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# Estimated revenue losses from Capital Gains Tax increases

## 1. Introduction

International evidence suggests clearly that increases in capital gains taxes above a very modest level result in decreases in revenue. Similarly, if capital gains tax rates are set above a relatively modest level, then their reduction will involve an increase in revenues.

Beyond these general conclusions what specific results might we expect from an increase in capital gains tax rates in the UK? It is difficult but not impossible to predict accurate results. This paper uses new evidence from Ireland, Sweden and Switzerland combined with existing analysis from America, Australia and Britain to try and identify more precisely the revenue consequences of CGT increases in the UK. We look at both revenue losses from capital gains tax and from other taxes.

## 2. The international evidence

### 2.1 The Irish evidence

The 1997 Budget in Ireland halved the rate of taxation of realized capital gains from 40% to 20%. The then Minister for Finance, Charlie McCreevy, was heavily criticized on the grounds that this change would reduce revenues. He countered by predicting that revenues would rise substantially as a result of the lower tax rate. He was proved entirely correct. Revenues rose considerably, almost trebling in fact, and greatly exceeded official predictions.

Calendar Year	Net receipts	Excess over Budget estimate
1996	£83.7m	£25.7m
1997	£132.4m	£65.4m
1998	£193.1m	£89.1m
1999	£356.2m	£163.3m

Source: Revenue Commission data.

Earlier in 1997 and while still in opposition Charlie McCreevy criticised the then Minister for Finance for not reducing CGT. He said:

*I am certain from my extensive professional experience that the total yield to the Exchequer would be far greater if it [CGT] were reduced to a lower level. I suspect the Minister may be hamstrung by members of his party who would have great difficulty taking this route. It is one of the unfortunate leftovers from the more doctrinaire socialist days of Labour and Democratic Left that even contemplating the reduction of capital gains tax might lead them to think they had given up all semblance of socialist doctrine. However, it is one they could easily give up because it would be far more beneficial to everybody. Also, it would create a better business climate and increase economic activity.*

Mr. McCreevy's position gained support from other parties. Mr. Michael McDowell of the Progressive Democrat Party said:

*Close to where I live, a family owns a house let out in flats. They thought of selling it but realised they would have to pay 40 per cent capital gains tax and the purchaser would have to pay 9 per cent stamp duty. Almost half the proceeds would go to the Minister's coffers. The family decided to hold on to it and do something else. Although their inclination was to sell, the tax consequences were such that the only person who would benefit was the Minister for Finance.... It is not beyond the wit of human beings to devise a system which imposes a rational levy on realised capital gains. Forty per cent is too high and people will not pay it. They will emigrate...*

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*to avoid it. They will not give 40 per cent of their property to the State just because they want to change the asset to something else. Unfortunately, that is the reality.*

Opponents of Mr. McCreevy's CGT cut accused him of taking a route designed "to featherbed the high earners in society...and halve the yield from capital gains tax."<sup>1</sup> They were wrong. The yield more than doubled.

## 2.2 The Swedish evidence

Swedish capital gains taxes varied considerably in the early 1990s, providing useful evidence for the relationship between tax rates and revenue. The Swedish tax reform package introduced in 1991 taxed ordinary income and capital income separately, with capital gains taxed at a rate of 30%. In 1992 the newly elected non-socialist government reduced the capital gains tax-rate to 25% and it was then further reduced to 12.5% in 1994. Uniform 30% taxes were reinstated when the Social democratic party came back to power in 1995.

Professors Sven-Olaf Daunfeldt, Ulrika Praski-Stahlgren and Niklas Rudholm of the University of Gävle studied the effect of these rate changes during the period 1993-1995 and concluded that a 10% increase in capital gains tax reduces the number of realisations of capital gains by 8.7% and the realised amount, given the decision to realise, by an additional 1.9%.<sup>2</sup>

They also found that wealthy individuals responded more to changes in CGT rates than less wealthy individuals, realising more gains at lower rates and locking-in gains at higher rates. This accords with the evidence presented in the earlier ASI paper that it is poorer people who are most affected by increases in CGT rates.<sup>3</sup> Also validating the earlier ASI paper, they found that older individuals are more likely to realise capital gains and to realise larger amounts of capital gains than younger individuals.

## 2.3 The US evidence

Estimates by US experts on the revenue effects of CGT reductions all agree that increasing CGT rates significantly damages the economy, although the estimates of precisely how much harm it will cause differ. A 1988 paper by Professor Lawrence Lindsey in 1988 concluded "in the long run about 5.4 percent more capital gains will be realized for every one percentage point reduction in the capital gains tax rate."<sup>4</sup>

Later analysis by Dr. Paul Evans in 2009 concluded that: "At current tax rates (15%), a 1 percentage point reduction in the marginal tax rates on capital gains might trigger a 10.32 percent increase in realized capital gains".<sup>5</sup>

Actual experience showed the following, (as set out in the earlier ASI paper):<sup>6</sup>

- Between 1968 and 1972 rates increased by 10 percentage points and revenues fell 21%.
- In 1978 the rate fell by 15 points from 35% to 20% and revenues increased by 46%.
- In 1986 the rate was raised by 8 points to 28% and by 1991 15% less revenue was being raised.
- In 1996 the rate was reduced by 8 points to 20% again and by 2000 revenues had grown by some 50%
- In 2003 the rate was cut to 15% and revenues grew by 45% over the following three years.

This actual experience shows that as CGT rates changed in a 20% band between 35% and 15% there was a close inverse relationship with revenues. For every one percentage point increase or drop in the rates there was a significantly bigger effect on revenues. Revenues increased more substantially from a decrease in the rates than they decreased from an increase in rates. This is undoubtedly due to both the 'lock-in effect' whereby higher rates result in people holding onto assets and selling them only when rates come down and the higher levels of business and entrepreneurial activity that result from low rates.<sup>7</sup>

## 2.4 The Australian evidence

After Australian CGT rates for individuals were cut by 50% in 1999 revenue from individuals grew strongly and the CGT share of tax revenue nearly doubled over the subsequent nine years.

Individuals enjoyed a larger discount under the 1999 reforms than superannuation funds (50% versus 33%), yet yielded a larger increase in CGT payable. The reforms also saw a change in the relative importance of individuals and companies in overall CGT revenue. In 1998-99, individuals accounted for 37% of CGT paid, while companies accounted for 41%. By 2006-07, the share of CGT paid by individuals rose to 44%, while the share paid by companies fell to 34%.<sup>8</sup>

## 2.5 The UK evidence

In 1988 CGT rates were increased by ten points from 30% to 40%. Revenues fell dramatically, more than halving from £2,175m in 87-88 to £976m in 90-91 and further still to £606m in 92-93.

Year of disposal	Amount of gains	Amount of tax paid
1987-88	8,712	2,175
1988-89	5,992	1,792
1989-90	5,486	1,658
1990-91	3,332	976
1991-92	2,999	894
1992-93	2,160	606

Source: [http://www.hmrc.gov.uk/stats/capital\\_gains/table14-1.pdf](http://www.hmrc.gov.uk/stats/capital_gains/table14-1.pdf)

That was a 55% drop in revenues after 3 years and a 70% drop after 5 years.

From the year 2002-03 business assets attracted a reduced rate of 10% CGT if held for more than 2 years. Revenues increased sharply.

Year of disposal	Amount of gains	Amount of tax paid
2001-02	5,372	1,581
2002-03	7,362	2,301
2003-04	7,855	2,356
2004-05	9,845	3,061
2005-06	12,325	3,896
2006-07	16,602	5,362

This represents a doubling of revenues after 3 years.

## 3. Drawing conclusions from the international evidence for UK CGT revenues

### 3.1 Estimating revenues – the linear fallacy

In 1989 Senator Bob Packwood asked the US Joint Committee on Taxation to estimate the revenues that would be raised from a 100 percent income tax rate on all Americans with earnings above \$200,000. You don't have to be a genius to know the answer to that question is zero, as no-one would bother to work if all their income was being confiscated. But the Joint Committee on Taxation, after having run the numbers through their model, answered as follows:

- In the first year the 100% tax rate would raise \$104 billion.
- In the second year it would raise \$204 billion.
- In the third year it would raise \$323 billion.

Senator Packwood was understandably perplexed. “Our models assume people will work if they have to pay all their money to the government. Clearly anyone in their right mind will not.”

It seems as if the same approach has been taken by those in Britain who predict that increasing capital gains taxes will somehow yield bountiful quantities of extra revenues. The Liberal Democrat Party has estimated that an increase in CGT rates would raise £1.92 billion, based on an assumption that tax revenues will increase smoothly along with rates.<sup>9</sup> Such linear progression just doesn't accord with reality, as all the evidence demonstrates.

### 3.2 A revenue estimation based on the international evidence

A sensible estimate of future CGT revenues needs to take into account behavioural responses as evidenced in a wide range of international experience. Of course variation in revenue raised in different countries was affected by economic conditions as well as the rate changes. The international evidence, summarised above, suggests that while increased revenue of 4% to 10% may be expected for every 1 percentage point drop in the CGT rate, the converse effect of revenue rises is not as sharp. A conservative approach to taking an average of the international evidence would suggest that for every 1% point increase in CGT rates revenue will fall by roughly 2%. (This assumes that the starting point for the revenue rise is above the revenue-maximising rate, which evidence suggests is about 10%).

If we then apply this rule to the current UK case, and assume that the base case is that the rate for most CGT disposals will increase to 40%, (either because payers are already in that tax bracket or the CGT disposal will take them into that tax bracket) then we can derive some conclusions

The coalition government's proposal is:

*We will seek ways of taxing non-business capital gains at rates similar or close to those applied to income, with generous exemptions for entrepreneurial business activities.*

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We have therefore based our calculations on assuming the following tax changes:

- Assets that currently qualify for “Entrepreneurs’ Relief” (primarily selling your own business) will continue to do so, and their effective tax rate will remain at the current level of 10%.
- Other assets will see their CGT rate increase from 18% to 40% (the current higher rate), but not the top 50% rate.

Capital Gains Tax currently raises just under £2.5 billion (estimate for the 2010-11 year). Of this, roughly £0.5 billion comes from assets that qualify for Entrepreneurs’ Relief, so we assume (see above) that the CGT on those will remain unchanged. That leaves £2 billion of CGT to be affected by these reforms.

If the rate increases by 22 percentage points from 18% to 40% then we may expect a 44% decrease in revenue collected. Taking into account the £0.5 billion of revenue that will be protected by entrepreneurs’ relief this will result in an overall reduction in revenue of £880m.

## 4. The effect of CGT increases on other tax revenues

### 4.1 The impact of capital gains taxes on the wider economy

Capital gains tax increases have a significant impact on economic activity as a whole, and thus on other tax revenues. This must be taken into account when estimating the overall effect rises in CGT have on revenues.

A capital gains tax is a tax on capital, to state the blindingly obvious. The more one taxes a certain thing the less there is of it. For example in 1695 a window tax was introduced. This caused many homeowners and shopkeepers to brick up their windows.<sup>10</sup> Indeed if you look today at older buildings you can often still see those bricked up windows. The result of the window tax was that there were fewer windows. Similarly the result of a higher capital gains tax is less capital. This is particularly concerning at a time when capital spending by companies is at its lowest as a proportion of consumption since at least 1960.

A recent paper from the Institute for Research in the Economics of Taxation (IRET) examines the economic and revenue consequences of letting US tax rates on dividends and capital gains increase in the top two tax brackets from 15% to 20%, 24%, or 28%. The analysis found that higher

tax rates on capital income would discourage investment and result in a smaller capital stock than would exist if the rate remained at 15%. At the three higher tax rates, the private business sector capital stock would be 3.8%, 6.8%, and 9.5% lower, respectively.

A tax on capital increases the rate of return or that an asset must earn to be worth investing in. At a lower tax rate, more capital could be formed and profitably used than at a higher tax rate. More people would be hired to work with the added capital. Productivity and wages would be higher.

The government would receive additional revenue from taxes on the higher levels of economic activity: higher income taxes on wages, higher corporation taxes on business profits, and additional receipts from other taxes. Conversely lower levels of output, employment, and consumption would reduce the same wide range of tax revenues.

A more difficult factor to quantify is the reduction in entrepreneurship caused by high CGT rates. The OECD has commented in particular on the effect low capital gains tax rates have on encouraging people to leave salaried employment and start new businesses:

*Lower capital gains tax rates encourage a salaried manager or worker to become an entrepreneur and start his or her own business.... In addition, high tax rates create a disincentive to realise the gain and reinvest the return to new projects. That is, high tax rates tend to ‘lock-in’ entrepreneurs who have the talent and eagerness to start new businesses.<sup>11</sup>*

Professor Jim Poterba’s research strongly supports that view. He argued that decreases in capital gains tax increase the attractiveness of becoming an entrepreneur to salaried employees.<sup>12</sup> More recent research by Professor Josh Lerner at Harvard Business School suggests that the primary mechanism by which capital gains tax cuts affect venture fund-raising is by increasing the demand of entrepreneurs for capital.<sup>13</sup>

### 4.2 Quantifying the negative economic effects of CGT rises on other tax revenues

Again international evidence suggests that the economic damage caused by CGT is considerable. For example, analysis of the comparative performance of cantons in Switzerland by Peter Kugler and Carlos Lenz yields powerful evidence on the effect the elimination of the capital gains tax has had on income in Switzerland.<sup>14</sup> They

compare cantons which retained capital gains tax with those that have abolished it and calculated the trend in the economic growth rates of all cantons before and after the elimination of the capital gains tax. They then calculated average growth rates for two groups of cantons, one in which capital gains taxes remained the same and one in which they were removed. They found that the cantons that eliminated the capital gains tax enjoyed an average short-run 2.2% jump in the level of national income relative to the other group of cantons. In the longer run, the jump in income is 3.1%.

An earlier ASI study estimated that the proposed CGT rises in the UK would lead to a reduction in GDP of £4.2 billion and a loss of 61,000 jobs, (taking the average value added per employee (full-time equivalent) in the UK of £68,782 (Department for Business, 2008).

Given that taxes next year (2011/12) are predicted to be 38% of GDP (source - Budget 2010), then it follows that the government's other tax receipts will fall by 38% of that, i.e. £1.6 billion.

#### **4.3 Does a low CGT rate lead to major tax avoidance and lower income tax revenues?**

A frequent argument for why one has to increase CGT rates in Britain is to prevent tax avoidance by people switching their income into capital gains. For example the Prime Minister David Cameron stated on June 7, 2010 that "If you read any of the things written by anyone about capital gains tax... they all agree that there is a massive leakage of revenue that takes place when you have a very low rate of capital gains tax and a high rate of income tax."

This is simply not the case. If one looks at the breakdown of capital gains by asset, one can see that there is little scope for such switching.

As a rough summary, the percentages of capital gains that come from different classes of assets are:

- Short-term (held for < 1 year), all assets: 2%
- Medium-short term (1-4 years), non-business assets: 3%
- Medium-long term (5-8 years), non-business assets: 7%
- Medium term (1-8 years), business assets: 33%
- Long term (> 8 years), all assets: 55%

Source: [http://www.hmrc.gov.uk/stats/capital\\_gains/table14-7.pdf](http://www.hmrc.gov.uk/stats/capital_gains/table14-7.pdf)

Only the first two categories are likely to be used for "income into capital" tax planning - anything longer term doesn't provide an equivalent cashflow as substitute for income, has a very different risk profile, and should be regarded as genuine investment. Since we're therefore talking about 5% of capital gains, and total CGT revenues are less than 2% of income tax revenues, we're talking about a tiny fraction of a tiny fraction that can potentially switched from one to the other. Yes, switching can happen, and can significantly decrease a few individuals' tax liabilities, but it doesn't seem possible on those figures for it to be having a significant impact on the income tax system.<sup>15</sup>

International evidence suggests that the switching problem is not a problem at all and attempts at income-switching can be dealt with by anti-avoidance measures. There are of course many countries with zero CGT that have no difficulty in collecting income tax. One of them is Hong Kong where Professor Berry F.C. Hsu and Chi-Wa Yuen undertook a detailed study into the extent of tax avoidance due to the zero capital gains tax. They concluded:

*Appeals [to the Board of Review of the Hong Kong Inland Revenue] may be considered to reflect the extent to which the absence of a capital gains tax has induced shifting of ordinary income into capital gains. After a review of the nature and magnitude of these appeals, the authors come to the following overall conclusion: On the basis of the indirect evidence available to us we conclude that the absence of a capital gains tax in Hong Kong has resulted in little, if any, inefficiencies and inequities.<sup>16</sup>*

## **5. Conclusion**

The total revenue effect of implementing the Coalition policy to bring capital gains tax rates in line with income tax rates will be a reduction in revenues of £2.48 billion, accounted for by a reduction of CGT revenues of £880m and of £1.6 billion from other taxes.

To put this in perspective this will involve finding substantial additional cuts in public spending akin to over 30,000 public sector jobs or cuts of equivalent size in the capital budget.

Insofar as the policy is not brought fully into effect and lower rate increases are adopted, then the revenue loss and accompanying spending cuts will be more modest. >>



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The oft-quoted contention that CGT rises are necessary to prevent ‘switching’ of income to lower taxed capital gains is a fallacy. Since only about 5% of capital gains revenue is accounted for by assets held in the short-term and possibly affected by such switching, the revenue effects will be negligible.

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## Endnotes

- 1 See <http://historical-debates.oireachtas.ie/D/0484/D.0484.199712030024.html>
- 2 Do High Taxes Lock-in Capital Gains? Evidence from a Dual Income Tax System, Sven-Olov Daunfeldt, Ulrika Praski-Ståhlgren and Niklas Rudholm, University of Gävle, June 16, 2009
- 3 The Effect of Capital Gains Tax Rises on Revenues, Adam Smith Institute, May 2010.
- 4 Capital Gains: Rates Realizations and Revenues, NBER Working Paper 1893, Lawrence Lindsay, June 1988.
- 5 Dr. Paul D. Evans, The relationship between realized capital gains and their marginal rate of taxation, 1976-2004, Institute for Research into the Economics of Taxation, October 2009
- 6 The Effect of Capital Gains Tax Rises on Revenues, Adam Smith Institute, May 2010.
- 7 This is undoubtedly due to both the ‘lock-in effect’ whereby higher rates result in people holding onto assets and selling them only when rates come down and the higher levels of business and entrepreneurial activity that result from low rates.
- 8 Stephan Kirchner, Reforming Capital Gains Tax, Centre for Independent Studies, 2009.
- 9 The Liberal Democrat Manifesto, 2010.
- 10 The window tax wasn’t abolished until 1851 which shows it can take a long time to get rid of a stupid tax.
- 11 Financing innovative SMEs in a global economy, OECD, June 2004
- 12 James M. Poterba, “Venture Capital and Capital Gains Taxation,” in Tax Policy and the Economy, ed. Lawrence H. Summers, 1989.
- 13 Josh Lerner, Boulevard of Broken Dreams, Princeton University Press, 2009.
- 14 Peter Kugler and Carlos Lenz, Capital gains taxation: evidence from Switzerland, in International Evidence on the Effects of Having No Capital Gains Taxes, Fraser Institute, 2001.
- 15 The wider argument that seeks to equate capital gains with income is entirely specious. Capital gains are not like income at all. They are not counted as income in national accounts, which record the value of goods and services produced. Simon Kuznets, one of the creators of the national income accounts states that “Capital gains and losses are not increments to or drafts upon the heap of goods produced by the economic system for consumption or for stock destined for future use, and hence they should be excluded.” (Kuznets (1941), p.12). Thus if capital gains are not considered to add to national income, how can they considered to add to personal, taxable income?
- 16 Berry F.C. Hsu and Chi-Wa Yuen, Tax avoidance due to the zero capital gains tax: Some indirect evidence from Hong Kong, in International Evidence on the Effects of Having No Capital Gains Taxes, Fraser Institute, 2001.