

THE NEW NUMBER CRUNCHERS

Before committing, decide which RESP formula works best for your client.

By Jamie Golombek

MARCH'S federal budget introduced a new planning complexity (and possible opportunity) for clients who wish to save for their kids' educations through RESPs.

There are two major changes to the contribution rules: The elimination of the \$4,000 annual RESP contribution limit and the increase of the lifetime RESP contribution limit to \$50,000 from \$42,000.

The Canada Education Savings Grant (CESG) rules were also enhanced. The maximum annual contribution that will qualify for the 20% CESG will be increased to \$2,500 from \$2,000, thereby increasing the maximum annual CESG per beneficiary per year to \$500 from \$400 for

SCENARIO 1 | Lump-sum Funding – \$50,000 in Year 1

Year	Opening	Contribution	CESG	Growth	Closing
1	-	50,000.00	500.00	3,030.00	53,530.00
2	53,530.00	-	-	3,211.80	56,741.80
3	56,741.80	-	-	3,404.51	60,146.31
4	60,146.31	-	-	3,608.78	63,755.09
5	63,755.09	-	-	3,825.31	67,580.39
6	67,580.39	-	-	4,054.82	71,635.22
7	71,635.22	-	-	4,298.11	75,933.33
8	75,933.33	-	-	4,556.00	80,489.33
9	80,489.33	-	-	4,829.36	85,318.69
10	85,318.69	-	-	5,119.12	90,437.81
11	90,437.81	-	-	5,426.27	95,864.08
12	95,864.08	-	-	5,751.84	101,615.92
13	101,615.92	-	-	6,096.96	107,712.88
14	107,712.88	-	-	6,462.77	114,175.65
15	114,175.65	-	-	6,850.54	121,026.19
16	121,026.19	-	-	7,261.57	128,287.76
17	128,287.76	-	-	7,697.27	135,985.03
18	135,985.03	-	-	8,159.10	144,144.13

Opening	Withdrawals		Growth	Closing
19	144,144.13	(39,244.12)	6,294.00	111,194.01
20	111,194.01	(39,244.12)	4,316.99	76,266.88
21	76,266.88	(39,244.12)	2,221.37	39,244.12
22	39,244.12	(39,244.12)	-	-

Total RESP withdrawals: \$156,976.49

Rate: 6.00%

years beginning in 2007. For beneficiaries with unused CESGs from prior years, the new maximum CESG will be \$1,000, based on a \$5,000 RESP contribution. The \$7,200 maximum lifetime CESG limit, however, remains unchanged.

Lump-sum funding

Perhaps the biggest debate among advisors is whether this newfound ability to lump-sum fund an RESP for a child's post-secondary education by up to \$50,000 in a single year (for clients who have the cash to do so) actually makes sense.

The complication lies with the fact that by doing so, the contributor waives the child's ability to collect CESGs in future years. In other words, for a parent who has never before opened up an RESP for a child, by contributing \$50,000 to an RESP today, the child would be entitled to either a \$500 CESG for 2007 if the child was born this year or up to \$1,000 in CESGs if the child was born in a prior year (i.e. the current year's CESG and any unused CESGs carried forward since 1998). No future CESGs would be available on the lump-sum amount contributed.

So, do the benefits of tax-deferred compounding for up to 25 years outweigh the loss of future CESGs? While it depends on a number of

SCENARIO 2

Contribute Annually to RESP to Maximize CESGs (no carry-forward CESG room)

RESP ACCOUNT

In dollars

Year	Opening	Contribution	CESG	Growth	Closing
1	-	16,500.00	500.00	1,020.00	18,020.00
2	18,020.00	2,500.00	500.00	1,261.20	22,281.20
3	22,281.20	2,500.00	500.00	1,516.87	26,798.07
4	26,798.07	2,500.00	500.00	1,787.88	31,585.96
5	31,585.96	2,500.00	500.00	2,075.16	36,661.11
6	36,661.11	2,500.00	500.00	2,379.67	42,040.78
7	42,040.78	2,500.00	500.00	2,702.45	47,743.23
8	47,743.23	2,500.00	500.00	3,044.59	53,787.82
9	53,787.82	2,500.00	500.00	3,407.27	60,195.09
10	60,195.09	2,500.00	500.00	3,791.71	66,986.80
11	66,986.80	2,500.00	500.00	4,199.21	74,186.00
12	74,186.00	2,500.00	500.00	4,631.16	81,817.16
13	81,817.16	2,500.00	500.00	5,089.03	89,906.19
14	89,906.19	2,500.00	500.00	5,574.37	98,480.57
15	98,480.57	1,000.00	200.00	5,980.83	105,661.40
16	105,661.40			6,339.68	112,001.08
17	112,001.08			6,720.06	118,721.15
18	118,721.15			7,123.27	125,844.42
		50,000.00	7,200.00		

	Opening	Withdrawals		Growth	Closing
19	125,844.42	(34,261.91)		5,494.95	97,077.45
20	97,077.45	(34,261.91)		3,768.93	66,584.47
21	66,584.47	(34,261.91)		1,939.35	34,261.91
22	34,261.91	(34,261.91)		-	-

Total RESP withdrawals: \$137,047.65
 Non-registered withdrawals – after tax: \$ 24,307.27*
 Total: \$161,354.93
 Rate: 6.00%

*(See Non-Registered Account, Page 41)

factors, including the age of the child and, perhaps most important,

the type of investment returns generated (income, dividends or capital gains) and the rate of return, in nearly all cases the benefits of the tax-deferred growth inside an RESP do not outweigh the loss of potential CESGs.

To fully understand how this works, let's take a look at three funding scenarios and see how much money we can accumulate for a child's post-

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Illustration by Jeremy Bruneel

Opening	Withdrawal	Growth	End of Year
33,500.00	-	2,010.00	35,510.00
35,510.00	(2,532.98)	1,978.62	34,955.64
34,955.64	(2,564.89)	1,943.45	34,334.20
34,334.20	(2,595.75)	1,904.31	33,642.75
33,642.75	(2,625.55)	1,861.03	32,878.23
32,878.23	(2,654.30)	1,813.44	32,037.37
32,037.37	(2,682.00)	1,761.32	31,116.70
31,116.70	(2,708.67)	1,704.48	30,112.51
30,112.51	(2,734.32)	1,642.69	29,020.89
29,020.89	(2,758.97)	1,575.72	27,837.64
27,837.64	(2,782.63)	1,503.30	26,558.31
26,558.31	(2,805.33)	1,425.18	25,178.16
25,178.16	(2,827.09)	1,341.06	23,692.14
23,692.14	(2,847.92)	1,250.65	22,094.87
22,094.87	(1,147.15)	1,256.86	22,204.59
22,204.59	-	1,332.28	23,536.86
23,536.86	-	1,412.21	24,949.07
24,949.07	-	1,496.94	26,446.02

THE REQUIRED WITHDRAWALS EACH YEAR ARE SLIGHTLY HIGHER THAN THE FUNDS NEEDED TO FUND THE RESP CONTRIBUTIONS.

Opening	Withdrawal	Growth	End of Year	Tax	Net Withdrawals
26,446.02	(7,200.09)	1,154.76	20,400.68	(1,075.84)	6,124.25
20,400.68	(7,200.09)	792.04	13,992.63	(1,108.68)	6,091.41
13,992.63	(7,200.09)	407.55	7,200.09	(1,139.67)	6,060.42
7,200.09	(7,200.09)	-	-	(1,168.89)	6,031.20

Total: \$24,307.27

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secondary education.

SCENARIO 1: Lump-sum funding of \$50,000 in year one. Let's assume a parent opens up a new RESP today for a child born this year by funding the RESP account with the \$50,000 maximum contribution, which generates a \$500 CESG.

The money is invested in a growth fund which averages a 6% rate of return annually. We allow the funds to grow tax-deferred in the RESP for 18 years, at which point we draw the money out equally, 25% per year, for four years to fund the child's education.

This funding strategy (see "Scenario 1," page 38) provides a total of \$156,976 to fund a four-year degree program, assuming the money is evenly withdrawn at the beginning of each year. In this and subsequent scenarios, we are going to assume that this full amount can be withdrawn tax-free from the RESP by the child. Unrealistic? Not really.

The \$50,000 RESP contributions come out tax-free (since they were made with after-tax dollars) so it's only the growth and CESGs that are taxable to the student as income, formally known as educational assistance payments

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SCENARIO 3 | Contribute Annually to RESP to Maximize CESGs (with carry-forward room)

RESP ACCOUNT					
In dollars					
Year	Opening	Contribution	CESG	Growth	Closing
1	-	19,000.00	1,000.00	1,200.00	21,200.00
2	21,200.00	5,000.00	1,000.00	1,632.00	28,832.00
3	28,832.00	5,000.00	1,000.00	2,089.92	36,921.92
4	36,921.92	5,000.00	1,000.00	2,575.32	45,497.24
5	45,497.24	5,000.00	1,000.00	3,089.83	54,587.07
6	54,587.07	5,000.00	1,000.00	3,635.22	64,222.29
7	64,222.29	5,000.00	1,000.00	4,213.34	74,435.63
8	74,435.63	1,000.00	200.00	4,538.14	80,173.77
9	80,173.77	-	-	4,810.43	84,984.20
10	84,984.20	-	-	5,099.05	90,083.25
11	90,083.25	-	-	5,404.99	95,488.24
12	95,488.24	-	-	5,729.29	101,217.54
13	101,217.54	-	-	6,073.05	107,290.59
14	107,290.59	-	-	6,437.44	113,728.02
15	113,728.02	-	-	6,823.68	120,551.70
16	120,551.70	-	-	7,233.10	127,784.81
17	127,784.81	-	-	7,667.09	135,451.90
18	135,451.90	-	-	8,127.11	143,579.01
		50,000.00	7,200.00		
	Opening	Withdrawals		Growth	Closing
19	143,579.01	(39,090.26)		6,269.32	110,758.07
20	110,758.07	(39,090.26)		4,300.07	75,967.87
21	75,967.87	(39,090.26)		2,212.66	39,090.26
22	39,090.26	(39,090.26)		-	-

Total RESP withdrawals: \$156,361.06
 Non-registered withdrawals – after tax: \$ 12,247.03*
 Total: \$168,608.09
 Rate: 6.00%

*(See Non-Registered Account, Next Page)

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(EAPs). That being said, in most situations the child won't face any tax at all on such withdrawals, given the myriad credits available to students.

For example, using 2007 amounts, a student could claim the basic personal amount (\$8,929), the tuition credit (say \$6,000 for a Canadian university), the education amount (\$400 per month for eight months or \$3,200), and the new textbook tax credit (\$65 per month for eight

months or \$520) for a total of about \$19,000 of credits before becoming taxable.

In other words, assuming the student has no other income when attending university or college, he or she could not only eventually withdraw all the contributions (\$50,000) tax-free but also access an extra approximately \$76,000 of EAPs before paying tax for a total tax-free RESP withdrawal of \$126,000—in today's dollars.

But remember, both the basic personal amount as well as tuition fees are generally inflation-adjusted, so, assuming a 3% average inflation rate in 18 years' time, the \$19,000 of credits would actually be worth over \$29,000 annually. This equates to total tax-free EAP withdrawals of \$116,000 plus \$50,000 of tax-free RESP contributions withdrawn for a total of \$166,000—higher than the RESP balance in this scenario (and the next two).

While this sounds pretty enticing, can we do even better? Let's explore Scenario 2, which maximizes the CESG opportunity for a child born in 2007.

SCENARIO 2: Contribute annually to maximize CESGs—no carry-forward CESG room. We'll take the same \$50,000 we had in the first scenario and instead of contributing it immediately to an RESP, forgoing future years' CESGs, we'll contribute \$2,500 each year to maximize the annual CESG.

This scenario assumes that the child was born in 2007 and therefore has no catchup CESG room available. Of course, to do the math properly, we need to assume that if a parent has the \$50,000 to lump-sum fund an RESP today, the alternative would be to invest that \$50,000 in a non-registered account for the next 22 years. Then examine the after-tax values of both the RESP and the non-registered account to see how they compare.

For a conservative investor at the highest marginal tax rate who would otherwise invest all of the education savings into highly taxed, interest-generating investments, the benefits of sheltering 22 years of interest income inside an RESP can perhaps outweigh

Opening	Withdrawal	Growth	End of Year
31,000.00	-	1,860.00	32,860.00
32,860.00	(5,065.95)	1,667.64	29,461.69
29,461.69	(5,129.79)	1,459.91	25,791.82
25,791.82	(5,191.50)	1,236.02	21,836.33
21,836.33	(5,251.10)	995.11	17,580.35
17,580.35	(5,308.59)	736.31	13,008.06
13,008.06	(5,364.00)	458.64	8,102.71
8,102.71	(1,083.47)	421.15	7,440.40
7,440.40	-	446.42	7,886.82
7,886.82	-	473.21	8,360.03
8,360.03	-	501.60	8,861.63
8,861.63	-	531.70	9,393.33
9,393.33	-	563.60	9,956.93
9,956.93	-	597.42	10,554.35
10,554.35	-	633.26	11,187.61
11,187.61	-	671.26	11,858.86
11,858.86	-	711.53	12,570.39
12,570.39	-	754.22	13,324.62

**THIS STRATEGY,
WHEN COMBINED
WITH THE
NON-REGISTERED
ACCOUNT SAVINGS,
PRODUCE THE
HIGHEST TOTAL
AFTER-TAX
WITHDRAWAL.**

Opening	Withdrawal	Growth	End of Year	Tax	Net Withdrawals
13,324.62	(3,627.71)	581.81	10,278.72	(542.06)	3,085.65
10,278.72	(3,627.71)	399.06	7,050.08	(558.60)	3,069.11
7,050.08	(3,627.71)	205.34	3,627.71	(574.21)	3,053.50
3,627.71	(3,627.71)	-	-	(588.94)	3,038.77

Total: \$12,247.03

the loss of the CESGs.

On the other hand, if a parent would otherwise invest the lump sum that would go into an RESP into tax-deferred investments that generate capital gains when sold, it's better to only lump-sum fund the excess that's not needed to maximize future years' CESGs or \$16,500 upfront (see "Scenario 2," pages 39 and 41), and then move \$2,500 annually into an RESP until the \$7,200 of CESGs are maximized.

It's assumed that the non-registered money being used to annually fund the RESP contributions is also invested in a tax-efficient mutual

fund, generating 6% per annum with no annual distributions.

As a result, you'll note the required withdrawals each year are slightly higher than the funds needed to fund the RESP contributions on account of the capital gains tax (assumed at the parent's top marginal tax rate on capital gains of 23%) which must be paid before the net amount is contributed to the RESP.

This scenario produces a total of \$161,355 of after-tax cash withdrawals, assuming tax is paid by the parent on the non-registered withdrawals and no tax is paid on the RESP funds, as discussed earlier.

SCENARIO 3: Contribute annually to maximize CESGs—with carry-forward CESG room. This time, we'll assume that a parent of a nine-year-old child who has never contributed to an RESP before wants to go back and collect the maximum CESGs, based on unused room since 1998.

The parent would again lump-sum fund the excess on day one (in this scenario \$19,000), and then contribute \$5,000 for the next six years and \$1,000 in year eight to fully catch up on the CESGs from prior years.

This strategy, when combined with the non-registered account savings, produces the highest total after-tax withdrawal of \$168,608 (see "Scenario 3," pages 42 and 43).

Of course, the danger with doing any scenario calculations such as these is that they're only as good as the assumptions. Variables such as the age of the child, the child's potential tax liability on EAP withdrawals if he or she has other sources of income while in school, the parent's marginal tax rate, the type of investment income being earned (capital gains versus interest versus dividends) and the tax efficiency of such investments are all factors that may affect the calculations.

Sit down with each client and discuss the pros and cons of these various RESP funding strategies. But at the end of the day, the only way you'll know which strategy is best, given a particular client situation, is to simply do the math.

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