Distortions in the tax treatment of rights issues

Christine Brown SF FIN is Associate Professor and Deputy Head, Department of Finance, The University of Melbourne. Email: christine.brown@unimelb.edu.au

Kevin Davis SF Fin is Commonwealth Bank Professor of Finance, The University of Melbourne and Director, Melbourne Centre for Financial Studies. Email: kevin.davis@melbournecentre.com.au

The current concessional tax treatment of long-term capital gains creates an incentive for long-term shareholders to sell rights rather than participate in rights issues of shares by Australian companies. To achieve consistent tax treatment of rights issues, we derive adjustments that can be made to the cost base of shares in companies which have made rights issues.*

Inconsistencies exist in the tax treatment of investors participating in rights issues of shares by Australian companies and this tax treatment contains an error of logic, whereas, these issues do not exist when rights are sold. The efficiency consequences of this inconsistent treatment arise because of the concessional tax treatment of long-term capital gains.

We derive an appropriate adjustment to the deemed purchase price of shares for capital gains tax calculations associated with rights issues, which prevents these rights issues from adversely affecting existing shareholder tax obligations. It involves decreasing the deemed cost base of existing shares and adding the value of the right received to the subscription price of new shares.

Although relatively simple in principle, its introduction would increase the information requirements of taxpayers needing to calculate capital gains on sales of shares in companies which have previously made rights issues. If the inefficiencies of the current treatment outweigh the practical complexities associated with applying the appropriate adjustment, the Tax Office would also need to develop and maintain a publicly available, historical, database of the requisite information about rights issues. (Alternatively if the concessional tax treatment of capital gains, which has other distorting effects, were abolished, these changes would not be required).

Rights issues: importance and characteristics

Rights issues are a highly popular form of equity capital raising by Australian companies in which existing shareholders are given rights by the company to subscribe for additional shares. Between July 1999 and June 2007 over $50 billion was raised through rights issues representing around 15.5% of all equity capital raisings over that period.[1] The rights are given in proportion to the number of shares held and the subscription price for the new shares is generally at a discount to the existing market price.

For example, a company with a current share price of $10 might make a one-for-four rights issue at a subscription price of $8, such that a shareholder with four shares (with current value of $40) would be able to buy another share for $8. It is easy to demonstrate (see Appendix) that, *ceteris paribus*,[2] the share price will be $9.60 after the take-up of the offer. This means that the value of the right to purchase the share for $8 is $1.60. In a renounceable rights issue, the shareholder can sell those rights on the ASX to other investors, and trade rights on the ASX between the ex-rights date and their expiry date. In a non-renounceable issue, shareholders cannot sell the rights which lapse if not exercised.

Tax treatment of rights issues

The tax treatment of rights issues came to prominence briefly in May 2007 when the Australian Tax Office (ATO) indicated its intention to subject the value of rights received by shareholders to tax at the time of receipt — even if they had not sold the rights but had subscribed to the share issue. This was a major change to the longstanding tax treatment of shares acquired in a rights issue, whereby the capital gains on the sale of such shares would only be taxed when the shares were sold, and was based on a High Court decision in February 2007. (Spalding and Coombes, 2007). Following an investor outcry, the Federal Government quickly announced its intention to amend the Income Tax Law to ensure that the previous treatment was continued (Dutton, 2007).

That current tax treatment (see ATO, 2007) operates as follows. A shareholder who receives rights is deemed by the ATO to have acquired those rights at the same time as the original shares were purchased. If the rights are sold, the amount received is subject to tax under the capital gains tax provisions. Thus if the original shares were purchased more than one year ago, only half of the sale proceeds are subject to income tax.

On the other hand, if the shareholder exercises the rights, no tax becomes payable at that time. Subsequent sale of the shares acquired in the rights issue will lead to tax consequences under the capital gains tax provisions. Those new shares are deemed to have been purchased at the exercise date (in contrast to the treatment of the rights) and to have a cost base equal to the subscription price ($8 in the example used earlier). Thus those new shares would need to be held for at least one year before the sales proceeds would become eligible for concessional capital gains tax treatment.

For investors who purchase rights on the ASX and exercise them, the new shares are deemed to be purchased on the exercise date and the cost base is the sum of the price paid for the rights and the subscription price.

While the restoration of the status quo appears to have been met with widespread approval, it is not obvious that the current tax treatment of rights issues is appropriate. In particular, the concessional tax treatment of 'long term' capital gains creates a distortion such that shareholders who participate in rights issues face a potential arbitrary increase in their tax liability if they wish to dispose of their shareholding within the next year. The differential application of concessional capital gains tax treatment of sale of rights versus exercise of rights also creates anomalies.

As we will demonstrate, these distortions arise from a misinterpretation of 'value' created by a rights issue that was also inherent in the May 2007 proposed tax treatment, now scrapped. A desirable tax system should not have arbitrary inconsistencies arising from such misinterpretations and, for this reason, a change to the status quo tax treatment of rights issues should now be considered. We derive a simple adjustment, which resolves the inconsistencies arising from the concessional tax treatment of capital gains, but we also acknowledge the practical complexities associated with its implementation.

Analysis

Critical to any assessment of the appropriate tax treatment of rights issues is the fundamental point that a rights issue at a discount to the market price and pro rata to all shareholders does not, of itself, create any value for existing shareholders.[3] While the recipients of the rights can obtain new shares at a concessional price, this is at the expense of existing shareholders because the company receives a below-market price for the new shares that also dilute their ownership stake. However, since the recipients of rights and the existing shareholders are identical, there is no value creation in aggregate or transfer of value between shareholders. For each shareholder, the market value of their original shareholding will fall (when shares go *ex-rights*) by the same amount as the gains made on the new shares to be subscribed for (or from the sale value of the rights). But the accrued gain (relative to the original purchase price) of existing shares will be redistributed between the existing and new shares.

Recognition of this fundamental point illustrates the flaw in the tax treatment which was proposed (and subsequently abandoned) by the ATO in May 2007, whereby the gains made on new shares subscribed for in a rights issue were to be subject to tax at the time of purchase. Since these gains are (and must be) matched by a decline in the value of existing shareholdings, it is inappropriate to subject one component of the effect of the rights issue to taxation but not the other. Equitable and logical treatment would require that the unrealised loss on the market value of existing shares (when they go ex-rights) would be deductible for tax purposes if the unrealised gains on the new shares subscribed for were to be taxed as had been proposed.

Under the status quo, whereby capital gains are taxed on realisation, the existence of a concessional capital gains tax treatment for 'long-term' holdings means that rights issues alter the potential tax liabilities of shareholders — even though no aggregate value has been created by the rights issue. Essentially, the total capital gains tax liability will increase for an existing long-term shareholder who participates in the rights issue and subsequently sells their holdings within the next 12 months. In effect, the value of the shareholder's option to sell existing shares within the next year at a concessional capital gains tax rate has been reduced.

The reason for this is straightforward. Assume a shareholder acquired all the currently held company shares more than 12 months ago. The rights issue means that the shareholder's total capital gains to date (which would all be concessionally taxed on sale) are redistributed between the 'old' shares (concessionally taxed on sale) and 'new' shares, which will be fully taxed on sale (if this occurs within 12 months). The value redistribution from old to new shares (and thus potential tax liability) will increase with the size of the rights issue discount to market price. It will also increase as the number of new shares (issued at a discount) relative to existing shares increases.

Consider the example given earlier of a one-for-four rights issue at $8 when the market price is $10, in the case of a shareholder on a marginal tax rate of 20%, with four shares purchased several years ago at $4. If the rights issue did not occur and she decided to sell her four shares, only half of the capital gain would be taxed. Thus the capital gains tax bill would be $T_0 = 4 \times 0.5 \times 0.20 \times (10-4) = \$2.40$. If the rights issue occurs, she participates, and then sells her (now) five shares, the capital gains tax bill will be $T_1 = 4 \times 0.5 \times 0.20 \times (9.60-4) + 1 \times 0.20 \times (9.60-8) = \$2.24 + \$0.32 = \$2.56$. This is an increase in the tax bill of 6.67%, which occurs because the capital gain on the new share is not concessionally taxed.

It is worth noting that a different result occurs if the shareholder elects not to participate in the rights issue, but instead sells the rights into the market. In the example above, the value of one right will be $1.60, and the sale proceeds will be taxed under the capital gains provisions. Because the purchase date of the rights is deemed to be the same as that of the original shares, the sale proceeds are concessionally taxed. The concessionally taxed capital gain on the original shares is now $1.60 lower ($5.60 versus $6.00 per share, or $22.40 versus $24 in total), and this is offset by the $1.60 of concessionally taxed income from the sale of the rights.

The tax treatment applied to the sale of rights thus correctly reflects the value consequences of the rights issue, unlike the tax treatment currently applied when rights are exercised.

Table 1 (based on the formula derived in the Appendix) provides an illustration of the potential increase in capital gains tax liability for a range of different scenarios each assuming a *cum-rights* share price of $20 and a shareholder with an existing $10 capital gain on her shareholding. It is assumed that the shareholder exercises the rights and subsequently sells her entire shareholding at the *ex-rights* share price (i.e. with no further capital gains) within 12 months. A one-for-two rights issue at a $1 (5%) discount to the market price of $20 would increase the capital gains tax bill by 3.3%. A larger rights issue discount has greater adverse effects. The more dilutive is the rights issue, the greater is the adverse tax effect, since more of the pre-existing capital gain is reallocated to the new shares. Were the shareholder to sell the rights, there would be a zero percentage increase in tax.

TABLE 1: Potential Capital Gains Tax Increase Following a Rights Issue

	Rights issue discount (on share price of $20)			
Shares required for one right	$1	$2	$3	$4
2	3.3%	6.7%	10.0%	13.3%
4	2.0%	4.0%	6.0%	8.0%
6	1.4%	2.9%	4.3%	5.7%
8	1.1%	2.2%	3.3%	4.4%

Assumptions: *Cum-rights* share price of $20 and an original purchase price of $10 more than 12 months earlier. The table shows the percentage increase in capital gains tax if the right is exercised and the shareholding sold within 12 months at the *ex-rights* price.

Implications and policy issues

The magnitude of the potential capital gains tax effects of rights issues outlined in the preceding section varies substantially depending upon company and investor characteristics. This occurs because of the differential tax treatment of short-term and long-term capital gains, which create significant distortions to the tax system and investor decision-making.

There are at least three perspectives from which this issue needs to be considered. From the *investor's perspective*, questions arise as to whether there are trading strategies or arbitrage opportunities available from the interaction of the rights issue and capital gains tax distortions. From the *company's perspective*, the questions to be considered include the following. How should the design of rights issues be structured to minimise the adverse tax effects upon shareholders? How will a rights issue affect the willingness of shareholders to subsequently sell shares? For *policy makers*, the implications of the tax distortion can be considered on the basis of two criteria. First, does the distortion impose unjustifiable differences in the tax treatment of different investors? Second, will investors and companies respond to the distortion in ways that create economic inefficiency? If either occurs, the question that arises is whether the tax treatment of rights issues can be amended to prevent such undesirable outcomes.

Investor implications

For shareholder recipients of rights, the current tax treatment has several consequences. First, for shareholders not wishing to increase their stakeholding in the company, there is a clear tax advantage from selling the rights rather than exercising the rights and selling the shares. If the rights are sold, it should be noted that the shareholder's total investment in the company is reduced, since the ex-rights value of the shares is below the cum-rights value. Thus to maintain an unchanged level of investment in the company, the investor needs to exercise some of the rights, using the proceeds from selling the remainder. Second, shareholders who exercise their rights will receive shares which are not subject to concessional capital gains tax on sale until 12 months have passed, and face an increased tax cost if they wish to exit their total investment within the next year.

Corporate financial policy

While rights issues are pro-rata, in principle, a rights issue will invariably affect the proportion of a shareholder's interest in the company. In a renounceable rights issue, shareholders deciding not to participate are compensated through the proceeds from sale of the rights on the exchange. However, shareholders in small companies, which often issue non-renounceable rights, must either exercise their rights or have their wealth in, and control of, the company diluted. Non-renounceable rights issues may compel shareholders to acquire shares to prevent ownership dilution, with the capital gains tax treatment working against liquidation of the share portfolio within a 12-month horizon. More importantly, because non-renounceable issues preclude the sale of rights, the company is preventing longer-term shareholders from accessing the concessional capital gains tax treatment arising from the sale of rights.

The current tax treatment creates an incentive for shareholders to retain shares acquired through a rights issue for longer than 12 months. Consequently, market turnover may be reduced following a rights issue, although shareholders subsequently wishing to sell may offset this by designating the sale as involving shares purchased earlier.

We have shown that the size of the adverse tax effects is proportional to the size of the discount. The tax distortion could therefore be minimized by structuring the rights issue with an offer price at a low discount to market price, but this structure provides less incentive for shareholders to take up their rights. A high discount to market price that potentially makes the rights issue more attractive to shareholders, results in a greater tax distortion.

Taxation policy

We have shown that a tax distortion arises because rights issues convert concessionally taxed gains into non-concessionally taxed capital gains if disposal occurs within 12 months. Are there simple changes to the tax treatment of rights issues which avoid this outcome?

One possibility might be to backdate the cost base date of shares acquired in a rights issue to the date of the original share purchase which gave rise to those rights, as is done when rights are sold. This is also how bonus issues (where the subscription price is zero) are treated (and for which the cost price of original shares and bonus shares are deemed equal and adjusted such that their total deemed cost price equals the investor's original outlay). However, to do so in the case of a rights issue, where the investor is contributing additional capital, would endow the new shares received with (and increase the total investment subject to) an immediate concessional capital gains status. This would not be appropriate. Using the same example as before, the sale of the right would reduce the shareholder's equity by \$1.60 (equivalent to selling some existing shares), whereas exercising the right leads to an increase in the shareholder's equity and a cost base of \$8 on the new shares.

Another possibility is to adjust downwards the deemed purchase price of the original shares giving rise to the rights. As indicated in the appendix, an adjustment which preserves the size of the investor's tax bill occurring if all existing shares are sold immediately after the subscription to the rights issue will reduce the deemed cost-base of the original shares by the difference between the rights issue discount and the theoretical value of the rights.[4] Thus, if P_0 was the original purchase price and a one-for-n rights issue occurred at a discount of x such that the theoretical value of a right was xn/(n+1), the adjusted cost base (\$$P^a$) would be:

$$P^a = P_0 - (x - \frac{xn}{n+1}) = P_0 - \frac{x}{n+1}$$

This adjustment meets the objective of keeping the capital gains tax liability on existing shares unchanged when those shares become ex-rights. However, it would expose existing shareholders to potential capital gains on the newly subscribed-for shares from the rights issue (since the subscription price is less than the ex-rights market price). Since the rights issue, itself, creates no aggregate value, the implied increase in the total potential capital gains tax liability is inappropriate. To overcome this, the accompanying tax code adjustment required is for the cost base of a share acquired in the rights issue to be deemed equal to the sum of the subscription price and the theoretical value of the right (or, equivalently, the ex-rights share price). This would also be consistent with the tax treatment applied when shareholders sell their rights on-market and the new shareholder who exercises those rights has a cost base equal to the purchase price of the rights plus the subscription price.[5]

The logically correct tax policy for dealing with capital gains consequences of existing shareholders purchasing shares in a rights issue is thus as follows. For a one-for-n rights issue at a discount of \$x to the market price (P) following the announcement, (a) reduce the cost base of existing shares by x/(n+1), and (b) deem the cost base of shares purchased in the rights issue to be the subscription price plus the value of one right (which is equivalent to the ex-rights share price $P^* = (P-x)+nx/(n+1)$).

To illustrate, consider the example earlier, where the investor has four shares with a post-announcement price of P =$10 and a rights issue of one-for-four at a subscription price of $8 occurs (i.e. x=$2), so the ex-rights share price will be $9.60. If the four 'old shares' had been purchased for $4 each, the current accrued capital gain (before the rights issue) is 4 x ($10-$4) = $24. By adjusting the cost base to $P_0 - x/(n+1)$ = $4 - $2/5 = $3.60, the deemed capital gain accrued on the old shares after the rights issue is 4 x ($9.60 - $3.60) = $24. Unless the cost base for the one new share purchased in the rights issue is deemed to be $9.60 (rather than $8), a potential capital gains tax liability would be created, inconsistent with the principle that the rights issue *per se* should not change total capital gains tax liabilities. Thus the deemed purchase price of the shares purchased in the rights issue needs to be adjusted to $P^* = (P-x) + nx/(n+1)$ = $8 + $8/5 = $9.60, which is the theoretical ex-rights share price.

While these adjustments are, in principle, relatively simple, they complicate what are already, for many taxpayers, complex calculations of capital gains tax obligations. Capital gains may be realised by sales of shares several years after a rights issue takes place, meaning that taxpayers need access to historical information on the rights issue terms (x and n). Thus implementing such a change in tax treatment should also be accompanied by Tax Office establishment of a publicly available historical database of the required information about rights issues.

One further complication arises from the possibility of rights issues by non-listed companies, where there is no observed market price for shares and thus for the value of the discount (x). Consequently, the proposed adjustment should only be mandatory for listed companies, although an 'opt-in' provision for non-listed companies could apply if market value information is available and auditable. In any event, the distortion arising from the concessional long-term capital gains tax arrangements (which prompts the need for an adjustment) is likely to be less severe in the case of non-listed companies since owner/investors are (arguably) more likely to be longer term holders not planning to sell within 12 months.

For consistency, this change in the tax treatment of rights issues is warranted, although the practical complexity involved may make it undesirable. On the other hand, if the concessional tax treatment of long-term capital gains were abolished, the change would be unnecessary (because the purchase date of shares would become irrelevant in calculating tax liabilities).

Conclusion

We have shown that the current tax treatment of rights issues includes an error of logic, due to the concessional tax treatment of long-term capital gains. This means that there is a tax incentive for shareholders to sell rather than exercise rights, and companies which use non-renounceable, rather than renounceable rights issues impose a tax cost on shareholders

Finally, we have demonstrated the adjustments required to the cost base of shares in companies which have made rights issues in order to achieve consistent tax treatment of rights issues. While simple in theory, the practical complexities introduced for taxpayers in calculating capital gains on shares sold in companies which have made rights issues are probably sufficient to prevent its adoption.

APPENDIX

Consider the case of a one-for-n rights issue at a discount of \$x to the share market price immediately before going ex-rights of \$P. (Note that the rights issue will have been announced prior to that date, and will specify a subscription price for the new shares of (say) $P^{\#}$. The discount x used in this analysis is thus given by $x = P - P^{\#}$). The *ex-rights* share price will be:

$$P^* = \frac{nP + (P - x)}{n+1}.$$

This is derived by noting that the n+1 shares now on issue will have a total value equal to the sum of the value of the original n shares (nP) plus the amount contributed (P-x) for the additional share. Since exercising the right and outlaying (P-x) will purchase a share worth P*, the value of the right to buy one share is

$$R = P^* - (P - x) = \frac{nx}{n+1}.$$

Consider an investor who holds n shares bought more than 12 months ago at a price of $P_0 < P$. Should that investor sell those shares at some future date, the capital gains tax liability would be:

$$T_0 = 0.5tn(P - P_0)$$

where *t* is the investor's marginal tax rate, and tax is paid on only 50% of the total capital gain of $n(P-P_0)$.

Suppose the investor exercises the rights and subscribes to the new issue. If the investor subsequently sells her total shareholding within the next year at the ex-rights price of P*, her capital gains tax bill will be:

$$T_1 = 0.5tn(P^* - P_0) + t(P^* - (P - x)) = 0.5t(n(P - P_0) - \frac{nx}{n+1}) + t\frac{n}{n+1}x$$

Hence,

$$T_1 = 0.5tn(P - P_0) + 0.5t\frac{n}{n+1}x = T_0 + 0.5t\frac{n}{n+1}x$$

The new tax bill results from the n 'old' shares being taxed at a concessional rate, but capital gains on the new shares being taxed at the full rate since the holding period is less than one year. It is clear that the percentage increase in tax paid increases with the size of the discount (x) and decreases as the number of shares (n) required to receive one right increases.

Assuming that the current share price (P) exceeds the original purchase price (P_0) the percentage increase in tax payable is given by:

$$\frac{T_1 - T_0}{T_0} = \frac{x}{(n+1)(P - P_0)}$$

It is possible to keep the tax bill on the original shares constant by reducing the deemed purchase price by the difference between the discount in the rights issue (x) and the theoretical value of the right (nx/(n+1)) which is x/(n+1). Prior to the rights issue, the capital gains tax payable (for a long term holder) was $T_0 = 0.5tn(P - P_0)$. When the shares become ex-rights, the share price will be $P* = \frac{nP + (P - x)}{n+1}$. If the deemed purchase price is adjusted to $P_0 - \frac{x}{n+1}$ the capital gains tax payable on those shares will be:

$$T_1 = 0.5tn[\frac{nP + (P - x)}{n+1} - (P_0 - \frac{x}{n+1})] = 0.5tn[P - P_0] = T_0$$

REFERENCES

ATO 2007, *About Capital Gains Tax*, Australian Tax Office.
http://www.ato.gov.au/content/downloads/NAT4151a_07.pdf

Dutton, Peter 2007, 'Taxation of Rights Issues' *Media Release 074, The Assistant Treasurer*, 26 June.
http://www.treasurer.gov.au/pcd/content/pressreleases/2007/074.asp

KPMG 2007, *Survey of the Australian Capital Markets, 2006-2007*
http://www.kpmg.com.au/Default.aspx?tabid=691&ClickGo=True&SearchText=capital%20markets&SearchPublication=True

Spalding, Andrew and Coombes, David 2007, 'ATO to tax shareholders on the market value of renounceable rights', *Deacons Legal Update*
http://www.deacons.com.au/UploadedContent/NewsPDFs/LU-080507-ATO_to_tax_shareholders_on_the_market.pdf

---

[*]We are grateful for the valuable comments of the referee which have helped to improve the paper, but we are responsible for any remaining errors.

[1] KPMG, *Survey of the Australian Capital Markets, 2006-2007*.

[2] The theoretical rights value and the adjustments subsequently proposed are based on the fact that the rights issue *per se* does not involve any value creation for shareholders. For example, the company receives $8 cash inflow which is worth $8. Of course, the announcement of the rights issue may convey information that means that the company's value has changed (e.g. the rights issue is to fund a new positive NPV project). This will mean that the company's share price will

change at the date of the announcement (e.g. from $9 pre announcement to $10 post announcement). Our analysis is focused on the division of capital gains tax liability on old versus new shares post announcement, and any value increase (or decrease) associated with the announcement has already been attributed to the original shares through their higher (or lower) price.

[3] While the company share price may respond to information about the company's investment opportunities and prospects conveyed by the announcement of the rights issue, the analysis here focuses upon the value effects associated with the shares becoming ex-rights and the issue of new shares.

[4] This is implicit in the tax treatment of a bonus issue.

[5] In the case of shares purchased before September 1985, there is no tax on capital gains on the original shares and thus no need to adjust their cost base. Interestingly, the current tax treatment for determination of the cost base of the shares acquired in a rights issue in respect of 'pre-85' shares is essentially the same as proposed above, although with market value rather than theoretical value of rights used. (See http://www.ato.gov.au/individuals/content.asp?doc=/content/36720.htm&page=2&H2).

ends