 subcommittee, as were practitioners C. Kirk Boggs and Michael Shannon. (None of the subcommittee's members, apart from Mr. Cavanagh, was a member of the Rules Committee. There was a deliberate effort to include, on the subcommittee, members who would represent the interests of the defence and plaintiffs' bar. That was why Mr. Boggs and Mr. Shannon participated.)
187. The 2013 subcommittee was advised by Dr. Peter Dungan, an economics professor at the University of Toronto (and one of the authors of the recent "PEAP" report, referred to at paragraph 86 above).
188. The report of the 2013 subcommittee really amounted to tinkering with the language of r. 53.09. The main issue then under consideration was a schism that had arisen in the caselaw about how the two-tiered rate provided for in the rule was intended to operate.
189. The 2013 subcommittee agreed that the wording of the rule was ambiguous. Based on advice from its consultant, it elected to adopt one of the two competing interpretations. Dr. Dungan proposed language to revise r. 53.09, to make that clear. That language was enacted and appears in the present version of the rule.
190. Another issue that had arisen in 2013 was that, on a couple of occasions, the discount rate, calculated on the formula that then existed, had dropped below zero. Based on the advice received from the subcommittee's consultant, that was thought to be an aberration. For that reason, the language of the rule was changed to provide that the discount rate could not be less than zero.

191. Since then, negative interest rates have become much more common and, in the view of some, long term real rates could be below zero. Also, the discount rate in the UK has been negative since 2017. The 2020 subcommittee does not see a principled reason to prohibit a negative discount rate. It will therefore recommend that the “floor” be removed from r. 53.09(1) (see § 2.11.4 below).
192. The other changes recommended by the 2013 subcommittee had to do with the fine-tuning of the discount rate, as it then existed. So, rounding of the rate, otherwise calculated, had been to the nearest $\frac{1}{4}$ of a percent. On the recommendation of Dr. Dungan, the rounding became to the nearest one-tenth of a percent.
193. The downward adjustment of the select period rate was reduced from one percent to $\frac{1}{2}$ percent. (See paragraphs 170 ff. for the genesis and rationale of that adjustment. It would appear, based on input to our subcommittee, that the reasons that led to that approach being taken at the time are not well understood today.)
194. Finally, a change was made to how the first-tier rate was derived. It was revised from the original Robins subcommittee’s twelve-month to a six-month average of rates, with the objective of basing the rate for that first-tier on more current rate data.
195. The submissions provided to the 2013 subcommittee by stakeholders were fairly general and, to a large extent, followed predictable partisan lines. As a result, the 2020 subcommittee asked for and received much more comprehensive submissions from stakeholders. (See § 2.9 below for discussion of 2020 stakeholder submissions about the discount rate.)

2.8 The British approach

196. This portion of our report is an attempted analysis of the approach that has been taken in the UK, which led to its discount rate—the “Ogden Rate”—being set, in the summer of 2019, at minus 0.25 percent. As has been pointed out to us by Dr. Hyatt,

there are some important differences between how the discount rate is dealt with in Ontario and in the UK, such that they are not directly comparable. Still, there is sufficient overlap to make a look at the UK solution worthwhile.

197. The first section of this analysis will describe the statutory framework within which the UK Ogden Rate is set.

198. The second section will evaluate the report to the Lord Chancellor of the Government Actuary, Martin Clarke, dated June 25, 2019. Finally, the third section will comment on what the Lord Chancellor actually did.

2.8.1 The British legislation

2.8.1.1 *The Civil Liability Act, 2018*

199. Section 10 of the UK *Civil Liability Act, 2018* (“CLA 2018”) mandates how awards of damages for future losses are to be discounted to present value. The first part of it reads as follows:

PART 2	
PERSONAL INJURY DISCOUNT RATE	
10	Assumed rate of return on investment of damages
	(1) Before section 1 of the Damages Act 1996 (assumed rate of return on investment of damages) insert—
*A1	Assumed rate of return on investment of damages: England and Wales
	(1) In determining the return to be expected from the investment of a sum awarded as damages for future pecuniary loss in an action for personal injury the court must, subject to and in accordance with rules of court made for the purposes of this section, take into account such rate of return (if any) as may from time to time be prescribed by an order made by the Lord Chancellor.
	(2) Subsection (1) does not however prevent the court taking a different rate of return into account if any party to the proceedings shows that it is more appropriate in the case in question.
	(3) An order under subsection (1) may prescribe different rates of return for different classes of case.
	(4) An order under subsection (1) may in particular distinguish between classes of case by reference to—
	(a) the description of future pecuniary loss involved;
	(b) the length of the period during which future pecuniary loss is expected to occur;
	(c) the time when future pecuniary loss is expected to occur.
	(5) Schedule A1 (which makes provision about determining the rate of return to be prescribed by an order under subsection (1)) has effect.
	(6) An order under this section is to be made by statutory instrument subject to annulment in pursuance of a resolution of either House of Parliament.”

Figure 5

200. As can be seen, this statutory provision departs somewhat from the Ontario approach. For example, it expressly allows for different rates to be used for different types of cases, one of the changes that some stakeholders have urged upon us.
201. Schedule A1 to the CLA 2018 contemplates reviews of the Ogden Rate (“The Assumed Rate of Return On Investment of Damages: England and Wales”) every five years. After the first review (which took place in 2019), subsequent ones are to be done by the Lord Chancellor, who is to consult an “expert panel established for the review”⁷⁵ and the Treasury.
202. (As discussed above, the “rate of return” is one of the two components of discounting to present value. It is the “nominal rate”, in the sense of being the rate of return without consideration of inflation. When the latter is factored in, the resulting rate is referred to as the “real rate”.)
203. Schedule A1 to the CLA 2018 makes it clear that the UK approach is based on assumptions as to what claimants will *actually* do with their awards of damages. Subsections 4(2), 4(3) and 4(5) describe the approach that is to be taken:

⁷⁵ The “expert panel” is made up of the Chief Actuary and four other members. The latter are to include a member with experience as an actuary, one with experience of managing investments, one with experience as an economist and one with experience in consumer matters as relating to investments. No lawyers or judges, apparently.

- (2) The Lord Chancellor must make the rate determination on the basis that the rate of return should be the rate that, in the opinion of the Lord Chancellor, a recipient of relevant damages could reasonably be expected to achieve if the recipient invested the relevant damages for the purpose of securing that—
- (a) the relevant damages would meet the losses and costs for which they are awarded;
 - (b) the relevant damages would meet those losses and costs at the time or times when they fall to be met by the relevant damages; and
 - (c) the relevant damages would be exhausted at the end of the period for which they are awarded.
- (3) In making the rate determination as required by sub-paragraph (2), the Lord Chancellor must make the following assumptions—
- (a) the assumption that the relevant damages are payable in a lump sum (rather than under an order for periodical payments);
 - (b) the assumption that the recipient of the relevant damages is properly advised on the investment of the relevant damages;
 - (c) the assumption that the recipient of the relevant damages invests the relevant damages in a diversified portfolio of investments;
 - (d) the assumption that the relevant damages are invested using an approach that involves—
 - (i) more risk than a very low level of risk, but
 - (ii) less risk than would ordinarily be accepted by a prudent and properly advised individual investor who has different financial aims.
- ...
- (5) In making the rate determination as required by sub-paragraph (2), the Lord Chancellor must—
- (a) have regard to the actual returns that are available to investors;
 - (b) have regard to the actual investments made by investors of relevant damages; and
 - (c) make such allowances for taxation, inflation and investment management costs as the Lord Chancellor thinks appropriate.

Figure 6

204. As can be seen, the Ogden Rate is based on somewhat of an objective test: what the recipient of an award could *reasonably* be expected to achieve with an investment of the award. It is based on “the *actual* returns that are *available* to investors”.
[Emphasis added]

205. However, while establishing the Ogden Rate is said to be “for the purpose of securing that...[*inter alia*] the relevant damages would meet the losses and costs for which they are awarded”, the approach that has *actually* been taken recognizes that the rate will only produce a high *probability* of ensuring that any particular plaintiff will be fully compensated. It is known in advance that statistically, a certain proportion of plaintiffs will not, in fact, receive full compensation. This is discussed in the next section.

206. What is immediately apparent is that the British have chosen to address the discount rate in a way that departs quite a bit from what Ontario has (at least implicitly) done. It is also quite different from what the UK itself had done before 2019.
207. Inherent in the Ontario approach has been the principle of “full compensation” but not “overcompensation”. Ontario has undoubtedly not met that objective consistently but at least that is what we have tried to do.
208. In the UK, the Ogden Rate was set with an express acknowledgment that what would be achieved was compensation for *most* of claimants’ losses. (Or perhaps, “most of the losses of most claimants” would be a better way of putting it.)
209. That approach certainly has its advocates, including some of the stakeholders who made submissions to our subcommittee. But we feel that if that is how compensation for future losses is to be done in Ontario, there should be an explicit decision made and an acknowledgment of that fact.
- 2.8.2 The report of the Government Actuary (June, 2019)
210. The 2019 change in the UK Ogden Rate was made on the basis of the report of the Government Actuary Department (“GAD”).
211. The GAD’s advice to the Lord Chancellor was said to have been based on “a representative claimant profile whereby regular future damages costs are to be met over a 43-year period through the investment of a portfolio of assets constructed according to the mid-range portfolio of those suggested in responses to [the Lord Chancellor’s] Call for Evidence”. Thus, in deciding what discount rate to recommend, GAD assumed a 43-year period of compensation and simulated returns

on an assumed portfolios of assets (the composition of which varied somewhat, depending on whether the time horizons were long or short).⁷⁶

212. The 43-year period and the “representative claimant” resulted from the UK government’s December, 2018 “Call for Evidence”. That evidence was to be used as the basis for determining the “actual investments made by claimants” and “actual returns that are available to claimants”. In a paper published on July 15, 2019, the results of that Call for Evidence were summarized. There were 40 responses: 13 from the insurance industry, 14 from the legal profession, six from financial advisors, three from the health sector and four from other experts.

213. The rationale for the GAD’s selection of a 43-year loss period is set out below:

In order to set a single PI discount rate applicable to all circumstances, it is necessary to make assumptions regarding the length of time over which damages are applicable and the representative claimant will be investing.

This is because return expectations can be different over different time periods – for example over the short term they might (as now) be lower than over a much longer term. Therefore, the choice of a PI discount rate for a claimant with a shorter damage profile (eg an elderly claimant) will be different to that for a claimant with a longer damage profile (eg an infant).⁷⁷

214. (The comment in the second paragraph of the above passage is based on a normal, not an inverted, yield curve.⁷⁸ That is a graph in which the curve slopes upward and to the right, indicating that long term yields are expected to be greater than short-term ones. Its accuracy might now be in doubt: see paragraph 226 below.)

215. The GAD’s 43-year assumed period of loss was the result of its decision to compromise between the 30-year period suggested by “investment managers and

⁷⁶ The reason that a 43-year period was used was that the UK’s “Call For Evidence” indicated that on average, the duration of investments by plaintiffs ranged from 40-45 years. So, the GAD picked a mid-point value (43) and used it for all of its calculations: see page 34.

⁷⁷ Page 39.

⁷⁸ https://en.wikipedia.org/wiki/Yield_curve

claimant lawyers” and the 40–45 year period advocated by “insurers and the Institute and Faculty of Actuaries”. (Obviously, the end result was much closer to the latter. In fact, in his report to Parliament, the Lord Chancellor, to whom the GAD has submitted its report, loaded the dice a bit on this issue. He said that the 43-year period was “supported by responses to the Ministry’s Call for Evidence, suggesting the average duration for serious personal injury cases was between 40 and 45 years.” No mention was made by the Lord Chancellor of the 30-year period that had been suggested by investment advisors and plaintiffs’ lawyers.)

216. Unsurprisingly, the summary noted that “[t]he views and material submitted often reflected the competing interests and differing perspectives of those representing claimants and defendants. They helped illustrate the complexity of the discount rate setting process, in terms of the multiplicity of factors and economic variables which are at play and must be taken into account.”⁷⁹ In other words, the submissions were heavily partisan. We have had the same experience, although that was to be expected.

217. The GAD said that this “analytical approach” was aimed at “deriving the net expected return, which if used as the PI [personal injury] discount rate would give a 50% likelihood of the representative claimant having full compensation for their loss (hereinafter referred to as having ‘sufficient funds’ to meet their needs).” As discussed below, the rate that was actually established was based on a downward adjustment to the one that the GAD calculated would yield a 50% probability of full compensation. But even the adjustment that was made did not attempt to arrive at a 100% probability of full compensation.

⁷⁹ “Setting the Personal Injury Discount Rate: Summary of Responses to the Call for Evidence” (Ministry of Justice, July 15, 2019), p. 5 (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/816711/setting-the-personal-injury-discount-rate-summary-of-responses.pdf)

218. The Government Actuary said, in the introduction to the report: “I expect this portfolio to produce an annual net return of CPI+0.25% pa [per annum] over the period but, in practice, it may produce more or less than that with equal likelihood. If the PI discount rate were set at this level, there would be an even or ‘50:50’ likelihood that the investment outcomes would be enough to meet all the needs in the future.”
219. That would seem to mean that the GAD did not see the Ogden Rate’s objective to be one of calculating the amount that, discounted to present value, would *fully* compensate all plaintiffs (or even fully compensate the *majority* of plaintiffs) for all of their future losses.
220. The GAD made it clear though, that the Rate could be adjusted in favour of plaintiffs (“claimants”) by lowering the initial rate of CPI+0.25% pa. It calculated that a reduction of 0.25% pa (to CPI + 0.0% pa) “would correspond to broadly a 60% likelihood that the representative claimant’s investment outcomes are enough to meet all the needs in the future, and around a 70% likelihood of the representative claimant being able to meet at least 90% of their needs”. A reduction to CPI-0.5% pa was determined to produce (approximately) a 70% probability that the representative claimant’s investment outcomes would meet all of his or her future needs and an 85% probability of that claimant being to meet at least 90% of those needs.
221. And so on. The more the discount rate is lowered, the more likely it is that “the representative claimant” would be fully compensated. But the risk of overcompensation would also rise. That is a “zero sum game”, unfortunately. The question is, where to draw the line?
222. The GAD commented on “damages inflation”:

There was no evidence or clear consensus from the Call for Evidence as to the varying levels of inflation that apply to different award components or in what proportions. It is fair to say therefore that the assumed level of inflation remains open to judgement but that some aspects are likely to be linked to general consumer prices (ie CPI linked) and some aspects linked to movements in earnings.

In the absence of any firm evidence, I therefore believe it reasonable to assume that claimant's damages inflate at CPI+1% pa and have accordingly included this in my analysis.⁸⁰

223. "Damages inflation" is not something that has been built into our discount rate. It postulates that the losses for which damages are awarded as compensation will inflate at a rate faster than that of the Consumer Price Index. The resulting adjustment of 1% by the GAD reduces the discount rate by that percentage, below what it would otherwise be (and thus, increases the damages award). As can be seen in the quoted passage though, the adjustment was made without much of an evidentiary basis.
224. The GAD considered the use of a two-tier system, such as r. 53.09 now uses. In fact, it recommended switching to a two-tier system using the same "switching point" (as the GAD called it) that we do: 15 years.⁸¹ It felt that a two-tiered approach would be "likely to more closely match the pattern of expected future investment returns which at the present time, are characterised by lower short-term investment returns but much higher long-term rates."⁸² (The latter statement is based on a normal, rather than an "inverted" yield curve: see paragraphs 226 ff.)
225. Ultimately, the GAD did not recommend immediate adoption of the two-tier system, but only because that would represent "a significant departure from current

⁸⁰ Page 37.

⁸¹ Page 26.

⁸² The report said that "there are good technical reasons to adopt a dual rate structure, however I have not thoroughly considered wider implications of implementing such a rate and would recommend that the Government considers the impact and practicalities of such an approach should you consider its adoption."

practice". It did, however, calculate the probability of "the representative claimant" being fully compensated, using various discount rates and a 15-year "switching point" (i.e., the point at which the first tier ends and the second begins). Those have not been set out here but, as with the single tier rate, the probability of "the representative claimant" being fully compensated was well below 100 percent but would increase as the rate is lowered.

226. In 2020, some might quarrel with the GAD's description of "the pattern of expected future investment returns" as being characterised by "lower short-term investment returns but much higher long-term rates". That is a reference to the traditional "yield curve", in which long-term yields are higher than short-term ones. (So, plotted on a graph with the future time period on the x-axis and the rate of return on the y-axis, the curve slopes upwards to the right, as it extends into the future.)

227. However, in 2019 and in early 2020, the "yield curve" has, at times, inverted, such that short-term returns exceeded long-term ones. Such a curve slopes downwards over time and so, is said to be "inverted". This is traditionally viewed as a strong indicator of an impending recession. As Reuters commented in an online article, dated January 28, 2020, "[t]he U.S. curve has inverted before each recession in the past 50 years. It offered a false signal just once in that time."⁸³

228. (There was no recession when that article was written, in January of this year. However, when the March, 2020 version of this report was being written, four past chief economists of the International Monetary Fund had said that we were already

⁸³ "Countdown to recession: What an inverted yield curve means" (<https://www.reuters.com/article/us-usa-economy-yieldcurve-explainer/countdown-to-recession-what-an-inverted-yield-curve-means-idUSKBN1ZR2EX>)

in a recession.⁸⁴ As this report was being updated, in April, 2020, there was little question that we were in a recession.⁸⁵ The only real question seemed to be whether we are headed for a depression.⁸⁶)

229. An inverted yield curve seems, once again, to have shown its predictive features. Thus, the GAD's seeming assumption of a normal (upwards) yield curve might now be open to question.

2.8.2.1 GAD's two-tier analysis

230. The GAD report did include a section in which it modelled a two-tier approach. Ultimately, that was not used, but as discussed in the next section, the Lord Chancellor also commented favourably on the two-tier system, so it is possible—perhaps even likely—that the UK might move to it in the future. To be clear, the discussion in this section does not reflect what the UK has actually done.

231. Briefly, the GAD's "short term discount rate" (the first 15 years, as in Ontario) was assumed to be "after deductions for tax, expenses and damage inflation, of between CPI-1% to CPI-0% pa depending on the investment approach and assumptions made."⁸⁷

⁸⁴ Giles, Chris, Greeley, Brendan, Arnold, Martin, "Global recession already here, say top economists", Financial Times, March 15, 2020.

⁸⁵ Although some might actually quarrel with that proposition, since the technical definition of "recession" is two consecutive quarters of negative growth, which we have not yet had. But a column in the Financial Times scoffed at the suggestion: "In reality, the US economy is already in depression. Nothing on this scale — and at this speed — has been seen since the Great Depression in the early 1930s. It took the second world war to dig the US out of that. It will take a vaccine, or a miracle prophylactic, to stop America's first depression in almost a century." (Luce, Edward, "The risk of a US double-dip depression is real", Financial Times, April 23, 2020.)

⁸⁶ "An extreme recession that lasts three or more years or which leads to a decline in real gross domestic product (GDP) of at least 10 percent. in a given year."

(<https://www.investopedia.com/terms/d/depression.asp>)

⁸⁷ Page 27.

232. The long term rate used in this analysis was higher. As mentioned above, this is consistent with the GAD assumption of a normal yield curve. The Government Actuary said: "I have presented results assuming that a long-term PI discount rate of CPI+1.5% pa would apply. Whilst other long-term rates are plausible, I believe that CPI+1.5% pa would be a reasonable balanced estimate of the long-term return on a low risk portfolio and simplifies the residual options to simply choosing a short-term rate in order to achieve the desired outcomes."⁸⁸

233. The result, had the two-tier approach been used, would have been that post-15 year awards would have been discounted to present value using a more aggressive rate than the one used for "first-tier" losses. But in the end, a one-tier approach was used.

2.8.2.2 The GAD's approach

234. The GAD's objective was to derive "the net expected return, which if used as the PI discount rate would give a 50% likelihood of the representative claimant having full compensation for their loss (hereinafter referred to as having 'sufficient funds' to meet their needs)".⁸⁹ This is important: the rate that was to be used as a starting point was meant to produce only a 50% probability of full compensation for what was considered to be a "representative claimant".⁹⁰ The GAD went on to note that that rate could then be adjusted to change the probabilities (which was, in fact, done), but that that would create its own set of problems:

To safeguard claimants from the likelihood of not being able meet their needs, it may be considered appropriate to set the PI discount rate lower than the net expected portfolio return. This would result in a higher expectation that the award will be

⁸⁸ *Ibid.*

⁸⁹ Page 5.

⁹⁰ It is hard to reconcile this objective of a 50% probability of full compensation with a statement on the first full page of the report, saying that "[a]wards of damages for claimants with serious and long-term injuries are intended to provide victims of life-changing events with *full and fair financial compensation* for all the expected losses and costs caused by their injuries." [Emphasis added]

enough to meet future needs. However, too low a PI discount rate may be considered unreasonable from the perspective of those responsible for meeting the claim, such as insurers and their policyholders or public sector bodies and those risks must be carefully balanced.⁹¹

235. The above passage encapsulates the discount rate problem. If the rate is adjusted downward (from one calculated, in this case, to produce a 50% chance of full compensation), the probability of full compensation will rise. But insurers are more likely to think the adjustment unreasonable and the risk of overcompensation in a certain number of cases will also rise.

236. Prior to the enactment of the Civil Liability Act 2018 on December 20, 2018, the discount rate in the UK had been determined using a methodology somewhat similar to our present r. 53.09, at least to the approach used in Ontario for the first 15 years of loss. The rate was set with reference to average yields on “index-linked gilts” (“ILGs”), which are bonds that are indexed to inflation, akin to the real return bonds of the Government of Canada that are used to set the discount rate under r. 53.09 for the first 15 years after judgment.⁹²

237. Inflation-indexed government bonds are usually considered to carry “very low risk”, at least if the word “risk” is understood to mean risk of default on the stipulated rate of return.⁹³ With the enactment of the Civil Liability Act 2018, the UK government moved explicitly to a system in which discount rates would be set on the basis of what a plaintiff could reasonably expect to achieve if his or her award were invested in a “low risk” portfolio. That was defined, in the legislation, to mean

⁹¹ Page 6.

⁹² As described in a 2013 paper issued by the UK Ministry of Justice, entitled “Damages Act 1996: The Discount Rate Review of the Legal Framework”, the discount rate “the discount rate is set by reference to the expected rates of return on certain types of safe investments” and had been set at 2.5% per annum since 2001: https://consult.justice.gov.uk/digital-communications/damages-act-1996-the-discount-rate-review-of-the/supporting_documents/damagesact1996discountateconsultation.pdf

⁹³ Although on March 9, 2020 Lebanon defaulted, for the first time, on one of its own government bonds: “For the first time, Lebanon defaults on its debts”, *The Economist*, March 12, 2020.

“more risk than a very low level of risk but less risk than would ordinarily be accepted by a prudent and properly advised individual who has different financial aims.”

238. Needless to say, the move from “very low risk” to “low risk” carries with it greater potential reward but also greater risk.
239. But it is important to note that the increase from “very low” to “low” risk was only one of three important changes made by the 2018 legislation. The rate was to be set based on the results of the “Call for Evidence”, which was intended to shed light on claimants’ real world experiences. And the third change was that the rate was to reflect what a claimant could *reasonably* be expected to earn.
240. Although the GAD recognized that setting the discount rate involves assumptions about the future⁹⁴, the “Call For Evidence” generated only information about the past (or at best, the present).
241. The GAD ran 2,000 “Monte Carlo”⁹⁵ simulations to determine the probability of under- or over-compensation at various discount rates. From that exercise, it came up with the following probability distribution:

⁹⁴ “Determining the PI discount rate relies on assumptions about the future which may or may not be borne out in practice. These assumptions are matters of judgement and there are other assumptions that could be equally appropriate.” (Page 13)

⁹⁵ These are computer simulations aimed at modelling risk. Typically, there will be a number of variables in a scenario that is being evaluated. Each variable is assigned a probability or a probability distribution and the model is run thousands of times, with the variables interacting with each other, according to the specified probabilities. The results provide probabilities of the various outcomes. A variety of software programs (the best-known third-party program is probably Palisade’s “@Risk”: https://www.palisade.com/decisiontools_suite/) will perform this sort of analysis. The GAD used two proprietary programs, referred to in the report as “Economic Scenario Generators”. As it happens, a book was published on March 17, 2020, entitled *Radical Uncertainty: Decision-Making Beyond the Numbers*, by John Kay and Mervyn King (Norton, 2020). One of the authors is a former governor of the Bank of England and the other a leading academic. They have strongly criticized the notion that risk is as readily quantifiable as Monte Carlo and other statistical analysis tools assume.

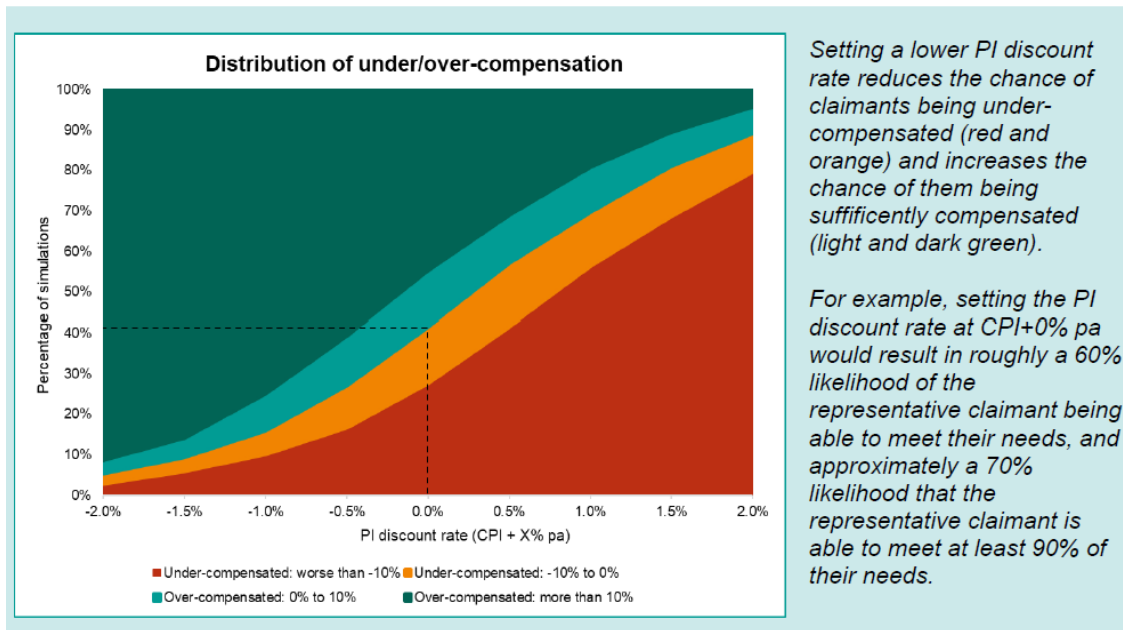


Figure 7

242. As can be seen, when the discount rate is set very low (on the x-axis, where the lowest value is minus 2.0%, in the above example), the probability of undercompensation (the red and orange portions of the graph) is also very low but the probability of overcompensation (light green and dark green) is very high (about 92 percent). Conversely, with a discount rate of plus 2.0% (the far right of the x-axis), the reverse is true (about an 80% chance of some undercompensation).
243. The GAD determined the discount rate on the basis of information generated by the “Call For Evidence” about the range of returns obtained by those who responded. Although it acknowledged that the responses demonstrated “a wide mix of allocations”, it concluded that the range of low-risk portfolios was 30% allocation to growth assets at “the cautious end of the spectrum” and 55% at the other end of the spectrum. It chose the mid-point: 42.5% as the assumed allocation of growth assets.

244. Again, the GAD conducted “Monte Carlo” analyses as to the probable returns on investment, using various assumptions with respect to investment period as well as the high, low and median allocations of growth assets in the assumed portfolios.

245. Chapter 9 of the GAD’s report began with a heading that arguably would not instill confidence: “The analysis shown in Section II is based on a number of assumptions. There are plausible alternative views for all of the factors affecting the investment profile, which would inevitably alter the PI discount rate chosen.”⁹⁶ A number of variables were looked at. They are not summarized here, as, unsurprisingly, some would result in larger returns and others, lower ones. Not all of that analysis was based on the Call for Evidence. For example, the Government Actuary said, “[i]n my analysis I have assumed that claimants investing over shorter or longer periods take less risk or more risk respectively than the representative claimant. Whilst this assumption is reasonable, there was no evidence collected from the Call for Evidence to this effect.”⁹⁷

2.8.3 The UK government’s decision

246. The UK government announced its decision with respect to reforming the Ogden Rate on July 15, 2019. The rate was raised, from minus 0.75% (at which it had been set in 2017) to minus 0.25 percent.

247. Then-Lord Chancellor David Gauke described the process leading to the setting of the rate in a way that is probably both accurate and, for that reason, suggestive of unreliability:

I emphasise at the outset that, while the reforms enacted last year have provided a clearer legislative framework for this process, the procedure for setting the discount rate remains a complex and technical one. It involves making a series of assumptions and judgements in considering the evidence and economic variables that apply. *Some*

⁹⁶ Page 57.

⁹⁷ Page 60.

*of these judgements are finely balanced and involve making predictions about the future which are inherently uncertain.*⁹⁸ [Emphasis added]

248. The Lord Chancellor accepted the Government Actuary’s “calculated” rate of plus 0.25% but said that it was only “a starting point for [his] determination rather than an end point”. He reviewed some different scenarios and the associated probabilities of full or partial compensation. Ultimately, the rate was adjusted downwards by one percent⁹⁹, to minus 0.25 percent. That is still the rate today. It is scheduled to be reviewed in 2024.

249. Unsurprisingly, insurers were unhappy (although they did welcome the rate having been raised from minus 0.75 percent). As the Financial Times reported on July 19, 2019:

Insurance companies have already had to adjust their reserves to take account of the new rate. On Tuesday, Hastings [a British insurer] said that it had been reserving on the basis that the rate would be between zero and 1 per cent. To take account of the government’s latest change, the company said it would have to take a one-off £8.4m hit to its profits.¹⁰⁰

250. The fallout in 2019 was more understated than in 2017 though, when the previous reduction—from 2.5% to minus 0.75%—was announced. Then, some insurers’ profits for fiscal 2016 were halved. Premiums were estimated to rise, on average, by £65 per year.¹⁰¹

251. Since the March version of this report was written, the world has changed—dramatically—as a result of the near-global lockdown. The impact on the UK’s

⁹⁸ Personal Injury Discount Rate – Outcome of Review; Statement placed by the Rt Hon David Gauke MP, Lord Chancellor, in the libraries of the Houses of Parliament on 15 July 2019, paragraph 5.

⁹⁹ Reminiscent of our own downwards adjustment in r. 53.09(1)(a).

¹⁰⁰ Ralph, Oliver, “Insurers hit back over Ogden rate change: Industry association ABI says government’s impact assessment was ‘misleading’”, Financial Times, July 19, 2019.

¹⁰¹ “UK insurers: discount day”, Financial Times, February 27, 2017.

Ogden Rate remains to be seen. As of this writing (April 22, 2020), little (which really means, “nothing that we could find”) has been written about this subject.

252. Stephen Cavanagh of our subcommittee made contact with the individuals at the Government Actuary’s Department who deal with the personal injury discount rate. In April, Mr. Cavanagh had a videoconference with the Chief Actuary, Insurance and Investment and one of his colleagues, as well as with two representatives of the UK’s Ministry of Justice.

253. The UK people were (and undoubtedly, still are) closely monitoring the economic situation there. The next review of the UK discount rate is not scheduled to happen until 2024 and they did not anticipate that that timetable would be accelerated, at least not until the future economic outlook becomes clearer.

254. They did indicate that the fallout from the 2017 and 2019 adjustments to the discount rate there had not been as fevered as some of the media reports had indicated.

255. The UK¹⁰² is looking at increasing the use of “periodic payment orders” (“PPOs”), which appear to be similar to our structured settlements. Amusingly, those who spoke with Mr. Cavanagh noted that everyone involved in the process is in favour of using PPOs, “except plaintiffs and defendants”. They said that plaintiffs tend to want all of their damages awards at once and defendants (insurers) want to close their files.

256. Almost all of the assumptions on which the GAD report was based are now, at least, in doubt. If the British government were to undertake the task of setting the discount rate today, it is very doubtful that it would have come to the same

¹⁰² More accurately, England and Wales. Scotland and Northern Ireland deal with discount rate issues separately.

conclusions. The notion that plaintiffs who invest their damages awards would realize a gain greater than that of a “low risk” investment is now very questionable. We will not try to speculate on what the government of another country might do under dramatically different circumstances. But we expect that the review of the Ogden Rate that is scheduled to take place in 2024 will be considerably less *pro forma* than the UK government might have expected.

2.8.4 Ways in which the UK discount rate is not directly comparable to the rate established under r. 53.09

257. It is important to bear in mind that the discount rate established in the UK in 2019 (-0.25%) is not derived in the same way as the Ontario rate and so, is not directly comparable. Among the differences are the following:

- a) One of our advisers, Dr. Hyatt, has pointed out that the UK economy was hit harder by the 2008 financial crisis than was Canada;
- b) Perhaps partly for that reason, its long-term government bonds have generated lower returns than Canada’s (and still do: see paragraph 114 above) That would tend to make the UK rate lower than ours, if bond yields were still used there to set the discount rate;
- c) The UK rate is now based on an estimate of returns that a representative plaintiff would receive from a low risk mixed portfolio of assets, over a 43-year horizon. Setting the rate on that basis was done using the results of a “Call For Evidence”. We do not do that in Ontario. In part, that is because we have no equivalent of the UK’s “Call For Evidence”;
- d) It was evidently considered acceptable in the UK for the rate to be one that was projected to result in about one-third of plaintiffs being undercompensated;
- e) Built into the UK rate is an adjustment for damages inflation, taxes and expenses, all totalling 1.75%. None of those is adjusted for in the discount rate in Ontario.

The result in the UK is to lower the discount rate by 1.75% from what it would otherwise have been; and

- f) The UK discount rate is based on its own CPI. In December, 2019, that rate was 1.4 percent. In Canada, the CPI for the same month was 2.2 percent. Now, the situation is reversed. Canada's CPI for March, 2020 was 0.9% and in the UK, the rate was 1.5 percent. Thus, if the discount rates for the two countries were being set today (and not last month), all other things being the same, the UK's rate should be higher than ours.

2.8.5 Discussion

258. One of the changes implemented in the UK is one that has also been urged upon us in some of the submissions that we received—basing the discount rate on assumptions about how plaintiffs will actually invest their awards of damages. (The GAD stopped short of using the “reasonable investor” as a benchmark. Its standard was something less than that.) Whether to follow such a “real world” approach is an important policy decision that the Rules Committee must make. We do not recommend that an objective or “reasonable investor” approach be used in r. 53.09(1), at least not now.

259. The 2019 Ogden Rate represented a philosophical change in the UK. The previous approach more closely resembled our own, in that the rate was set based on an external source: ILGs. In 2017, this resulted in the rate dropping to minus 0.75 percent.

260. The new approach, begun in 2019, was meant to be more “evidence-based” and more reflective of returns that plaintiffs could reasonably expect to achieve.

261. If the Civil Rules Committee were inclined to follow a similar approach, several additional steps should probably be taken. First, as can be seen from the discussion

above, the 2019 UK approach explicitly recognized that a certain number of plaintiffs would be undercompensated by the new Ogden Rate. We feel that before endorsing such an approach, the Rules Committee should recognize that that method of calculating the discount rate would result in less than full compensation for most plaintiffs (while, at the same time, reducing the risk of overcompensation).

262. Secondly, we feel that a change to the 2019 UK approach (or something like it) should be supported by evidence, as the UK's evaluation was. As discussed above (see paragraphs 212 ff. above), the UK issued a "Call for Evidence". The responses guided the Government Actuary in the choice of a period of loss (43 years) for a "representative claimant" as well as the composition of a "low risk" portfolio of investments and an expected rate of return on those investments.
263. We feel that a move to an "evidence-based" discount rate should be preceded by a "Call for Evidence" of our own. As we are not recommending that approach, we have not attempted to define what sort of evidence should be gathered. But that task could be undertaken, should the Rules Committee wish.
264. Apart from the philosophical change in course, from at least an ideal of *restitutio in integrum* to one of undercompensation of a significant number of plaintiffs, the UK's "Call for Evidence" produced results from various stakeholders that seem to have varied widely and often along partisan lines. The GAD would select a point within those ranges, saying only that it considered its selection to be "reasonable". The Lord Chancellor, in turn, endorsed the GAD's selections as being "reasonable" but, in neither case were parameters of "reasonableness" given.
265. The evidence about damages inflation was admitted to be of rather poor quality and the assumed damages inflation rate (CPI+1% pa) seems to have been arrived at somewhat arbitrarily.

266. Finally, the adjustment to the baseline rate that was made by the Lord Chancellor, reducing the GAD's "calculated" rate from 0.25% (which was estimated to produce a 50–50 chance of full compensation) to minus 0.25% also seems to have been done through a non-rigorous approach. (Although, in fairness, the same criticism could be levelled at our own downward adjustment of ½% in r. 53.09(1)(a). The historical origins of that adjustment—originally one percent—are discussed in paragraphs 170 ff. above.)

267. Even taking into account these possible shortcomings and the philosophical change to an "evidence-based" approach, the UK still arrived at a discount rate of minus 0.25 percent. Some of the discount rates that have been suggested to our subcommittee have been as high as 3.5 percent. Even taking into account the factors that make the UK and Ontario rates, to some extent, "apples and oranges" (see paragraph 257 above), were the Rules Committee to set the r. 53.09 rate that high, it might be said to be out of step with even the more defence-oriented approach that the UK has now adopted.

2.9 Submissions of stakeholders

268. In this section, we have summarized the submissions that we received from the stakeholders.

2.9.1.1 *Should the discount rate be based on how plaintiffs are likely to invest?*

269. On one level, this is a key issue. To what extent, if at all, should the discount rate try to anticipate what plaintiffs will *actually* do with their awards? The answer to that question will have a strong effect on the discount rate that is chosen.

270. On another level, it really does not make much difference. In the view that we take, setting the discount rate on the basis of the returns that plaintiffs can actually earn involves as much crystal ball gazing as does setting the rate based on real return bonds and is therefore unreliable, for somewhat the same reasons. (There

would be a further level of uncertainty introduced by the need for evidence of the different variables, were an evidence-based approach to be used.)

271. There is, perhaps, a misconception (or at least, a conceptual disagreement) about the role that is currently played by GOC real return bonds under r. 53.09(1)(a). Many of the submissions and advice that we have received proceeded on the basis that rates of return on real return bonds are being used as a predictor of what plaintiffs will *actually* earn on the investment of their damages awards in real return bonds. In fact, that is probably almost never the case. Very few individuals actually purchase real return bonds. (Some of these issues were raised in the report of the Robins subcommittee: see discussion at paragraphs 180 ff. above.)

272. Likewise, in the course of discussions with our own subcommittee's experts, the point was made that there is a secondary market for real return bonds (i.e., after being purchased from the GOC, they are bought and sold by investors, at various prices. The government also "reopens" auctions on these bonds at certain points after their issue.) The "coupon" of the bond does not change, so that the person holding the bond will only receive returns based on the stipulated rate. But as can be seen on a Bank of Canada website¹⁰³, the "yield" of real return bonds in the secondary market (reflecting the coupon *and* the purchase price of the bond) changes on a daily basis.

273. To try to anticipate capital gains and losses by any individual plaintiff, on the assumption about the amount that he or she might be thought to earn by trading in real return bonds, strikes us as an impossible and unrealistic task.

274. Even in the UK, where insurers also argued for the rate to be based on returns that are actually achievable in the real world, using a mixed portfolio of

¹⁰³ <https://www.bankofcanada.ca/rates/interest-rates/canadian-bonds/>

investments, the government initially did not accept that suggestion. In the course of its 2017 consultations about reforming the discount rate from its then-level of 2.5%, proponents of the “mixed portfolio” approach said that the use of the UK index-linked gilts was an unrealistic standard to use for setting the rate.

275. The UK Lord Chancellor rejected that approach and endorsed the continued use of ILGs. In a statement to Parliament, given on February 27, 2017, then-Chancellor Elizabeth Truss explained her reasoning:

I am aware that issues have been raised as to whether ILGs (or a portfolio containing 100% ILGs) continues to represent a realistic or the appropriate basis for arriving at the discount rate, in part because changed economic circumstances have had an impact on the demand for ILGs. In particular, the case has been made by a number of respondents to the consultation exercises that it might be more appropriate and realistic to use a ‘mixed portfolio’ approach (in which other securities feature). I acknowledge that those arguments have some merit. However, I am not persuaded by them. I consider that a faithful application of the principles in *Wells v Wells*¹⁰⁴ leads to the 100% ILGs approach as the best way, in the current markets, of ensuring that there is “no question about the availability of the money when the investor requires repayment of the capital and there being no question of loss due to inflation.” *The mixed portfolio approach in contrast runs counter to these principles by requiring the assumption by the investor of a greater degree of risk.*¹⁰⁵ [Emphasis added]

276. Two years later, in 2019, the same government took a different view. It endorsed the establishment of the discount rate on the basis of “low risk” investments rather than “very low risk”, which ILGs were considered to be. Then-Chancellor David Gauke said:

I must assume that the relevant damages are payable in a lump sum (rather than under an order for periodical payments), I must assume that the recipient of the relevant damages is properly advised on the investment of those damages, and that they invest in a diversified portfolio of investments. I must also assume that the sums are invested using an approach which involves more risk than very low risk, but less

¹⁰⁴ The then-leading UK case on discount rates: [1999] 1 AC 34.

¹⁰⁵ Discount rate: statement placed by The Rt Hon Elizabeth Truss MP, Lord Chancellor, in the libraries of the Houses of Parliament on 27 February 2017 (paragraph 9).

risk than would ordinarily be accepted by a prudent and properly advised individual investor who has different financial aims.¹⁰⁶

277. Still, the two statements quoted above provide a good overview of the two sides of this debate. The stakeholders who made submissions to our subcommittee also divided along somewhat predictable lines on this issue, as discussed below.

2.9.1.1.1 Canadian Medical Protective Association (“CMPA”)

278. CMPA’s submission was the most detailed of those that we received: 113 pages, including reports from five consultants.

279. Its recommendations were based on what “an average prudent investor” would do with a lump sum award of damages. It advocated that two fixed discount rates be used. For investment horizons of more than ten years, it proposed a rate of 3.5 percent (which implies a nominal rate of return of 5.5% per annum if inflation is assumed to remain at about 2% per annum. As discussed in § 2.3 above, that assumption is probably now in doubt.) For shorter-term losses of less than ten years, it suggested a rate “in the range of 2 percent” (implying an assumed rate of return of 4% per annum).

280. CMPA’s alternative submission, if the existing two-tier model were to be retained, was philosophically similar: based on rates of return considered to be actually achievable if the award were invested in a mixed portfolio. Under that approach, CMPA proposed that the first “tier” be set at 2% and the second at 3.5 percent.

281. CMPA’s approach would go one step further than the UK government did in 2019. As set out in the passage quoted in paragraph 237 above, the latter expressly steered clear of setting the discount rate on the basis of the risk that “would

¹⁰⁶ Personal Injury Discount Rate – Outcome of Review; Statement placed by the Rt Hon David Gauke MP, Lord Chancellor, in the libraries of the Houses of Parliament on 15 July 2019 (paragraph 8).

ordinarily be accepted by a prudent and properly advised individual investor who has different financial aims". The current UK approach is to assume "low risk" investment, while CMPA's recommendations would probably be characterized as an assumption of "moderate risk". It might be true (although we do not have evidence, one way or the other) that the majority of plaintiffs would, indeed, invest in that fashion. Now that investment portfolios have collapsed, the result of that assumption is almost certainly not what CMPA expected it to be when its submission was made.

282. Setting the discount rate on the basis of that assumption would involve accepting a higher risk of undercompensation along with the assumed higher returns.

283. CMPA would shorten the first tier from 15 to 10 years, "to more accurately reflect investment practices likely to be followed by the plaintiff and returns readily available to the average, prudent investor".¹⁰⁷

2.9.1.1.2 Insurance Bureau of Canada ("IBC")

284. IBC discouraged setting the discount rate on the basis of "how each individual recipient will invest their award." However, it did advocate use of a "profile for the investment of the award by a 'typical' recipient under the assumption that it is appropriate for the investment of awards to be in instruments that are secure and therefore, conservative in the sense they carry a low risk level."¹⁰⁸ That approach would resemble, somewhat, the UK's "representative plaintiff" and a "low risk" versus a "very low risk" model.

285. However, IBC took issue with the use of real return bonds to set the discount rate. The actuarial firm that assisted it (Eckler Consultants + Actuaries) undertook an

¹⁰⁷ CMPA submission, p. 15.

¹⁰⁸ IBC submission, p. 7.

analysis of real return bonds and “nominal” (i.e., not inflation-indexed) Government of Canada bonds and concluded that the actual rate of inflation is distorted by real return bonds. As an alternative, IBC’s consultant suggested that the discount rate be set using a nominal GOC bond and that that rate of return then be reduced by the target rate of inflation (2%: see § 2.3 above).

286. Eckler’s rationale was that “[t]he nominal government bonds are more broadly traded than real return bonds and because of their nature would not require adjustments for either an illiquidity premium or tax treatment.”¹⁰⁹

287. This implies that Eckler and IBC were considering government bonds as investment vehicles in which plaintiffs would *actually* invest their awards.

288. It could be that the “distortion” of which Eckler spoke is the cost of the “insurance” that has sometimes been thought to be built into real return bonds (see paragraph 100 above).

2.9.1.1.3 Health Insurance Reciprocal of Canada (“HIROC”)

289. HIROC’s submission was brief. On this issue (whether the discount rate should be set based on how plaintiffs will actually invest), HIROC was concerned about the consequences of an “over-cautious” approach and the resulting increases in the cost of health care. It referred to the Goudge report¹¹⁰ and drew support from it for the proposition that the rate should be based on “a determination of what a reasonable rate of return is for plaintiffs who are expected to follow and benefit from prudent investment advice.”¹¹¹

¹⁰⁹ IBC submission, p. 10.

¹¹⁰ See § 2.13.2.

¹¹¹ HIROC submission, p. 2.

2.9.1.1.4 Canadian Institute of Actuaries (“CIA”)

290. CIA recommended “[t]hat the discount rate be fixed without assumptions as to how claimants invest damages awards.”¹¹²

291. As its rationale for this approach, CIA relied on what was said in “the UK consultation”.¹¹³ The latter was relied upon for the proposition that “the object of the award of damages for future expenditure is to place the injured party as nearly as possible in the same financial position as he or she would have been in but for the accident.”

292. However, the document to which CIA was referring was written in 2017. In 2019, the UK Government Actuary’s Department (“GAD”) instead recommended a different approach, one in which, statistically, about one-third of plaintiffs would receive less than full compensation and 78% would receive at least 90% of full compensation. (The principle underlying the CIA recommendation might still be valid, but the current UK evaluation probably should not be relied on in support of it.)

2.9.1.1.5 Ontario Trial Lawyers Association (“OTLA”)

293. OTLA’s submission did not address this question directly. But its recommendation was that the discount rate be set using the recent average yield rates established for real return bonds:

In OTLA’s view, a simple and just solution is readily available. The Government of Canada regularly sets yield rates on real return bonds known as Government of Canada Benchmark Long Term Real Bonds, published every Wednesday by the Bank of Canada. Utilizing an average return from this index of, say the prior six or twelve

¹¹² CIA Summary of Recommendations

¹¹³ Government Actuary’s Department, Technical Bulletin, Personal Injury Discount Rate (Sept. 7, 2017).

months, would restore justice to the discount rate applicable each year. This will also mean that the discount rate is regularly adjusted based on objective market data.¹¹⁴

294. The “objective market data” to which OTLA is referring in the last sentence of the passage from its submission, quoted in paragraph 293 above, are presumably the Bank of Canada yields, discussed in paragraphs 33 ff. above.

295. OTLA’s submission seems to contemplate that plaintiffs would *actually* invest in real return bonds. See, for example, the report of its expert, Dr. Eli Katz, who said: “the idea behind a lump sum award is that by purchasing an appropriately tailor-made portfolio of government bonds, an individual can match future (lost) income.”¹¹⁵

2.9.1.2 Two-tiered rate system

296. The stakeholders who made submissions to our subcommittee were divided: CMPA, IBC and CIA advocated continuing with a two-tier system while OTLA recommended using a single rate. HIROC referred to the Goudge report in support of returning to a single rate.

297. In essence, the argument in favour of a two-tier system is that the rate during the first, shorter period can be matched more precisely to recent economic conditions. Past data are known and the short-term future can probably be predicted with greater confidence.

298. OTLA’s consultant said that a single rate should be used, but it is not clear on what basis that suggestion was made. Its consultant (JK Economics Inc.) seems to have believed that if a single rate were set with reference to rates of return on real return bonds, that would ensure a fair result. Certainly, one aspect of the “unfairness” to which OTLA points is the 2.5% rate used for post-15 year losses. Its

¹¹⁴ OTLA submission, p. 3.

¹¹⁵ Report of JK Economics Inc., October 23, 2018, p. 4.

consultant said, “the rules broadly ignore the actual current real interest rates, which are what a victim of an injury or medical malpractice has to work with in securing future cash flows from an award. This, in our view, is unfair.”¹¹⁶

2.9.1.3 How should the rate(s) be set?

299. To some extent, this topic overlaps with the one dealt with in § 2.9.1.1 above, “Should the discount rate be based on how plaintiffs are likely to invest?” In this section, we are going to focus more on the mechanics.

2.9.1.3.1 CMPA

300. As discussed in § 2.9.1.1.1 above, CMPA favoured setting both rates on the basis of returns achievable through the investment of damages awards in diversified portfolios consisting of equities and bonds.

2.9.1.3.2 IBC

301. IBC proposed a two-tiered approach, with the second tier to be a fixed rate, as it is now. Its consultant, Eckler, acknowledged the difficulty of predicting the future but proposed a rate of 2.25 percent for the post-15 year period. With respect to the first tier, Eckler recommended that the existing formula be “improved”. As has already been mentioned, Eckler’s view was that real return bonds overstate the rate of inflation. It thought that a better approach would be to use the estimated yield of a nominal (i.e., non-indexed) Government of Canada bond and to subtract from that rate 2% per annum, derived from the government’s inflation target. (To repeat, assuming that rate of inflation might now be open to question: see § 2.3 above.)

302. Eckler made the interesting point that using Government of Canada bonds with maturity dates of “over 10 years” to predict returns for the future 10 to 30 years

¹¹⁶ *Ibid.*, p. 2.

would have been a very unreliable approach in the past and that, in fact, there is often “a negative correlation between the two”.¹¹⁷

303. Its suggested second-tier rate of 2.25% was based on an historical analysis of the returns on long-term Government of Canada bonds, going back to the 1930s.

Whether that is a valid approach depends, to a large extent, on the extent to which it is true that the future is likely to resemble the past. As discussed in § 2.6 above, we think there is reason to doubt that it will.

2.9.1.3.3 HIROC

304. As mentioned already, HIROC referred to Justice Goudge’s report. HIROC definitely felt that the discount rate(s) should be set with regard to what plaintiffs would actually do with their awards. In its submission, it expressed the hope that a meeting of major stakeholders might be convened by the Rules Committee, in order to try to resolve competing views.

2.9.1.3.4 CIA

305. CIA’s suggested approach appears to have been to maintain a two-tiered approach and for the rates to be derived as they are now. It supported, by long-term historical data, the continued use of a 2.5% rate. Its submission referred to “the expectation that economic conditions will revert to historic norms”.¹¹⁸ As discussed in § 2.7 above, past subcommittees dealing with the discount rate did so on the basis of a very similar expectation of the future.

306. CIA felt that while real interest rates have declined well below 2.5% in recent years, they had been higher than that, going further back in history. For that reason, CIA warned that “reversals in persistent real interest rates toward a historic norm

¹¹⁷ IBC submission, p. 5.

¹¹⁸ CIA submission, p. 9.

have a precedent, suggesting that a decision to depart from historical norms should be made cautiously.”¹¹⁹

307. Even if the proposition in the previous paragraph were true (and we entertain considerable doubt that it is), it strikes us that it would be cold comfort to a party—especially a plaintiff who will only ever have one court case—to say that overcompensation or undercompensation in their particular case will even out with an opposite adjustment in some future case.

2.9.1.3.5 OTLA

308. OTLA’s preferred approach has already been discussed: see § 2.9.1.1.5 above

2.9.1.4 *Should the ½% adjustment continue to be made?*

309. Unsurprisingly, CMPA and IBC submitted that the ½% reduction should be eliminated. The other stakeholders have not commented but presumably, OTLA would prefer to retain it.

310. The defence rationale for removing the ½% adjustment is captured in CMPA’s submission:

The discount rate for the first tier under Rule 53.09(1)(a) is calculated based on the average of the rates on long-term Government of Canada real return bonds in the 12 months prior to the date of trial. The Rules require, however, that this average rate be adjusted downward by ½ percentage point and rounded to the nearest 1/10 of a per cent. This requirement has no basis in actual investment practices and further perpetuates the risk of unjust enrichment.

The Subcommittee of the Civil Rules Committee on Rules 53.09 and 53.10 suggested in 2011 that this was intended to “provide a “buffer” for plaintiffs”. There is no evidence to suggest a discount rate based on real return bonds requires an adjustment to ensure plaintiffs are appropriately compensated. As discussed above, CPC, Professor Shum Nolan, and JSCP agree that the proposed investments are already inappropriate, given that plaintiffs would not invest exclusively in a real return bond portfolio, given

¹¹⁹ CIA submission, p. 10.

the higher returns available at similar levels of risk using a diversified portfolio.¹²⁰
[Footnote omitted]

311. Other defence stakeholders made similar points.

2.9.1.5 Should negative discount rates be permitted?

312. At present, the discount rate for the first 15 years cannot be less than zero. That was a change that was introduced in 2013, after the discount rate had sometimes become negative.

313. CMPA said, “[t]o the extent that the downward adjustment to the rate is removed and more realistic investment vehicles are considered, we do not foresee the issue of a negative discount rate in the current economic climate. We therefore hesitate to propose any changes to this Rule at the present time without any factual context.”¹²¹

314. IBC favoured retaining the floor.¹²²

315. CIA agreed that negative discount rates are “defensible theoretically” but that it would be “difficult for the public to comprehend”.¹²³ We agree, although the latter statement is broadly applicable to negative interest rates too. Since the phenomenon of negative rates has become more widespread, there have been a number of commentaries about the “cognitive dissonance” thereby produced.¹²⁴

316. OTLA saw no reason to continue to prevent negative discount rates. We agree.

¹²⁰ CMPA submission, pp. 15–16.

¹²¹ CMPA submission, p. 18.

¹²² IBC submission, p. 11.

¹²³ IBC submission, p. 21.

¹²⁴ Schneider, Stefan, “Negative interest rates and their effect on humans”, Deutsche Bank Talking Point, August 23, 2019; Tett, Gillian, “The downside of negative interest rates”, Financial Times, October 9, 2019.

2.9.1.6 *Should there be judicial discretion to set different discount rates for different types of damages?*

317. The CIA felt that judicial discretion to alter the r. 53.09(1) discount rate should remain. It gave as an example “compensating for lost wages where one individual is in a declining industry with few productivity gains, compared to an individual in a growth industry.”¹²⁵ The main situation in which that group thought that the exercise of such discretion might be called for was in cases involving productivity gains that warrant a different treatment.

318. But CIA was generally opposed to having multiple discount rates, for different types of damages, saying, “the future cost of care includes many items that are related to wage inflation, rather than the purchase of goods. This reduces any justification for having a separate discount rate. Further, a separate discount rate has the disadvantage of adding complexity to the calculation and to the communication of the result.”¹²⁶

319. CMPA opposed judicial discretion, on the basis that the efficiencies of having a rule would thereby be jeopardized.

320. IBC did not express a view.

321. OTLA was in favour of a different rate being used for certain types of damages, not on the basis of an exercise of judicial discretion but using a pre-set rate. It recommended a “long term labour productivity growth” adjustment (subtraction) of 0.9%. The example in its submissions, assuming a real return bond yield of 0.64% was as follows:

$D = \text{Benchmark Long term RRB yield} - \text{Long term labour productivity growth} = 0.64\% - 0.9\% = -0.26\%$

¹²⁵ CIA submission, p. 22.

¹²⁶ *Ibid.*, p. 21.

322. In other words, assuming a real return bond yield of 0.64% (which, of course, has already been adjusted for inflation) and reducing that yield further by 0.9% on account of labour productivity growth would result in a discount rate of -0.26% that OTLA would apparently want to see used for damages with a wage component.

323. Its rationale was its allegation that wages tend to increase at a rate faster than that of prices, with the result that a higher rate of inflation should be assumed for them. That would result in a lower discount rate for those damages.

2.10 Subcommittees' advisors

324. Both of the experts who advised our subcommittee (Dr. Douglas Hyatt and Dr. Christopher Bruce) initially proceeded on the basis of how plaintiffs would actually invest their awards and how much risk it was reasonable to expect them to assume. That appears to be how both usually approach the issue when they are providing expert evidence (such as in Alberta). (Dr. Hyatt advised us that even when they have been experts on the opposite sides of cases, the two had "never disagreed" on what the discount rate should be.)

325. Based on the discussions that we had, our advisors' approaches seem to have been driven by the fact that real return bonds are rarely purchased by individuals. Most plaintiffs, they felt, would invest in some combination of stocks and bonds that would generate a greater return, albeit with more risk. The question, in their minds, was how much risk it is reasonable to expect plaintiffs to assume.

326. Over the course of our discussions, we ultimately asked our advisors not to opine on this question. That was partly because it is really a philosophical or policy decision to be made by the Civil Rules Committee, whether to set the discount rate on the basis of investments that plaintiffs will *actually* make. The other reason for asking the experts not to base their opinions on potential returns by real world

plaintiffs is that, unlike in the UK, we have no evidence as to what those returns should be considered to be.

327. As a result, we asked our advisors for their input on how the discount rate should be set if the returns that might realistically be achieved through investment in stocks and/or bonds are ignored.

328. Both Dr. Hyatt and Dr. Bruce conferred with the subcommittee at a meeting in October, 2019. Dr. Hyatt attended in person and Dr. Bruce by telephone. They provided further input by telephone and emails after that meeting.

2.10.1.1 Dr. Douglas Hyatt

329. Dr. Hyatt provided a number of preliminary comments about the discount rate problem. He and Stephen Cavanagh of our subcommittee had a number of email exchanges and spoke at some length on several occasions. As a result of those discussions and subsequent discussions, Dr. Hyatt reformulated his opinion somewhat and provided a written memorandum dated February 12, 2020 in which he summarized his views.

330. The following are some comments about specific statements made by Dr. Hyatt in his memorandum, to try to minimize any misunderstandings.

- *“Simply stated, government debt markets in the UK and Canada have followed fundamentally different paths since the financial crisis, and the market interest rates on government debt instruments are very different between the two countries (specifically, interest rates payable on government debt instruments are lower in the UK than those in Canada).” (Page 1) This is true: see paragraph 114 above.*
- *“The UK PI rate is not directly comparable to the Ontario Rule 53.09(1) discount rate because the PI rate makes allowances for real wage increases, inflation above CPI for certain extraordinary costs, investment management fees and for taxes.” (Page 2) This is true at*

present. Section 4(5)(c) of Schedule A1 (“Assumed Rate of Return On Investment of Damages: England and Wales”) to the UK’s Damages Act 1996 requires that in setting the discount rate, the Lord Chancellor “make such allowances for taxation, inflation and investment management costs as the Lord Chancellor thinks appropriate.” However, that only came into force on December 20, 2018. We are unsure whether there was a corresponding provision before that. For that reason, it is not certain that the increase of 1.75% in the calculation that appears in the second full paragraph of page 3 of Dr. Hyatt’s report is correct, although it might be.¹²⁷ That calculation would be valid now though, subject to the comments that Dr. Hyatt made at the bottom of page 2, about the difference in approaches between the two countries.

- *“I note that the UK review looked favourably upon the Ontario two-tier discount rate, but felt further research was necessary before adopting the approach for the UK.”* (Page 2) The UK Government Actuary Department did not go quite that far. It would be fair to say that it looked favourably on a two-tier system and is, in fact, actively considering a move to such a system right now. But the only reference to Ontario in the GAD report was in a review of various “switching points” between the first and second tiers.¹²⁸
- *“Yield curve inversions are relatively rare and have been prescient at foreshadowing recessions. When investors anticipate a recession, a common response is to buy safe 10-year bonds, thereby bidding up the price of bonds and bidding down the yields. Again, inverted yield curves are rare, and in my opinion, determining a long-term interest rate based on bond yields in an inverted yield curve environment is imprudent.”* Also true (see discussion at paragraphs 214 and 226 above). However, what has perplexed

¹²⁷ That is, “if one was to add back the 1.75 percent for taxes, inflation risk and investment management fees”. It is that addition that is in doubt.

¹²⁸ Government Actuary’s report, *supra*, para. 3.19.

commentators is that although yield curves have frequently been inverted over the last year, no recession has yet taken place (at least until recently: see paragraph 228 above). Some now feel that the inverted curve is more indicative of a concern about low long-term rates:

What is going on? One plausible interpretation is that the market has become more concerned about chronically low growth, or “secular stagnation”, in the global economy in 2019.

As Lawrence Summers and Lukasz Rachel have argued in new research, global equilibrium interest rates have been falling precipitously for several decades, especially in the private sector. It is possible that this decline was temporarily arrested during the economic upswing of 2016-18, helped by the US fiscal stimulus, but has now reasserted itself.¹²⁹

331. On page 7 of his memorandum, Dr. Hyatt outlined his thinking with respect to the post-15 year rate: “Unlike previous iterations of the Rule which set a fixed second-tier discount rate, the second tier rate could be based upon a formula that allows a measured response to possible changes in longer term interest rate trends, be it higher, lower or reversion to the mean.” [Emphasis in original]

332. Dr. Hyatt then discussed possible approaches to the long-term rate that should be used for the second (post-15 years) period:

In my opinion, the Rule 53.09(1) discount rate should use the current formula for the first 15 years (but not reduced by 0.5 percent) with the language revised to refer to the correct data series and the reference to the *Weekly Financial Statistics* publication (that the Bank of Canada no longer produces) removed. The post-15-year discount rate should be fixed at 2.3 percent.

333. (“The correct data series” just refers to the fact that the language of the existing rule no longer refers to the right real return bond series.)

334. His suggested rate of 2.3% for the post-15 year period appears to have come from a recent (February, 2020) publication authored by colleagues of his at the University

¹²⁹ Davies, Gavyn, “Here is what’s going on with the yield curve”, Financial Times, November 3, 2019.

of Toronto's Rotman School of Business's Policy and Economic Analysis Program ("PEAP").¹³⁰

335. As Dr. Hyatt observed, the PEAP paper did not comment directly on future yields of real return bonds. But it did project future nominal returns on 10-year GOC bonds and on anticipated CPI. Dr. Hyatt said that "[t]he difference between the 10-year yield and CPI inflation is a reasonable proxy for the real rate of return on government bonds."¹³¹ The real return rate, thus constructed (and using a CPI rate of 2.0%), would rise to 2.3% in 2023 and remain at that level to 2050 (the end of PEAT's projection horizon).
336. (As discussed in § 2.3 above, the assumption that inflation will continue to be about 2.0% probably now deserves a lot more careful thought.)
337. Dr. Hyatt also supported his 2.3% rate by looking at the average yield on real return bonds from September 1, 1993 to August 31, 2019. Setting the second-tier discount rate on that basis, he said, would translate into a rate of 2.4 percent.
338. Finally, Dr. Hyatt looked again at the UK approach and, translating it into Ontario values, arrived at a long-term rate of 3.25 percent. He explained the fact that that would exceed his proposed long-term rate by 0.95% by noting that:

The analytical/judgement-based approach (rather than a simple average of past yields) followed by the UK Government Actuary to establish the second term rate arrived at rate that is 0.95 percent greater than the PEAP rate, which, in part, reflects that the UK assumes that plaintiffs would invest their awards in a low risk diversified portfolio, but not exclusively government bonds.¹³²

¹³⁰ Already mentioned at paragraphs 313 and 314.

¹³¹ Page 8.

¹³² Page 10.

339. Dr. Hyatt did not think that use of different discount rates, for different heads of damages, could be justified on the basis of productivity or inflation of wages at rates different than those of CPI.

340. In a preliminary report to us, Dr. Hyatt addressed the question of health care expenses rising at a rate faster than that of CPI. Essentially, it was his view that if a particular sector of the economy (such as health care workers) becomes more productive by, say, 2%, a wage increase of 2% creates “no upward pressure on the real cost of health care services. As a result, the price of health care services will increase at the overall rate of inflation in spite of the fact that the health care providers received wage increase in excess of the rate of inflation”. He also went on to say that “[f]inally, economic theory would suggest that rapidly growing prices in one sector of the economy will induce economic (and political) responses to mitigate those price increases.”¹³³

2.10.1.2 Dr. Christopher Bruce

341. Dr. Bruce too would have set the rate on the basis of returns that could be achieved in the market, but having been asked not to make any assumptions about what plaintiffs would actually do, his preference was for a single rate, using “the benchmark rate that is published by the Bank. It reflects a kind of average rate that investors can expect.”¹³⁴

342. Dr. Bruce added that if that course of action were followed, he would suggest “that the Committee include a section in which it explains why it has chosen to use the most risk-free investment available. That is, why does the Committee believe that the plaintiff should not have to accept any risk, even when that would seem, in

¹³³ Draft copy of preliminary comments on submissions of stakeholders by Dr. Douglas Hyatt, September 3, 2019.

¹³⁴ Email, C. Bruce to S. Cavanagh, January 9, 2020.

some sense, to be reasonable (given that the average investor seems to be willing to accept at least some risk).”¹³⁵

2.11 Our recommendations

343. In this section, we have set out our own recommendations with respect to changes to r. 53.09(1). Suggestions about possible reforms going beyond that rule are dealt with below, in § 2.12.

2.11.1 Should the discount rate be based on how plaintiffs are likely to invest?

344. In its submission, CMPA cited a rather venerable decision of the Supreme Court of Canada, in which the court set out the “full compensation” principle that has underlain our system of personal injury law:

It is true that it is possible that the future will prove better than the evidence appears to indicate but the contrary is also possible and *the innocent person who has been gravely injured by the fault of another should not be called upon to bear all the risk of the uncertainties of the future.*¹³⁶ [Emphasis added]

345. We agree with that view. But we recognize that an approach that aims at using the discount rate to ensure that all (or at least the great majority) of plaintiffs will be fully compensated is very likely to result in a large number of them being overcompensated.

346. As a starting point, we observe that there seems to be uncertainty as to whether the existing rule is based on investments that plaintiffs will actually make. We do not believe that it is.

347. In our view, it is not realistic to assume, as some of the stakeholders’ submissions seem to (see paragraph 294 above, for example), that plaintiffs will *actually* invest in real return bonds. While prior subcommittees have not addressed the issue

¹³⁵ *Ibid.*

¹³⁶ *Archibald v. Nesting*, 1953 CanLII 57 (SCC), [1953] 2 SCR 423, p. 427, cited at p. 6 of CMPA submission

explicitly, we do not believe that they have proceeded on that assumption either.¹³⁷ We feel that the use of real return bonds to establish a discount rate would have to be on the basis that they are the most reliable predictor we have of future real rates of return, on a basis that minimizes risk to plaintiffs.

348. Admittedly, that assumption has not been explicitly set out, either in the rule itself or in reports from previous subcommittees. This issue does not really seem to have been addressed by those subcommittees. (Although see the discussion of the deliberations of the Robins subcommittee at § 170 ff.) Adjustments to the rate produced by reference to real return bonds were made to reflect the “illiquidity” of such investments and other factors, which might suggest that the subcommittee was assuming that those bonds would actually be purchased by plaintiffs.

349. In our view, r. 53.09(1) has always sought to provide a mechanism for calculating the amount that, paid now, would fully compensate plaintiffs for future losses, but not overcompensate them. Because the calculation is based on estimates of future economic conditions, that objective has been difficult (or, more accurately, “impossible”) to meet. Such forecasts have often proven to be very wrong in the past, both in the direction of overcompensation and undercompensation.

350. Many of those who have looked at this problem (including both of our consultants, a number of stakeholders and some who provided input into the UK consultations) have questioned the use of government bonds, indexed to inflation, as a basis for setting the discount rate because, in fact, very few plaintiffs (if any) would ever choose to invest their awards in such bonds. Those subscribing to that view go on to say, quite reasonably, that better returns will be realized by plaintiffs in the

¹³⁷ See paragraph 163 ff. re Robins subcommittee’s apparent view.

real world because awards are more likely to be invested in a mixed portfolio of stocks and/or bonds that would produce a higher return, albeit at greater risk.¹³⁸

351. The question, then, is whether present value calculations should be made on the basis of estimates of returns that plaintiffs, acting reasonably, are expected to be able to achieve in reality or using real return bonds as a conservative estimate of expected, long-term investment yields. The former carries with it greater risk of undercompensation as a corollary of the likelihood of higher returns. The latter would minimize the risk of undercompensation but increase the risk of overcompensation. And it would also be only a theoretical measure of returns. Real return bonds are unlikely to be used by many—if any—plaintiffs in the real world.

352. The tension between the risk of overcompensation when a low discount rate is used and undercompensation when a higher discount rate is used is illustrated graphically in the chart prepared by the UK's Government Actuary Department (Figure 7, on page 68).

353. In our view, the present r. 53.09(1) is an unsatisfactory way of calculating damages.¹³⁹ But for now, it is all we have. It is our subcommittee's view that the discount rate should be established on the basis of minimizing the risk of both undercompensation and overcompensation. However, we feel that the latter should give way to the former, for the reasons set out in paragraph 344 above, in the quotation from *Archibald*.

¹³⁸ Of course, at the time of writing the March, 2020 draft report, the TSE has had its worst decline since 1940. So, while there is no doubt that higher returns can often be had through investment in the stock market or through a mixed portfolio of stocks and bonds, there is also no doubt that the higher returns come with risk that, at some point, will manifest itself. The economic picture has not become clearer since.

¹³⁹ See § 3.9 for our recommendations for a reformed approach.

354. We recognize that a strong case can be made for approaching the task of setting the discount rate on the basis of the returns that plaintiffs, acting reasonably, are likely to achieve. That is what the UK has decided to do. Such an approach would probably approximate more closely what will happen in the real world. But our recommendation is that the rate be set without regard to the returns that plaintiffs might actually be able to achieve.

355. If the Rules Committee were to disagree with us and prefer a “reasonable investor” approach, we feel that additional work needs to be done, including the following:

- a) as was done in the UK, we should try to gather evidence as to what plaintiffs have typically done with their awards;
- b) there should be evidence as to sorts of returns that are expected to be achievable and the assumptions underlying those projections;
- c) there should be an estimate of the probability of undercompensation and overcompensation, perhaps using a Monte Carlo analysis (as was done by the Government Actuary in the UK);
- d) a decision should be made as to the probability of undercompensation that is considered acceptable; and
- e) we should make explicit the assumptions upon which r. 53.09(1) will be based, going forward.

2.11.2 Two-tiered rate system

356. As noted above, one of our advisors (Dr. Hyatt) favoured maintaining the two-tiered system while the other (Dr. Bruce) thought that a single rate should be used: see § 2.9.1.6).

357. Although we have struggled with this issue, we are inclined to agree with Dr. Bruce and OTLA, that r. 53.09(1) should return to a single rate.
358. Our understanding is that it was thought that relatively current economic data would be a reasonable basis upon which to set the discount rate for short-term losses.¹⁴⁰ It was anticipated that, over the long-term, the “spread” between nominal interest rates and inflation would return to what was thought to be an historical norm of 2.5 percent.
359. The change to a two-tier system was made by the Robins subcommittee in 1998 and is still in use.
360. In large part, our reasons for opting for a single rate have to do with the difficulty of establishing a rate for a period that will only begin 15 years in the future. That being so, setting a second rate would involve even more speculation than does the first rate. So, we have elected to recommend the use of one rate, derived as explained in the following section.
361. We disagree with the present system, of using a fixed rate of 2.5 percent for the second period. We are not persuaded that the spread between returns on investment and inflation will “revert to normal”, at 2.5%, as has been thought to be the case since the 1980s.
362. In our view, there is no reason to conclude that if a 2.5% spread between returns and inflation was ever “normal”, it is now.

¹⁴⁰ See discussion of Robins subcommittee, § 2.8.3, which created the two-tiered system.

2.11.3 How should the discount rate(s) be set?

363. In this section, we have proceeded on the basis that a single discount rate will be used. We will first look at the recommendations of our consultants and then explain our own proposal.

2.11.3.1 Dr. Hyatt's proposal

364. Dr. Hyatt, one of our two consultants, has suggested that the first tier rate continue in its present form (but without the ½% reduction). He recommended that the second-tier rate be set at 2.3 percent. He supported this suggestion on the following bases:

- a) Referring to the recent report of his University of Toronto colleagues at the Policy and Economic Analysis Program ("PEAP").¹⁴¹ While that report does not predict what the yield of real return bonds will be in the future, it does predict the yield on 10-year GOC bonds. Dr. Hyatt said that using those predicted yields and subtracting estimated inflation, is "a reasonable proxy for the real rate of return on government bonds". His chart (based on PEAP's predictions) looks like this:

<u>Year</u>	<u>10-Year Yield</u>	<u>CPI Inflation</u>	<u>Real Return</u>
2021	2.3%	2.0%	0.3%
2022	3.3%	2.0%	1.3%
2023	4.2%	2.0%	2.2%
2024	4.3%	2.0%	2.3%
Thereafter	4.3%	2.0%	2.3%

Figure 8

- b) He also pointed to the second part of the two-tier rate that the UK GAD considered (but did not ultimately use) and converted it to an Ontario rate of 3.25 percent. He got there by starting with a rate of 1.5% and adding to that 1.75%, which he calculated as the built-in UK adjustment for damages inflation, tax and

¹⁴¹ See paragraph 82.

expenses. (The UK GAD's notional second-tier rate was CPI+1.5% so what Dr. Hyatt has done is cancelled out CPI (since that would have to be done to derive a "real" rate) and used 1.5% as the starting figure, before adjusting for damages inflation etc.)

- c) Dr. Hyatt converted the *actual* UK discount rate of minus 0.25% to an Ontario value, which he concluded was 2.0 percent. (That calculation started with the actual UK rate of minus 0.25%, added back their adjustment for damages inflation and taxes (1.75%) and their "undercompensation adjustment" (see paragraph 248 above), which Dr. Hyatt said was 0.50 percent.) In fact, the adjustment made by then-Lord Chancellor Gauke was a full one percent, from 0.25% to minus 0.25 percent.) In the course of Dr. Hyatt's analysis of the UK, he noted that interest rates there are significantly lower than here.
- d) Finally, Dr. Hyatt looked at the yields on real return bonds since 1992 and noted that they had averaged 2.4 percent. He felt that that too lent support to his proposed rate of 2.3 percent.

2.11.3.1.1 Comments on Dr. Hyatt's proposal

365. Dealing with the UK situation first, Dr. Hyatt's calculations do not quite render their rates comparable to ours, even after backing out their adjustment for "damages inflation" etc. (Dr. Hyatt acknowledged in his comments to us, that "[t]he 'comparable' Ontario rate is not quite comparable because the UK rate is based on a portfolio comprised of between 22.5 percent and 30.0 percent UK government Gilts (bonds). The UK methodology attempted to consider how a cautious plaintiff would invest their award in a 'low risk diversified portfolio'." ¹⁴²)

¹⁴² Dr. Hyatt's report, pp. 2-3.

366. Dr. Hyatt also relied on PEAP's predictions of the yields on 10-year GOC bonds, starting in 2021 (see paragraph 364.a) above). Those predictions might come true. But yields would have to move a very long way to get there. (In Canada, 10-year bond yields reached 0.53% on March 9, 2020, before recovering slightly (along with US Treasury bonds) following President Trump's declaration of a state of emergency. GOC 10-year bonds finished that week with a yield of 1.33 percent.)

367. The following is the yield history on the corresponding Government of Canada 10-year bond for the last two years:

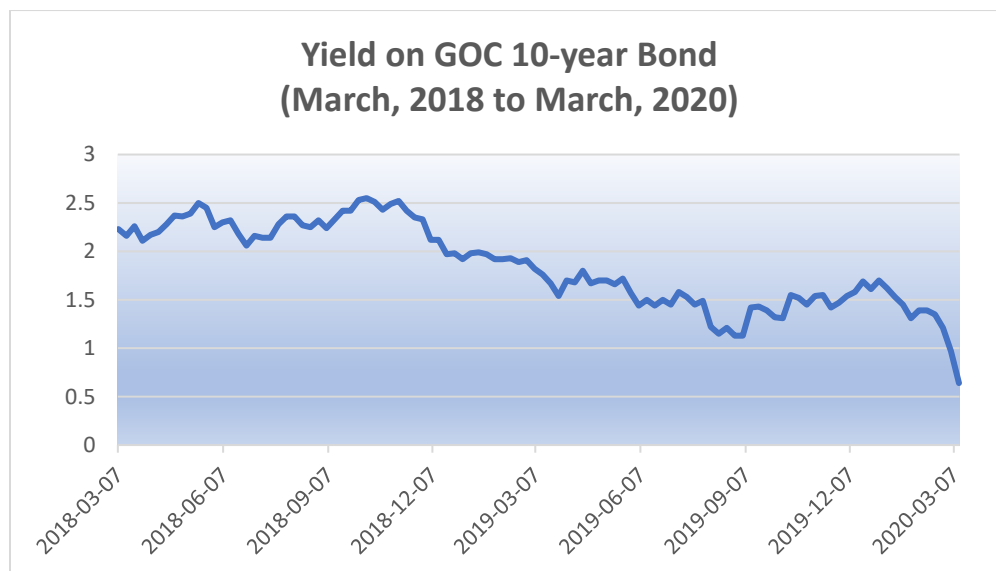


Figure 9

368. As is apparent, the yield has come nowhere near the 4.3% that it would have to reach in order to support a discount rate of 2.3% (i.e., a rate that, when estimated inflation of 2% is subtracted, would still be 2.3% or more). The yield on 10-year bonds has not been that high since 2008. (Of course, if the calculation is based on assumed low inflation or deflation, that would make a discount rate of 2.3% easier to achieve. Hyper-inflation, were that to develop in the future, would have the opposite effect.)

369. PEAP also made an economic forecast in 2015. At that time, it predicted the following yields on Government of Canada 10-year bonds:

YEAR	PREDICTED YIELD
2015	1.5
2016	2.5
2017	3.8
2018	4.6
2019	4.8
2020	4.9
2021	4.9

Figure 10

370. The *actual* yields for GOC 10-year bonds (up to the present) fell far short of PEAP's 2015 predictions:

V122543: Government of Canada benchmark bond yields - 10 year

V122543: Government of Canada benchmark bond yields - 10 year		
Low	2016-09-01	0.98
Average	2015-03-01 – 2020-02-01	1.67
High	2018-10-01	2.49

Figure 11

371. Dr. Hyatt's report also mentioned that yield curves on GOC bonds are now inverted, which he noted has usually been associated with impending recession. (That phenomenon was discussed in paragraphs 214 and 226 above. And that "rule of thumb" seems to have been accurate again.) However, he thought that it would be "imprudent" to set the discount rate on that basis.

372. It seems to us that it would be a leap of faith to assume that, unlike its 2015 forecast, PEAP's 2020 prediction of the future is correct and to establish the second-tier discount rate on that basis. That would fly in the face of the Schmelzing paper (see paragraph 116 above), which showed that real return rates have been

descending since the middle ages and are continuing to do so. And it would certainly require a belief that the economic world of the next few years will look much different than it does today, when many analysts are predicting that a recession or even a depression is either imminent or already happening.

373. With respect to Dr. Hyatt's suggested support for a second-tier rate of 2.3% based on the historical average yield on real return bonds, using a start date of 1992 (as he did) can be argued to have created a rather misleading picture.

374. Like any solution to this problem, Dr. Hyatt's depends on predictions of the future. If a shorter historical period were used for the average yield of real return bonds, the results would be very different from starting the calculation in 1992. This can be seen from the following table, also prepared by Dr. Hyatt:

Period	Average Yield
September 1, 1992 to August 31, 2019	2.4%
September 1, 1995 to August 31, 2019	2.1%
September 1, 1999 to August 31, 2019	1.7%
September 1, 2000 to August 31, 2019	1.6%
September 1, 2001 to August 31, 2019	1.5%
September 1, 2004 to August 31, 2019	1.1%
September 1, 2009 to August 31, 2019	0.8%

Figure 12

375. If the information were brought even more up to date, it can be seen that real return bond yields have continued to decline. The following is a summary of the history of yields of real return bonds, from April, 2010 to the present (an average yield of only 0.67):

V122553: Real return bond - long term

V122553: Real return bond - long term		
Low	2020-02-01	0.08
Average	2010-04-01 – 2020-03-01	0.67
High	2010-07-01	1.55

Figure 13

376. Thus, if we were inclined to use the yield on real return bonds for, say, the last twenty years, we might think about a rate of 1.6 percent (as shown in Figure 12). But of course, the yield has been dropping steadily ever since, so even that approach is difficult to justify.

377. In sum, we are not persuaded that a rate of 2.3 percent is a reasonable one, even if we were going to continue to use two tiers. It is even less defensible if, as we recommend, the rate return to a single tier.

2.11.3.2 Dr. Bruce's proposal

378. Dr. Bruce proposed a single rate, based on real return bond yields. In effect, he would use the existing r. 53.09(1)(a) approach (i.e., the one used to set the first-tier rate) but would apply it to both short-term and long-term losses.

379. Overall, Dr. Bruce was not in favour of the present ½% reduction in r. 53.09(1)(a), but that did not seem to be a big factor for him in making this recommendation. We are recommending though, that that reduction be eliminated.

380. If we eliminated the zero floor and kept the ½% reduction, we would have a negative discount rate for trials in 2020.¹⁴³

¹⁴³ Although at least one Superior Court judge has doubted whether there will be any more trials in 2020: *Spiridakis v. Li*, [2020 ONSC 2173 \(CanLII\)](#), para. 14 (*per* Boswell J.)

2.11.3.2.1 Comments on Dr. Bruce's proposal

381. We recommend that the discount rate be set as Dr. Bruce has recommended, but with the abolition of both the zero percent floor and the ½% downward adjustment (see §§ 2.11.4 and 2.11.6 below). Our rationale is that recent real return bond yields probably provide as reliable a predictor as any of what is inherently almost impossible to predict: long-term interest rates and inflation. We are hopeful that adoption of a different system for calculating damages awards for future losses can replace this one.

382. In endorsing Dr. Bruce's recommendation, we have taken comfort from some of the reasoning that underlay the approach of the first discount rate subcommittee, as discussed in the following section.

2.11.3.3 *The approach taken by the original Morden discount rate subcommittee*

383. As discussed in § 2.7 above, we got to a discount rate of 2.5% in the first place because of what the first few subcommittees were being told: that on average, the yields on "long-term Government of Canada bonds" would exceed inflation by about 2.5 percent:

The 1980 special committee concluded that the real rate of interest in Canada (i.e. the excess of the rate of interest on long term Government of Canada bonds over the long term rate of price increases) would be in the range of 2% to 3% per year for the foreseeable future. The committee's "best single point estimate" was 2½% per year.¹⁴⁴

384. Another possible approach would be to return to that methodology and set the discount rate on the basis of historical yields on long-term GOC bonds, reduced by an assumed value for inflation. But, of course, we would not be prepared to assume that the real yields on those bonds will reach 2.5%, as was thought to be the case

¹⁴⁴ Osborne subcommittee report, p. 3.

back then. (Recent deflationary trends just add to the uncertainty.) We think it would make sense to look at *average* nominal yields on those long-term bonds.

385. The average nominal yield (i.e., without adjusting for inflation) for the benchmark Government of Canada long-term bond (which has a coupon of 2.75%), for the last ten years, has been only 2.48 percent:

V122544: Government of Canada benchmark bond yields - long-term

V122544: Government of Canada benchmark bond yields - long-term		
Low	2020-02-01	1.35
Average	2010-04-01 – 2020-03-01	2.48
High	2010-04-01	4.04

Figure 14

386. Like other bonds, the yield trend has been fairly steadily downward and February's yield was the lowest of the entire period (although it did rise sharply in March, 2020, as discussed above). The *five*-year average yield is even lower than the ten-year average: 2.08 percent. And at no point over the ten-year period has the yield of this bond exceeded inflation by 2.5 percent. (As shown in Figure 14, the highest yield over that ten-year period was 4.04 percent and that was right at the beginning, in 2010.)

387. If we were to use the ten-year average yield on this bond as a basis for a single-tier or a second-tier discount rate, we would make an assumption about the rate of inflation and subtract it from the average yield. If inflation is assumed to be 2.0% per annum¹⁴⁵, the resulting discount rate would be 0.48 percent ($2.48 - 2.0 = 0.48$). That is much closer to Dr. Bruce's proposed figure than to Dr. Hyatt's. And if this trend continues (the yield on this bond in late April was 1.22% but has declined since),

¹⁴⁵ An assumption that may no longer be valid; see § 2.3.

even a discount rate of 0.48% would probably turn out to be too high if we wanted to adhere to the original rationale of Justices Morden, Osborne and Robins.

2.11.3.4 Conclusion

388. None of the options that we have looked at has been attractive. That is because they all depend on predicting what the economy will look like far in the future. But of the poor alternatives available to us, we favour Dr. Bruce's recommendation.

2.11.4 Should negative discount rates be permitted?

389. At the time that the "zero floor" was introduced in 2013, the advice provided was that the instances of the discount rate having become negative were anomalous and should not be permitted to happen.

390. Since then, the UK single discount rate has been set—twice—at a negative figure. It is possible, even likely, that the Ontario rate would be negative if the floor were removed, especially with the present ½% reduction.

391. Given the existence of negative discount rates in the UK (and negative interest rates in various economies), we see no reason to maintain the present zero floor. As our predecessor subcommittees have noted, the discount rate was too low in the 1980s and early 1990s, with the result that defendants paid too much. In our view, the long-term rate is now too high, such that plaintiffs are being undercompensated.

392. The fact that a negative discount rate might be difficult for people to understand (see paragraph 315 above) is not a persuasive justification for continuing the present floor.

2.11.5 Should there be different discount rates for different types of damages?

393. There is no doubt that the cost of services inflates at a higher rate than does the cost of goods. In fact, in a 2013 paper by the New York Federal Reserve Bank, it was

observed that “core inflation”¹⁴⁶ in goods and in services actually have an inverse correlation with each other.¹⁴⁷

394. There are a number of reasons for that. Productivity gains affect goods much more than services. Being able to make widgets in half the time, due to technology advances, lowers the unit cost of that production process. The same product is delivered, but at lower cost. But it is less straightforward to reduce the time and the cost of delivering a service. Indeed, spending *less* time in that process would often be the last thing that a consumer would want. (Who would want a half-hour piano lesson reduced to 15 minutes on the basis of productivity?)
395. In this instance, while a strong case can be made for the proposition that the cost of health care services will inflate at a faster rate than other components of CPI, we are not inclined to make the adjustment that OTLA seeks.
396. For one thing, at present, CPI is based on both goods and services. If a special discount rate were to apply to health care services, that would imply that an opposite adjustment should be made to the CPI for goods.
397. Setting a second rate would be subject to all of the same frailties that, in this report, we have identified with *any* discount rate.
398. In addition, we have considered Dr. Hyatt’s comments on this issue, set out above at paragraph 340 above.
399. Finally, we anticipate that opening the door to setting discount rates based on the type of damages will be an invitation to the introduction of discount rate evidence. That is something that we think should be avoided, as much as possible.

¹⁴⁶ A term that refers to inflation with the very volatile items of food and energy prices stripped out.

¹⁴⁷ Peach, Richard, Rich, Robert and Linder, M. Henry, “The Parts Are More Than the Whole: Separating Goods and Services to Predict Core Inflation”, Federal Reserve Bank of New York, Current Issues in Economics and Finance (vol. 19, no. 7, 2013), p. 2.

2.11.6 Should the ½% adjustment continue to be made?

400. Whether the current ½% reduction (or any other artificial change) in the discount rate should be maintained is probably a function of the view that the Rules Committee takes with respect to whether one of the objectives of the discount rate is to minimize risk to plaintiffs.

401. At present, the rate for the first 15 years, determined by reference to real return bonds, is then reduced further by a further ½ percent (thereby benefiting plaintiffs). The Robins subcommittee originally established a reduction of one percent, to take into account “economic and risk factors”.

402. As Dr. Hyatt observed in a communication to our subcommittee, the ½% reduction is a source of confusion among stakeholders. That is probably because the historical genesis of the reduction is not widely known. When the actual process that led to that adjustment is considered, it would appear that the adjustment was intended to reduce, even further, the already “very low risk” associated with real return bonds. Dr. Hyatt does not recommend continuing the reduction.

403. Dr. Bruce also did not feel that such an adjustment was called for.

404. The answer to this question gets back to the policy issue of whether we intend the discount rate to compensate plaintiffs fully or whether, as in the UK, we consider it acceptable for a certain proportion of plaintiffs to receive less than full compensation. If full compensation is the aim, then some sort of adjustment might be warranted. However, the adjustments that have been made to date have been arrived at quite unscientifically and are almost universally misunderstood by stakeholders.

405. A similar reduction in the rate, otherwise calculated, was also made in the UK (see paragraph 248 above above). It appears to have been arrived at rather

unscientifically, as with our own reduction. But it seems clear that in both cases, the objective was to tilt the table somewhat further in favour of plaintiffs.

406. We recommend that there be no artificial reduction of the discount rate, if it is to be set on the basis that we have recommended in § 2.11.3 above.

2.11.7 No judicial discretion to depart from r. 53.09(1)

407. Like our predecessor subcommittees,¹⁴⁸ we think that parties should be discouraged from leading evidence to try to have the court order a rate that departs the one (or two) established by the rule. As was said in the report of the Robins subcommittee:

It can be accepted that the discount rate and gross-up provisions were established to relieve parties embroiled in litigation of the need to incur the added expense of calling economic and actuarial evidence: and to prevent the general injustice that would result if awards differed greatly in similar cases because: different discount rates were used to calculate them. See: *Giannone v. Weinberg* (1989), 68 O.R. (2d) 767 (CA.). It can also be accepted that these considerations are equally applicable to other economic and actuarial assumptions underlying the calculation of any future pecuniary award. In short, the key objective is to minimize the need for litigants to resort to adversarial positions with respect to the quantification of future damages.

...

[T]here was general agreement that it was important to continue to have a discount rate clearly mandated by the Rules of Civil Procedure and not subject to evidentiary dispute.¹⁴⁹

408. The reason most often given for trying to have a court order a different discount rate is the suggestion that the cost of certain types of future expenses (such as health care costs) will increase at a rate greater than that of the CPI. Often, this is said to be on the basis of productivity. (This was discussed in §2.11.5 above.) A similar argument was made to the Robins subcommittee but was rejected: see paragraphs 173 ff.

¹⁴⁸ See, for example, paragraph 123.

¹⁴⁹ Report of Robins subcommittee, pp. 5, 6.

409. That argument was advanced by OTLA in its submissions. If effect were given to it, the discount rate would be less for the damages to which this adjustment is applied.
410. Unsurprisingly, CMPA took the opposite position, although it did so in only one sentence. It said that the evidence does not justify different discount rates for different heads of damages.¹⁵⁰
411. If the door were opened to litigants calling evidence to vary the prescribed rate, it can be seen from the above that many aspects of the calculation could be debated. A few examples:
- a) Should there be an adjustment to reflect the sorts of risk factors referred to by the Robins subcommittee?
 - b) Should there be a reduction to reflect a supposed “insurance premium” built into the rate of return of real return bonds (see paragraph 100 above)?
 - c) Does the yield of real return bonds implicitly misstate the rate of inflation, as suggested by IBC (see paragraph 285 above)?
 - d) Should it be possible to adduce evidence as to what sorts of investments plaintiffs will actually make?
 - e) Is the use of CPI to measure inflation now outdated and unreliable?
 - f) Will inflation now begin to depart significantly from the GOC target of 2% per annum?
 - g) Is the average yield on a particular real return bond, over a specified period, a reliable measurement of future real rates of interest?

¹⁵⁰ CMPA submission, p. 18.

412. It is our recommendation that, as much as possible, parties not be given the opportunity to depart from the prescribed discount rate, in a given case.
413. There had been debate within the subcommittee as to how that objective (upon which we all agreed) is best accomplished. Should there be an outright prohibition on courts ever departing from r. 53.09(1)? Or should wording be added to the rule, to the effect that courts should only use a different discount rate in “exceptional circumstances”?
414. The problem with the latter approach is that it probably amounts to an invitation to parties—both plaintiffs and defendants—to try to bring themselves within that “exceptional” category.
415. On balance, we feel that an outright prohibition against departing from the rule would be best.

2.11.8 Summary

416. Thus, while we feel that there are inherent problems with using any discount rate to calculate the present value of future losses, we suggest that for now, the rate be established so that:
- a) the two-tier system be transformed into a single-tier one;
 - b) the rate is derived as it is now for the first tier, from the average yield of GOC real return bonds for the six-month period (March to August) in the year prior to the trial;
 - c) the prohibition against negative discount rates is removed;
 - d) the present ½% adjustment is removed;
 - e) there should be no different discount rates for different types of damages; and

- f) judicial discretion to set a discount rate on the basis of evidence should be eliminated.

2.12 Changes in wording of subrule 53.09(1)(a)

417. Rule 53.09(1)(a) deals with the approach to be taken “for the 15-year period that follows the start of the trial”.

418. The introductory words of the rule read as follows: “The discount rate to be used in determining the amount of an award in respect of future pecuniary damages, to the extent that it reflects the difference between estimated investment and price inflation rates, is...”

419. The same language appears to have been used since the very first discount rate rule (r. 267a, which was part of the Rules of Practice and dates back to 1980): see below.

420. This language can be improved, particularly the phrase, “to the extent that it reflects the difference between estimated investment and price inflation rates”. The discount rate is used for only one purpose in the context of r. 53.09, so at least the phrase, “to the extent that it reflects” is superfluous and can be deleted.

421. While it is true that the purpose of r. 53.09 is to calculate “the amount of an award”, it might be a good idea to make explicit the fact that what is being done is discounting future pecuniary damages to *present value* on the basis of the difference between estimated *return* on investment and price inflation rates. Yet the phrase, “present value” does not appear in the rule at all.

422. We would suggest replacing the preamble with the following:

An award of damages to compensate for future pecuniary loss in an action for personal injury shall be discounted to present value to reflect the difference between the estimated return on the investment of the award and the estimated effect of price inflation.

423. We suggest the use of Dr. Hyatt's proposed language for the first tier of the discount rate: that that rate be "set on the basis of "the Government of Canada Real Return Bond as measured by data series identifier V122553 as reported on the Bank of Canada web site (and can also be accessed using the same identifier through the Statistics Canada CANSIM data base)".

2.13 Recommended new approach to compensation for future losses

424. For the reasons already discussed, we feel that use of a rate to discount awards of damages to present value is a flawed approach. No matter how the rate is arrived at, it necessarily involves both (a) a prediction about future economic conditions; and (b) a policy decision as to whether we should err on the side of overcompensation or undercompensation. Despite the best of intentions, discount rates set by the Rules Committee in the past have been wrong, sometimes by a wide margin.¹⁵¹

425. Of the entire period since the discount rule was first introduced, we are experiencing the most extreme economic conditions, making the inherent problems with setting a discount rate even more acute.

2.13.1 Structured settlements

426. One alternative to the use of the discount rate is structured settlements.

427. A structured settlement involves periodic payments to plaintiffs rather than a lump sum. One of the attractions of structured settlements is that the payments can be received by plaintiffs tax-free.

428. We do not intend to evaluate structured settlements (or any alternative approaches to compensation for future losses) in detail. But the following comments describe some of the features that commend themselves to us.

¹⁵¹ See paragraph 48.

429. With a structured settlement, the plaintiff is protected against himself or herself, in that the distribution of the funds is taken out of the plaintiff's hands.
430. However, the flip side of that advantage is a potential detriment: creation of a schedule of periodic payments that will adequately address the plaintiff's future needs (which are, to some extent, unpredictable) is challenging. Emergency cash requirements can be difficult to address.
431. Still, structured settlements protect plaintiffs against the vagaries of future economic circumstances. The holder of the structure assumes that risk.
432. In the days of very high interest rate, structures were extremely attractive because of the combination of compound interest and tax-free payments. For now, in an era of ultra-low interest rates, the former is not much of a carrot. But, at the same time, low interest rates apply to everyone.
433. Another issue with structures is the fees charged by structured settlement brokers. That issue is addressed in the next section.

2.13.2 2017 Report of Hon. Stephen Goudge, Q.C.

434. Former Justice Stephen Goudge addressed some of these same issues in his December 29, 2017 report, "Report to Ontario Ministry of Health and Long Term Care Re: Medical Liability Review".¹⁵²
435. We have conferred with Mr. Goudge in the course of preparing this report.
436. Mr. Goudge's discussion of the discount rate was brief: only a page and a half, beginning at p. 28 of his report. It was clear from his comments that he was

¹⁵² Available at

http://www.health.gov.on.ca/en/common/ministry/publications/reports/medical_liability/docs/medical_liability_review_en.pdf

approaching the issue on the basis of returns that could actually be achieved in the market on the investment of awards of damages:

While this [i.e., the present r. 53.09] was a well intentioned attempt to better approximate future real rates of return, the almost universal view among those I consulted was that, because of significant fluctuations in real return bond rates, that has not been the experience. In the last five years, the mandated discount rate up to 15 years appears to have been well below the actual rate of return available on investment, with the result that the cost of structured settlements has been higher than it should be.¹⁵³

437. As discussed above (see § 2), we do not believe that the discount rate has been set in the expectation that many or even *any* plaintiffs actually use their damages awards to purchase real return bonds. Rather, we think that real return bonds were chosen as the most reliable prediction of future real return rates for a very low-risk investment.

438. The issue raised by Mr. Goudge is part of the policy decision that we think the Rules Committee must make: whether the discount rate should reflect returns likely to be achievable in the market. We have recommended that that not be done.

439. However, elsewhere in his report, Mr. Goudge discussed structured settlements and suggested some possible changes to the present approach. His comments were made in the context of s. 116.1 of the *Courts of Justice Act*, which provides for awards of damages for future care that exceed \$250,000, in a medical malpractice action, to be paid by “periodic payments”, if the court so orders.

440. Mr. Goudge noted that “[t]he limited number of life insurance companies currently willing to offer these products and the constraints they use to price them, mean that this component of future care costs is larger than it needs to be. The same of course is true of future income loss that is included in the structure.”¹⁵⁴ As a

¹⁵³ Page 28.

¹⁵⁴ Page 20.

result, he proposed that “there should be a government entity to hold the funds for future costs and administer the periodic payments required in these cases.”¹⁵⁵ He suggested the Workplace Safety and Insurance Board (“WSIB”) as one possible candidate for the administration of the funds.

441. Dr. Douglas Hyatt, who advised our subcommittee, also assisted Mr. Goudge with this issue. At pp. 21–22 of his report, Mr. Goudge set out what he referred to as a “striking example” provided by Prof. Hyatt. The latter used an example of a future care cost award in a serious case, of \$200,000 per year, for a plaintiff who was 10 years old at trial and had a life expectancy of 65. The present value of an award for damages to compensate that loss, using r. 53.09, would be about \$7.4 million, according to Dr. Hyatt. However, the present value of the same award of damages, using the discount rate that is available to WSIB would be only \$5.3 million. The reason given by Mr. Goudge for the 40% lower figure was the “large pool of funds” administered by WSIB.

442. WSIB does have its own “Discount Rate Calculation Table” that it uses to commute “pensions”.¹⁵⁶ Presumably, the discount rate established there assumes a much higher yield on investment than does r. 53.09 (since inflation would be a constant). Obviously, the WSIB discount rate is based on returns that it actually expects to be able to achieve in the market, given its very large portfolio. The substantially lower capital requirement evident from the Hyatt example above would obviously be of interest to defendants, if ss. 116 (periodic payments) and 116.1 (periodic payments in medical malpractice actions) could be extended to other types of personal injury claims.

¹⁵⁵ *Ibid.*

¹⁵⁶ See <http://www.owa.gov.on.ca/en/benefits/Pages/Pension-Commutations.aspx>

443. Dr. Hyatt also made some comments about this issue (the potential use of structured settlements in a government-administered system) in input contained in a preliminary report to our subcommittee. He referred to his experience with the Goudge Commission. In his comments to us, Dr. Hyatt emphasized how the expanded use of structured settlements would address the very issues that concern us about the discount rate (risk of undercompensation, uncertain future etc.) At the same time, there would potentially be significant cost savings:

Should this approach be determined to be feasible, it could potentially result in dramatic reductions in costs, while ensuring that successful plaintiffs receive the same after-tax compensation that they receive under the current system, independent of how the discount rates are set. It also allows that errors made in predicting the future do not fall upon the successful plaintiff.

444. Dr. Hyatt's memo to us went into considerably more detail about what he sees as the benefits of using structured settlements in personal injury cases other than ones arising from medical malpractice. Since it is not within the scope of our mandate to make that sort of change, this report does not attempt to analyze the issue in detail. But we suggest that consideration be given to their expanded use, possibly through a government-run body.

445. Were this sort of change to be considered, it might be appropriate to restrict its use to cases in which the damages award passes a certain monetary threshold, as in the current s. 116.1 of the *Courts of Justice Act*.

2.13.3 Periodic review of damages

446. Another possible approach to address the problems inherent in discounting awards of damages to present value might be expanded use of periodic reviews of those awards. Again, such a change might be more appropriately confined to awards that surpass a certain monetary threshold.

447. This power already exists for awards of damages falling within the scope of s. 116 of the *Courts of Justice Act* (see para. 439 above). Subsection (4) of that section provides:

In an order made under this section, the court may, with the consent of all the affected parties, order that the award be subject to future review and revision in such circumstances and on such terms as the court considers just.

448. Our impression is that the powers conferred by subsection 116(4) are used seldom, if ever. There would be obvious drawbacks to expanded use of the provision, from the standpoint of defendants. Insurers would face contingent future liabilities extending well beyond the date of trial. Their ability to “close the file” would be reduced. And not only would they face the possibility of damages being increased in the future, they would incur additional administrative costs in managing the claim.

449. However, we have not studied periodic review in any detail: we have simply raised it as another possible alternative to present value discounting of damages awards for future losses.

3 Prejudgment interest on non-pecuniary damages

3.1 History and rationale of r. 53.10

450. As noted in paragraph 159 above, it appears that the Robins subcommittee was the first to deal with this issue, back in 1998. However, it did so in one sentence, observing only that it saw no reason to change the rule, which had been in force since 1990.

451. At the time that r. 53.10 was introduced, the rates set by s. 127 of the *Courts of Justice Act* for prejudgment interest on other types of damages were very high. The following table shows the rates from 1989 to date:

Year	1st Qua	2nd Qu	3rd Qu	4th Qu
1989				12.40%
1990	12.50%	13.50%	13.90%	12.90%
1991	12.30%	10.00%	9.10%	8.80%
1992	7.70%	7.50%	6.30%	5.10%
1993	8.30%	6.10%	5.10%	5.00%
1994	4.30%	4.10%	6.60%	5.60%
1995	6.00%	8.00%	7.60%	6.60%
1996	6.10%	5.60%	5.00%	4.30%
1997	3.30%	3.30%	3.30%	3.50%
1998	4.00%	5.00%	5.00%	6.00%
1999	5.30%	5.30%	4.80%	4.80%
2000	5.00%	5.30%	6.00%	6.00%
2001	6.00%	5.80%	4.80%	4.30%
2002	2.50%	2.30%	2.50%	3.00%
2003	3.00%	3.00%	3.50%	3.30%
2004	3.00%	2.80%	2.30%	2.30%
2005	2.80%	2.80%	2.80%	2.80%
2006	3.30%	3.80%	4.50%	4.50%
2007	4.50%	4.50%	4.50%	4.80%
2008	4.80%	4.30%	3.30%	3.30%
2009	2.50%	1.30%	0.50%	0.50%
2010	0.50%	0.50%	0.80%	1.00%
2011	1.30%	1.30%	1.30%	1.30%
2012	1.30%	1.30%	1.30%	1.30%
2013	1.30%	1.30%	1.30%	1.30%
2014	1.30%	1.30%	1.30%	1.30%
2015	1.30%	1.00%	1.00%	1.00%
2016	0.80%	0.80%	0.80%	0.80%
2017	0.80%	0.80%	0.80%	1.00%
2018	1.30%	1.50%	1.50%	1.80%
2019	2.00%	2.00%	2.00%	2.00%
2020	2.00%			

452. As can be seen, it was not until the third quarter of 2001 that rates dropped below 5 percent. Since then, they have consistently been below 5%, sometimes by a wide margin.
453. The rationale for the enactment of rule 53.10 was recently set out by the Court of Appeal in 2019, in *MacLeod v. Marshall*¹⁵⁷, where the court said:

[45] The reason for the 5% rate for non-pecuniary loss in an action for personal injury is as follows: it was a legislative response to the 1987 Ontario Law Reform Commission Report for Compensation for Personal Injuries and Death, which criticized the practice of awarding damages for pecuniary and non-pecuniary damages at the same rate because there is a cap on non-pecuniary damages; this cap is adjusted for inflation. The Report concluded that giving the default interest rate (which was much higher than 5% at the time) was effectively double compensation for inflation. The lower rate of 5% was therefore more appropriate: *Awan v. Levant*, 2015 ONSC 2209, aff'd 2016 ONCA 970, 133 O.R. (3d) 401, at para. 23.

[46] However, as Matheson J. noted in *Awan*, “the mischief that gave rise to the subsection [128(2)] is no longer served by a 5% rate given the interest rate climate throughout the period of time relevant to this case”, as interest rates had dropped even further. For this reason, s. 258.3(8.1) of the *Insurance Act* was amended through the enactment of the *Fighting Fraud and Reducing Automobile Insurance Rates Act*, 2014, S.O. 2014, c. 9, such that the 5% rate did not apply in the context of motor vehicle accident actions.¹⁵⁸

454. In *MacLeod*, the Court of Appeal held that the trial judge should not have simply applied the rate specified by r. 53.10: “He should have taken into account the factors listed in s. 130(2) of the CJA, including the changes in market interest rates. He did not. In so doing, he placed no weight or insufficient weight on the consideration of market interest rates.”¹⁵⁹
455. As noted in the first paragraph of the excerpt from *MacLeod*, quoted in paragraph 453, when r. 53.10 was introduced, it was in recognition of the fact that the cap on non-pecuniary general damages is indexed to inflation, with the result that

¹⁵⁷ 2019 ONCA 842 (CanLII)

¹⁵⁸ Paragraphs 45, 46.

¹⁵⁹ Paragraph 54.

awarding prejudgment interest at the then-prevailing interest rates (12% to 13%) would result in double compensation. It was determined that the applicable rate should therefore be lower than the one that applied to other heads of damages.

3.2 The present

456. The same problem now exists, in reverse. Non-pecuniary general damages are still indexed to inflation. Therefore, when such damages are awarded at trial, the inflationary erosion of the value of the compensation, between the time that the cause of action has arisen to the time of trial, has already been adjusted for. Awarding prejudgment interest on such damages at a higher rate than that applicable to other types of damages represents an overpayment.

3.3 Stakeholder submissions

457. In the submissions made by stakeholders, only OTLA sought to continue the operation of r. 53.10. Its submission was the following:

Prejudgment interest (PJI) is intended to be compensatory. Therefore, PJI must be viewed as part of the compensatory package provided to the wronged person. To achieve full compensation, an award of damages must include PJI in the full amount which will compensate the plaintiff for the loss of use and the loss of value of a monetary award until it is paid. The rationale of our current tort system is that the wronged party is entitled to damages as at the time of the injury and as if he or she would have had the ability to invest those funds from that immediate point in time. The PJI rate is to reflect the value of the lost investment opportunity. As discussed further below, it is OTLA's position that PJI for non-pecuniary general damages should continue to be calculated at its current rate of 5% under Rule 53.10 for the foreseeable future.¹⁶⁰ [Footnote omitted]

458. However, that submission simply does not engage with the points made by the Court of Appeal in *MacLeod*.

459. CMLPA's submission pointed to the "double-counting" that results, under the current rule, from non-pecuniary general damages being indexed to inflation. It recommended that the rate of interest on such damages be the same as that for other

¹⁶⁰ OTLA submission, p. 5.

sorts of damages. IBC also recommended the same approach (but without the inflation-indexing rationale).

3.4 Recommended approach

460. To be consistent with the approach taken when r. 53.10 was first enacted in 1990, the effect of inflation-indexing should be removed from the rate of prejudgment interest on non-pecuniary general damages in order to avoid overcompensation.

461. Rule 53.10 came into force the year before the 1991 introduction of the GOC's inflation-targeting policy.¹⁶¹ Inflation had been in the range of 4–5% for several years (having been higher than 10% in the 1980s). In the year after the inflation-targeting policy began, inflation fell to 1.4% and has mostly been around 2% since then (until very recently). As discussed in § 2.3 above, some commentators have questioned the role of inflation in the economy and the way in which it is measured. And because of the impact of Covid-19, it is hard to know which economic canons will now be overturned.

462. As the Court of Appeal said in *Bozzo v. Giampaolo*, “[t]he purpose of prejudgment interest is to compensate for loss of use of money.”¹⁶²

463. To be consistent with the original objective of r. 53.10, as set out in the passage from *MacLeod*, quoted in paragraph 453 above, interest to compensate for “loss of use” of an award of damages for non-pecuniary loss should remove the effect of inflation-indexing. To accomplish that, we would suggest that r. 53.10 be reworded as follows: “The prejudgment interest rate on damages for non-pecuniary loss in an action for personal injury is the rate provided for in s. 128 of the *Courts of Justice Act*, minus the rate of inflation for the month in which the proceeding was commenced,

¹⁶¹ See paragraph 105.

¹⁶² 2005 CanLII 17773 (ON CA), para. 23.

as established by the Bank of Canada at <https://www.bankofcanada.ca/rates/price-indexes/cpi/>.”

464. Establishing a floor of zero percent (i.e., that the rate of prejudgment interest will not be allowed to drop below zero) could be considered, although there is not much of a principled case to be made for that approach.

4 Gross-up

465. The final part of the Rules Committee’s review mandate, is set out in s. 66(2)(v) of the *Courts of Justice Act*: “the method of calculating the amount to be included in an award of damages to offset any liability for income tax on income from investment of the award”. This issue (“gross-up”) is dealt with in subrule 53.09(2):

In calculating the amount to be included in the award to offset any liability for income tax on income from investment of the award, the court shall,

(a) assume that the entire award will be invested in fixed income securities; and

(b) determine the rate to be assumed for future inflation in accordance with the following formula:

g rounded to the nearest 1/10 per cent where,

$$g = (1 + i) / (1 + d) - 1$$

“ i ” is the average of the value for the last Wednesday in each month of the nominal rate of interest on long-term Government of Canada bonds (Series V121758, formerly Series B113867), as published in the Bank of Canada’s Weekly Financial Statistics for the period starting on March 1 and ending on August 31 in the year before the year in which the trial begins;

“ d ” is,

(a) for the 15-year period that follows the start of the trial, the greater of,

(i) the average of the value for the last Wednesday in each month of the real rate of interest on long-term Government of Canada real return bonds (Series V121808, formerly Series B113911), as published in the Bank of Canada’s Weekly Financial Statistics for the period starting on March 1 and ending on August 31 in the year before the year in which the trial begins, less ½ per cent, and

(ii) zero, and

(b) for any later period covered by the award, 2.5 per cent per year for each year in that period.

466. If our recommendation with respect to the discount rate is followed (a single rate, using somewhat the same approach as is now used for the first tier, under

- r. 53.09(1)(a), but with the removal of the “zero floor” and the ½% adjustment),
r. 53.09(2) should also be amended to reflect the same change.

467. Once the Rules Committee has settled on an approach with respect to the discount rate, we would propose to go back to our two consultants in order to fine-tune the language of r. 53.09(2).

468. Only one stakeholder—CMPA—proposed that the existing gross-up rule be revised. As discussed below, CMPA’s submissions are an outgrowth of its position with respect to the discount rate.

469. OTLA’s submission proposed that the gross-up rule be left unchanged.¹⁶³ The same was true of CIA’s submission.¹⁶⁴ IBC’s submission did not comment on gross-up.

470. CMPA’s position flows from its argument in relation to the discount rate: that it should *not* be assumed that plaintiffs will invest their awards in fixed income securities. Its recommendation for the gross-up rule is:

Remove the requirement in Rule 53.09(2) that calculations to determine the amount of gross-up must “assume that the entire award will be invested in fixed income securities”. Such an approach does not reflect actual investment practices of the average, prudent investor. The rates and time periods used in the formula for determining future inflation should also correspond to those used in Rule 53.09(1).¹⁶⁵

471. We agree that if the Rules Committee were to conclude that r. 53.09 should be based on “actual investment practices of the average, prudent investor”, such a change would dictate new approaches to both the discount rate and to the gross-up rule.

¹⁶³ OTLA submission, p. 5.

¹⁶⁴ CIA submission, p. 24.

¹⁶⁵ CMPA submission, p. 20.

472. However, if that sort of policy change were to be made, it seems to us that something like the UK's "Call For Evidence" should then take place, so that, as much as possible, the resulting revisions to the discount rate and gross-up would be "evidence-based".

5 Disclosure issues

473. Following the changes that were made in the wake of the recommendations by the 2013 subcommittee, the Rules Committee received a number of outside requests for copies of the subcommittee's report. Stephen Cavanagh, in consultation with John Kromkamp, chose not to release that report. The rationale at the time was that it was best to keep the Rules Committee's deliberations confidential. Despite that, it is apparent that at least some of the stakeholders making submissions to the current subcommittee have obtained a copy of the 2013 report.¹⁶⁶

474. There will undoubtedly be more requests for information about the Rules Committee's deliberations in 2020. A decision will have to be made as to the release of this paper. We have taken note of the great transparency with which the UK's discussions have been conducted, so it might be that this report should be in the public domain.

¹⁶⁶ See, for example, footnote 31 to the CMPA submission, which refers to "Submission of the Subcommittee of the Civil Rules Committee on Rules 53.09 and 53.10" (May 2013) at p. 13." The passage in which that footnote appeared is quoted at paragraph 267.

All of which is respectfully submitted to the Civil Rules Committee, for its consideration.

April 27, 2020

Justice Kathryn N. Feldman (Court of Appeal for Ontario)

Associate Chief Justice Frank N. Marrocco (Superior Court of Justice)

Justice James E. McNamara (Superior Court of Justice)

Justice Mark L. Edwards (Superior Court of Justice)

Stephen Cavanagh