BRAD

Chapter 4

SPECIFYING TAX VALUES OF ASSETS AND LIABILITIES

BRAD

Chapter 4: specifying tax values of investment assets and liabilities in Brad's country's redesigned tax code

In this chapter, our very dedicated tax policy team of Claudia, Brad and Sami try to meet the Tax Minister's request to explain to him exactly how the policy team's proposed redesign of the income tax code in Chapter 1 would apply to individual investment assets and liabilities. That redesign substitutes government-endorsed changes in **tax values** for changes in **actual values** in the measurement of taxable income from investment assets and liabilities.

Naturally, a redesigned code needs to include Brad's country's general capital gains tax (CGT) regime which applies to investment assets that typically increase in value over time. As in other chapters, that CGT regime, like the rest of the tax code in Brad's country, bares a remarkable resemblance to that in the Australian tax code.

There are significant differences in views within the policy team regarding capital gains taxation. Inevitably, too, discussion of that old chestnut, negative gearing, reveals some different views within the policy team.

Brad's Tax Minister is becoming quite interested in the tax policy team's proposed treatment of key asset types, set against the tax principles of fairness, efficiency (minimal impact on decisions) and simplicity. That is because the possibility of a major tax reform package is starting to embrace him.

Tax policy team's task

OK, guys, remember the Tax Minister wants a briefing on how the treatment of individual investment assets and liabilities would look in a redesigned code for taxing investment income.

As you know, he is now considering the possibility of a wide-ranging tax reform package.

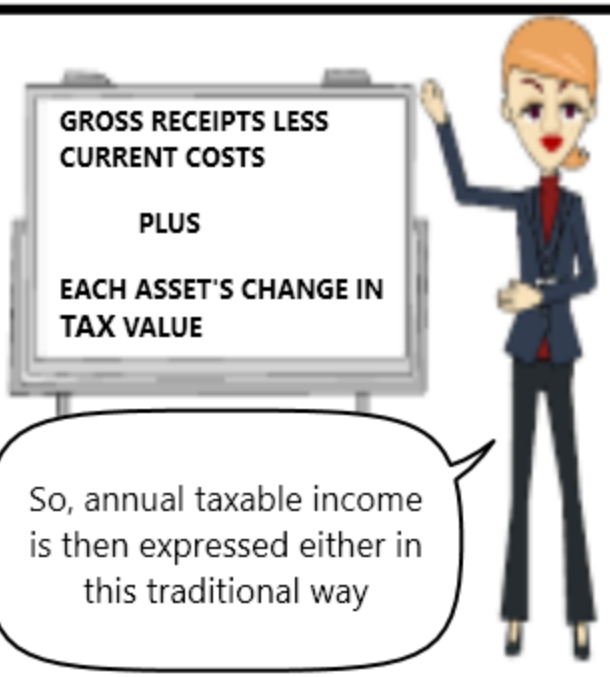
We need to help him get familiar with tax code redesign that could form part of such a package.

Remember the over-arching basis of the redesigned code is to align taxable income with the income, or commercial profit, from non-private investments.

Yes - design needed for both efficiency, or investment neutrality, and fairness.

In practice, of course, in measuring taxable income, that over-arching benchmark gives way to "tax value" change, endorsed by government, substituting for "value" change.

With value the default if tax values are not specified.



So, annual taxable income is then expressed either in this traditional way

Or, as this generalised trading stock formulation.

With, in each case, cash accounts excised from assets and "plus" changed to "minus" for liabilities.

Government's deciding how different assets are to be taxed is not the only reason for tax design to set change in tax value against over-arching change in actual value.

The actual year-by-year value of many assets is difficult to establish - like the value of each of a multitude of a taxpayer's items of equipment.

Even some financial assets and liabilities don't have a ready market value.

So, we need to determine the most suitable way to establish annual tax values for the various asset types - always, though, with a view to aligning tax value with value as closely as possible.

Remember, I showed the Tax Minister this chart* which shows the different ways of determining tax values across different asset types.**

We are going to work through various asset types to prepare for the Tax Minister's briefing.

Is commercial (non-private) expenditure involved?

Yes

Does the expenditure create/improve an asset?

No

Yes

Deduction allowed in the year expenditure is incurred	Change in tax value based on write-off rate – eg depreciating physical assets, horticultural plants	Tax value at cost until sold – eg trading stock, CGT assets like land and shares (with losses quarantined, unless traded)	Tax value at cost until production starts – eg forestry, horticulture, mining assets, infrastructure	Change in tax value computed from known or assumed future net receipts - eg financial assets, leases, rights	Annual mark to market – eg trading stock, financial assets, asset bundle of taxpayer or ring-fenced project

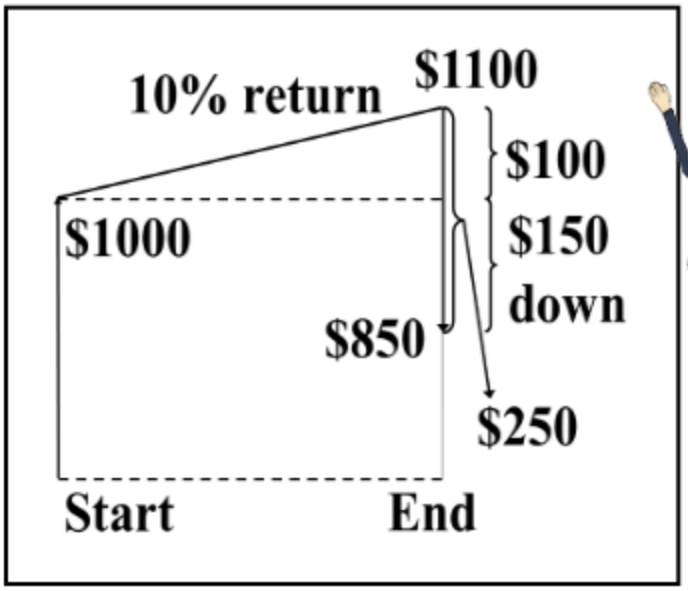
Start tax value = cost; end tax value = sale price (ex CGT discount)

At least, current tax treatment need not change even if the tax code is re-worked against Claudia's "tax value" design.

Sounds good, Claudia.

* Ch1, p 41.

** Ralph Review, p 158, Mayo (2011), p 52.



Before looking at tax value measurement in selected asset classes, I want to show you a general formula for specifying tax values of any asset.

This chart, which we have used before, illustrates that general formula. It shows the tax value change of an asset from $1000 to $850 over a year.

In numbers, end tax value is,

$850 = ($1000 x 1.1) - $250

which translates to the general formula:

End tax value = Start tax value x (1 + asset's period return) - net receipts in the period

With no annual net receipts, tax value goes up to $1100 in line with the annual return.

But net receipts of $250 going to the investor reduce the tax value because a buyer cannot access those receipts.

The return from the asset will not be known unless the asset is actually valued before or after the $250 payout.

That's exactly right, Brad.

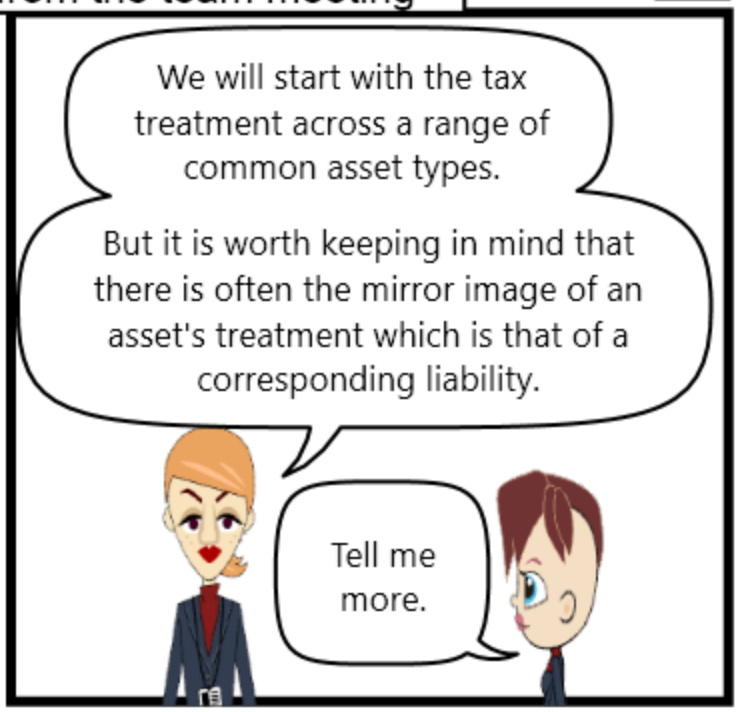
But the formula sets a conceptual benchmark....

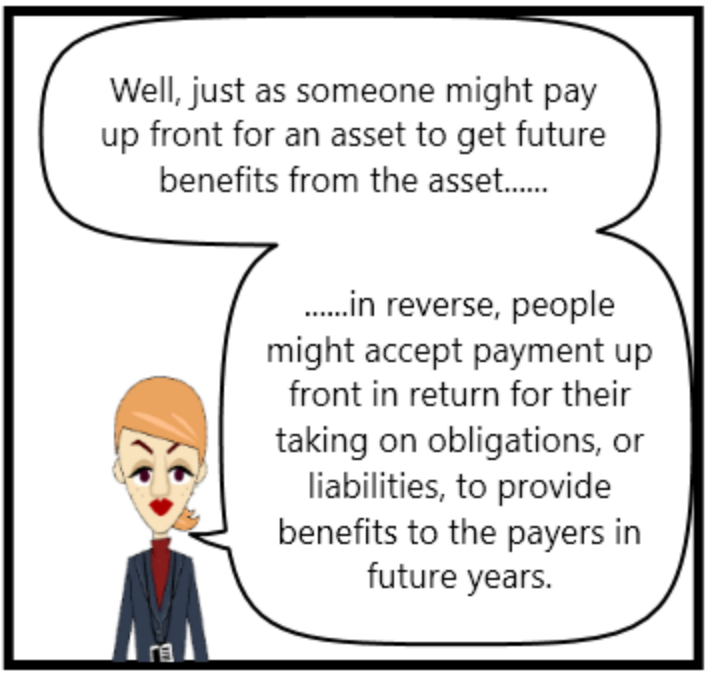
....a benchmark which will play out in practice if the return is able to be imputed or is implicit in the circumstances concerned.*

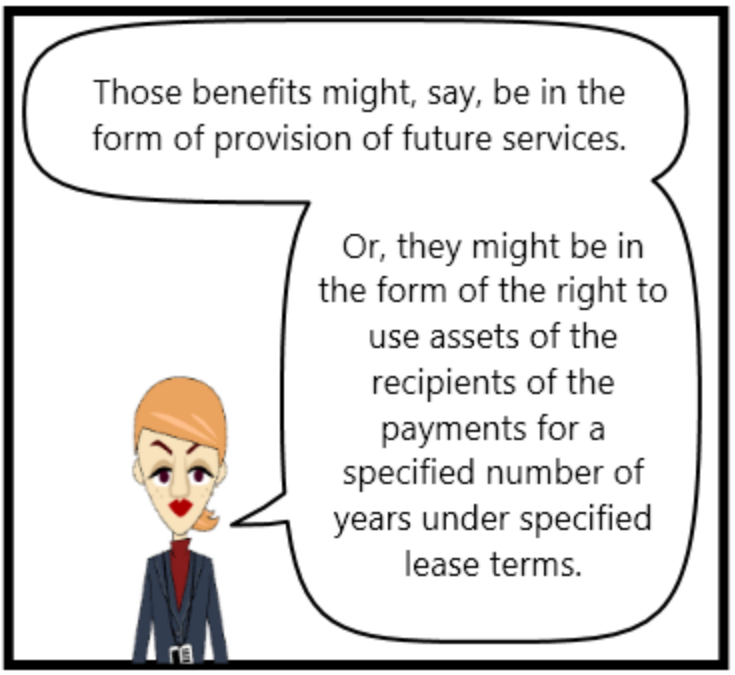
You'll see as we go through the asset types after a brief break.

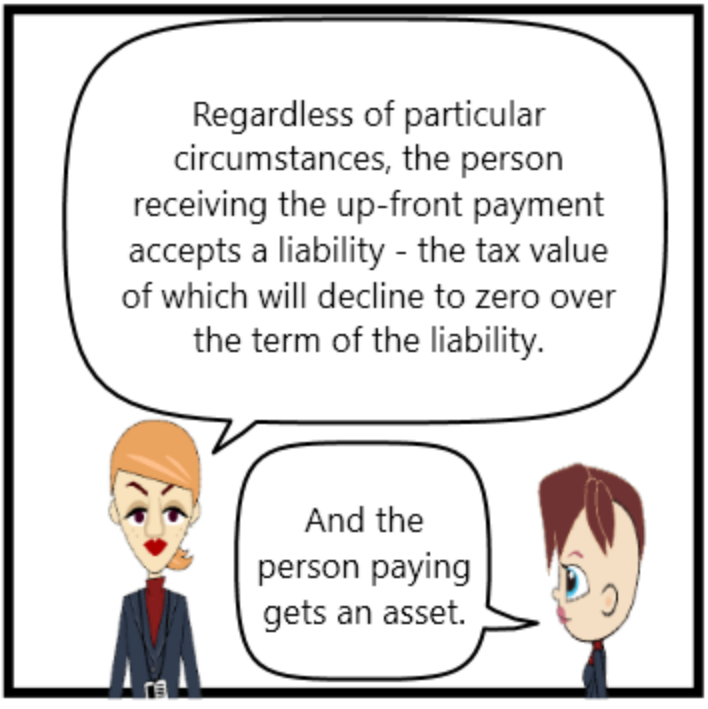
* Ralph Review, Draft Legislation, pp 145-146.

Sami queries Claudia during a break from the team meeting









DEPRECIATING NON-FINANCIAL ASSETS -

producing net receipts soon after installation

Plant and equipment, intangibles

Assets like plant and equipment often contribute net receipts soon after being installed ready for use.

Their contribution to net receipts typically declines over the years as they wear out and annual maintenance costs increase.

Consequently, their value also declines over the years - often roughly at a constant rate for a given rate of asset price inflation.

But...

Most business operations would have a multitude of items of plant and equipment

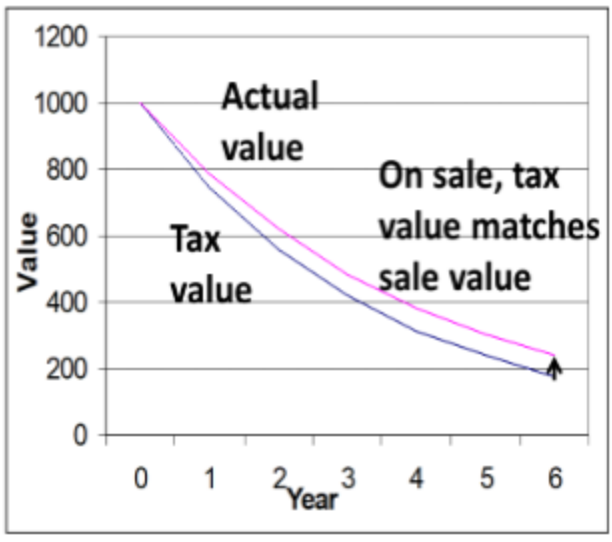
There is no way of knowing the contribution to a business' annual net receipts of each item, or its annual return.

That's exactly right, Brad.

The general formula for tax value determination cannot be used.

Each item of plant is given a declining tax value schedule, or tax depreciation, which seeks to mirror actual value decline.

At time of sale or disposal, any amount of final value above tax value adds to assessable income- even if value is above purchase price - and any amount of final value below tax value subtracts from assessable income....



....as shown in this schedule of tax write-off compared to actual decline in value for a plant item.

I know the huge number of items in the tax depreciation order.

It even includes camels!

But the depreciation write-off rates are just based on the expected number of years of effective service - or the effective life - of a particular item.

That is not related to reduction in actual value.

That is one approach to setting write-off rates or tax value reductions.

Another uses direct measurement of asset values from sales in the used market.

Let me show you how both methods to set tax value change coalesce around reduction in value.*

Direct technical estimate of effective life

↓

Effective life

1/life

Declining balance rate of write-off ← x1.5 or x2 — **Straight line rate of write-off**

1. Effective-life estimation

A measure of 5 years for Brad's effective life equates to 20% pa straight line write-off in each of those years.

Which, in turn, translates to 30% pa declining balance write-off, if a multiplicative factor of 1.5 is applied.

Value decline estimated from secondary market data

% pa ↓

Effective life

1/rate

Declining balance rate of write-off → /1.5 Or /2 — **Straight line rate of write-off**

2. Rate-of-decline estimation

Alternatively, a 30% pa decline in value measured directly from market data translates to 20% pa straight line write-off when divided by the 1.5 factor.

And the reciprocal of that rate gets you back to a 5-year effective life.

* Mayo (2011), p 59.

So, you can see how effective life is related to percentage decline in value of depreciating assets.

And, empirical studies have suggested that each type of depreciating tangible asset declines at a broadly constant rate peculiar to it.*

Which says measure that rate directly as in Method 2 and only allow the associated declining balance write-off for tax value determination.

So, effective life, the artificial multiplicative factor and straight-line write-off are not needed at all.

Logical thinking, Sami, but not all depreciating assets have secondary data deep enough for estimating value decline.

And business people like the simplicity and finality of straight-line write-off.

Hopefully, the multiplicative factor is set such that declining balance rates obtained via effective life measures would approximate assets' rate of value decline.

Our factor used to be 1.5 but has been increased to 2, supposedly, I think, to account for the effect on value of recent increases in technical obsolescence.

Why don't we suggest simply having each business pool all its plant depreciation and writing the pool off at a set annual rate - like we do with small business?

The way to achieve both simplicity and sound investment decisions is to apply the same depreciation arrangements to all.

Along with the ability of taxpayers to vary write-off rates according to the circumstances of use of plant items.

Annual change in asset value, aligned as far as practicable with change in value, is so important to a non-distorting income tax system, Brad.

* For example, Hulten & Wykoff (1980).

Of course, under inflation, measured tax depreciation will disadvantage investors.

That argues for statutory accelerated depreciation arrangements.

On the contrary, Brad.

!?!

A declining balance depreciation rate measured from market data under non-inflationary conditions would be too generous under asset price inflation.*

That can't be right!

I've got it: physical decay reduces value but inflation increases it.

With no inflation, annual value decline is from V to:

V(1 - s)

With inflation at rate, i, this decline becomes:

V(1 - s)(1 + i)

= V (1 - s + (1 - s)i)

Look here. V is start-year value of asset, i is annual rate of asset price inflation and s is non-inflationary rate of value decline from market data or technical effective-life determination.**

If, say, s is 0.25 and i is 0.05, annual rate of decline is 25% before inflation and 21.25% after.

That's exactly right, Sami.

Showing that tax depreciation rates measured from market data under low inflation will be too generous under high inflation - under our nominal income tax system.

Such measurement should ideally be made from data reflecting typical inflationary circumstances.

But, inflation....

We're taxing nominal, not real, income, Brad.

OK. Let's move on to appreciating assets.

* Swan (1978), p 7.

** Swan (1978), p 3.

** King (1977), p 242.

** Mayo (1984), p 34.

APPRECIATING ASSETS SUBJECT TO CGT-

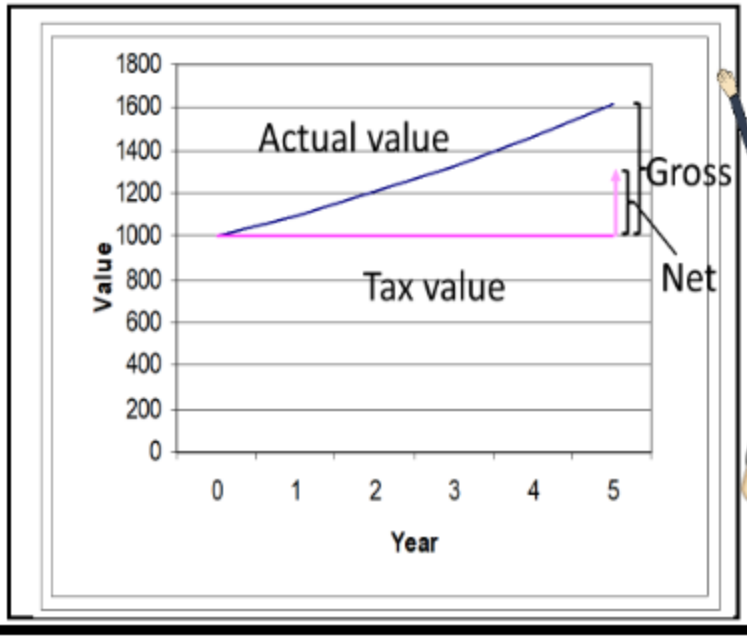
value increase a component of expected investment return

Land, company shares

Here we're looking at assets like land and company shares that investors hold for investment purposes.

Year by year the investors might, say, earn net receipts via dividends from their shares or by running livestock, or renting accommodation, on their land.

But the tax values of the shares and land assets for non-traders are dealt with under our general capital gains tax, CGT, regime.



Note that land and buildings are often treated as a combined asset, which we will cover later.

That aside, under CGT design, tax value does not attempt to track actual value.

Tax value stays at original cost until sale.

And, even on sale, a tax discount may apply.

Thus, the proportion of the gross realised gain that is included in taxable income, the net gain, varies across taxpayers and the length of their investment.

As you know, it is 1/2 generally, 2/3 for superannuation funds and full amount for companies and for assets held for less than a year.

Moreover, taxpayers' current- or prior-year realised CGT losses (sale value less than prior tax value) can only be written off against any current-year gross CGT gains.

That loss quarantining is necessary in the absence of accruals CGT because of the scope taxpayers would otherwise have to exploit the timing of loss realisation.

It is any excess of gross realised CGT gains over available gross realised CGT losses that attracts any applicable proportional reduction.

Remaining losses are carried forward.

And losses may be written off first against any gross gains not subject to a proportional reduction.

We know that CGT discounts and loss quarantining have to be handled by adjustments to the regular computation of taxable income under the reworked tax value design....

....often with long delays before tax value catches up with actual value.

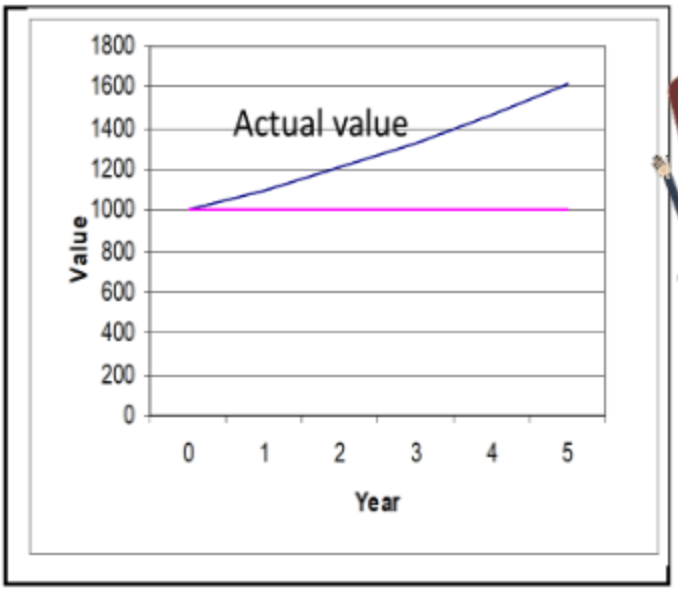
Yeah. So?

Yes, Sami, though if the taxpayer is trading in assets like shares and property, there will be limited delays before actual values are realised in sales.

And, in those circumstances, no discount applies and any trading losses are part of the regular measurement of taxable income.

But, Claudia, why is the treatment of land and, say, a discounted zero-coupon bond so very different?

Those bonds were used to avoid tax!



See, the value profile of the bond looks just like that of your land.

And yet tax value of the bond tries to track actual value, which will change before maturity if interest rates change.

The bond does have a known maturity value, Sami, but I take your point.

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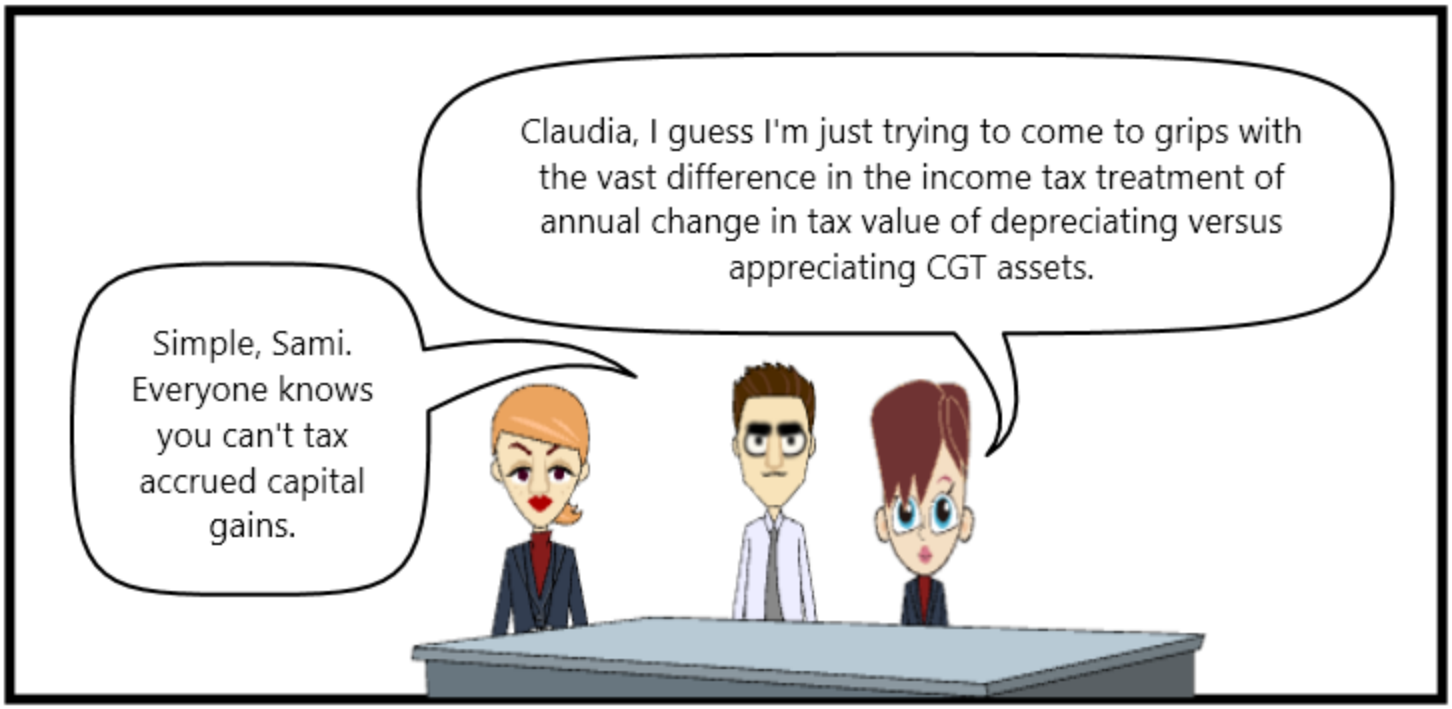
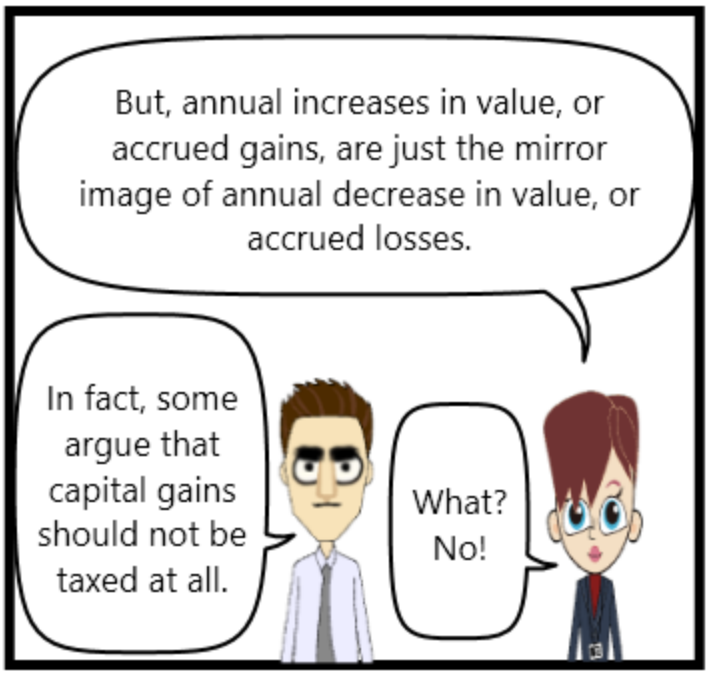
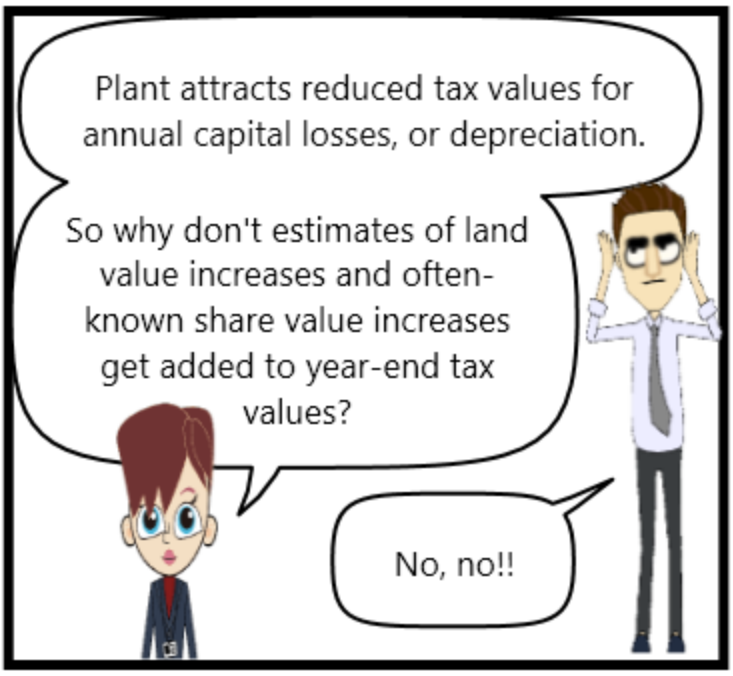
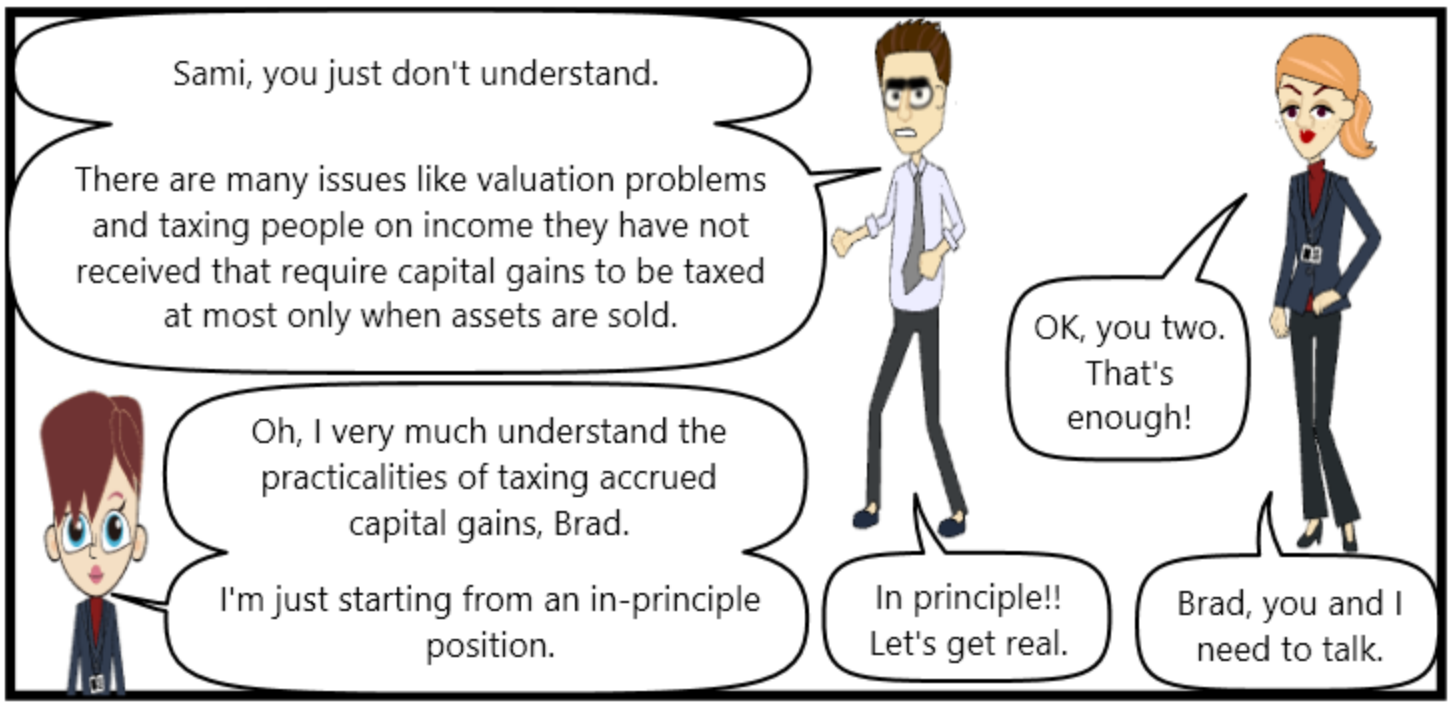

Claudia, I guess I'm just trying to come to grips with the vast difference in the income tax treatment of annual change in tax value of depreciating versus appreciating CGT assets.
Simple, Sami. Everyone knows you can't tax accrued capital gains.


But, annual increases in value, or accrued gains, are just the mirror image of annual decrease in value, or accrued losses.
In fact, some argue that capital gains should not be taxed at all.
What? No!


Plant attracts reduced tax values for annual capital losses, or depreciation.
So why don't estimates of land value increases and often-known share value increases get added to year-end tax values?
No, no!!


Sami, you just don't understand.
There are many issues like valuation problems and taxing people on income they have not received that require capital gains to be taxed at most only when assets are sold.
Oh, I very much understand the practicalities of taxing accrued capital gains, Brad.
I'm just starting from an in-principle position.
In principle!! Let's get real.
OK, you two. That's enough!
Brad, you and I need to talk.

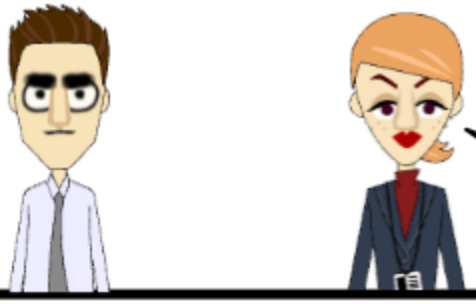
Brad and Claudia on income tax treatment of capital gains

Taxing capital gains **reduces growth**.

People undertake investments to achieve best possible returns. Those returns may include regular cash receipts and accrued capital gains which may be realised as cash via sale at any time.

Seeking best returns leads to top productivity and long-term growth.

And, you remember that minimal tax interference in this strategy is achieved by taking a percentage clip, the investor's tax rate, off all annual returns, including accrued gains.



But not taxing capital gains would boost investment and innovation.

This is not about government boosting activity during a cyclical downturn in the economy.

Establishing an economically sound tax structure is about letting the investment dollar seek out best genuine commercial returns.

Special capital gains tax treatment pushes investment towards rental property, for example, and away from manufacturing activity with declining value assets.

Boost overall demand by reducing tax rates, not via concessions for any asset types.

Anyway, only real capital gains should be taxed, after allowing for **inflation**.

As we have discussed before, Brad, annual change in value in taxable income could be in real, rather than nominal, terms - but always applied across all investment assets and liabilities.*

Thus, inflation adjustments would also have to apply to depreciating assets, trading stock and, crucially, monetary items, thus changing investors' post-tax discount rates.

Complexity is necessarily involved along with higher tax rates because of the narrower income tax base.

* Draft White Paper (1985), Ch 18.

* Ch3, pp 5-6.

Productivity benefits of sound investment decisions are achievable with taxable income including across-the board changes in values of assets and liabilities measured either in nominal or real terms.*

OK, so ....

And, as discussed, the inflation adjustment required to convert value changes from nominal to real would be opening value times general inflation.*

Thus, that adjustment would, for example, reduce annual taxable income of depreciating and appreciating assets alike and reduce nominal interest deductions on investment debt - and involve some extra issues with financial institutions with their matching monetary assets and liabilities.**

With inflation adjustments, an asset with no net receipts whose nominal value is increasing in line with general inflation would rightly attract no tax year by year.

What? No!

That is spot on, Brad! And that illustrates why we ideally would prefer to be only taxing real investment income everywhere.

But, Brad, do you realise you are confirming that we would first assess annual accrued nominal gains in value before the general inflation adjustment was applied to them.

It would make no sense to, say, hold tax value of appreciating assets, including trading stock, at cost and apply the annual inflation adjustment to that.

Thus, the complexity of across-the-board inflation adjustments could only be contemplated once there was general acceptance of the ideal of including in investors' tax assessments annual change in actual value of investment assets and liabilities.

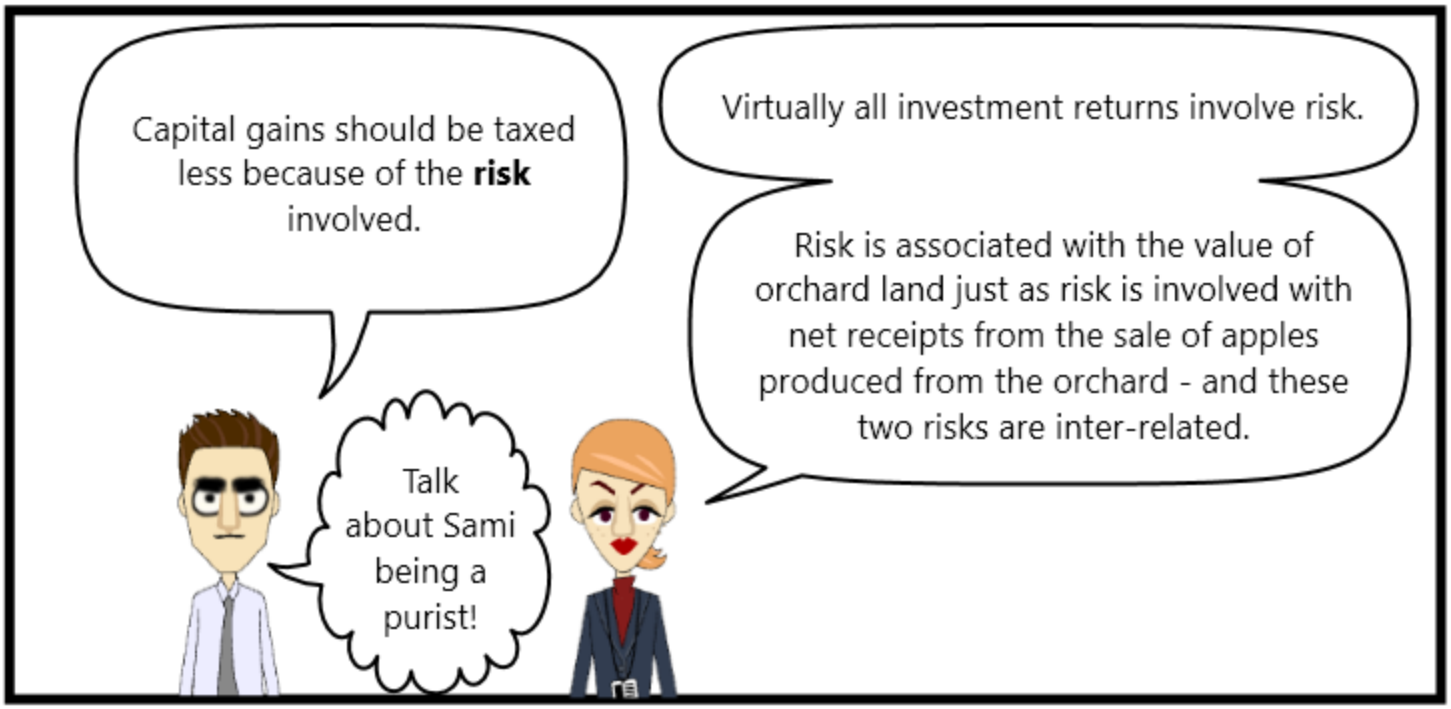
Aww, anyway, inflation is not the only reason for special treatment of capital gains.

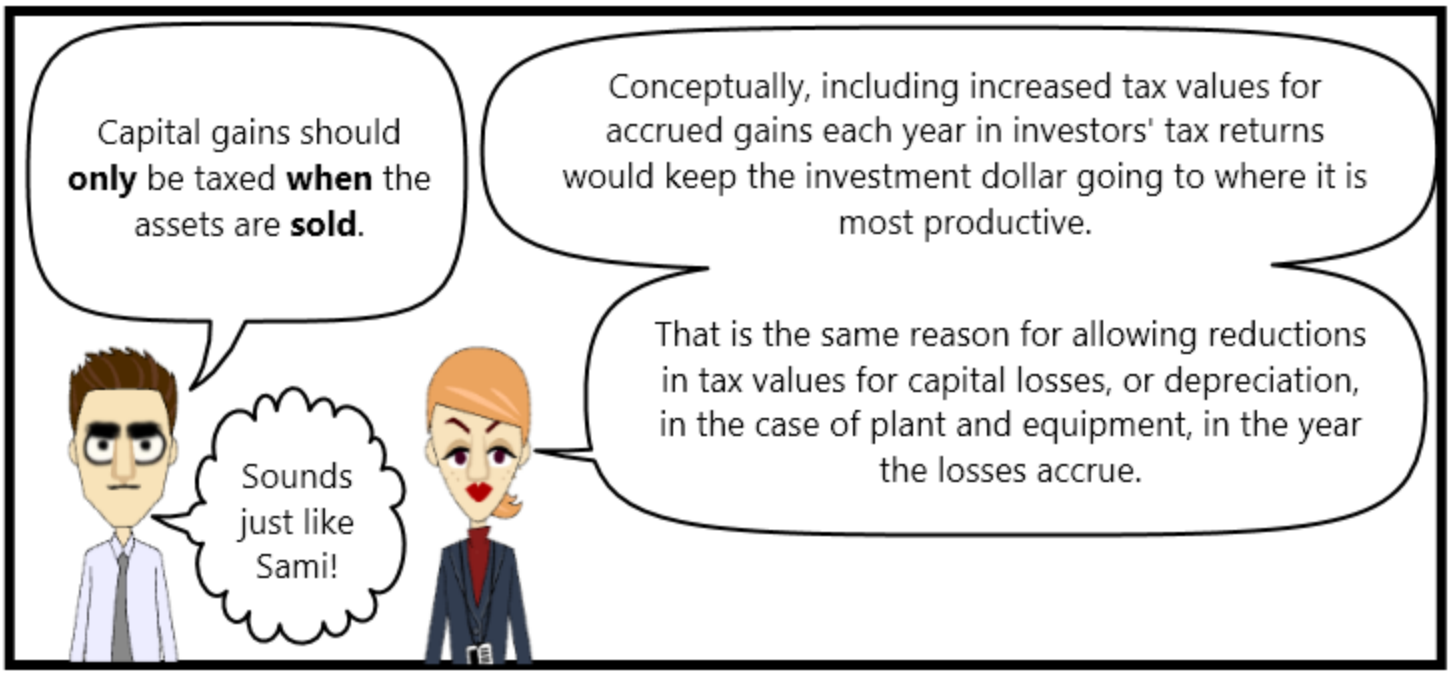
Until then, best to keep inflation low and push towards this ideal broad base for taxing investment income.

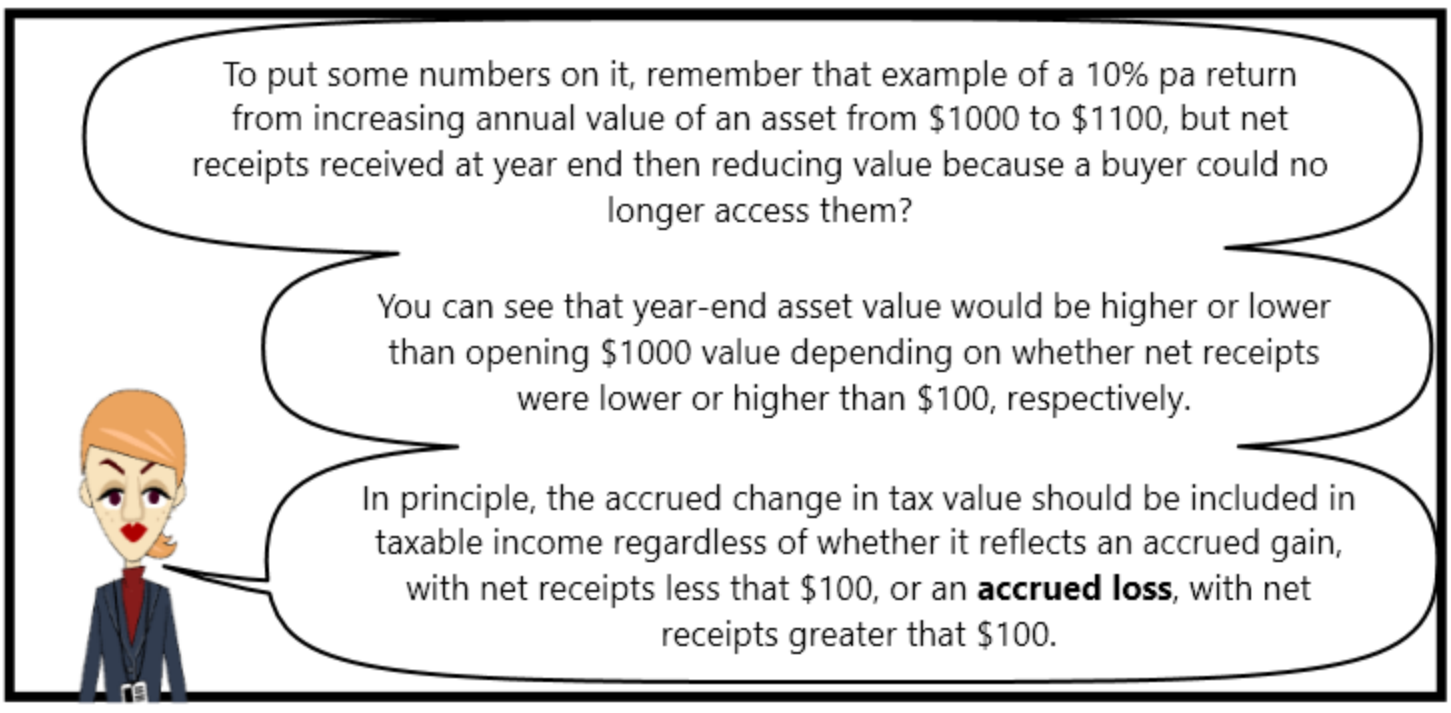
Remember, the broad base low tax rates slogan - or BBLT?

* Swan (1978) p 3, Mayo (1984) pp 39-42.

** Draft White Paper, pp 211-214.


Capital gains should be taxed less because of the **risk** involved.
Virtually all investment returns involve risk.
Risk is associated with the value of orchard land just as risk is involved with net receipts from the sale of apples produced from the orchard - and these two risks are inter-related.
Talk about Sami being a purist!


Capital gains should **only** be taxed **when** the assets are **sold**.
Conceptually, including increased tax values for accrued gains each year in investors' tax returns would keep the investment dollar going to where it is most productive.
That is the same reason for allowing reductions in tax values for capital losses, or depreciation, in the case of plant and equipment, in the year the losses accrue.
Sounds just like Sami!


To put some numbers on it, remember that example of a 10% pa return from increasing annual value of an asset from $1000 to $1100, but net receipts received at year end then reducing value because a buyer could no longer access them?
You can see that year-end asset value would be higher or lower than opening $1000 value depending on whether net receipts were lower or higher than $100, respectively.
In principle, the accrued change in tax value should be included in taxable income regardless of whether it reflects an accrued gain, with net receipts less that $100, or an **accrued loss**, with net receipts greater that $100.

But, anyway, accrued capital gains **cannot be measured** accurately enough to put an increasing tax value on them.

As you know, Brad, rates of write-off - or tax value reduction - for thousands of disparate items of plant and equipment are specified as estimates of the annual reduction in value of these items.

And properties everywhere are being bought and sold all the time.

Could it be that the difference here is not estimation difficulty but the fact that declining tax values reduce taxable income whereas increasing tax values for accrued gains increase taxable income?

Certainly, accrued gains of some non-traded assets would be difficult to estimate, like intellectual property and earned goodwill of unincorporated businesses. But, for other assets, such as listed shares, value is known daily.

Moreover, accrued gains are already taxed on some assets, like discounted zero-coupon bonds, trading stock when market valuation is chosen and financial assets subject to mark-to-market treatment.

Accrued gains should not be taxed because people **don't have the cash** to pay the tax.

People choose all the time to enter dividend reinvestment plans where they get taxed on their dividends without receiving cash in hand.

When people pay land tax as a percentage of the **estimated value** of their rental properties, why should there be such an uproar over the idea of applying a tax rate to an **estimated increase in value** of the properties?

In addition, when a property's value declines, land tax is still payable whereas income tax would be reduced via accruing **capital losses** if accrued value changes were recognised.

Moreover, people pay rates based on the value of their family homes and payments can be delayed until the homes are sold in some circumstances.

Some regional jurisdictions also allow land tax to be deferred, in specific circumstances, with interest applied to the delayed payments.

Hmm.... A move to towards taxing accrued gains more generally could be greased were taxpayers given the choice of deferring tax on accrued capital gains with interest applied to deferred payments.

Such delayed payments would accommodate any accrued losses along the way.

Thanks, Brad. I'll raise this with the Tax Minister.

The purist attempting a practical twist!

Anyway, taxing accrued gains is a **wealth tax**.

On the contrary, sound income taxation taxes **changes** in wealth by incorporating annual change in asset values.

In contrast, as I advised the Tax Minister, expenditure taxation does not tax regular investment returns at all, inevitably leading to calls for wealth or inheritance taxes.

If accretions to wealth are being taxed via income taxation, why also impose tax on absolute wealth?

Despite all this, Brad, I appreciate it is hard for the Tax Minister to push for taxing accrued gains across the board.

But, as you know, under our general CGT system, when long-held assets are sold, not even the full realised gain is taxed.

Yes, the **discount** is right given the effects of **inflation** over time.

C'mon, Brad. As I explained, in our nominal income tax system, the investor has the advantage of nominal interest deductions on debt and not being taxed on accruing gains for all the pre-sale years!

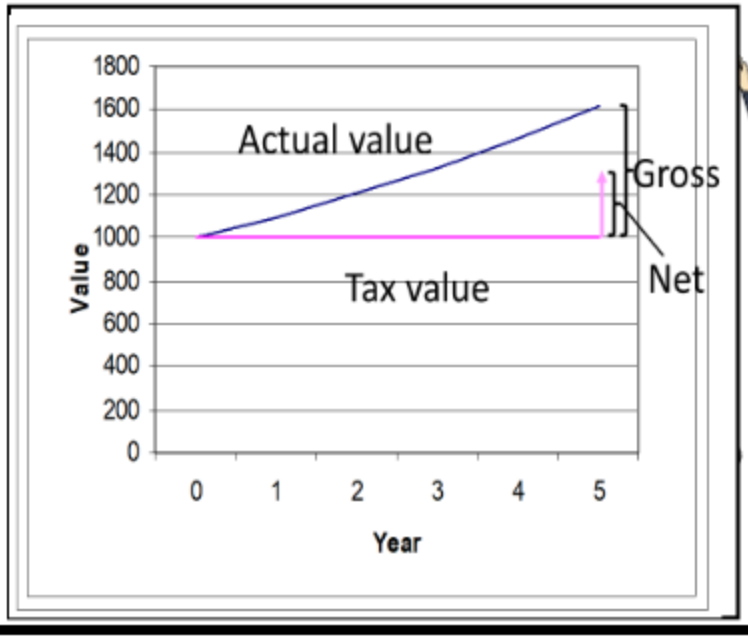
The discount provides **double concessional treatment** for capital gains.

Remember, Brad, in our nominal system, ideally investors' personal tax rates apply to the annual commercial profits across all their investments.

And investors' commercial returns include annual change in nominal values of all their investment assets and liabilities.

If, within such an ideal nominal system, inflation adjustments were only applied to appreciating tangible assets - and not all investment assets and liabilities - distorted investment decisions would again result.

To reiterate, for sound investing, values of investors' appreciating assets are aligned year by year as closely as possible to the assets' changing values.



Current general CGT treatment is way short of this, doubling up on concessional treatment.

Yes, and.....?

You can see that, even if tax value remained at cost until sale but the overall capital gain realised on sale were taxed, the tax treatment would be concessional.*

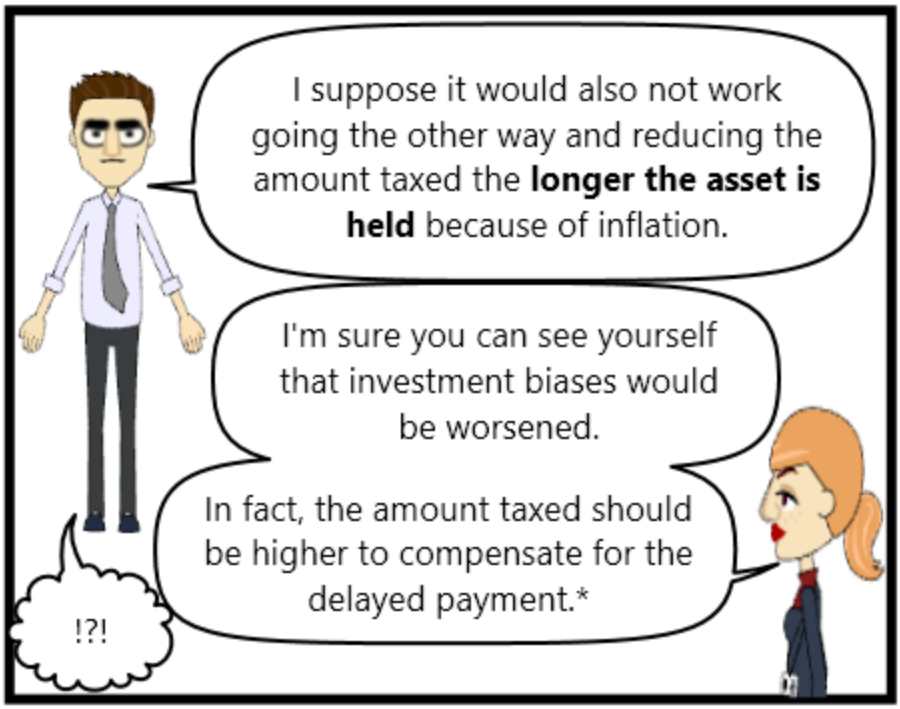
Because year-by-year tax value is not trying to track actual value as far as practicable, a bias is imposed towards property and shares relative to, say, depreciating assets, regular wages and bank accounts.

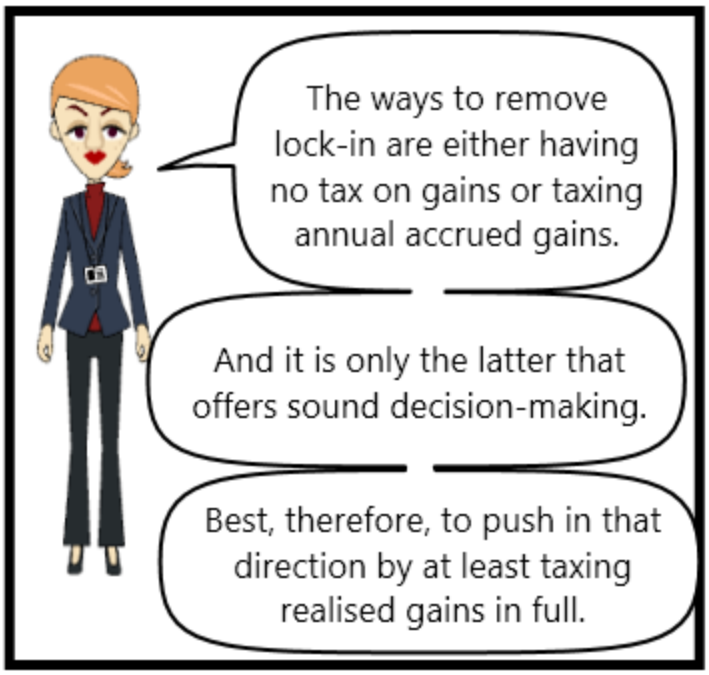
Distorted investment decisions and associated price distortions are the result.

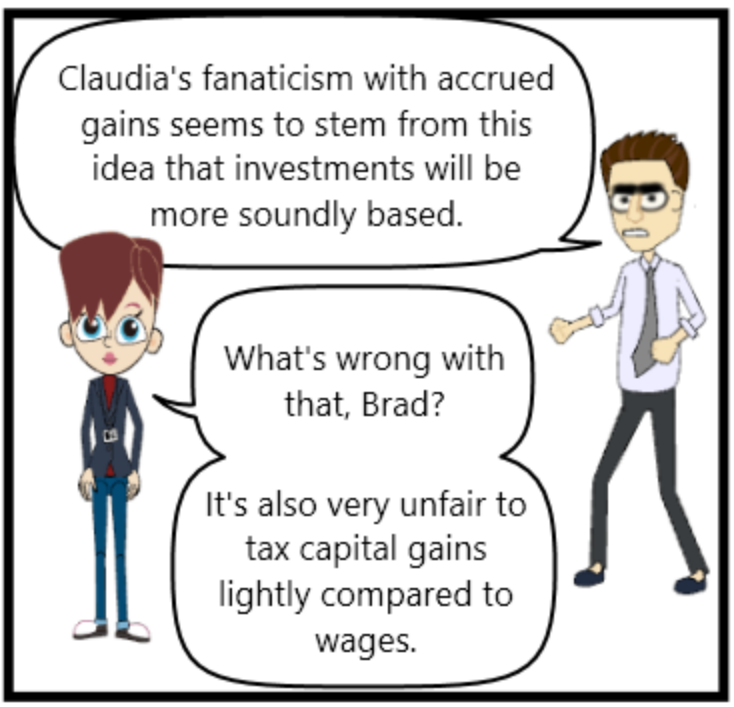
The practical starting point is to seek general acceptance of the ideal of aligning tax values of investment assets and liabilities with their actual values - and formulate practical tax design against that ideal.

Hmmm.

* See interest-free loan analogy, Draft White Paper, p 78.

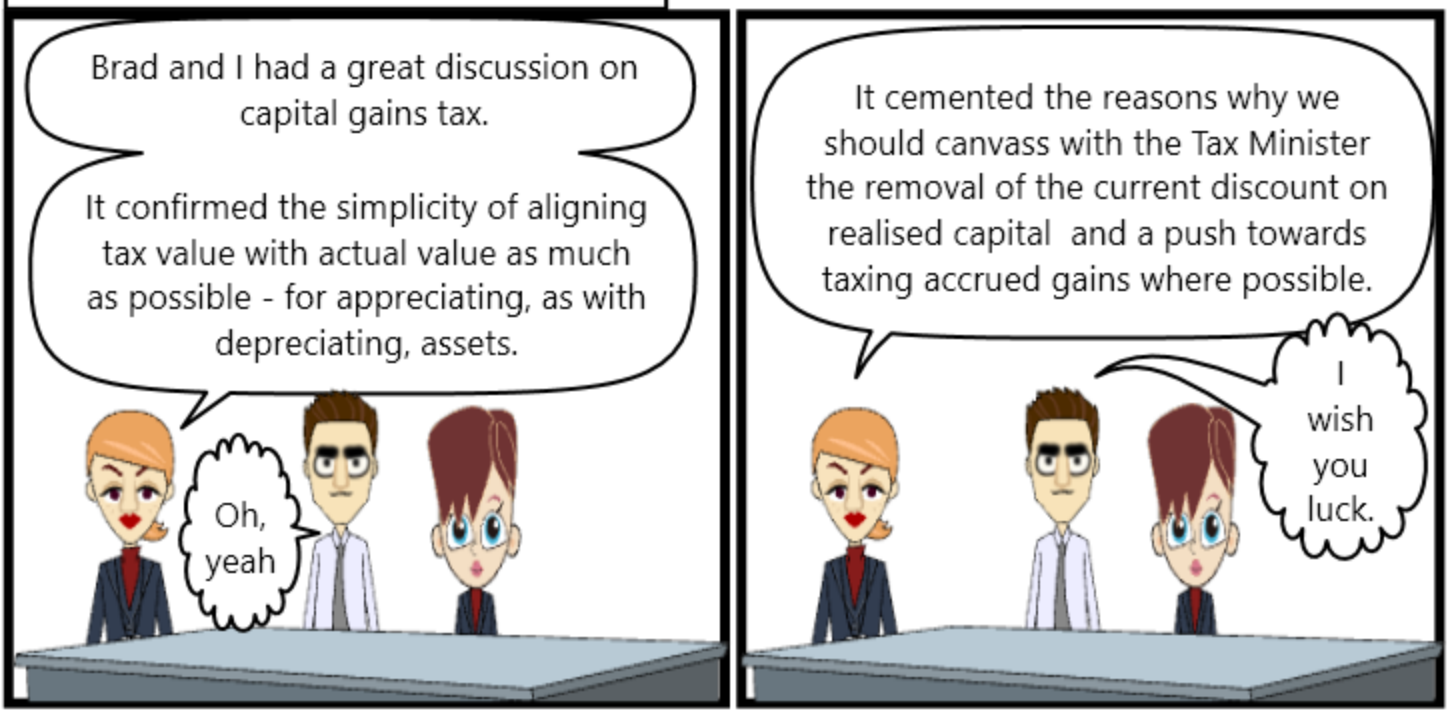


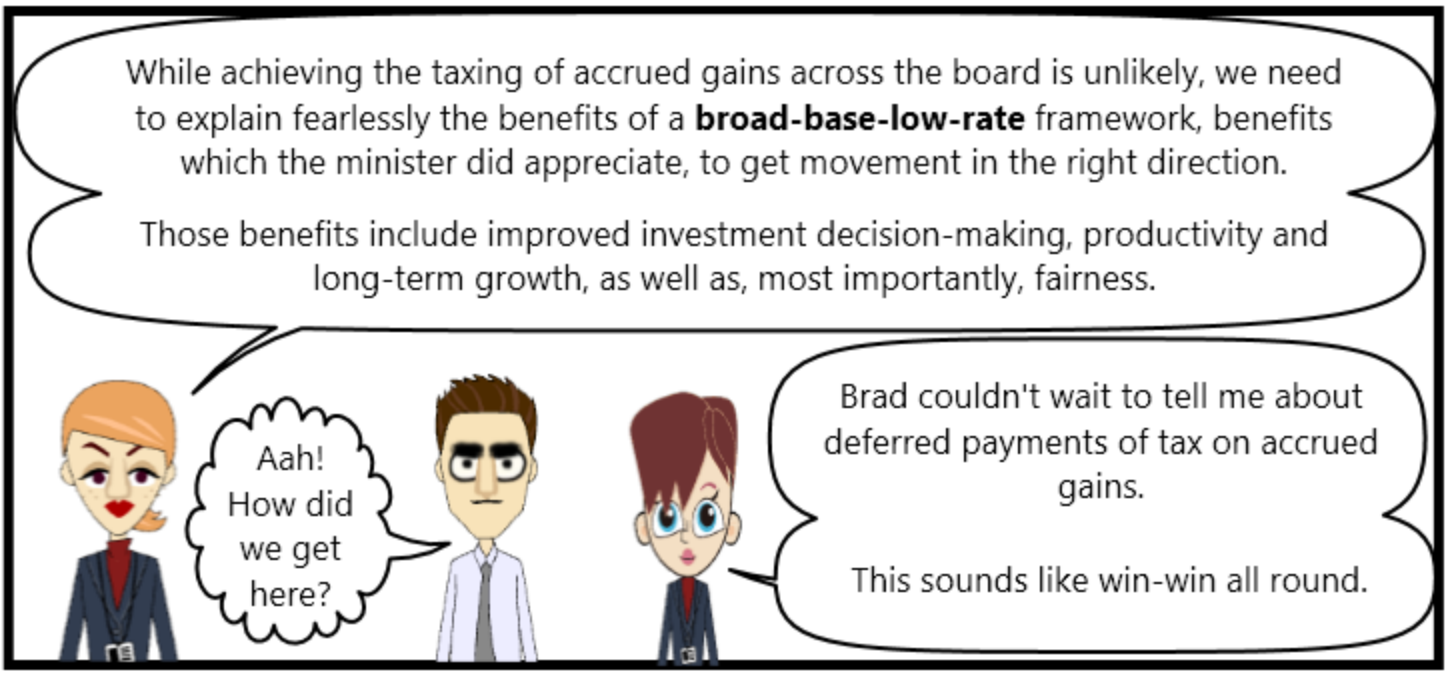


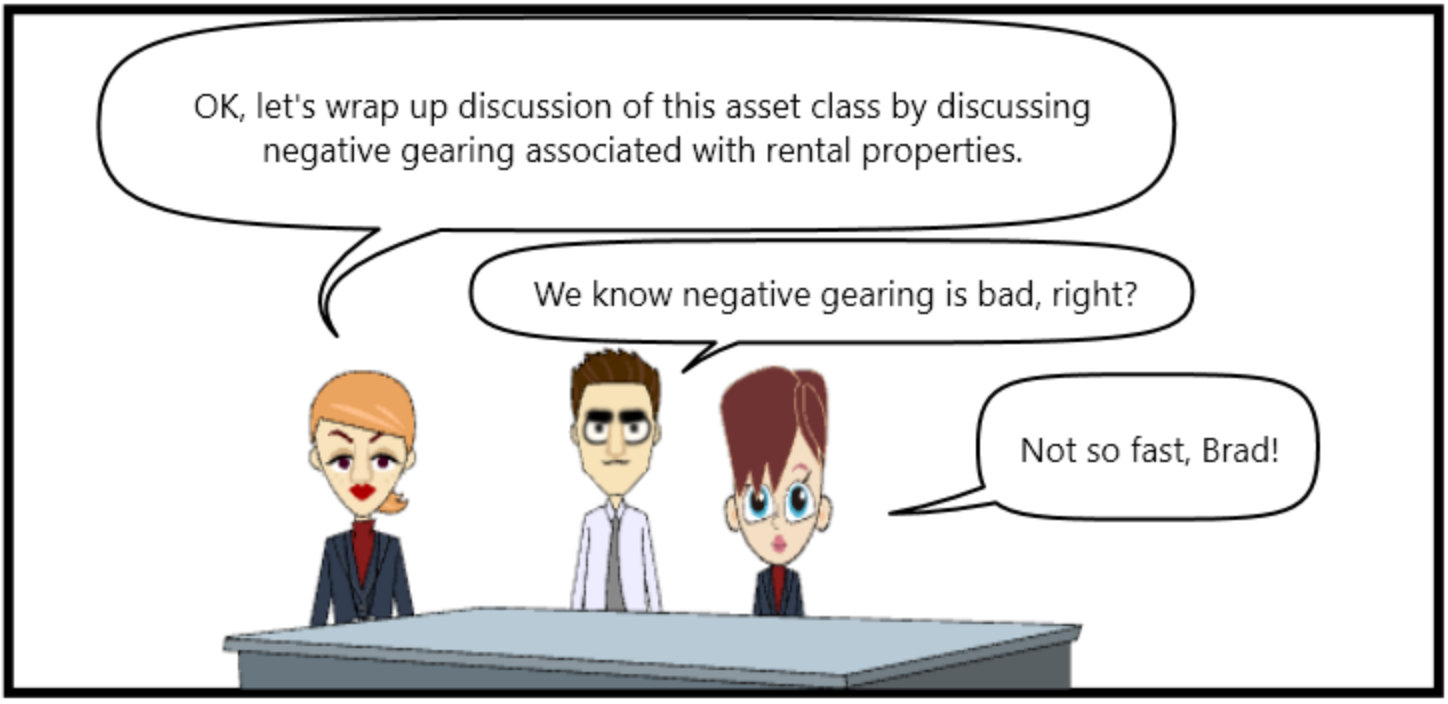


* Auerbach (1988), p 3.

Back to the team discussion.....







Negative gearing: that old chestnut

Negative gearing is the term given to the situation where an investor's income tax loss from an on-going investment reduces the investor's taxable income from other investment activities or from wages in the case of individual investors.

The tax loss arises when annual gross receipts from the on-going investment are less than associated current costs plus annual change in tax values of the investment's assets and liabilities.

There are no specific provisions allowing so-called negative gearing. It is embedded in our "comprehensive", rather than "modular", style of income tax code.

They should not be allowed to offset their tax losses against their other taxable income!

Why not, Brad?

People seem to immediately associate negative gearing with rental properties, even though it arises with investments generally.

With rental properties, tax losses typically arise from annual gross rental receipts being less than annual maintenance costs plus interest payments on borrowings plus depreciation allowed on buildings and fittings.

By the way, prior building depreciation reduces the property's tax value for CGT purposes, increasing the gross realised gain of the property - because it is treated as a combined asset - an issue to return to.

The annual losses should be carried forward and offset against future taxable income from the property, including that arising on ultimate sale - rather than being applied to wages income now.

Certainly, the property investor is prepared to wear current tax losses because of accruing capital gains on the property. But....

Brad, non-commercial losses* aside, there is nothing wrong with a taxpayer offsetting a tax loss from a investment in a particular year against the taxpayer's taxable income, including wages, in that same year.

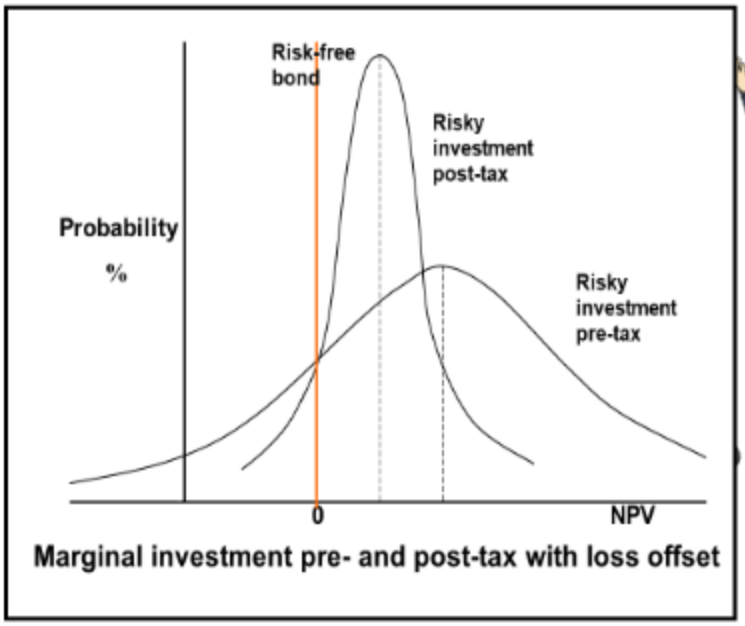
That's the practical way for the taxpayer to obtain the full value of the loss immediately.

Obtaining the value of tax losses immediately would achieve balance across the spread of possible outcomes of an investment.

And balance across the risk profile of an investment is important for achieving income tax neutrality.

What? Negative gearing is....

I'll demonstrate.....



Marginal investment pre- and post-tax with loss offset

This shows the spread of possible net present value, or NPV, outcomes of an investment pre- and post-tax. The cash flows of each outcome is discounted at a risk-free rate to avoid double counting of risk.

It shows how loss offset has possible negative NPVs cut by the tax rate to balance the tax-rate cuts to possible positive NPVs from taxing upside outcomes.**

Yes, you can't expect income tax to be investment neutral if you tax the upside of investment prospects but give nothing back to the downside.

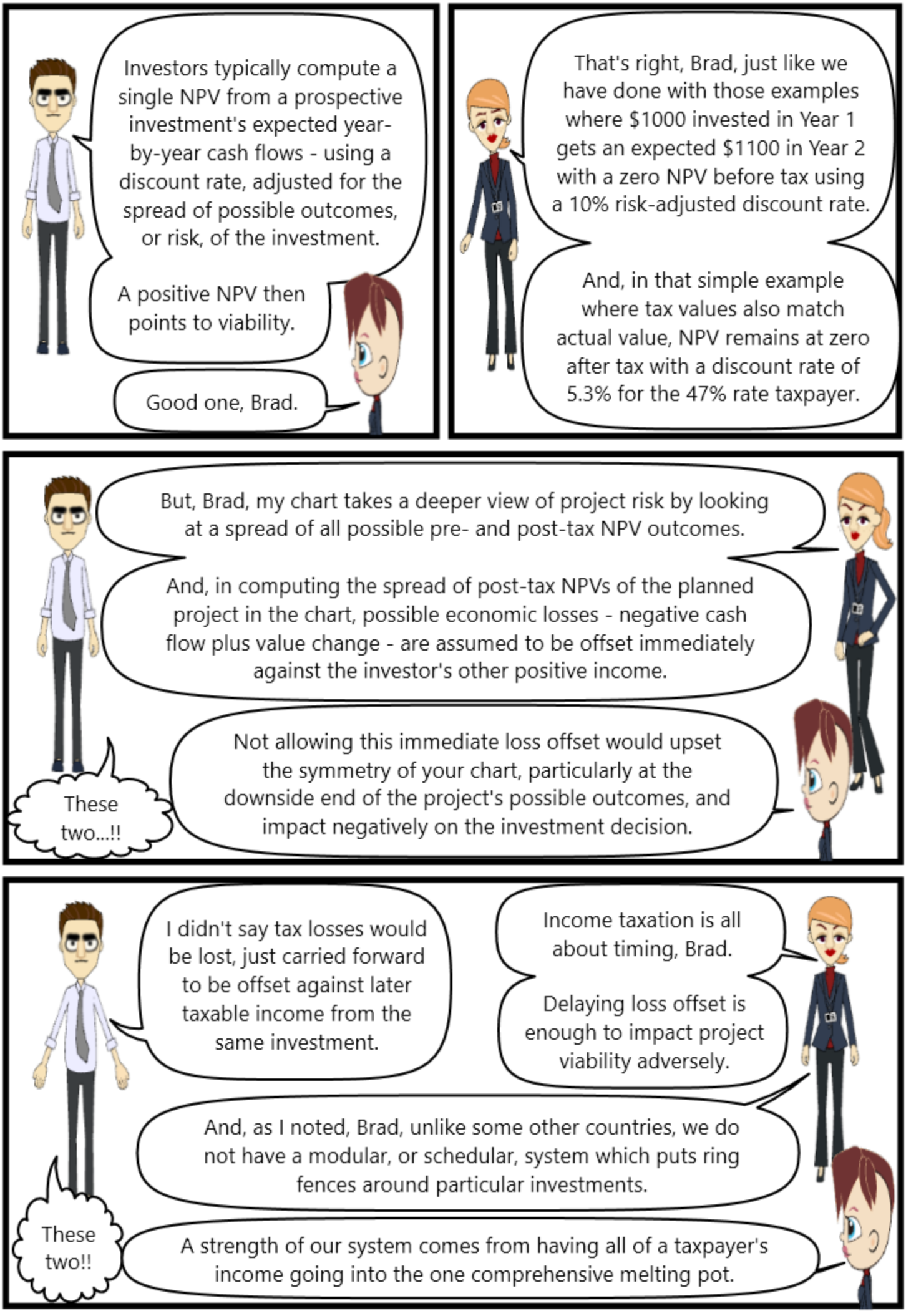
But, Claudia, your chart is very theoretical.

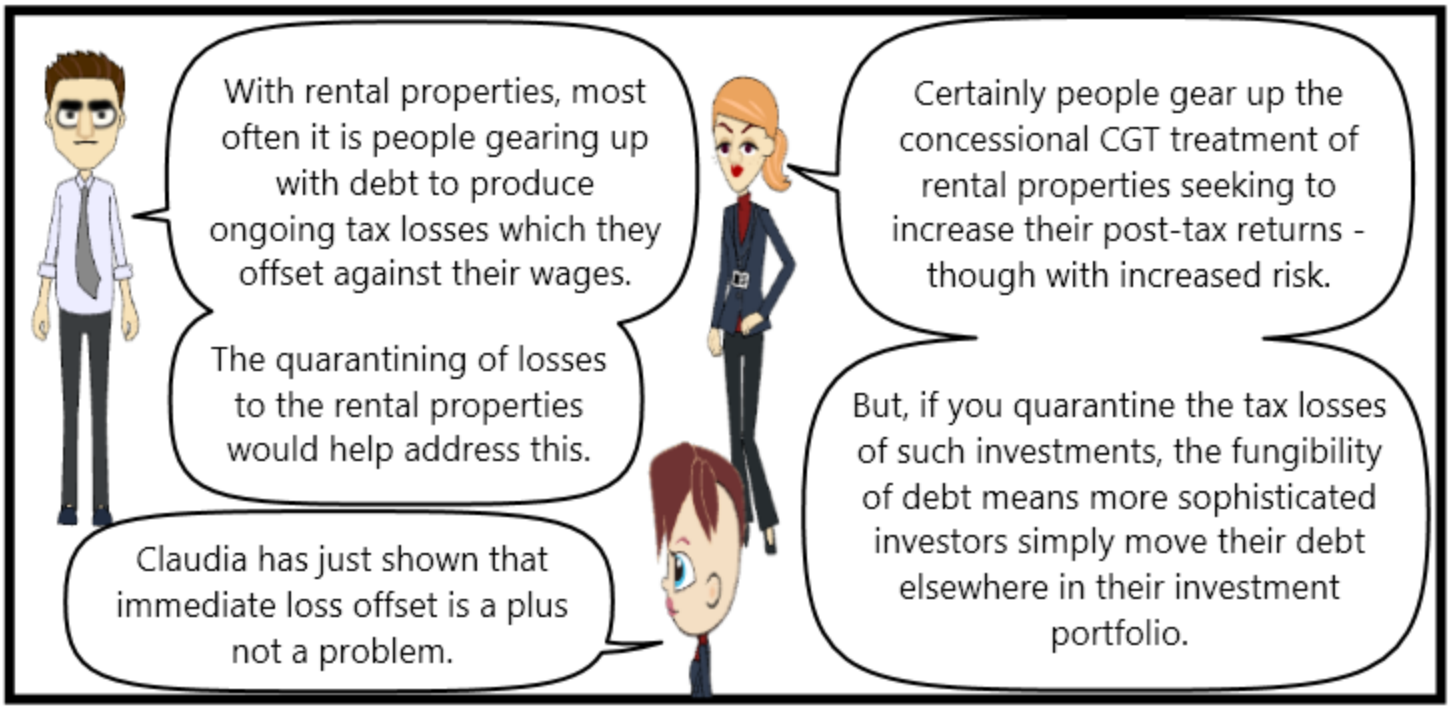
It assumes annual taxable income incorporates the change in value of investment assets, or economic depreciation - including when the assets are first acquired.

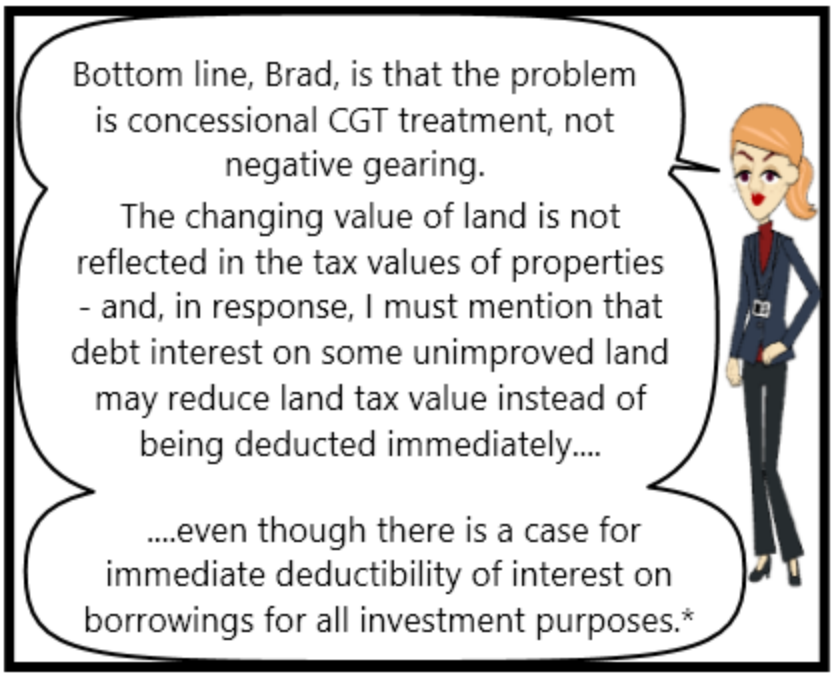
And no one computes the full range of possible outcomes using a risk-free discount rate!

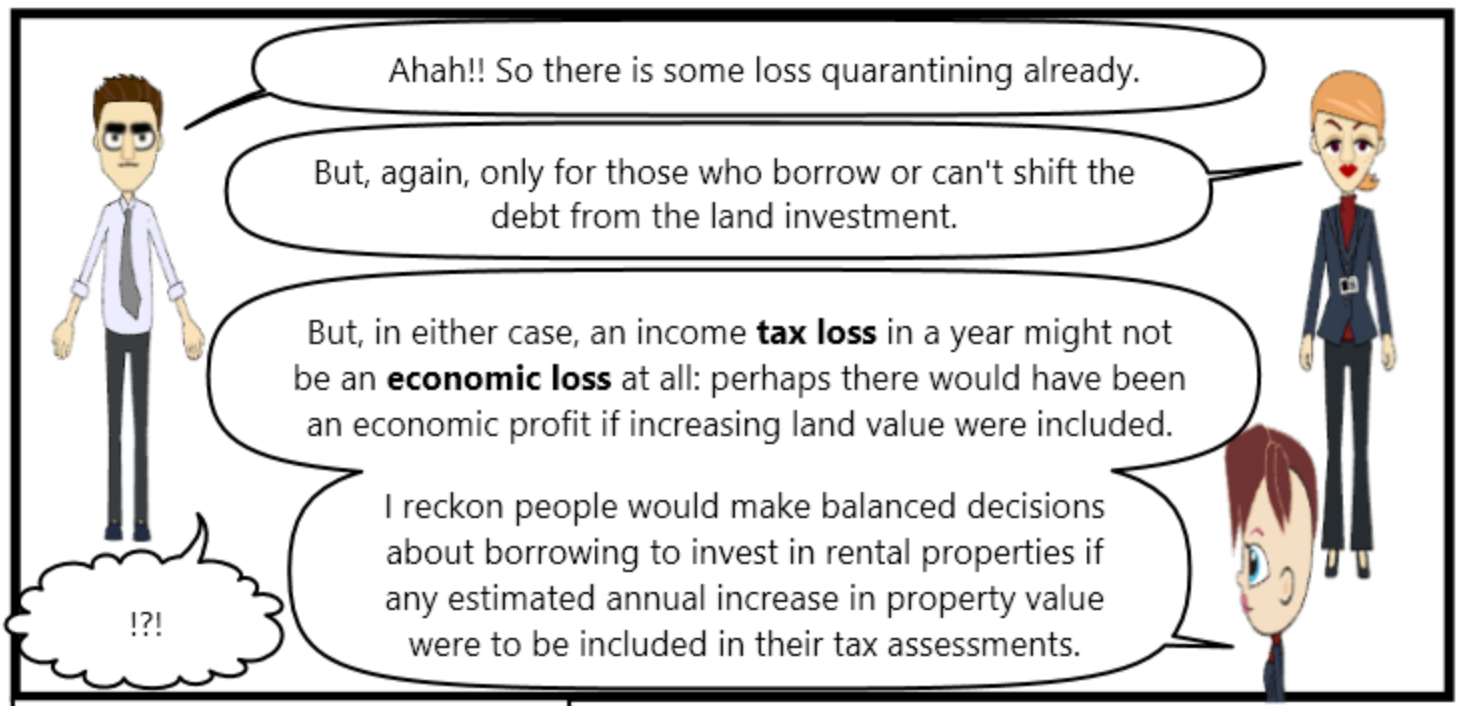
* In Australia, initiated by Ralph Review, pp 294-300.

** Mayo (2018) p 47.

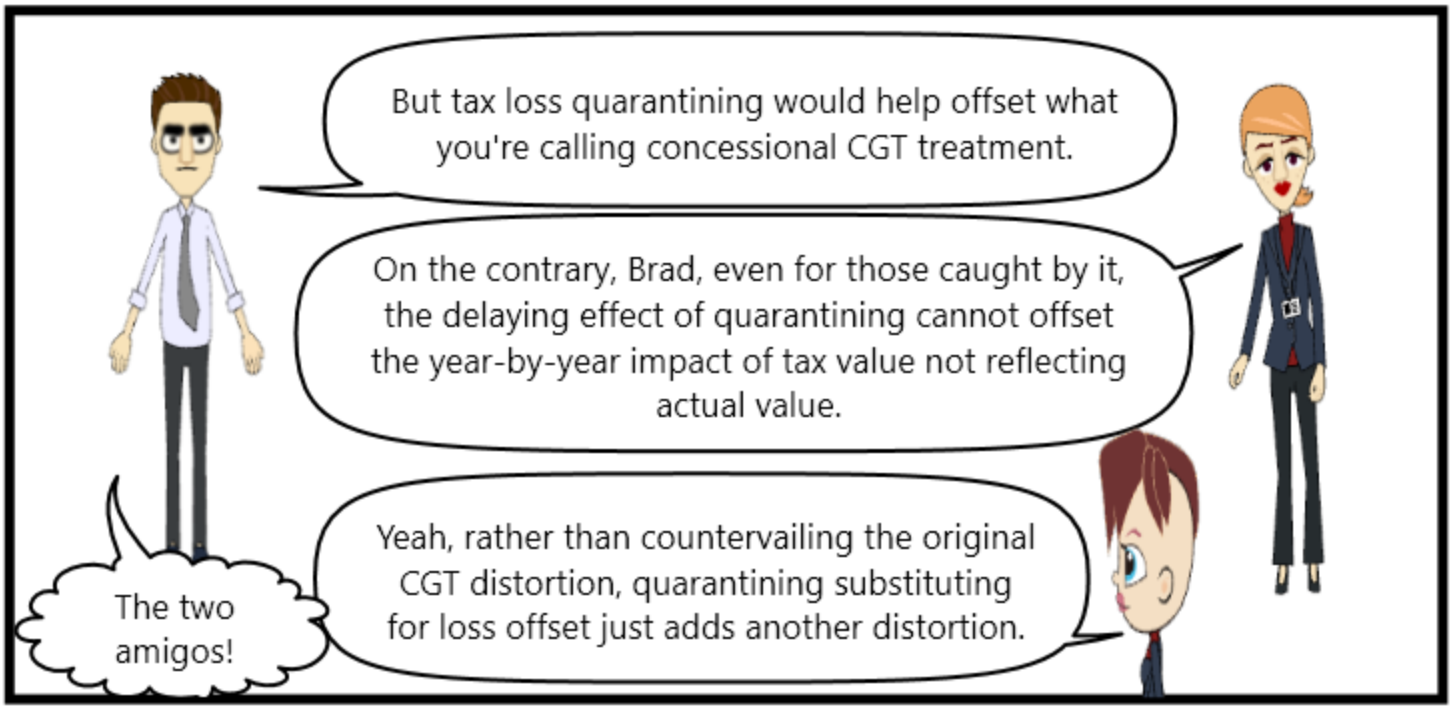

Investors typically compute a single NPV from a prospective investment's expected year-by-year cash flows - using a discount rate, adjusted for the spread of possible outcomes, or risk, of the investment.
A positive NPV then points to viability.
Good one, Brad.
That's right, Brad, just like we have done with those examples where $1000 invested in Year 1 gets an expected $1100 in Year 2 with a zero NPV before tax using a 10% risk-adjusted discount rate.
And, in that simple example where tax values also match actual value, NPV remains at zero after tax with a discount rate of 5.3% for the 47% rate taxpayer.
But, Brad, my chart takes a deeper view of project risk by looking at a spread of all possible pre- and post-tax NPV outcomes.
And, in computing the spread of post-tax NPVs of the planned project in the chart, possible economic losses - negative cash flow plus value change - are assumed to be offset immediately against the investor's other positive income.
Not allowing this immediate loss offset would upset the symmetry of your chart, particularly at the downside end of the project's possible outcomes, and impact negatively on the investment decision.
These two...!!
I didn't say tax losses would be lost, just carried forward to be offset against later taxable income from the same investment.
Income taxation is all about timing, Brad.
Delaying loss offset is enough to impact project viability adversely.
And, as I noted, Brad, unlike some other countries, we do not have a modular, or schedular, system which puts ring fences around particular investments.
A strength of our system comes from having all of a taxpayer's income going into the one comprehensive melting pot.
These two!!





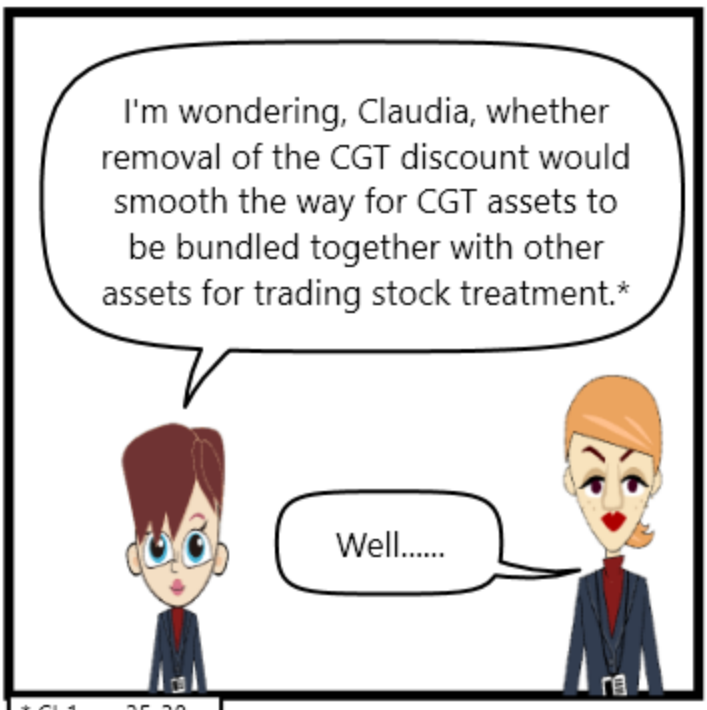


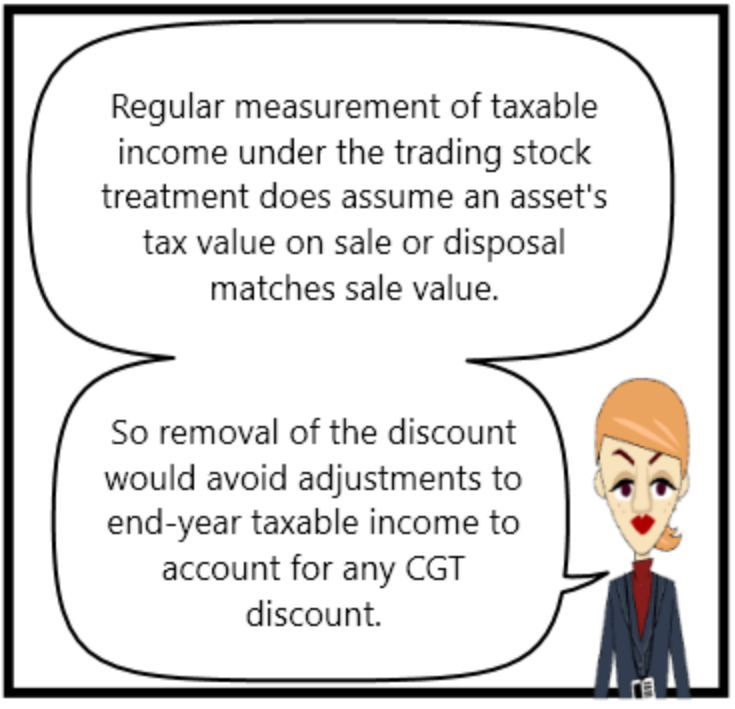
* Ralph Platform, p 44, Ralph Review, pp 190-192.


But tax loss quarantining would help offset what you're calling concessional CGT treatment.
On the contrary, Brad, even for those caught by it, the delaying effect of quarantining cannot offset the year-by-year impact of tax value not reflecting actual value.
Yeah, rather than countervailing the original CGT distortion, quarantining substituting for loss offset just adds another distortion.
The two amigos!


Oh, I get it.
Once again, you two just want to tax annual accrued capital gains!
Well, if annual income tax losses were always economic losses, maybe all tax losses could go into the one assessment melting pot.


And with rental properties, including accruing capital gains, and losses, would remove any tax incentive for borrowing and provide investing balance.
But, as we discussed earlier, Brad, start at least with removing the CGT discount on realised gains on CGT assets like property and shares.


I'm wondering, Claudia, whether removal of the CGT discount would smooth the way for CGT assets to be bundled together with other assets for trading stock treatment.*
Well.....


Regular measurement of taxable income under the trading stock treatment does assume an asset's tax value on sale or disposal matches sale value.
So removal of the discount would avoid adjustments to end-year taxable income to account for any CGT discount.

* Ch1, pp 35-38.

Even if the CGT discount were removed, however, adjustments would still be needed to deal with the quarantining of realised CGT losses to realised CGT gains.

More generally, trading stock treatment or otherwise, special attention is needed if CGT assets and other assets with them are sold as a combined asset - like, say, property comprising **land and buildings**.

Really, the land and buildings should be treated as separate assets with separate arm's length valuations when sold so that CGT losses and gains and any associated discount are correctly attributed and building depreciation properly applied.

As you explained earlier, Claudia, CGT and its discount no longer apply to transient capital gains on depreciable assets like buildings used solely for investment purposes. So, separating the assets raises no tax revenue issues and would fix the unsatisfactory treatment of building depreciation with rentals.

And, of course, there is my ideal treatment.

Wait for it...!!

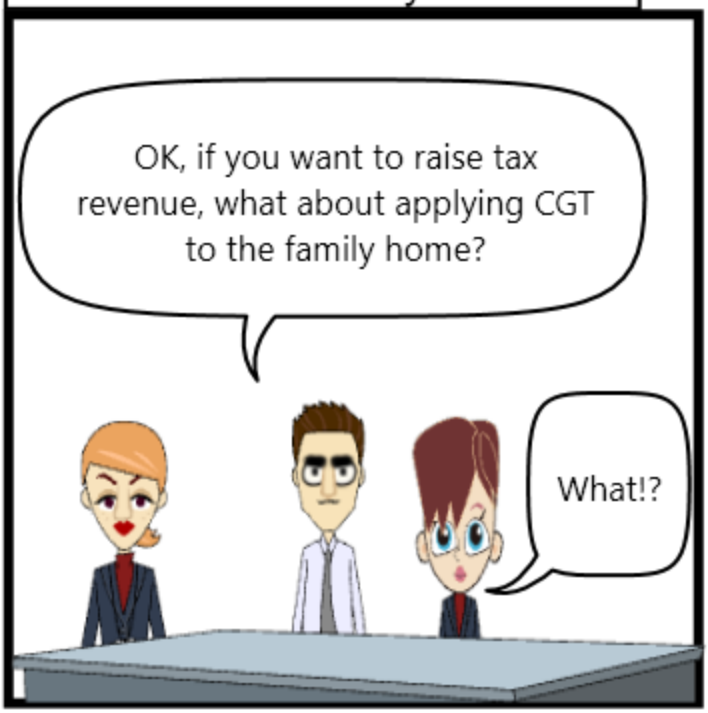
That is to apply the trading stock treatment to the combined land/building asset valued each year at market value.

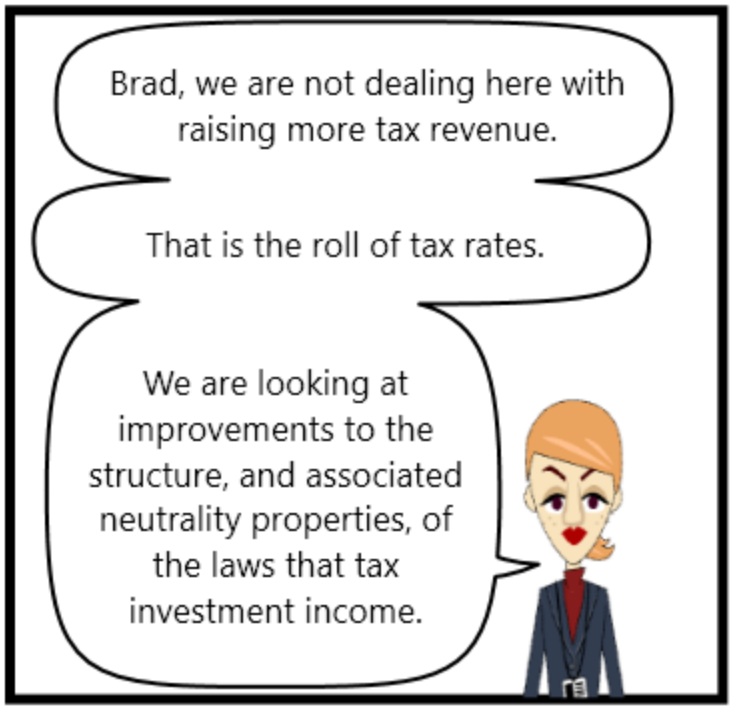
Separate tax values for each asset would no longer be needed, negative gearing would be a non-issue and any annual tax losses, which would also be commercial losses, would feed into regular taxable income.

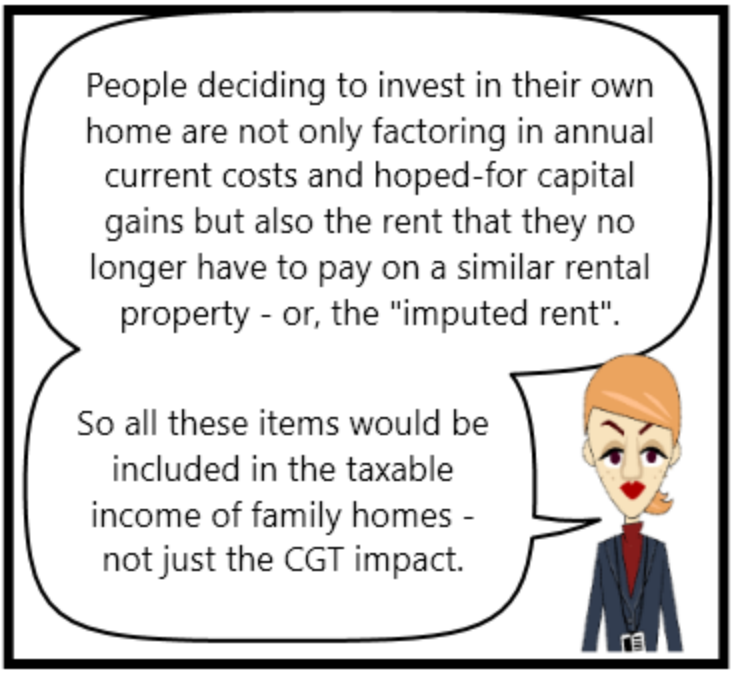
Like government and taxpayers are going to sign up to year-by-year market valuation!

And everyone knows negative gearing is bad.

What about the family home?







* Swan (1976), p 172.

The team's discussion moves on

DELAYED CASHFLOW ASSETS -

delay before production commences

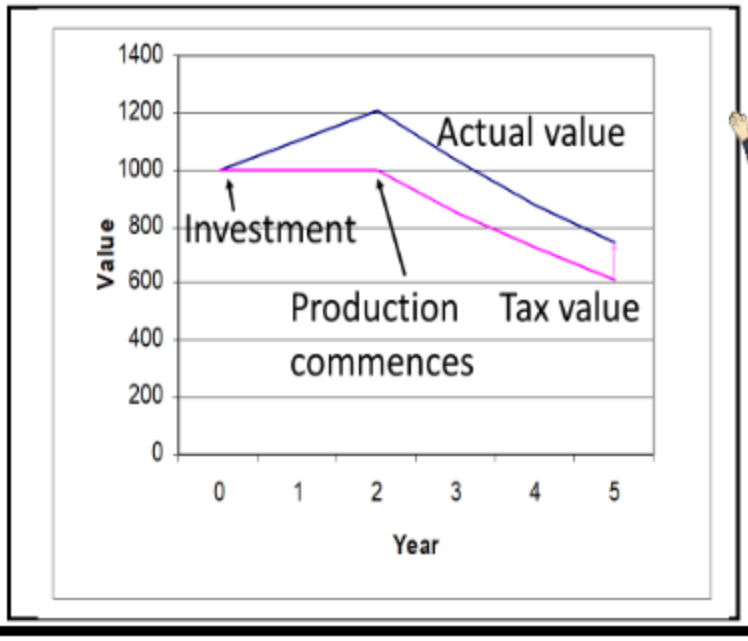
Infrastructure, mining, forestry

Here we're looking at investments - like those in infrastructure, mining or forestry - which have a long lead time as assets are accumulated before production commences.

You can appreciate that, with such investments, as the realisation of net receipts gets closer and closer the value of the investments gets higher and higher.

Buyers would be prepared to pay more the less time they have to wait for positive cash flow.

Accrued capital gains again!



Yes, Brad, but after production commences, value drops as assets deteriorate or a resource gets depleted.

The chart compares ideal and practical tax treatment of changing value.*

Ideally, change in tax value in determining annual taxable income would mirror year-by-year change in the investment's actual value shown in the chart.

Well, that's not going to happen!

Indeed, Brad. That's why my chart shows tax value unchanged at cost of the investment's assets, which are all acquired up front here, until production starts.

I bet the early increase in value could be estimated.

* Mayo (2018) p 86.

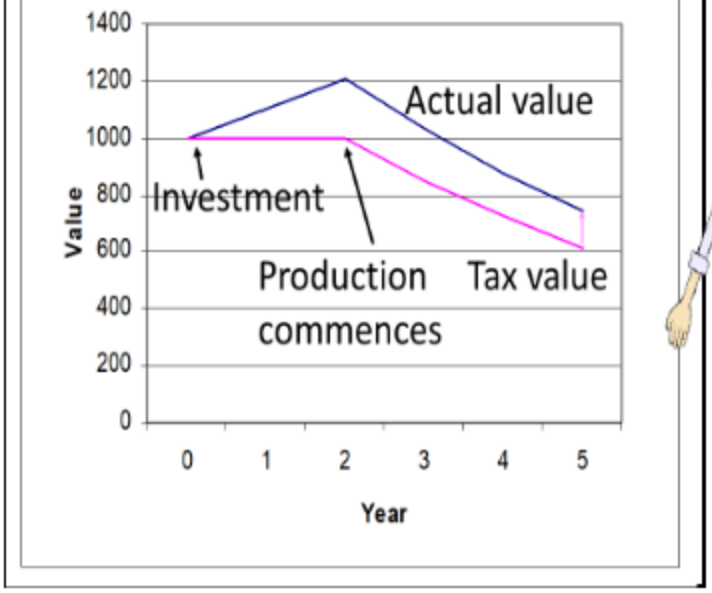
I think we could do much better at estimating increasing value prior to production using the general formula for tax value determination.

You know: end-year tax value = start-year tax value x (1 + asset's annual return) - annual net receipts.

But the investment's annual return is not known.

In this situation, a government bond rate could be used.

Nice one, Sami, but I think practicalities have to win out here.



The tax value profile in your chart fits that bill, Claudia.

It just says wait until production starts before commencing regular depreciation allowances.

That might be regular depreciation on, say, a power plant or vineyard or write-off over the life of a mine.

Right again, Brad, but remember that all costs of creating the assets are capitalised in tax value - like wages of those establishing a plantation forest.

That could even include management costs and costs of tree spraying for pests etc in the tree establishment phase.

Talking about forests reminds me that, as usual, trading stock treatment could be used with these stand-alone investments.

To reiterate, that treatment sets taxable income as annual cash flow plus end-year minus start-year tax value of total assets.*

* See Ch1, pp 35-37.

Under that treatment, trading stock could be valued at cost or market value.

With stock valued at cost, the trees in this case, establishment costs would be the flat tax value schedule in your chart prior to production.

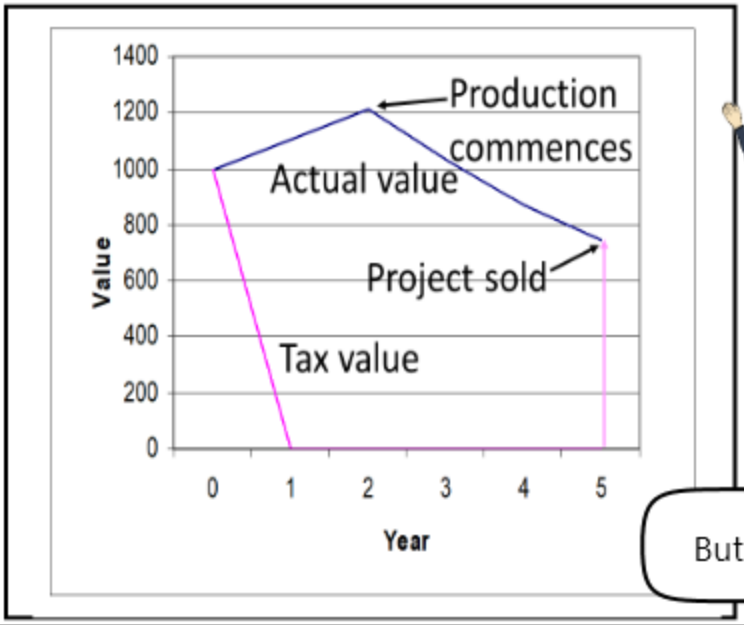
And post-production tax value would fall depending on speed of tree felling.

Of course, if the stock were valued at market value, tax value would follow the actual value schedule in your chart.

And cash flow plus value change neatly absorbs both capital and current costs.

Nice, Sami, but we'll stick with practical design.

Accrued gains taxed!!



And in that practical vein, this illustrates the biggest worry with delayed cashflow assets.

If up-front capital costs are allowed write-off or, even worse, immediate deduction as in this case, tax value is wildly different from actual value.*

But....

But growing trees is a good thing.

Environmental taxes or subsidies are separate considerations, Brad.

We do not want income tax design that encourages unbalanced investment patterns or investment schemes driven by over-generous provisions.

Anyway, talking about trading stock treatment is a good segue into briefly discussing the taxing of trading stock.....

....before we get into the always-interesting taxation of financial arrangements.

* Mayo (2018), p 90.

TRADING STOCK -

items acquired or made to sell or exchange

Retail stock, wine, livestock

We don't have to spend much time on trading stock.

We have spent spent much time discussing how trading stock design - that is, cash flow plus end- less start-year aggregate tax value of all assets - can apply, not only to clearly identified trading stock, but all of a taxpayer's assets.

With trading stock, taxable income is got by taking from sales receipts the cost of goods sold.

Taxable income

= **sales - cost of goods sold**

= **sales - [purchases + (start - end tax value)]**

= **(sales - purchases) + (end - start tax value)**

= **cash flow + change of aggregate tax value**

Sure, Brad, but, see, that is the same as cash flow plus aggregate tax value change.

So, under cost valuation, take the situation where end value is less than start value - meaning stock run-down has bolstered recorded cash flow.

In that case, taxable income is reduced below cash flow by that same stock run-down.

The reverse applies to taxable income if there is a stock build-up.

Of course, if end-year stock were valued at market price.....

OK, OK, Sami. That's enough. Let's move on to financial arrangements.

FINANCIAL ARRANGEMENTS

financial assets and liabilities

Bank accounts, annuities, bonds, etc

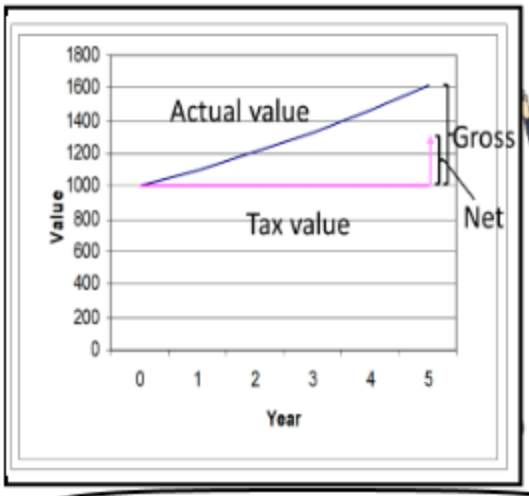
Leases, rights

I'm going to start on taxing financial arrangements by revisiting a comparison Sami made earlier.

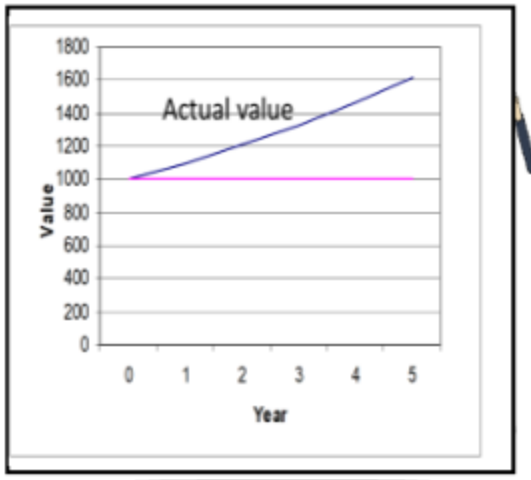
!?!

Oh, good!

Sami asked why a block of land and a discounted zero-coupon bond were taxed differently.



This is land, taxed on sale, and then on only half the realised gain.



This is the bond, taxed annually on estimated accruing capital gain.

In the charts, both the land and bond are bought for $1000.

Each provides a 10% pa return, with the land sold for $1611, the same as the face value of the bond received by the investor, in Year 5.

The sale price of the land is not known up front!

True, Brad, and the value of the bond will change prior to maturity as interest rates change.

Nevertheless, Sami, the known cash flows from the bond can help to explain the different tax treatment.

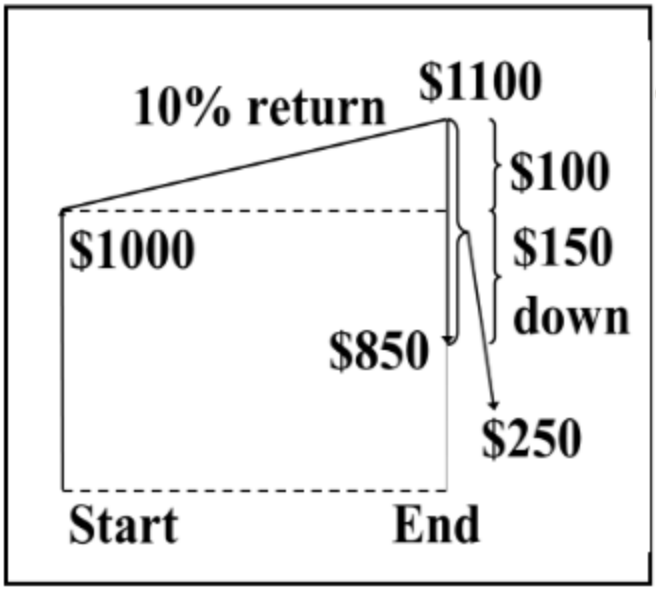
As I said.

So, known cash flows of a financial instrument and its associated overall per annum return can readily be used to determine annual tax values that are estimates of market value to feed into annual taxable income.

Such tax values come from the general formula Sami revisited when we discussed delayed cashflow assets.

The formula uses overall return of the instrument and any annual net receipts.

We know!



In numbers, for our asset with a 10% pa return, end tax value is, **$850 = ($1000 x 1.1) - $250** which translates to the general formula:*

End tax value = Start tax value x (1 + asset's period return) - net receipts in the period

Oh, I love how ubiquitous it is.

And, exactly the same formula applies to liabilities.

So, a liability that is the mirror image of the asset in the chart would have a start tax value of -$1000, -$250 of annual obligations and end tax value of -$850: **-$850 = (-$1000 x 1.1) - (-$250)**

Really neat!

This approach can be applied across a wide range of financial instruments.

That should be enough on financials for my briefing tomorrow for the Tax Minister.

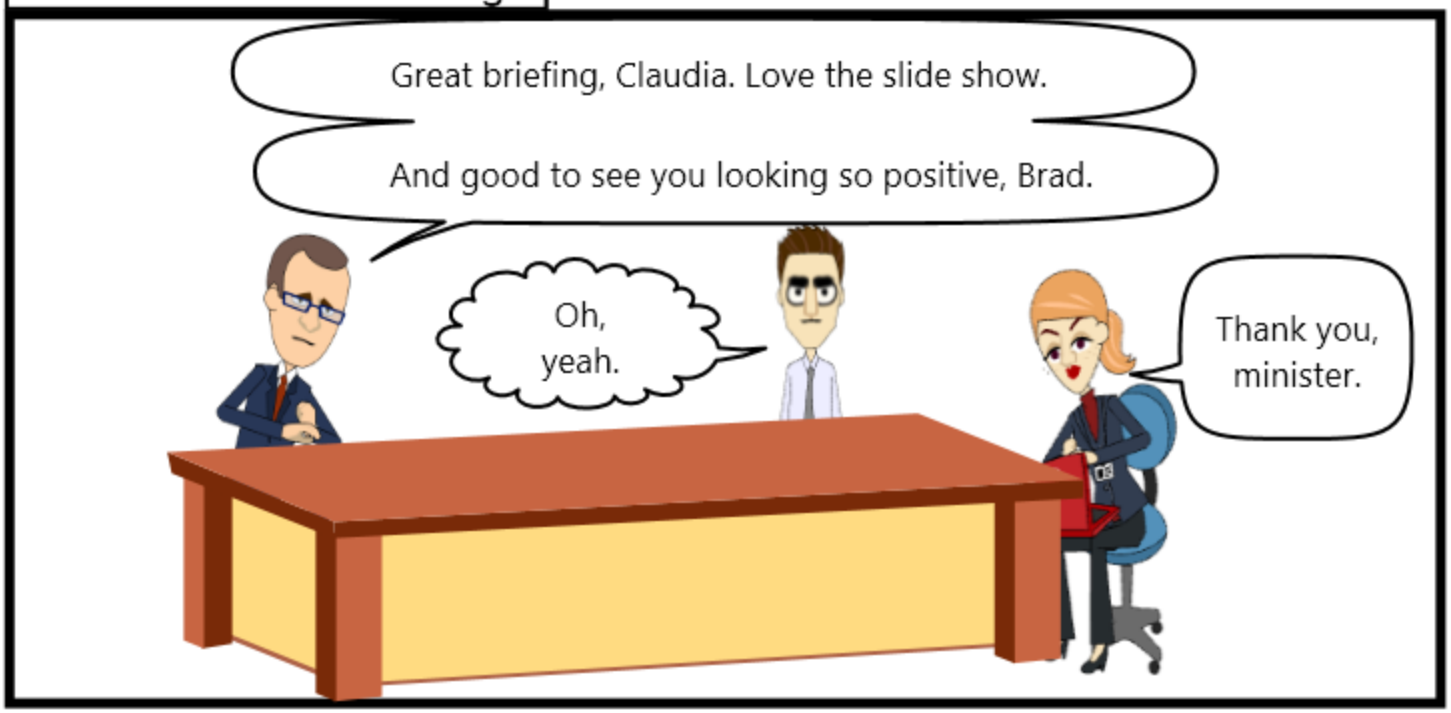
Good luck with all that purity.

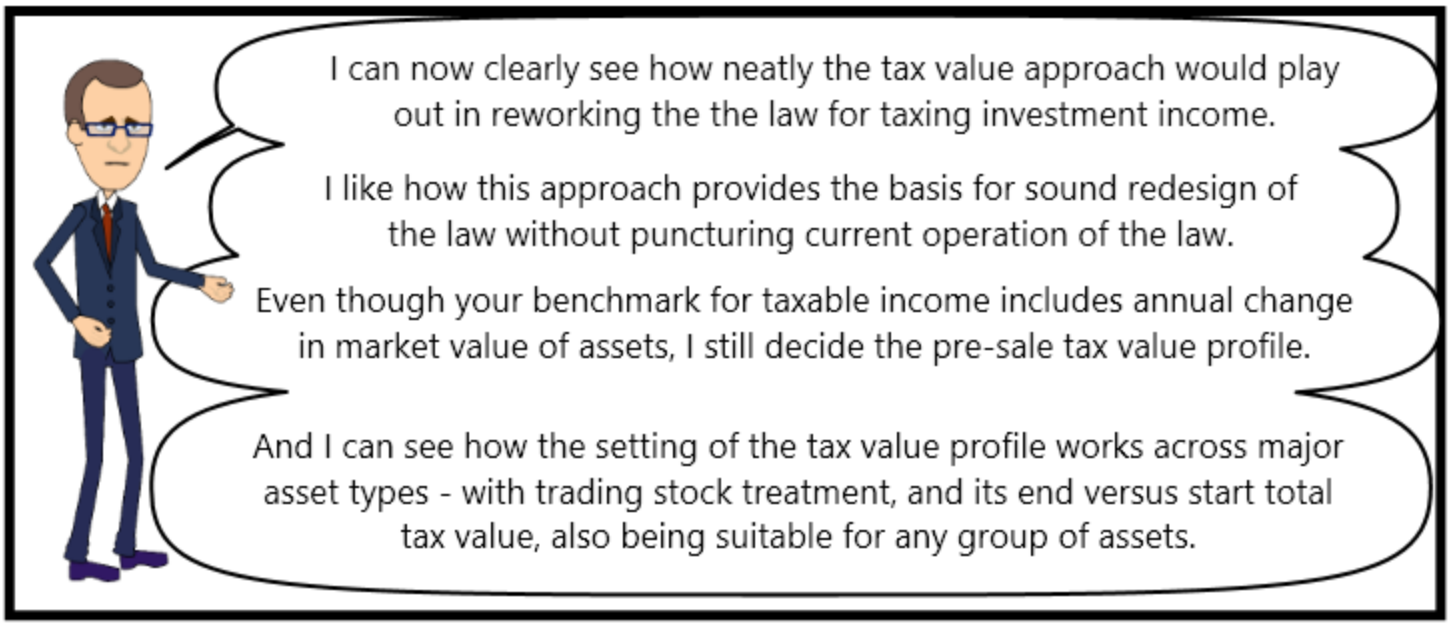
Good luck!

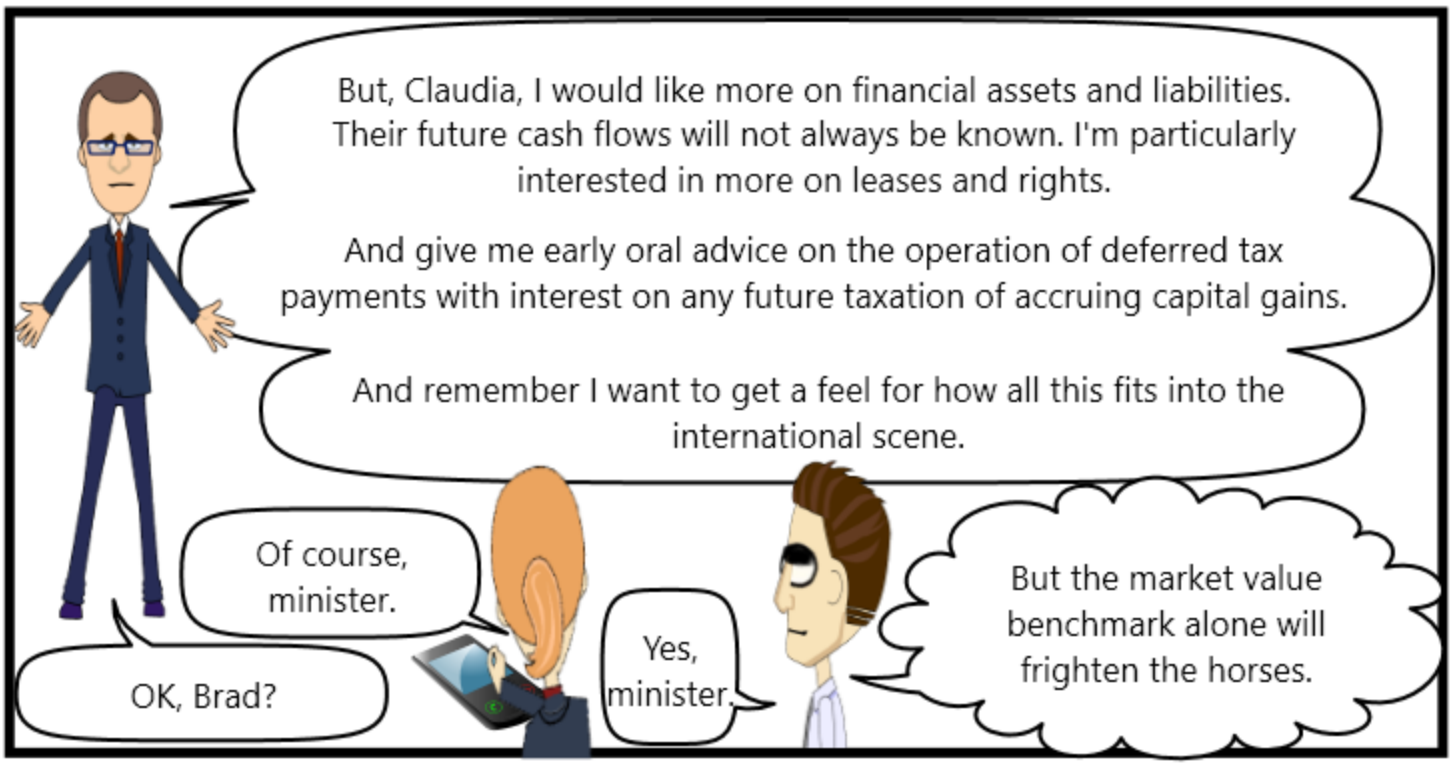
* Ralph Review (Draft Legislation), p 145.

* Mayo (2018), p 53.

The Tax Minister's briefing







More work to be done

The briefing went well, Sami with more on financials and international needed.

I can't believe that the Tax Minister wants more on deferred tax on accrued gains.

I'll be going across tomorrow to brief him on possible deferral of tax under a more generalised application of taxing accrued capital gains. I will focus on the basic operation of possible deferral arrangements. In doing so, I will make the distinction between "**tradable**" assets, like shares and property, where current market value is readily measurable - whether or not continuously traded - and "**non-tradable**" assets, like unlisted businesses and intellectual property, where it is not.

Wow. This is just amazing!

But, Sami, don't get your hopes up about another world first coming out of this.

Focusing deferred tax on accrued gains of **tradable** assets would help address concerns that accrued gains present measurement problems.

And, seeking to defer the tax is, of course, all about addressing the key concern that people would face a tax impost without the cash to pay it.

Now, it might seem that a deferred tax regime simply involves applying an interest rate to these unpaid taxes accumulating year by year until the compounded amount is applied against available cash from the sale of the asset. But, tax unpaid each year on accrued gains of a tradable asset would create a new liability.

So, tax-neutral design - with pre-tax asset return cut by the taxpayer's tax rate - requires a tax deduction each year for the extra liability faced by the taxpayer from the interest added to the accumulating unpaid taxes.*

Of course, the annual tax savings from these deductions would come off the tax owed.
I'll discuss further after seeing the Tax Minister tomorrow.

What? Tax savings along the way!?

Oh, I see. Deductions for increased liabilities.

* Auerbach (1988), p 3.

Team debrief on Claudia's briefing on deferred tax on accrued gains

Assets involved (outside any mark-to-market regime): tradable assets (eg listed shares, property); non-tradable assets (eg unlisted businesses, intellectual property)

OPTIONS FOR TAX ON ACCRUED GAINS/LOSSES ON COMMERCIAL ASSETS

(1) NO DEFERRAL

Tradable assets: accrued gains/losses assessed year by year

Non-tradable assets: realised gains/losses assessed on sale with no discount

(2) DEFERRAL - TO ADDRESS LACK OF CASH TO PAY ACCRUALS TAX

Tradable assets: interest rate applied year by year to accumulating deferred tax on accrued gains/losses with annual tax credit for deductions for extra liability from interest added and any accrued losses

- net accumulated deferred tax set against ultimate sale proceeds

Non-tradable assets: "look-back" treatment* which seeks parallel treatment to that for tradables by spreading difference between sale and acquisition prices across the years that assets are held (though actual varying profiles of value change raise issues)**

- requires records of investor's tax rate in each of the years of holding

(3) UNIVERSAL LOOK-BACK TREATMENT

Look-back treatment in Option (2) applied to tradables and non-tradables

OK, guys, this is what I took the Tax Minister through earlier today.

I illustrated the complexities of deferral using some spreadsheeting....

....noting the interest rate would need to be high enough to minimise the **lock-in** effect,

and that people would still be able to realise **loss positions** as desired.

Rather than carry forward tax savings from **net capital losses** in any year, I suggested that the net loss could immediately be included in the investor's tax assessment.

I also raised the alternative of just taxing tradable asset categories year by year according to changes in corresponding asset price indices - with a balancing up on asset sales - noting that annual losses would then not be recognised at all.

Perhaps not surprisingly, the minister was totally non-committal overall.

Pity. Option 2 would improve investment decision-making and, therefore, the pattern of investment compared to our current realisations-based CGT.

Oh, c'mon, Sami, the treatment looks worse than the so-called disease.

Oh, please, Claudia. Take us through the spreadsheeting.

* Gravelle (2019), p 2, footnote 5.

** Auerbach (1988), p 4.

Mechanics of deferring tax on accrued gains

TABLE 1: TAX ON ANNUAL ACCRUED GAIN

Year	Buy/sell price (a)	Tax value (b)	Taxable income (c)	Tax at 47% (d)	Post-tax cash flow (e)
0	-621	621			-621
1	0	683	62	29	-29
2	0	751	68	32	-32
3	0	827	75	35	-35
4	0	909	83	39	-39
5	1000	1000	91	43	957
Return pa	10.0%				5.3%

(b) Prior year tax value increased by 10% (pre-tax return pa)
(c) Current less last year tax value in Col (b)
(d) Taxable income in Col (c) times taxpayer's 47% tax rate
(e) Cash flow in Col (a) less tax on accrued gain in Col (d)

TABLE 2: DEFERRED TAX ON ACCRUED GAIN

Year	Net tax not paid (loan) (a)	Accum Imputed loan (b)	Higher liability (interest) (c)	Tax on liab increase (d)	Post-tax flow (e)
0					
1	29	29			29
2	31	63	2.9	-1.4	32
3	32	101	6.3	-3.0	35
4	34	146	10.1	-4.8	39
5	-160	160	14.6	-6.8	-153
Return pa	10.0%				5.3%

(a) Deferred net tax (that is, Col (d) tax Table 1 less Col (d) tax savings Table 2) Years 1 to 4, payout in Year 5
(b) Col (a) compounded at 10%, giving payout in Year 5
(c) Interest on accumulated net unpaid tax (prior year Col (b) times 10%)
(d) Tax saving on increased liability (ie -Col (c) times 47%)
(e) Cash flow in Col (a) Years 1 to 4, Col (a) less Col (d) Year 5

Table 1 shows the effect of annual tax on accrued gains, cutting the appreciating asset's pre-tax 10% pa return by the investor's 47% tax rate to 5.3% pa.

Table 2 shows the same pre- and post-tax outcome when the tax is deferred.

The deferred tax design in Table 2 should see investment balance improved compared to realisation-based CGT design. Nevertheless, the Tax Minister's reaction underlines the fact that the desirability of taxing accrued gains first needs to be generally accepted.

As I said, treatment worse than the so-called disease.

And now, more on financials and international needed.

Nice to see the deferral mechanics though, Claudia.