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## 60% CASH PAYOUT OR 400% PIC CLAIM?

### Which Is Better? (Part 2)



BY KHOO TENG AUN  
CLEMENT TAN KAI GUAN

This is Part II of a two-part series on how an organisation can best optimise the benefits of the Productivity and Innovation Credit (PIC) scheme offered by the Singapore government to boost productivity and innovation. Part I was published in *IS Chartered Accountant*, September 2013.

### CONVERTING OPTIMAL AMOUNT TO CASH PAYOUT

In our first article, we examined the first two of the following alternatives based on a qualifying productivity and innovation credit expenditure (QPE) of \$400,000:

ALTERNATIVE	DESCRIPTION
1	Make a 400% PIC claim on the entire QPE of \$400,000
2	Convert \$100,000 of the QPE to a 60% CP and make a 400% PIC claim on the remaining QPE of \$300,000
3	Convert less than \$100,000 of the QPE to a 60% CP and make a 400% PIC claim on the remaining QPE

We stated that Alternative 1 will result in lower overall net cash outflows

than Alternative 2 when the following are maximised under both alternatives: (a) PTE of \$152,500, and (b) CIT rebate of \$30,000, and this will be the case when the "CI before PTE" is at least \$740,735 (minimum CI before PTE).

We had also shown that when the "CI before PTE" for both alternatives is greater than \$740,735, Alternative 1 is the preferred choice as the cash outflow is minimised. On the other hand, when

Table 1

	Alternative 1 (\$)	Alternative 2 (\$)
QPE	400,000	400,000
Less: amount converted to CP	-	100,000
400% PIC claim	400,000	300,000
<b>Tax computation (YA 2013)</b>		
CI before QPE and PTE	2,000,000	2,000,000
Less: 400% PIC claim	(1,600,000)	(1,200,000)
<b>CI before PTE</b>	<b>600,000</b>	<b>800,000</b>
Less PTE	(152,500)	(152,500)
CI after PTE	247,500	647,500
Tax @ 17%	42,075	110,075
Less: 30% CIT rebate	(12,623)	(30,000)
Net tax payable	29,452	80,075
CP	-	(60,000)
Net cash outflow/(inflow)	29,452	20,075

the "CI before PTE" for both alternatives is less than \$740,735, Alternative 2 is the preferred choice.

This article examines the circumstances under which Alternative 3 is the preferred choice.

Under Alternative 3, the issue is to determine how much of the QPE (lower of actual QPE and \$100,000) to be converted to a CP will optimise the net cash flows of a company.

Table 1 illustrates the effects of Alternatives 1 and 2 on the net cash outflows of a company based on a "CI before QPE and PTE" of \$2,000,000.

The "CI before PTE" for Alternative 1 is less than \$740,735 but is greater than \$740,735 for Alternative 2. Notice that for "CI before PTE" that is equal to or

greater than \$740,735, both the PTE and the 30% CIT rebate are at their maximum.

In this case, Alternative 2 is the preferred choice as it has a lower net cash outflow than Alternative 1.

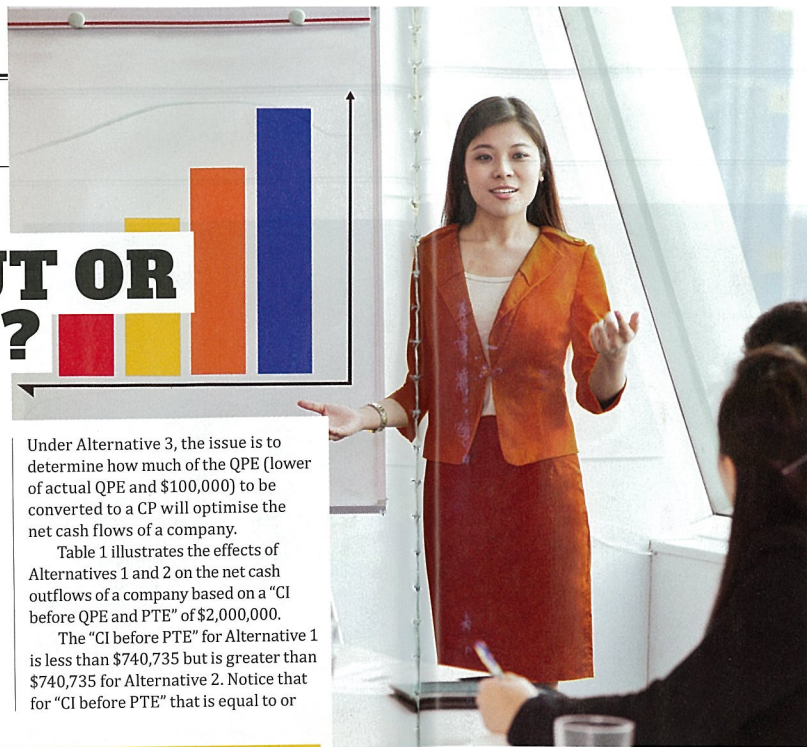


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As the "CI before PTE" in Table 1 (Alternative 2) is \$800,000, further reduction of it to \$740,735 will realise a tax benefit of 68% for every dollar claimed under the 400% PIC scheme, which is better than the 60% CP. This will result in 8% more reduction in cash outflows for every such dollar shifted from a CP to a 400% PIC claim. This explains why with \$10,000 shifted from a CP option to a 400% PIC claim, there is a further reduction in cash outflow of \$800 (\$10,000 x 8%) from \$20,075 in

Table 1 (Alternative 2), to \$19,275 in Table 2(a).

As we move from Table 2(a) to Table 2(c) with \$10,000 more dollars shifted from a CP option to a 400% PIC claim, instead of a further reduction in the net cash outflow, a higher net cash outflow of \$19,532 in Table 2(c) results. This suggests that the optimal amount of conversion to a CP should lie somewhere between \$80,000 in Table 2(c) and \$90,000 in Table 2(a), as illustrated in the following graph.

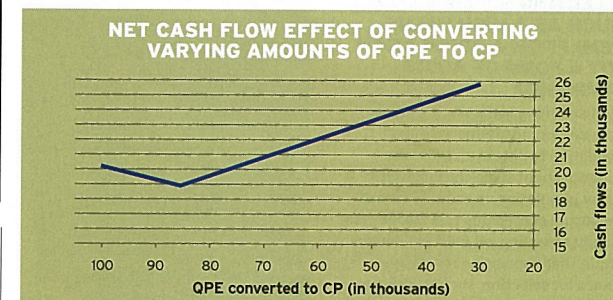


Table 2 illustrates the net cash outflow effects of converting different amounts of QPE into a CP under Alternative 3.

Table 2

	(a) \$	(b) \$	(c) \$
QPE	400,000	400,000	400,000
Less: amount converted to CP	90,000	85,000	80,000
400% PIC claim	310,000	315,000	320,000
<b>Tax computation (YA 2013)</b>			
CI before QPE and PTE	2,000,000	2,000,000	2,000,000
Less: 400% PIC claim	(1,240,000)	(1,260,000)	(1,280,000)
<b>CI before PTE</b>	<b>760,000</b>	<b>740,000</b>	<b>720,000</b>
Less PTE	(152,500)	(152,500)	(152,500)
CI after PTE	607,500	587,500	567,500
Tax @ 17%	103,275	99,875	96,475
Less: 30% CIT rebate	(30,000)	(29,963)	(28,843)
Net tax payable	73,275	69,912	67,532
CP	(54,000)	(51,000)	(48,000)
Net cash outflow/(inflow)	19,275	18,912	19,532

Thus, when \$85,000 of the QPE is converted to a CP, there is a further reduction in the net cash outflow from \$19,275 in Table 2(a) to \$18,912 in Table 2(b). This should represent approximately the optimal amount of QPE to be converted to a CP as its "CI before PTE" approaches \$740,735, at which point the net cash outflow is minimised.

### CONCLUSION

If the "CI before PTE" is less than \$740,735 under Alternative 1 but is greater than \$740,735 under Alternative 2, Alternative 3 is the preferred choice. The optimal amount of QPE to be converted to a CP that minimises the net cash outflows under Alternative 3 is the one that has its "CI before PTE" closest to \$740,735. This conclusion is also applicable when the actual amount of QPE incurred is less than \$100,000. ISCA

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