

# Are There Any Good Arguments Against Cutting Income Taxes?

Sinclair Davidson

Perspectives on Tax Reform (9)

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### Foreword

he 2005 federal budget caused a storm of protest from the Labor Party, the trade unions and the welfare lobby when the Coalition government announced it was reducing income tax by significantly raising the top rate thresholds and lowering the bottom marginal rate. It might seem strange that a package of tax *reductions* should have led to so much controversy (Labor even vowed to block the tax cuts in the Senate). With a 48.5 percent top marginal rate on incomes above A\$70,000, Australia was taxing higher earners much more harshly than almost any other OECD country, so there seemed to be a compelling comparative case for lowering the top rate and/or raising the threshold at which it applies. But rather than welcoming the government's promise to leave a little bit more money in people's pockets and purses, critics attacked the budget tax cuts as 'unfair'.

Australians see the principle of 'the fair go' as a core feature of our national identity and culture, yet there is remarkably little clarity surrounding our use of the concept of 'fairness'.<sup>1</sup> Politicians on the 'Left' often equate it with 'equality,' but a moment's thought tells us that 'equal shares' can often be extremely unfair (try convincing a worker putting in overtime that his or her extra income should be shared equally with somebody who prefers to stay in bed all day). Nevertheless, it was this assumption that equalising people's incomes is 'fair' (and that any increase in post-tax income inequality is therefore automatically 'unfair') that seems to have prompted the adverse reaction on Budget night.

The basic criticism was that some taxpayers were going to receive more relief than others. Labor leader Kim Beazley, for example, saw it as 'blatantly unfair' that the taxes paid by high earners were to be reduced by a bigger proportion than the taxes paid by those on low incomes, and his party offered an alternative which would have increased the tax cuts for those nearer the bottom while watering down the tax cuts for those higher up. This, we were told, was 'fairer'.

In this, the ninth in a Centre for Independent Studies series of short monographs on tax reform, Sinclair Davidson explains why, in a sharply 'progressive' tax system like ours, tax cuts that appear to favour high earners more than low earners are not only 'fair' but are to a large extent unavoidable whenever governments offer to reduce taxes. Just as an aspirin will bring more relief to somebody with a bad headache than to someone suffering only mild discomfort, so a tax cut will bring more relief to somebody paying a greater chunk of their income in tax than to somebody paying only a small proportion.

In an earlier paper in this series,<sup>2</sup> Davidson calculated that 63 per cent of all the revenue raised from personal income tax is paid by just one quarter of taxpayers (meanwhile, the bottom quarter pay just 3 per cent of it). Clearly, therefore, our tax system is far from proportional higher earners pay a bigger percentage of their income in tax than lower earners do. Yet in this new paper, Davidson cites disturbing evidence that many voters do not realise that higher earners are paying vastly more than their 'fair share' of income tax.

Given that higher earners pay proportionally more income tax than lower earners, it should come as no surprise that on the odd occasion when government decides to reduce its tax-grab, higher earners will have more to celebrate. Those who argue that tax *cuts* are only 'fair' if everyone reduces their payment by the same proportion relative to their income should logically also be willing to argue that tax *increases* are similarly only 'fair' if they too are proportional. But this is an argument that is rarely heard.

The only way to achieve proportional 'fairness' whenever taxes go up or down would be through a flat tax (where everyone pays the same percentage of their income in tax, no matter how much they earn). Elsewhere in this series, Lauchlan Chipman<sup>3</sup> has spelled out the argument in favour of moving to a flat tax, but there is little sign yet of those on the 'Left' embracing such a radical idea. Judging by their complaints on Budget night, it seems the federal Labor opposition believes in 'progressive' taxation when taxes are going up, but in flat taxation when taxes are coming down. This is known as having your cake and eating it. Sinclair Davidson's new paper does not only address the question of tax fairness. He also identifies three other core claims which often surface among opponents of lower taxation.

One particularly important issue analysed in his paper is the question of whether lower taxes reduce or increase work activity. Those who argue for reducing income taxes tend to assume that lower taxes will increase the incentive for people to work harder, thereby raising their own prosperity and increasing the wealth of the country as a whole. Opponents, however, suggest that lowering taxes might induce people to work less rather than more, for it means they can attain a satisfactory income with less effort than before. They also query whether it is a good thing to encourage people to work harder. Davidson discusses both of these questions.

The issue of whether lower tax increases or decreases work incentives turns on the balance between what economists call the 'substitution effect' (higher taxes deter workers from working harder and encourage them to spend their time on leisure instead) and the 'income effect' (higher taxes lead workers to intensify their working effort in order to achieve a desired net income). Davidson reviews a number of studies which try to determine which of these effects is the stronger. The evidence is not clear cut, but it does seem that workers on higher incomes who can control their hours of work often respond to the prospect of higher net earnings by working harder. Davidson finds, for example, that self-employed physicians tend to work harder if taxes are cut, that people work longer in countries with lower taxes and take more leisure (or unemployment) in countries with high taxes, and that entrepreneurial activity, such as new business start-ups, is stronger when taxes are lower.

Some opponents of tax cuts reply that, even if lower taxes do encourage people to work harder, this is a bad thing. As Davidson points out, there is a heads-I-win, tails-you-lose quality to this kind of response, for if tax cuts do not increase work incentives, opponents conclude they are not necessary, and if they do, they tell us they are not desirable! Be that as it may, Davidson sensibly argues that, if the government is going to be in the incentive business at all, it is better that it encourage people to work more rather than to work less.

Another key question addressed in Davidson's paper is whether tax cuts necessarily lead to reduced government revenues. On the face of it, it would seem that they would, which is why opponents argue that taxation must remain high in order to fund public services. The American economist, Arthur Laffer, believes otherwise, however. He points out that if marginal tax rates are set at zero, government will get no revenue, but this is also true if they are set at 100 percent (for nobody will bother working). It must, therefore, be the case that, somewhere between 0 and 100 per cent there is a rate which maximises revenue, and that *either* side of this point, revenue will be lower than it could be. The key question is where this point falls, and whether current Australian tax rates are above or below it.

Laffer himself provides evidence, reviewed by Davidson, of occasions when big tax cuts in the US resulted in increased rather than decreased government revenues. But there are also contrary examples where big tax cuts appear to have triggered big budget deficits (although Davidson suggests this has more to do with a failure to control spending than with reduced tax revenues). As with data on the substitution versus income effect of tax cuts, so too with evidence on the so-called 'Laffer curve', Davidson finds there is no conclusive answer, but he finds indications that current Australian tax rates may be on the high side of the Laffer optimal point. Certainly our experience with corporate income tax reform in recent years demonstrates how dramatically reduced tax rates can lead to increased rather than reduced government revenues.

The case for cutting income tax is not solely, or even primarily, an economic one. The basic argument is moral—people have a right to keep the wealth they generate through their own efforts, and government therefore has a duty to keep taxation as low as it possibly can. Critics of tax cuts sometimes argue that this is a selfish argument and that the rich have a moral duty to use their wealth to help others as well as themselves, but in the final part of his paper, Davidson shows that the highest earners in Australia already pay much more than their 'share' of charitable donations, and that high taxes tend to 'crowd out' private charity. Where income

tax is low, in other words, people voluntarily donate more of their income to worthy causes than when taxes are higher.

Next time you hear a socialist economist arguing that the rich gain unfairly from tax cuts, that cutting taxes does nothing to improve work incentives, that we cannot afford to cut taxes because it would destroy government services, or that tax cuts pander to selfishness, refer them to this paper. There are few good arguments for high taxation, and it is time Australia reformed the income tax system so that everyone who earns a living can reap more of what they sow.

**Peter Saunders** Social Research Director The Centre for Independent Studies

## **Executive Summary**

his monograph addresses four arguments that are commonly advanced against those who seek to cut income tax rates.

The first is the claim that tax cuts benefit the 'rich' at the expense of the 'poor'. There are at least two problems with this claim. The first is that tax cuts 'return' income to taxpayers at the same rate tax is raised (if a progressive tax system is fair in raising taxes, it must be equally fair in lowering taxes). The second is that arguing that income tax cuts benefit the rich at the expense of the poor panders to ignorance and prejudice. There is widespread popular ignorance about how our tax system works, for a majority of Australians do not realise that high-income earners pay more in tax as a proportion of their income than do low income earners. Ill-defined notions of 'fairness' and 'social equity' lead to pork barrelling and waste of public money.

The second argument relates to work-leisure trade-offs and the question of work incentives. The basic argument here is that lower taxes do not encourage individuals to work any harder, and may even lead them to work less because they can secure an adequate income from less effort. This may be true for average income earners who have little control over their working environment and who do not pay the top marginal tax rate, but for those individuals who have substantial control over their working patterns the situation is very different. Taxes have huge effects on the work effort of the self-employed, small business owners, and the 'rich' (they also impact significantly on the work decisions of second earners in households). Furthermore, high taxes have huge macro-economic effects. A substantial proportion of the difference in hours worked across the G7 economies can be explained by differences in taxation. High rates of personal tax may also contribute to the Australian Diaspora, although the evidence here is weak, and much more research need be undertaken.

The third argument relates to the relationship between tax revenue and tax rates. Would a decrease in tax rates necessarily lead to a decline in tax revenues? The infamous Laffer curve suggests that at certain tax levels, a decline in tax rates could lead to an increase in tax revenue. The theory and evidence is reviewed, and it is argued that the Laffer curve is not as discredited as orthodox economists and commentators would have us believe. The crucial issue is where Australia lies on the Laffer curve. Given that the top marginal personal tax rates are high by OECD standards, and the Total Tax to GDP ratio is low by OECD standards, I argue it is likely Australia is on the 'wrong' side of the Laffer curve. In other words, a decrease in tax rates could lead to an increase in tax revenue. The question then becomes why politicians in Australia do not lower tax rates? Given political short-termism, it is rational for politicians to choose inefficient high tax rates ensuring long term tax revenues are below their optimum level.

The final argument relates to selfishness. If tax rates were lowered would the rich give more, or less, to charity? Australia is often, and unfavourably, compared to the UK and US in this regard. Private philanthropy is said to be low in Australia. Compared to the OECD, however, private giving in Australia is average. The UK and US are very much above average. According to ATO data the 'very-rich' are very generous. The 2,586 Australians who earn more than \$1,000,000 p.a. make up 0.02 percent of the taxpaying population, earn 1.28 percent of total income, pay 2.39 percent of all income tax and donate 7 percent of gifts and donations. Not only do high-income earners pay more than their share in income tax, they also donate more than their share in charity. I am also able to show an inverse relationship between high levels of personal taxation and charitable giving.

The economic literature is clear. High levels of taxation have adverse economic effects. It is important to notice, however, that it is high tax *rates* that do the damage (especially high tax rates on individuals with greater control over their working conditions). The 2005 budget brought in tax relief—there will be more money in people's pockets. The budget, however, did not bring down the top marginal tax rate. In other words, the government has incurred the political costs of tax relief, but few of the benefits of tax reform will be realised.

#### INTRODUCTION

Over the past few years, a blizzard of argument and statistics has confronted the general public as Australia has wrestled with a major debate over taxation policy. Faced with demands that personal income taxes should be reduced, various experts and pressure groups favouring high taxes and high levels of public spending have repeatedly claimed that ours is a relatively low tax economy, yet as Peter Burn has demonstrated, Australia's Tax to GDP ratio is relatively high when compared to the weighted average Tax to GDP ratio for the OECD as a whole, and it is above the weighted average for the English speaking OECD economies.<sup>4</sup>

In this paper I defend the view that Australian personal income tax rates are too high, particularly at the upper end where individuals are expected to pay almost half of every extra dollar earned in tax. Individuals and organisations opposing income tax cuts have raised various objections to cutting tax rates, but this paper suggests that most of these arguments are misleading or contestable. In particular, it addresses four key assertions repeatedly advanced against those who seek radically reduced personal income tax rates:

- The claim that tax cuts unfairly benefit the rich at the expense of the poor;
- The claim that tax cuts will not improve work incentives, and may even encourage people to work less;
- The claim that tax cuts reduce government revenue and lead to damaging cuts in necessary areas of public expenditure;
- The claim that tax cuts are immoral, in the sense that they pander to human selfishness.

Arguments in this paper do not always reflect economic orthodoxy ... Overall there are few, if any, good reasons to maintain our high tax rates on people's incomes. My arguments in this paper do not always reflect economic orthodoxy, and some academic economists will be critical of what I have to say on all four of these core claims. On the first, for example, so-called 'progressive taxation' is commonly justified on the grounds that this is the only fair way to tax people's incomes, but I argue this is no more than an assertion based in personal value judgements, and that it has nothing to do with economic analysis. Similarly regarding the second issue, some commentators doubt whether lower taxes strengthen work incentives, but I review a number of papers showing that particular kinds of workers respond very positively to changes in top marginal tax rates. I also defend the much-maligned Laffer curve, which suggests

that revenues do not necessarily fall if tax rates are cut, and I argue that Australia is on the 'wrong' side of the Laffer curve, but the short-term costs of remedying that situation may be too high for politicians to accept. Overall, I conclude there are few, if any, good reasons to maintain our high tax rates on people's incomes.

#### QUESTION 1: Do tax cuts benefit the rich at the expense of the poor?

One of the greatest myths in tax policy is that a reduction in taxation benefits the rich *at the expense* of the poor. There are a number of interpretations as to what this actually means. It could mean, for example, the rich pay less in tax while the poor pay more. It could mean that the rich pay less in tax and so the poor get fewer public services. It could mean that tax cuts favour the rich over the poor, i.e. the rich pay less in tax while the poor pay just as much as before. Irrespective of what it means, however, the basic complaint is one of unfairness: Tax cuts are unfair.

The basis of progressive taxation rests on notions of 'fairness'. To disguise their unorthodox definition of fairness, economists use the terms 'horizontal' and 'vertical' equity. Horizontal equity means that equals should be taxed equally, while vertical equity implies that unequals should be tax unequally. As unequals, high income earners are taxed unequally. I have calculated, using ATO data, the top 25 percent of income earners paid 63.8 percent of net income tax in 2003. The 3.5 percent of taxpayers earning above \$100,000 pay 25.5 percent of net income tax.<sup>5</sup> The rich therefore pay a lot more of their income in tax than do the poor.

There are a number of arguments why progressive tax may be considered 'fair'. The most common argument is based on the principle of equality of sacrifice. This approach is common in textbooks, but as the most famous textbook writer and Nobel Laureate, Paul Samuelson, points out: 'Equality of sacrifice would imply *proportional rather than progressive taxation*' (emphasis added).<sup>6</sup> The only way unequal rates of tax can generate equal rates of sacrifice is if money is worth less to the rich than it is to the poor. Even if this proposition were true, however, Dutch economist Arnold Jacob Cohen-Stuart demonstrated, in 1889, '*Progression does not follow from the general law of decreasing utility*' (emphasis original).<sup>7</sup> Economists today *assume* progressive taxation is fair, but this assumption cannot be derived from any *economic* theory.<sup>8</sup> More importantly, economists have known this to be the case for over 100 years.

This, of course begs the question, 'Why do economists argue in favour of progressive taxation?' The answer relates to techniques of economic method. Knut Wicksell described the approach as follows, 'Imagine how an enlightened and benevolent absolute ruler—one imbued, say, with the sense of equity of our modern educated classes—would organize the expenditures and taxes of his country.'<sup>9</sup> But James M. Buchanan, the 1986 Nobel Laureate, has been quite scathing of this approach.<sup>10</sup>

Many economists, along with other social scientists and social philosophers, enjoy playing God, by which I mean laying out in detail their own private versions of the 'good society' without being required to suggest ways and means of implementing their precepts or even to defend the consistency of these precepts with democratic political processes. ...

My plea is for more positive analysis of taxes and tax institutions, of the taxing process, and for less espousal of personal, private norms for taxes and taxation.

Other attempts to establish the 'fairness' of progressive income tax rates refer to the totality of the tax system. It is sometimes held, for example, that indirect taxes are regressive, and that progressive income taxes are therefore required to make the entire system proportional. But I have previously investigated this argument and found it to be overstated at best, and most likely false in the Australian context.<sup>11</sup>

The notion that progressive taxation is fair is simply a value judgement. The arbitrariness of that value judgement was highlighted in the 2005 federal budget. If the government had increased the bottom tax rate, and/or lowered the income thresholds, taxes across Australia would have increased, and because the system is highly 'progressive', higher earners would have been hit hardest. High-

income earners could have ended up paying about \$65 a week more, while low-income earners would pay about \$6 a week more. That is how a progressive tax system is designed to operate, and this reflects the principle of vertical equity. This would have been described as being 'fair'. In reality, however, the reverse happened. Taxes were cut, so those who pay most gained most. This was criticised as 'unfair'. But if it is 'fair' to take more from higher earners when taxes rise, it must by the same logic also be 'fair' to return a bigger proportion to them when taxes fall. Furthermore, the logic of progressivism (equality of sacrifice and ability to pay) requires that low-income earners must value their proportionate tax cut of \$6 just as much as a high-income earner values a proportionate tax cut of \$65.

It seems that many voters are woefully ignorant about how the tax system works. According to the 2004 Australian Election Survey<sup>12</sup>, only 43 percent of respondents know that low-income earners pay a smaller proportion of their income in income tax than higher earners do. Of the remainder, 30 percent think low-income earners pay a greater proportion of their income in income tax while 8 percent think they pay the same proportion.<sup>13</sup> Remarkably, the majority of Australians do not understand how the progressive income tax works.<sup>14</sup>

People's level of knowledge or ignorance does not appear to dictate their attitudes towards the tax cut—welfare cut trade-off.<sup>15</sup> Nor does it dictate whether they thought tax policy was important at the last election.<sup>16</sup> But people who think low-income earners pay more in income tax are more likely to identify with the ALP,<sup>17</sup> more likely to think taxes have risen a lot since 2001<sup>18</sup> and more likely to strongly favour spending on social services.<sup>19</sup> They tend to describe themselves as 'working class'<sup>20</sup> and have lower incomes.<sup>21</sup>

The criticism that income tax cuts benefit the rich at the expense of the poor and are therefore

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'unfair' panders to ignorance and prejudice. The people making these arguments fail to explain why progressive tax is fair, fail to explain why tax cuts are unfair, and fail to explain what would be fair. They also fail to appreciate how pursuit of fairness or 'equity' as a social goal is likely to give rise to many economic distortions. As Buchanan phrased the question, 'Should social scientists and social philosophers really be surprised when their idealized schemes for income transfers to the demonstrably poor are converted by the legislating process into schemes which produce benefits for members of dominating political coalitions while the poor secure assistance largely as a byproduct?'<sup>22</sup> In other words, ill-defined objectives such as 'fairness' and 'social equity' and the like give rise to political pork barrelling and waste of public money.

In an analysis of equity as a social goal, Cathy Buchanan and Peter Hartley demonstrate, regardless of rhetoric, proponents of progressive taxes over proportional taxes 'must be motivated by envy and not by compassion'.<sup>23</sup> Edward C. Prescott, the 2004 Economics Nobel Laureate, points out that, 'Lower tax rates are good for all taxpayers. We're barking up the wrong tree if we think that 'taxing the rich' will solve all our problems. ... The whole economy suffers under such a scenario—not just those few individuals who are taxed at a higher rate.<sup>24</sup>

## QUESTION 2: Do tax cuts encourage people to work more (and is this something the government should be encouraging)?

The common sense, intuitive understanding is that high taxes make people work less. After all, we are told that if we want less of an activity, say pollution, we should tax it. Why then should tax on work be any different? According to the Australian Election Survey of 2004, most Australians believe 'High income tax makes people less willing to work hard' (see Table 1).

	Number	Percentage
Strongly Agree	430	25.3
Agree	668	39.3
Neutral	336	19.8
Disagree	218	12.8
Strongly Disagree	47	2.8

Table 1: Australian Opinions on Whether High Tax Discourages Work, 2004

Source: AES (2004). Question: D.15. 'Please say whether you strongly agree, agree, disagree or strongly disagree with each of these statements. High income tax makes people less willing to work hard.'

Table 2 shows those individuals who think high taxation makes people less willing to work also thought taxation policy, at the last election, was either 'extremely important', or 'quite important'. It is interesting to note, those individuals who were neutral to the tax-work trade-off, or who disagreed there was such a trade-off, were less likely to think tax policy was 'extremely important'.

	Hig			
View on tax	Total Agree %	Total %		
Extremely important	nportant 31.45 6.57		6.02	44.04
Quite important	23.19	9.82	6.81	39.82
Not very important	9.64	3.43	3.07	16.14
Total %	64.28	19.82	15.90	100.00

Source: Adapted from AES (2004). Columns contain data from question D.15. 'Please say whether you strongly agree, agree, disagree or strongly disagree with each of these statements. High income tax makes people less willing to work hard.' Rows contain data from question D.1. 'Here is a list of important issues that were discussed during the election campaign. When you were deciding about how to vote, how important was each of these issues to you personally? Taxation.' These attitudes are significantly different from each other (p< 0.0001). Total respondents = 1660.

At the last election, 36 percent of voters supported reducing taxation, while 37 percent supported higher spending on social services. Table 3 provides a breakdown of the attitudes of these two groups.

	Reduce			
High tax leads to less work	Reduce Tax %	Neutral %	Increase Social Spend %	Total %
Total Agree	26.32 17.22 20		20.75	64.29
Neutral	5.44	6.40	8.07	19.92
Total Disagree	4.01	3.83	7.95	15.79
Total %	35.77	27.45	36.78	100.00

#### Table 3: Attitudes to Tax-work Trade-off and Tax-welfare Trade-off, 2004

Source: Adapted from AES (2004). Columns contain data from question E.1. 'If the government had a choice between reducing taxes or spending more on social services, which do you think it should do?' Rows contain data from question D.15. 'Please say whether you strongly agree, agree, disagree or strongly disagree with each of these statements. High income tax makes people less willing to work hard.' These attitudes are significantly different from each other (p< 0.0001). Total respondents = 1672.

A majority of Australians (64 percent) clearly believe there is a trade-off between taxes and work effort. Of those Australians who want to reduce taxation, a large majority (74 percent) recognise this trade-off, but even among those who want to increase social spending, most (56 percent) also recognise the disincentives of high taxation.

Pro-tax policy professionals think these people are wrong, and they offer two, mutually exclusive, arguments on the tax-work trade-off. The first is to deny there is a trade-off. The second is to concede the trade-off exists, but to argue this is socially desirable.

#### (a) Denying the tax-work trade-off

In basic economic models individuals either work or engage in leisure. 'Work' in this context has a very specific definition. Work occurs in the formal economy where individuals earn a wage or fee. Housework is 'leisure' by this definition. These activities are mutually exclusive. The very basic idea of a supply curve is that if price rises, more of a commodity will be offered for sale and when price falls, less of that commodity will be offered for sale. If a tax cut results in the after-tax price of labour (wages) rising, will more labour be offered for sale (i.e. will people work more), or less?

It is clear from the public opinion data that most ordinary Australians believe 'people will work more'. But Ross Gittins—economics editor of *The Sydney Morning Herald*—argues otherwise: 'You can understand why punters and businesspeople see this as a self-evident truth requiring no further analysis but how a trained economist could fall into such sloppy thinking is beyond me—unless, of course, they're allowing their wallet to do their thinking.'<sup>25</sup>

To understand Gittins' argument, we need to recognise that an increase in income tax may have two different effects on the supply of labour. The *substitution effect* occurs when higher taxes reduce the opportunity cost of leisure leading to greater consumption of leisure (i.e. taxes lead to less work). On the other hand, a loss of income may cause an individual to work harder to maintain their lifestyle—the *income effect*. These two effects are offsetting. A backward bending supply curve occurs when the income effect dominates the substitution effect. In plain language, at sufficiently high levels of income an increase in wages (caused by reduced taxes) will lead to a decrease in labour supply. Similarly an increase in taxation will increase the labour supply as employees seek to make up the shortfall by increasing their work activity. The incentive effects of tax cuts largely turn on which of these two effects dominates—the income effect or the substitution effect.

Ross Gittins believes, 'There's no convincing empirical evidence of the substitution effect dominating the income effect in the case of primary earners.'<sup>26</sup> He follows the standard textbook position on the matter. Joseph Stiglitz, the 2001 Nobel Laureate, in his leading text *Economics* of the Public Sector writes, 'Research in this area has been extensive and has yielded important (but controversial) results.' Joel Slemrod, in his introduction to *Does Atlas Shrug? The Economic Consequences of Taxing the Rich*, writes, 'Taken as a whole ... the evidence is more mixed on the question of how, and how much today's Atlases shrug.'27

As Gittins indicates, there is apparently little, or no, adverse relationship between hours worked and tax rates for employed men. This may not be surprising, for the incentives for the 'principal earners' in households to participate in productive employment are fairly constant, irrespective of marginal tax rates (traditionally, most principal earners have been men). The impact on secondary earners (generally partnered women), however, tends to be larger—especially in the decision over whether or not to participate in productive employment at all. Lowering marginal tax rates encourages more women into the work force.

Even in the case of principal earners, however, there are grounds for suspecting that tax plays a stronger role in discouraging work than Gittins and the conventional textbooks allow.

One issue that confounds the textbook analysis is the unit of taxation. In Australia partnered individuals are taxed separately, but in the US, married couples are taxed as a single unit. The first dollar earned by the second wage earner in an American household is taxed at the first wage earner's top marginal rate. Furthermore, the average wage in the US is not subject to very high rates on income taxation, yet twice the average wage is known to be very responsive to tax effects. In Australia the top marginal rate (prior to 2005) applied to income only 1.3 times greater than average earnings.

The US textbook treatment of tax responsiveness does not therefore translate well to Australia. Partnered individuals are taxed separately, but individually face high marginal tax rates at lower

There are grounds for suspecting that tax plays a stronger role in discouraging work than Gittins and the conventional textbooks allow. incomes. Responsiveness to high tax rates may well be higher in Australia than in the US. The economic jargon for these responses is labour supply elasticity.

A second factor is that many salary earners have little control over their terms of employment, especially hours worked. Any adverse impact of high marginal tax rates will not be found by looking at employees working average hours for average rates of pay, for in a progressive tax system, high rates are not meant to apply to the average worker.

To gauge the impact of tax on work incentives we obviously need to investigate professions where individuals are free to set their own hours (e.g. taxi drivers), and/or where they can earn a very high hourly income (e.g. physicians). According to the ABS, nearly 20 percent of the Australian workforce are owner-managers in their own business (either incorporated or unincorporated).<sup>28</sup> To the extent that these individuals have control over their own working conditions, high marginal tax rates may be having a huge impact on our economy.

Peter Martin, economics correspondent for SBS television, recently reviewed research evidence relating to New York taxi drivers and concluded that, even where workers can vary their hours in response to income incentives, they hardly respond at all to changes in financial incentives.<sup>29</sup> But Martin misinterprets the debate, and selectively quotes from his sources.

Martin claims a study by Henry Farber finds the response of men to an increase in pay is usually 'very small and not significantly different from zero' (conversely, married women considering returning to work are much more responsive to a pay hike or a tax cut).<sup>30</sup> But this is not what Farber investigated. Rather, Farber notes that 'a reasonable summary' of the existing literature is that men have low responses to tax changes but that women have higher responses.

Martin goes on to report that Farber's own research 'finds no connection between the daily pay rates of New York taxi drivers and their knock-off times,' and he presents this as conclusive evidence in favour of backward bending supply curves. But Martin's interpretation is in contrast to what Farber actually writes: 'There is an emerging literature on labor supply that ... investigates labor supply responses in settings in which workers are free to set their hours of work. By and large, this literature finds substantial positive labor supply elasticities and evidence consistent with the standard neoclassical labor supply model. ... My analysis shows that daily income effects are small, as one would expect in a standard intertemporal labor supply model, and that the decision to stop work at a particular point on a given day is primarily related to cumulative daily hours to that point.' In contrast to what Martin alleges, Farber finds taxi drivers work until they are tired, then they stop working. Martin argues Farber's results support those of another study by Camerer and others.<sup>31</sup> But this is not the case. Farber explicitly states, 'My findings are in direct contrast to those of Camerer et al. ... They find that the daily wage elasticity of labor supply of New York City cabdrivers is substantially negative, implying large daily income effects that could be interpreted as target earnings behavior.' In other words, the Camerer team found that taxi drivers keep working until they achieve their desired income (supporting the 'income effect' hypothesis), whereas Farber found they stop when they are tired (supporting the substitution effect).

Farber goes on to investigate the difference between his results and the Camerer team's results. It turns out the different findings reflect different statistical methods employed. When Farber adopts the Camerer et al. technique to analyse his own data, he comes up with results consistent with theirs. Conversely, when he analyses their data using his own techniques he finds 'there do not appear to be strong income effects in the ... data.' In short, the backward bending supply curve result (for taxi drivers) is an artefact of the statistical technique. The Farber result contradicts the earlier Camerer et al. results, for it suggests that income effects do not dominate substitution effects.

Another group that is free to change its working hours in response to changing income incentives is self-employed physicians, and unlike New York taxi drivers, they tend to be highly paid (in 1983, 15 percent of the top one-half percent of US income earners were physicians, so this group makes up a substantial proportion of very high-income earners in the US). Mark Showalter

and Norman Thurston<sup>32</sup> have investigated their tax responsiveness by analysing data on their incomes, hours worked and demographic profile.<sup>33</sup>

Restricting their analysis to males under the age of 60 years, they find that tax responsiveness of physicians employed by hospitals (or HMOs) is low and not statistically significant. This appears consistent with the textbook literature suggesting that male principal earners are not responsive to tax changes. Self-employed physicians, however, were found to very sensitive to tax changes, and solo physicians had an even greater tax response.<sup>34</sup> Self-employed physicians work 22.2 minutes less per week for every 1 percentage point increase in income tax.

Self-employed physicians work 22.2 minutes less per week for every 1 percentage point increase in income tax. Assuming a 48-week year, this translates to 17.76 hours per annum per percentage point. If the top marginal tax rate were to fall from, say, 47 percent to 30 percent, this means self-employed physicians would be predicted to increase their working hours by 301.92 hours per annum.<sup>35</sup> Assuming a 7.2-hour workday, that amounts to 42 additional days of work. It seems from this that forty-two days worth of work is 'lost' due to high progressive marginal tax rates. The effect for solo-physicians is 43.2 minutes per week—almost double.

Far from Gittins' belief that there is 'no convincing evidence' that high marginal income tax rates impact adversely on work incentives, there clearly is such evidence, but it relates mainly to workers in specific situations—second earners in households, self-employed people who can easily vary their hours, and high-paid autonomous professionals.

There is also some evidence from cross-national comparative data that high income taxes reduce work effort. Edward Prescott, for example, has asked why Americans work so much more than Europeans do, and he thinks one key reason has to do with differences in tax incentives.<sup>36</sup>

Prescott derives a simple theoretical model that predicts labour supply (weekly hours worked) for the population aged 15-64. There are, of course, huge differences between the labour markets in Europe and the US (European labour markets are renowned for their 'rigidity' while US markets are said to be more 'flexible'), but Prescott sets up a deliberately simplified model in which country differences are assumed to be driven solely by tax rates and consumption-to-output ratios, and this generates predicted values for labour supply close to the actual values. In other words, the differences in labour supply across the G7 countries (and across time) can be explained largely by differences in their tax rates. Prescott reports (emphasis added):

An important observation is that when European and U.S. tax rates are comparable, European and U.S. labor supplies were comparable. At the aggregate level, where idiosyncratic factors are averaged out, people are remarkably similar across countries. ...

I am surprised that virtually all the differences between US labor supply and those of Germany and France are due to differences in tax systems. I expected institutional constraints on the operation of labor markets and the nature of the unemployment benefit system to be of major importance.<sup>37</sup>

Prescott's suggestion that tax factors are more important in the labour supply decision than labour market issues has important implications for current Australian policy, for the Coalition government has signalled its intent to pursue an aggressive labour market deregulation policy, yet it is timid in tax policy. Prescott's findings indicate aggressive and fundamental tax reform is likely to have much bigger positive labour market consequences.

Prescott's research has not gone unchallenged. Alberto Alesina, Edward Glaeser and Bruce Sacerdote<sup>38</sup> suggest, 'Europeans have a cultural predilection for leisure' (translation, Europeans are naturally lazy). But this explanation is unsatisfactory. It is hard to believe Europeans suddenly became lazy over the past 30 years. Alesina et al. suggest that hours worked may have initially declined due to tax policy (as Prescott suggests), but Europeans then realised that leisure was

High tax rates reduce working hours, increase the size of the illegal underground economy and lead to higher rates of unemployment among lessskilled workers. desirable and chose to consume even more leisure. They also investigate the impact of trades unionism on hours worked, arguing that strong trade unions (not high taxes) led to reduced hours, but they report that taxes still explain between a third and half of the difference in hours worked.

Prescott's evidence indicates high taxes reduce labour supply, but that is only half the story. High tax rates can also introduce labour discrimination. There is evidence, for example, that high tax rates affect choices between participation in the legal economy and participation in the illegal, underground economy. Steven Davis and Magnus Henrekson derive a theory<sup>39</sup> which predicts high tax rates

reduce working hours, increase the size of the illegal underground economy, change industry mix, and (importantly) distorts labour demand by 'amplify[ing] negative effects on market work and concentrat[ing] effects on the less skilled.' In other words, high tax rates, often justified on 'equity' grounds, lead to higher rates of unemployment among less-skilled workers.

They test their theory using a sample of OECD economies (including Australia). They find a tax increase of 12.8 percent (one standard deviation) would lead to 122 fewer market hours worked per adult per year, a 4.9 percent decline in the employment-population ratio, an increase in the underground economy, and a 10-30 percent decline in value add and employment share in those industries that rely on less-skilled labour. High tax rates lead skilled workers voluntarily to reduce their paid employment, while less skilled workers find their paid employment involuntarily reduced.

High taxes can also undermine entrepreneurial behaviour. Donald Bruce and Tami Gurley have undertaken an extensive study on taxes and entrepreneurship.<sup>40</sup> They consider a panel of data from 1979 to 1990 and investigate the impact taxes have on the decision to go into business, remain in that business, and ultimately exit. They find 'convincing evidence that tax rates have important effects on entrepreneurial entry and survival'. Decreasing marginal tax rates increase the probability of entry into a new business, and the longevity of existing businesses.

In a series of papers Robert Carroll, Douglas Holtz-Eakin, Mark Rider and Harvey Rosen investigate the relationship between taxation and various aspects of entrepreneurial behaviour. They define entrepreneurs as sole traders and use the 1986 Tax Reform Act as a natural experiment. There are a number of potentially conflicting incentives associated with changes in taxation. The sole trader faces work-leisure trade-offs when taxes change. For example, a decrease in the marginal tax rate may lead the entrepreneur to work harder and earn more income, or at a given level of after-tax income consume more leisure. On the other hand, a lower tax rate increases after-tax income that can be re-invested in the business leading to higher and faster growth. Alternatively, the sole trader can use the additional income to employ an additional worker *and* consume more personal leisure. Carroll et al. report evidence consistent with all these possibilities.

They find that a five percentage point increase in marginal tax rates leads to a 9.9 percent decrease in entrepreneur investment spending.<sup>41</sup> Further, as the entrepreneur's tax rate increases so the probability of employing workers declines and, to the extent they do employ additional

labour, decreases the growth rate in wages. Indeed, Carroll et al. speculate that entrepreneurs are able to shift high personal tax rates onto their employees, likely to be lower-income individuals, 'leading to counter-intuitive effects on the distribution of after-tax income'.<sup>42</sup> In other words, high rates of taxation on 'the rich' can lead to less employment and lower wages over time (so ironically, high taxation leads to 'the poor' becoming relatively poorer over time). Finally, they demonstrate an inverse relationship between marginal tax rates and growth. This effect is quite large; a decline in the marginal tax rate from 50 percent to 33 percent would result in an increase in receipts of 28 percent.<sup>43</sup> In a play on the Ayn Rand book *Atlas Shrugged* Carroll et al. state, 'these particular Atlases do indeed shrug'. Small business responds to tax rates, in ways that common sense should lead us to expect.

The impact of high taxation can also be found in migration between high-tax and low-tax countries. The common perception is that one million Australians make up the Australian Diaspora. With a population of 20 million this constitutes 5 percent of the population. But official estimates vary. The Bolkus Senate Report<sup>44</sup> took a broad definition of who is an Australian and canvassed several estimates. For example, estimates by the Department of Foreign Affairs and Trade vary from 720,000 to 759,849. The Hugo Report estimated 858,886 as at 31 December 2001 (4.29 percent), with an additional 264,955 temporarily offshore.<sup>45</sup> Whatever the exact figure, this is a large number of Australians living overseas.

The Lowy Report<sup>46</sup> summarises the demographics of the Australian Diaspora. Forty-one percent of Australian emigrants are between 25 and 39 years of age. Professionals, managers and administrators tend to be over-represented in this group (relative to the Australian population) and 42 percent have a post-graduate qualification relative to 9 percent in the general population. Fifty-four percent have an annual household income greater than A\$230,000 and another 45 percent have an annual household income over A\$110,000 (but less than A\$230,000). In short, most of the Australian Diaspora would likely be facing the top marginal tax rate were they living and working in Australia.

The Business Council of Australia (BCA) has indicated personal taxes are high in Australia relative to those in other English speaking economies.<sup>47</sup> Consequently it is difficult for Australian firms to compete in international labour markets. In particular, they calculate the top marginal tax rate for high-income individuals to be about 40 percent (including social security, state taxes, and the like) in the UK and US. In Australia the top marginal tax rate is 47 percent with a 1.5 percent Medicare Levy (this is not a marginal impost). This is, however, an underestimate of the top marginal rate, for parts of Australia's social security system are 'privatised'. Superannuation, for example, at 9 percent of income, and private health insurance are additional 'taxes' that are not calculated in the BCA comparison. And until the 2005 budget, this was a top rate cutting in at a very low income as compared with other countries. As the Australian Chamber of Commerce and Industry has argued, 'Australia's income tax regime ... is too punitive by international standards, ... i'48

There are many reasons why Australians may choose to live offshore. The Hugo Report finds 43 percent leave for 'better employment opportunities', 36 percent for 'professional development',

Region	Proportion (%)	Tax Burden
UK & Ireland	24	Lower
Europe	26	Higher
Asia	17	Lower
North America	15	Lower
Pacific	9	Higher
Middle East	6	Lower
Africa	2	Lower (?)
Central & South America	1	Lower (?)

Table 4: Location and Tax Burden of the Australian Diaspora

Source: Data are sourced from the Lowy Report.

32 percent of 'higher income' and 24 percent for 'promotion/career advancement'. Twenty-four percent of women leave Australia following their partner. But, are these emigrants tax exiles? In all likelihood, taxation is not a *primary* driver in emigration for most Australians. It may well be a secondary consideration in the decision to leave, but it may be an important consideration in the decision to return.

The Lowy Report provides a breakdown of where the Australian Diaspora lives. Data are shown in Table 4. Also shown is a subjective assessment of the tax burden they might face. We have seen that the tax burden for high-earners would be lower in the UK and US than in Australia. Twentythree percent of the Australian Diaspora is in the UK, while 12 percent are in the US. Of the 17 percent in Asia, 10 percent are in North-Asia, with 1 percent in South-Asia and the remainder

More than half of the Diaspora lives under a lower tax burden than they would in Australia. in South-East Asia. These economies also tend to have much lower top marginal tax rates and smaller governments than Australia. Eight percent live in New Zealand, and like those in western Europe, they are likely to face a higher tax burden there than they would back home. All up, more than half of the Diaspora lives under a lower tax burden than they would in Australia. While this does not indicate they are tax exiles, it may indicate that the opportunities that drew them to those locations are more plentiful (although it is also worth remembering high altilled workers than it locate)

that Australia attracts more high-skilled workers than it loses).

The Bolkus Report specifically addressed the issue of income tax and the Australian Diaspora, but the discussion is disingenuous.<sup>49</sup> The Inquiry received a number of submissions indicating taxes were too high, but although we are told that 'a number' of submissions addressed 'allegedly' high tax rates, *one* submission approved of high tax rates, and the Senate Inquiry bases its rebuttal on that one submission:<sup>50</sup>

The Committee supports one underlying argument in these submissions: that Australia should have an internationally competitive taxation regime. However, in the Committee's view it is somewhat simplistic to examine personal income tax in isolation. Rather, income tax should be considered in the context of the taxation system *as a whole*, and also in terms of the services which are provided by government. Other nations may indeed have smaller levels of income tax, but may compensate for this either by having other forms of taxation, or by providing lower levels of government service. One submitter ... took a more sophisticated view of personal income taxation and found that she preferred a nation with relatively high levels of personal income tax ...

Individuals who argue for lower taxes are being 'simplistic', while the one submission (out of a total of 677 submissions) that prefers higher taxes is 'sophisticated'.

Australians emigrate for a variety of reasons, and it is not precisely clear what role tax plays in their decisions to leave, or to return. It is probably a secondary consideration for many. As both the Hugo and the Lowy Reports indicate, data on the Australia Diaspora is patchy and much more research needs to be done. It is, however, unfortunate that the Bolkus Report seems already to have made up its mind.

#### (b) Justifying the tax-work trade-off

A second response to the argument that high taxes damage work incentives is to argue that this is a good thing, for we all work too much as it is.

Sometimes, the same people who argue taxation has no impact on how hard we work also argue that high taxes are justified precisely because they do have an impact. In a series of *Sydney Morning Herald* opinion pieces, for example, Ross Gittins suggests both that lower taxes will not make individuals work harder, and that higher taxes might make them work less:

Work. Work and more work. ... Those who aren't working, should be. Those who *are* working, aren't working hard enough. And those considering retirement should resist the temptation. ...

But do you see what's happening? We're putting the maximisation of production ahead of enjoyment of the fruits of production—time to *enjoy* the stuff we buy, time for leisure and recuperation, time for relationships with family and friends.<sup>51</sup>

On 13 April 2005, highlighting the work of Professor Lord Richard Layard of the London School of Economics, Gittins wrote, 'We need to keep tax rates high to discourage us from working so hard and, in the process, neglecting more important aspects of life, including leisure.'<sup>52</sup> Yet only six weeks later, on 23 May 2005, he dismissed the idea that cutting marginal tax rates would encourage more work as sloppy thinking. But if the income effect did dominate the substitution effect as he implies, then lower taxes would lead to more income and less work—his desired outcome. Between April and June, Gittins has managed to produce a number of contradictory arguments, yet all of them support high levels, and rates, of taxation.

For the record, Richard Layard makes clear his view, 'Lower taxes would induce people to work harder. I mean, that is a completely central proposition in economics which is completely correct.'<sup>53</sup> But Gittins has already dismissed this argument as 'letting their wallet to do their thinking'.

Layard's argument is that it is undesirable to lower taxes precisely because this encourages people to work harder. He says individuals are in a race for status—relative position in society—but that status seeking is a zero-sum game because not everybody can be on top at the same time. Consequently, in his view, individuals are engaged in 'fruitless' behaviour. According to Layard, 'The question you should be asking ... is do you want people to work harder? Now that you understand what they're working for, something which can't be achieved, do you want them to work harder?'<sup>54</sup>

Layard's analysis begs three questions: Is status seeking a primary motivator? Is competition among individuals 'fruitless'? Can social engineering work at this level, if at all? This is not the place to address these issues, except to raise the question of whether it is appropriate for government to seek to use the tax system to shift people's preferences as between work and leisure.

I have suggested that one reason for cutting taxes is that it will encourage people to work more. But why is this a legitimate aim for government policy? Why not argue that taxes should be kept high to dissuade people from working too much? If one of these is undesirable social engineering, why not the other?

James Buchanan provides a solution to this dilemma.<sup>55</sup> In particular, Buchanan asks whether a work ethic has any economic value:

Members of a society in which there is a strong work ethic will be better off, materially, than those of a society in which such ethic is weak or nonexistent. This statement will be accepted without question by persons who do not classify themselves as professional economists. By contrast, economists will find the statement difficult to incorporate into their analytical orthodoxy.<sup>56</sup>

Most economists would argue that so long as individuals were adequately compensated for their work, the choice between more work and more leisure is entirely private. Not so, according to Buchanan. The decision to work more generates external benefits, while the decision to work less, or as Buchanan puts it 'loaf', creates external harm. A work ethic may have evolved to 'internalize the work choice externality.' To the extent that government operates to enhance individual choices it is not unreasonable that governments encourage more, as opposed to less, work.<sup>57</sup>

**Summary:** Labour supply curves may well bend back at some level of after-tax income for some individuals. But this does not mean individuals do not respond to changes in tax rates. In particular, self-employed entrepreneurs and workers with control over their working hours do respond to tax changes. It is possible that high rates of tax would induce more leisure (rather than more work) for some individuals. I have argued, however, that this would represent undesirable social engineering. I suspect most Australians would anyway choose lower taxes over a lower material living standard.

Most economists would argue that so long as individuals were adequately compensated for their work, the choice between more work and more leisure is entirely private. Not so, according to Buchanan.

#### QUESTION 3: Do tax cuts reduce government revenue?

#### (a) The Laffer curve

Arthur B. Laffer famously drew the 'Laffer curve' on a napkin on 4 December 1974. This curve plots the hypothetical relationship between tax revenue and tax rates. When tax rates are zero, no revenue is raised, but when tax rates are 100 percent, no revenue is raised either (because nobody will work for nothing). In between those two extremes there are two tax rates associated with every level of tax revenue—a high tax rate and a low tax rate. At some point there is a tax rate that maximises tax revenue. If the actual marginal tax rate is above that level, then a decrease in tax rates will lead to an increase in tax revenue, while an increase in tax rates will lead to a decrease in tax revenue. Conversely, if the actual marginal tax rate were below the revenue maximising rate an increase in tax rates would lead to an increase in tax revenue and a decrease is tax rates would lead to a decrease is tax revenue.

The Laffer curve is nothing new. Max Moser describes it as a theoretical framework derived from 'an accepted, orthodox application of economic theory'.<sup>58</sup> All first year microeconomics students learn the relationship between price, demand elasticity and total revenue while studying the theory of the firm. In public finance theory that same relationship is the Laffer curve. Nor does Laffer claim originality. He quotes Ibn Khaldun (1332-1406) who in his 1375 masterpiece

John F. Kennedy famously said, 'It is a paradoxical truth that tax rates are too high today and tax revenues are too low and the soundest way to raise the revenues in the long run is to cut the rates now.' *al-Mugaddimah* (Introduction) wrote: 'At the beginning of the dynasty, taxation yields a large revenue from small assessments. At the end of the dynasty, taxation yields a small revenue from large assessments.'<sup>59</sup> Adam Smith, J.B. Say and John Maynard Keynes have all written similar comments. John F. Kennedy famously said, 'It is a paradoxical truth that tax rates are too high today and tax revenues are too low and the soundest way to raise the revenues in the long run is to cut the rates now.'<sup>60</sup> Critics who dismiss the Laffer curve as being 'wrong', or discredited, or belonging to some fringe element of 'voodoo economics', forget that it has a long and distinguished ancestry.<sup>61</sup>

There are two classic papers that 'estimate' Laffer curves. One

of these relates to the US experience, while the other relates to the Swedish experience. Each of the papers recognises that the relationship between tax rates and tax revenue is (partially) determined by tax responsiveness. Furthermore, that responsiveness itself will vary over time and also for different tax rates.

The US study, by Don Fullerton, makes use of a general equilibrium tax model and 1973 data to trace out Laffer curves with given tax elasticity.<sup>62</sup> Fullerton reports nine potential Laffer curves. The lower the tax elasticity the higher the revenue maximising tax rate. Fullerton then surveys the literature and suggests a low tax responsiveness figure, which in turn indicates a high revenue maximising tax rate for the US. Based on this result, he concludes, 'broad-based cuts in labor tax rates would not increase revenues'.<sup>63</sup> This conclusion critically depended on tax elasticity being low. Seven of the nine estimated Laffer curves showed revenue maximising tax rates below the 1980 level of taxation. If any of these were the 'correct' tax elasticity, then a decrease in tax rates would lead to an increase in revenue.

By contrast, Charles Stuart argues Sweden was above its revenue maximising tax rate in the 1970s and 1980s.<sup>64</sup> Under various assumptions he is able to estimate the revenue maximising tax rate to be in the range of 69-73 percent. He settles on a total tax rate of 70 percent and argues that the Swedish tax rates (80 percent at that time) placed Sweden on the 'wrong' side of the Laffer curve.

Laffer himself identifies three major income tax events in US economic history. In the 1920s personal income taxes were dramatically reduced (from 58 percent in 1922 to 26 percent in 1926). In the 1960s the top marginal tax rate fell from 91 percent to 70 percent. And in 1982, the highest marginal tax rate was reduced to 50 percent. Laffer compares the growth in real (inflation adjusted) Federal revenue, real (inflation adjusted) GDP and unemployment before and after these events.<sup>65</sup> The before, and after, data are averaged for the four year period before any tax reform, and the four year period following the tax reform. Summarised results are shown in Table 5.

Year	Real Federa Grow	al Revenue rth %	Real GDP	Growth %	Unemploy	yment Rate %
	Before	After	Before	After	Before	After
1925	-9.2	0.1	2.0	3.4	6.5	3.1
1964	2.1	8.6	4.6	5.1	5.8	3.9
1982	-2.8	2.7	0.9	4.8	7.6	7.8

#### Table 5: Consequences of US Tax Reform

Source: Data summarised from Laffer, 'The Laffer curve: Past, present, and future', Tables 1, 4 and 7. These figure refer to the 'real' changes i.e. are inflation adjusted.

In each instance a rapid change in real federal revenue occurred. In 1925 and 1982 declines in real federal revenue were reversed, and real economic growth was higher after the tax change. Unemployment decreased after the 1925 and 1964 tax reforms, but not after 1982. Based on evidence such as this, Laffer concludes, 'Seldom in economics does real life conform so conveniently to theory.'<sup>66</sup>

Laffer argues that, 'Lower tax rates change people's economic behavior and stimulate economic growth, which can create more—not less—tax revenues.'<sup>67</sup> More revenue will be created when tax rates that are too high are reduced: 'If the existing tax rate is too high ... then a tax cut would result in increased tax revenues.'<sup>68</sup> But herein lies the difficulty: When is a tax rate too high?<sup>69</sup>

Laffer's three U.S. historical examples illustrate his theory, but there are other tax 'reforms' in US history that he does not investigate. We might all agree that decreasing the top marginal tax rate from 90 percent to 50 percent (and later to 28 percent) is sensible, but in 1993, the top marginal tax rate in the US increased for the top 1.2 percent of taxpayers from 28 percent to 39.6 percent, and this does not seem to have generated adverse results.<sup>70</sup> A naïve application of the Laffer curve In the popular mind, cutting tax leads to budget deficits, but this is only true if government does not restructure spending.

would suggest tax revenues should have fallen, but tax revenue from the top 1 percent of taxpayers (that group of taxpayers affected by the tax change) increased dramatically. There is some dispute as to what this means.

Martin Feldstein and Daniel Feenberg argue that high-income earners would have reported even more taxable income if taxes had not been raised.<sup>71</sup> They estimate the deadweight loss of the 1993 tax reform to be twice as large as the addition revenue raised. Alan Reynolds has argued that as a percentage of GDP tax revenues were lower in the period 1993-1995 (7.7, 7.8 and 8.1 percent respectively) than they were in 1989 (8.3 percent).<sup>72</sup> In contrast, Joseph Stiglitz says, 'these increased revenues were largely responsible for the elimination of the deficit in the late 1990s'.<sup>73</sup> On this point, Edward Prescott is short, and blunt, 'This is false.'<sup>74</sup> Nonetheless, it is an important point in need of discussion.

A second serious criticism of the Laffer curve relates to budget deficits. In the popular mind, cutting tax leads to budget deficits, but this is only true if government does not restructure spending. It is true the US budget was briefly in surplus in the late 1990s (1998-2000) before the latest round of federal tax cuts. It is not clear, however, that this was due to higher taxes. Using OECD data, I calculate Total Tax Receipts grew on average by 7.16 percent between 1992 and 1999 (the Clinton presidency).<sup>75</sup> Over the same period GDP grew, on average, by 5.46 percent, but Total Government Expenditure only grew, on average, by 3.77 percent. The 'secret' behind the US budget surplus was not just higher taxes, despite Stiglitz's opinion, but restrained government expenditure.<sup>76</sup>

I have also investigated 23 OECD economies, comparing their change in top personal income tax rates for the period 1980-2001<sup>77</sup> and their budget balance for 2001<sup>78</sup>. The average decline in top personal tax rate was 22.3 percent, while the average budget balance was 0.91 percent. The correlation between the two series of numbers was a statistically insignificant –0.012. The average decline in personal tax rates for the 13 OECD economies in budget surplus was 21 percent, while the ten that were in deficit had an average decline in top personal tax rates of 23 percent.<sup>79</sup> This suggests it is not tax cuts that produce budget deficits so much as high government spending.

The latest evidence in support of the Laffer curve can demonstrate this point. In 2003, the US cut tax rates on dividend income and capital gains. According to Stephen Moore, writing in the *Asian Wall Street Journal*, tax receipts are 'up 30% in the two years since the tax cut. ... federal expenditures are up \$110 billion, or 7.2%, so far this year as the congressional Republican spending spree rolls on'.<sup>80</sup>

#### (b) Cut taxes to get the rich to pay more

In a related literature, economists have explored the impact high marginal tax rates have had on the behaviour of high-income individuals and households. These individuals are often characterised as 'the rich'. In the US literature, 'the rich' are usually defined as being the top 1 percent of taxpayers. According to the US Internal Revenue Service this group of taxpayers, in 2002, had an income above US\$285,424 earning 16.12 percent of all Adjusted Gross Income, but paid 33.71 percent of US income tax while facing an average tax rate of 27.25 percent.<sup>81</sup> The New Tax Responsiveness (NTR) literature examines the behaviour of this group (or sub-sets of this group) around US tax reforms; particularly the 1986 and 1993 tax reforms.<sup>82</sup>

The argument is that this group of taxpayers is most likely to be highly sensitive to high tax rates, and especially to changes in those high tax rates. In particular, this group of taxpayers can afford the best tax planning advice, they may receive a large proportion of their total income

High marginal tax rates may therefore impede the revenue raising effects while also imposing high deadweight losses on the economy. in forms other than wages and salary, and they have the ability to shift assets and income into tax-advantaged (or at least, less taxdisadvantaged) forms, or to alter the timing of taxable income. This is a somewhat more sophisticated version of the 'tax is voluntary if you can afford a good accountant' argument. Of course, tax is not voluntary, and there must be high fixed and variable costs associated with tax avoidance—after all, this group of taxpayers still pay 33.71 percent of all US income tax.

The NTR literature recognises that taxes have two effects; first, they exist to raise revenue, and second, they generate deadweight losses in the form of wealth that is not created as a result of the tax on outputs.<sup>83</sup> High marginal tax rates may therefore impede the revenue raising effects while also imposing high deadweight losses on the economy. This means any changes in marginal tax rates need to be evaluated in terms of the change in revenue and changes in deadweight losses.<sup>84</sup>

The classic paper in the NTR literature is by Martin Feldstein, chairman of the Council of Economic Advisors to Ronald Reagan. He investigated the impact of the 1986 US Tax Reform Act on taxable income using panel data on 4,000 high-income taxpayers (i.e. he tracked the same individuals before and after the tax reforms). The 1986 Tax Reform Act reduced the top marginal tax rate from 50 to 28 percent; it also redefined taxable income and broadened the tax base by closing a number of loopholes used to facilitate tax avoidance. Feldstein finds a huge response to lower taxation. Lower rates of taxation have a large positive impact on taxable income, and substantially reduce the deadweight loss associated with taxation.

Ross Gittins thinks that, 'The notion that people require higher monetary rewards to induce them to work harder is likely to be truer for jobs at the bottom of the tree than those at the top,'<sup>85</sup> and many analysts have expressed concern about the impact of high 'effective marginal tax rates' (where the tax system and the welfare system interact) on those on low incomes. Jon Gruber and Emmanuel Saez, however, investigated a panel of US tax returns over the decade of the 1980s, and they found that the biggest impacts are at the top of the income distribution rather than the bottom:<sup>86</sup>

These findings have two potentially important implications for tax policy. First, they highlight the value of having low tax rates on a broad tax base, a position long advocated by economists. The large elasticities [responses] that we observe are driven by 'holes' in the tax base that allow taxpayers, particularly at higher income levels, to reduce their tax burdens. With a broader tax base we would distort behavior less and could therefore raise revenues more efficiently.

Second, they suggest that the substantial concern currently expressed about the distorting impact of high implicit tax rates at the bottom of the income distribution may

be overblown. Most of the concern is focused on the [US]\$10,000-50,000 income range that we examine where the EITC [earned income tax credit] is phased out. But we find no evidence that, at least for the explicit taxes that arise through the federal and state income tax system, taxpayers in this range are substantially changing either their real incomes or reported taxes in response to tax policy. This suggests that the distributional advantages of tightly income targeted tax subsidies may outweigh the efficiency costs of high implicit tax rates on the lower middle-income taxpayers ...

High tax rates create disincentives. The greatest disincentive applies to high-income earners, for it is this group that is best able to organise its affairs in response to changes in the tax system. 'Holes' in the tax system are important too. Gruber and Saez do not address arbitrage between types of taxation, but they too can be described as 'holes'.

The NTR literature has not gone uncriticised. Many of the critical papers are collected in Joel Slemrod's edited book *Does Atlas Shrug? The Economic Consequences of Taxing the Rich.* One of the major criticisms concerns the increasing income inequality in the US. Another concerns the reliance on tax data to estimate tax responsiveness. Tax authorities tend to report data at high levels of aggregation (for privacy purposes) making detailed analysis difficult, if not impossible. For example, changes in reported taxable income could result from changes in work, or from changes in tax avoidance. Many of the papers in Slemrod's book end by calling for more analysis on better quality data. Slemrod summarises by arguing the results are 'mixed'.

The results, however, are not as mixed as Slemrod would have us believe. In the same volume, Daniel Feenberg writes, 'None of the points raised ... in this volume turn out to be quantitatively decisive, so the conclusions they draw must be seen as unrefuted.'<sup>87</sup> By 2005, Slemrod seems to have changed his mind. He writes (emphasis added)<sup>88</sup>

I recognize that a progressive tax distribution requires higher marginal tax rates, which dampen the incentive to work and do anything else that engenders financial success, and encourage privately rewarding but socially inefficient activities that reduce taxable income. But my reading of the empirical evidence has convinced me that the efficiency cost of progressivity is not so large (*a professional opinion*) that it overwhelms the benefits of a more equal distribution of well-being that tax progressivity provides (*a value judgement*).

#### At least, he is honest.

Austan Goolsbee, professor of economics at the University of Chicago Business School, undertook a NTR type analysis of all major US tax changes over the 20th century.<sup>89</sup> Over the period 1920s-1990s several tax changes are investigated—excluding WWII. He reports the large tax response of the 1980s is an outlier. In previous periods, and also in the 1993 tax rate increase, the tax responsiveness is much lower. Goolsbee implies that not too much stock can be placed in the *a priori* benefits of dramatic tax rate reduction. He overlooks, however, an obvious point that the discussants to his paper identify. There is no reason to believe that the tax responsiveness need be a constant. Lawrence Katz argues behavioural responses to tax changes are likely to be a function of 'the enforcement regime and of innovations in tax

'Behavioural responses to tax changes are likely to be a function of 'the enforcement regime and of innovations in tax avoidance and evasion opportunities and technologies.'

avoidance and evasion opportunities and technologies<sup>7,90</sup> In addition, attitudes towards government and taxation have changed dramatically over time. Robert Hall argues tax responsiveness is likely to be a function of the type of tax reform. 'Good tax reform, like that of 1986, generates high elasticities. Regression in the tax system, as in 1993, generates low elasticities.'<sup>91</sup> In a similar vein, Joel Slemrod and Wojciech Kopczuk speculate that the 1986 US tax reforms had the effect of lowering the 'true' tax responsiveness.<sup>92</sup> This makes before and after comparisons difficult and unreliable for public policy purposes.

#### (c) Economic orthodoxy versus the Laffer curve

Textbook writers are usually hostile to the Laffer curve. The classic 'Samuelson' text, now coauthored with William Nordhaus, tells students: 'Mainstream economists reacted to the Laffer curve much as physicists later did to the announcement of cold fusion: they were profoundly skeptical about the empirical prediction that lower tax rates would raise tax revenues.<sup>'93</sup>

Samuelson and Nordhaus provide two statements that relate to empirical evidence. The first is a comparison between the theoretical Laffer curve and an estimated Laffer curve. On the estimated Laffer curve, US tax rates are found to be below the optimum revenue-maximising tax rate (in other words tax rates in the US could be increased). This estimated Laffer curve is taken from Fullerton.<sup>94</sup> Fullerton, however, estimated *nine* Laffer curves with different labour supply responses to tax changes. Samuelson and Nordhaus report the estimated Laffer curve with the *lowest* labour supply response. Seven of the nine estimated Laffer curves, however, show the pre-1986 top marginal tax rate to be above the revenue maximising tax rate. Samuelson and Nordhaus thus report one of the only two (from a total of nine) instances that support their argument.

Their other concession to evidence is the following statement, 'There was, however, no perceptible increase in the personal savings rate or in labor force participation. The Laffer-curve prediction that revenues would rise following the tax cuts has proved to be false; instead, federal revenues shrank relative to their trend and the federal budget consequently moved from an approximate balance in 1979 to an unprecedented \$200 billion deficit after 1983.'95 Note the sudden vagueness. There is no diagram showing the revenue trend shrinking, while the Laffer curve says nothing about government budgets (if any government increases spending relative to revenue the budget is likely to be in deficit).

The claim that US tax revenue fell after the 1982 tax reform is repeated in many texts. Few, however, are as specific as N. Gregory Mankiw. In the first edition of his *Principles of Microeconomics*, Mankiw—a full professor of economics at Harvard University—wrote<sup>96</sup>

Year	Number Tax Returns	Total AGI	Total Net Tax	Growth AGI %	Growth Total Net Tax %	Inflation %
1980	93,238,823	1,626,555	249,077			12.5
1981	94,586,878	1,791,116	282,298	9.6	12.5	8.9
1982	94,426,498	1,875,872	276,076	4.6	-2.2	3.8
1983	95,330,713	1,969,600	271,645	4.9	-1.6	3.8
1984	98,436,000	2,173,228	297,376	9.8	9.1	3.9
1985	100,625,484	2,343,989	321,916	7.6	7.9	3.8
1986	102,087,623	2,524,124	366,979	7.4	13.1	1.1
1987	106,154,761	2,813,728	369,046	10.9	0.6	4.4
1988	108,872,859	3,124,156	412,761	10.5	11.2	4.4
1989	111,312,721	3,298,858	432,838	5.4	4.7	4.6
1990	112,812,262	3,451,237	447,061	4.5	3.2	6.1
1991	113,804,104	3,516,142	448,349	1.9	0.3	3.1
1992	112,652,759	3,680,552	476,163	4.6	6.0	2.9
1993	113,681,387	3,775,578	502,720	2.5	5.4	2.7
1994	114,989,920	3,961,146	534,754	4.8	6.2	2.7
1995	117,274,186	4,244,607	588,331	6.9	9.5	2.5
1996	119,441,767	4,590,527	658,124	7.8	11.2	3.3
1997	121,503,284	5,023,457	727,303	9.0	10.0	1.7
1998	123,775,831	5,469,211	788,452	8.5	8.1	1.6
1999	126,008,974	5,909,329	877,292	7.7	10.7	2.7
2000	128,227,143	6,423,977	980,521	8.4	11.1	3.4
2001	128,817,051	6,241,036	887,882	-2.9	-9.9	1.6
2002	128,323,986	6,113,778	796,862	-2.1	-10.8	2.4

Table 6: US Taxable Income, Net Tax and Inflation

Sources: The tax data, originally sourced from the IRS, are from the Tax Foundation and inflation data are from the US Bureau of Labor Statistics (ftp://ftp.bls.gov/pub/special.requests/cpi/cpiai.txt).

Subsequent history failed to confirm Laffer's conjecture that lower tax rates would raise tax revenue. When Reagan cut taxes after he was elected, the result was less tax revenue, not more. Revenue from personal income taxes (per person, adjusted for inflation) fell by 9 percent from 1980 to 1984, even though average income (per person, adjusted for inflation) grew by 4 percent over this period.

There are three things to notice in this statement. First, notice the unusual time period. Reagan was elected in November of 1980, passed the Tax Act in late 1981 that came into effect in 1982, but was phased in over three years. Secondly, inflation over the 1980-1984 period fell from about 12.5 percent to 3.9 percent, and there was a recession in 1982. Third, and most important, note the words 'per person'. To provide some context Table 6 shows US tax data taken from the Tax Foundation, and inflation data, for the period 1980-2002.

Recall, the comment of no perceptible increase in labour force participation. Between 1980 and 1984, the number of tax returns increases by 5.4%. While we cannot be sure this constitutes increased labour force participation, we do see a lot more people paying tax (an implication of tax reform). The nominal tax paid for all taxpayers increased by 17 percent over the period. This type of analysis, however, does not differentiate between types of taxpayers (something progressive tax system actually do). The Tax Foundation also provides information for different categories of taxpayer. Nominal income taxes for the top 1 percent of taxpayers increased by over 28 percent in 1980-1984. If we accept Mankiw's 9 percent figure as an average it seems that taxes for the top 1 percent increased in real terms by about 2 percent. In addition, the share of tax paid for the top 1 percent increased from 19.05 percent to 21.1 percent over the same period. Looking back at Table 6, it seems unsurprising Mankiw chooses to end his analysis at 1984—since that time (except for recessions in 1990-91 and 2001-02) tax growth has exceeded inflation.

I am aware of only one textbook that discusses the Laffer curve objectively and presents unambiguous evidence. James Gwartney and Richard Stroup argue the 1980s was a period of tax reduction and they provide evidence for that period in tabular form.<sup>97</sup> Part of that table is reproduced in Table 7 that shows (in inflation-adjusted dollars) that the tax changes of the 1980s were very progressive. While tax rates fell, tax revenue from the top end of the income spectrum grew very dramatically. The average revenue per return fell, but the number of returns grew. Revenue from the top 1 percent of taxpayers increased by 51 percent after inflation!

Income Group	Group %	Per Return %
Top 10 percent	28.8	5.6
Top 1 percent	51.4	24.1
Top 5 percent	35.9	11.4
Next 40 percent	1.1	-17.1
Bottom 50 percent	-8.5	-25
Total	14.1	-6.5

Table 7: Percentage	change in	Tax Revenue	1980-1990
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Source: Source from Gwartney and Stroup p. 129, originally sourced from IRS and US Department of Treasury. Notes: Data are percentage changes calculated in inflation-adjusted dollars. Number of returns increased by 21 percent over the period.

This is convincing evidence. The Laffer curve makes a simple prediction; Gwartney and Stroup set out that prediction and set out the evidence in a clear understandable format. But there is no Australian edition of this text. This means every Australian university student who does first year economics reads a text that claims, falsely, that Laffer was wrong. Small wonder tax reform is so difficult.

The question for Australia, of course, is whether our tax rates are too high—would a reduction in tax rates lead to an increase in tax revenue? To the best of my knowledge, no definitive Australian study into this question has been undertaken. In a 1991 paper for the Dallas-based National Centre for Policy Analysis, economist Gerald Scully estimated governments would maximise revenue when the income tax rate was 22.5 percent.<sup>98</sup> He used IMF data for 103 countries over the period 1960-1980 for his analysis. During that period Australia's marginal income tax rate was far higher than 22.5 percent.

In order to provide some guidance as where Australia might be on the Laffer curve I calculated summary statistics for the OECD. I first calculated the median tax rates and the median Total Tax to GDP, Total Revenue to GDP and Total Expenditure to GDP ratios. The data are segmented into above and below median size. I calculate the averages for above median and below median data and report the results in Table 8. The median economy is identified in the table but is excluded from the analysis.

		Personal Tax Rate	Corporate Tax Rate	Total Tax/ GDP	Total Revenue/ GDP	Total Expenditure/ GDP
Australia		47.0	30.0	30.1	36.8	37.9
Total Tax/GDP	Low	43.0	33.5	32.1	38.9	40.2
Median = Greece 36.9	High	46.5	31.8	43.4	49.5	50.0
Total Revenue/GDP	Low	40.7	32.0	32.8	38.2	40.0
Median = Iceland 44.9	High	48.7	33.8	42.7	50.2	50.2
Total Expenditure/GDP	Low	42.6	33.4	32.8	38.6	39.0
Median = Greece 46.8	High	46.9	31.8	42.7	49.8	51.1

Table 8: Tax Rates and Government Size, 2004

Source: Data from OECD, Figures, 2004 Edition. Data are unweighted.

Laffer predicts that for every level of government revenue there are two tax rates, one high and one low. Bearing this in mind Table 8 tells a startling story. When we look at the government size ratios (Total Tax to GDP, Total Revenue to GDP and Total Expenditure to GDP) it is clear Australia has a small government (the Australian measures for these variables are below the 'low' OECD average statistics). But when we look at the personal tax rate, we see that Australia ranks 'high' (corporate tax rates are indeterminate—by some measures they appear high and others they appear low). Overall, bigger governments tend to have higher personal tax rates, but Australia has a small government, yet has high personal income tax rates. *This is exactly what we would expect to see for an economy on the 'wrong' side of the Laffer curve.* 

Would a reduction in these tax rates improve economic growth? In 1945 John Maynard Keynes agreed with Colin Clarke that 25 percent should be regarded as an upper-limit to the Tax-to-GDP ratio.<sup>99</sup> But the Tax-to-GDP ratio for Australia in 2001 was 30.1 percent (the ratio for the OECD was 36.9 percent,<sup>100</sup> and for some European economies it is between 40 and 50 percent). Alex Robson has found that 'countries which significantly cut taxes between 1980 and 2000 enjoyed average per capita economic growth rates of nearly three times those that did not'.<sup>101</sup>

What sort of tax rate would maximise the economic growth rate? Again, there is no definitive study in Australia that investigates this issue. In his 1991 paper, Gerald Scully estimates a growth maximising tax rate of 11.9 percent. In a recent paper, Scully<sup>102</sup> estimated the 'optimal total tax rate' for the US to be 19.3 percent, while Barro put it at 25.1 percent.

A possible criticism of the view that Australia is on the 'wrong' side of the Laffer curve is that it assumes politicians and tax officials are irrational. Surely a rational politician, knowing higher revenue could be raised with lower marginal tax rates, would advocate lower taxes. But this overlooks the time dimension. It is well known in microeconomic theory that elasticities are lower in the short run than they are in the long run. James Buchanan and Dwight Lee have argued that a mismatch between short-run and long-run objectives can lead to a rational decision to be on the 'wrong' side of the Laffer curve.<sup>103</sup> While government lives forever, the individuals who make up government have a short time horizon. In their planning, they are sensitive to short-run

fluctuations in tax revenue. Taxpayers, however, have long-run planning horizons. They respond to short-run tax changes with a lag. In his analysis of the Swedish Laffer curve, Stuart suggested this lag might be as long as 10 years.<sup>104</sup> In other words, with a long-run perspective tax rates could be lower and tax revenues higher, but with a short-run perspective the political costs of lowering tax rates are too high. Consequently, it is politically rational to make inefficient decisions.

David Altig, Alan Auerbach, Laurence Kotlikoff, Kent Summers and Jan Walliser undertook a simulation exercise evaluating several radical tax proposals for the US.<sup>105</sup> They found that a proportional consumption tax would increase economic output by 9 percent, but would have high transition costs. A flat tax with lower transition costs would increase economic output by 4.5 percent. In both cases, real and substantial increases in economic wealth can occur in the long run but do have real and significant short run costs.

Where does this leave Australia? By our own historical standards, the current top marginal rate of 47 percent is low, so is it plausible to argue that a historically low top marginal rate could still be of the wrong side of a Laffer curve? The answer is yes.

Two broad streams of reform have occurred in Australia in the past 30 years. First, labour markets have been reformed dramatically since 1983. Higher levels of flexibility in labour markets and increasingly flexible labour responses to market opportunities would lead to an increase

in tax responsiveness. Recall the Alesina et al. argument—as labour market regulation and unionisation increased in Europe so the tax responsiveness fell. Australia has seen the opposite—labour market regulation and unionisation has fallen. This would place downward pressure of the long-run revenue maximising tax rate. The second reform has consisted of broadening the tax base and closing loopholes. While these changes are broadly seen as being desirable reforms, nonetheless they increase the period of time necessary for taxpayer responses to changes in the tax system.

Not only do high-income earners pull more than their weight in the philanthropy area, they pull more than their weight in taxation too.

#### **QUESTION 4: Do tax cuts pander to human selfishness?**

Daniel Petre, of the Petre Foundation,<sup>106</sup> recently wrote an article for *The Sydney Morning Herald* calling for greater philanthropy amongst Australia's wealthy.<sup>107</sup> He argued that wealthy Australians should 'start to pull their weight and give back appropriately to the society from which they made their fortunes'. So is it true that the high earners are stingy with their money, and if so, what might be the explanation?

Data on wealth are notoriously difficult to acquire. Data on income, on the other hand, are available from the ATO—similarly the ATO provides data on tax deductions, including gifts and donations. Some summary statistics, calculated from the ATO Taxation Statistics 2002-03 are shown in Table 6. These data do not include all charitable giving. The ATO only collects data on charitable giving that has been subsequently claimed as a tax deduction. The data are shown by income category. Petre 'targets' those Australians on the BRW 'rich list'. I broaden the analysis to those Australians who earn more than \$1,000,000—it is reasonably safe to assume these individuals could be described as being 'rich' even if they did not make it into BRW.

There were 2,586 taxpayers who had an income greater than \$1,000,000 in 2002-03 (0.02 percent of total taxpayer numbers). Of those, 1,643 (63.53 percent) claimed a deduction for 'Gifts or donation'. In total, this group of taxpayers claimed \$67,144,320 that makes up 7 percent of the total deduction, and constitutes an average donation of \$40,866.90 per taxpayer. To place this number in context I calculated the average taxable income for each income category and the average net tax paid for each income category. When comparing the income and net tax paid data to the giving data some caution is required. While both sets of data are from the ATO there are different numbers of taxpayers in the income categories. So the ATO report 2,586 taxpayers with an income more than \$1,000,000 in their donations table, but only 2,272 in their income table. Nonetheless, we can get a 'rough and ready' comparison between average income, average net income, and about 5 percent of net income tax. Another way of looking at this is to compare these taxpayers' contribution to total net income tax, and to total giving. Taxpayers earning more than \$1,000,000 make up

	Total Taxpayers	% Tax- payers	Claiming Deduc- tion	% Givers	\$ Amount	% Given	Average Donation/ Giver	Average Taxable Income*	Average Net Tax Paid*
Less than \$15,000	2,747,971	25.77	397,538	14.47	45,728,186	4.77	115.03	7,976.29	297.32
\$15,001-\$20,000	921,662	8.64	266,528	28.92	35,556,799	3.71	133.41	17,614.25	1,635.43
\$20,001-\$25,000	912,699	8.56	305,322	33.45	44,325,316	4.62	145.18	22,498.85	3,016.00
\$25,001-\$35,000	1,796,184	16.84	698,974	38.91	104,872,330	10.93	150.04	29,907.25	5,529.92
\$35,001-\$50,000	2,022,931	18.97	887,479	43.87	156,067,412	16.27	175.85	42,024.48	9,291.28
\$50,001-\$100,000	1,916,200	17.97	975,838	50.93	270,046,769	28.15	276.73	64,711.94	16,494.05
\$100,001-\$500,000	334,998	3.14	185,271	55.31	195,948,852	20.42	1,057.63	159,559.47	53,825.22
\$500,001-\$1,000,000	8,635	0.08	5,183	60.02	39,714,576	4.14	7,662.47	664,281.66	266,955.07
\$1,000,001 or more	2,586	0.02	1,643	63.53	67,144,320	7.00	40,866.90	1,990,386.69	812,545.34

#### **Table 9: Charitable Giving**

Source: Data are sourced from the ATO, *Taxation Statistics 2002-03*. Gifts or Donations data are from Table 15, Taxable Income and Net Tax data from Table 12. \*Tables 12 and 15 have different numbers of taxpayers in each income category. Data manipulated from Table 12 are based on Table 12 taxpayer numbers, and data manipulated from Table 15 are based on Table 15 taxpayer numbers.

#### Table 10: International Comparisons of charitable donations

Country	Giving	Corporate Tax Rate	Personal Tax Rate	Total Tax Revenue
Australia	0.34	36.00	47.00	31.80
Austria	0.17	34.00	50.00	43.40
Belgium	0.44	40.20	58.00	45.70
Czech Republic	0.23	31.00	32.00	39.00
Finland	0.28	29.00	51.00	48.00
France	0.28	36.70	54.00	45.20
Germany	0.13	51.60	56.00	37.80
Hungary	0.60	18.00	40.00	39.00
Ireland	0.55	24.00	42.00	32.20
Italy	0.09	41.30	51.00	43.20
Japan	0.14	42.00	50.00	27.10
Mexico	0.04	35.00	40.00	18.50
Netherlands	0.37	35.00	52.00	41.20
Norway	0.26	28.00	48.00	43.20
Poland	0.28	30.00	40.00	32.50
Slovakia	0.36	29.00	42.00	34.00
South Korea	0.18	30.80	44.00	23.60
Spain	0.87	35.00	48.00	35.20
Sweden	0.40	28.00	51.00	53.80
UK	0.62	30.00	40.00	37.40
US	1.01	40.00	40.00	29.90
Correlation		-0.2262	-0.2262	0.0234

Source: Giving Data (includes cash or in-kind gifts by individuals, corporations, and foundations) is from Lester Salamon, S. Wojciech Sokolowski, and Associates, *Global Civil Society: Dimensions of the Nonprofit Sector*, Volume Two (Kumarian Press, 2004). Data available at http://www.jhu.edu/~cnp/pdf/comptable5\_dec04.pdf. Personal Tax data are from James Gwartney and Robert Lawson, *Economic Freedom of the World 2003*. Corporate tax rates are from the Cato Institute KPMG data. Personal and Corporate tax data are for 2000. Tax data can be downloaded from the Cato Institute http://www.cato.org/research/fiscal\_policy/2003/factsfigs.html. Total Tax Revenue is collected from the OECD, *Revenue Statistics 1965-2003*.

about 0.02 percent of the taxpaying population; they earn 1.28 percent of total income but pay 2.39 percent of total net income tax. They contribute 7 percent of total 'Gifts or donations'. Based on figures such as this, it is hard to justify the notion that the wealthy need to be motivated to 'pull their weight and give back appropriately'. Not only do high-income earners pull more than their weight in the philanthropy area, they pull more than their weight in taxation too.

Petre refers to research undertaken by the Asia-Pacific Centre for Philanthropy and Social Investment.<sup>108</sup> This research, commissioned by the Petre Foundation, compares philanthropy in Australia to that in the UK and US. Petre argues the comparison 'paints a rather bleak picture of philanthropy and *our* wealthy' (emphasis added).<sup>109</sup> In Table 8, I report a far larger cross-section of comparative data. The Asia-Pacific Report only contains data for Australia, Canada, the UK and US. The data in Table 10 are for 21 OECD economies. The data in the first column (Giving) is the average sum of cash and in-kind gifts by individuals, corporations and foundations to GDP to the period 1995-2000. The next two columns are the top marginal corporate tax rate and personal tax rate for the year 2000; the final column is the total tax revenue (from all sources and all levels of government) to GDP ratio for the year 2000.

Looking at the Giving data, Australia's performance is average. The average for the 21 OECD economies is 0.36 percent of GDP, and Australia records 0.34 percent of GDP. The US is an outlier;

with a Giving ratio of 1.01 percent of GDP levels of philanthropy are extremely high. When I recalculate the Giving ratio excluding the US, the overall average falls to 0.33 percent. The median ratio is 0.28 percent. On these latter two measures Australian philanthropy is slightly above average. The UK and US, however, are high-philanthropic countries. It is unsurprising Australia performs poorly compared to these two economies. By way of comparison with the US, the top 5 percent of income earners in Australia paid an average tax rate of 37.9 percent in 2001-02, the top 5 percent of US income earners paid an average income tax rate of 22.95 percent in 2002.

Individuals give more the wealthier they become, but as taxes fall so the value of the tax deduction also falls—this is equivalent to an increase in price.

As an additional piece of analysis, I also looked at tax rates, and tax revenue in these economies. The final row of Table 10 includes the correlation between Giving and the tax measures. The correlation is -0.2262, indicating that high taxing economies tend to be low Giving economies. There is no relationship between Giving and the size of government. Results like this lend support to the notion that high tax rates crowd out voluntary giving.<sup>110</sup>

While charitable gifts increase with income, the real issue is whether they would increase with tax cuts? Answering this question requires economists to unravel income effects and price effects. Individuals give more the wealthier they become, but as taxes fall so the value of the tax deduction also falls—this is equivalent to an increase in price. One of these effects dominates the other, and it is the net effect we are interested in. Here the economic literature is mixed.

William Randolph, for example, reports the income effect dominates the price effect.<sup>111</sup> By contrast, Gerald Auten, Charles Clotfelter and Richard Schmalbeck provide 'a rough and tentative' analysis of charitable giving following the 1982 and 1986 US tax reforms.<sup>112</sup> They suggest the price effect dominates the income effect. Unfortunately they provide no sensitivity analysis to confirm their results—they simply state the implied income elasticities are small. They also admit their analysis is 'based on the implicit assumption that nothing else changed ... to affect the giving behavior of taxpayers'.<sup>113</sup> It is an open question as to which of these studies is a closer approximation to actual responses and which of the effects would dominate in Australia. In the absence of death duties, for example, both the income and price effects would be lower in Australia.

In general, however, if we want individuals and corporations to donate more to charity, we should advocate policies that increase levels of income (and subsequently wealth) in the economy. The results in Table 10 suggest high levels of taxation—especially high rates of taxation—crowd out philanthropy.

#### CONCLUSION

In this monograph I have shown first, that tax cuts are as fair as the tax system, for tax cuts 'return' income at the same rate as it is raised. It is hypocritical of the defenders of high taxation to argue

that tax cuts are unfair; given that they argue simultaneously that progressive taxation is fair.

Secondly, we have seen that cuts in marginal tax rates induce people to work harder in situations where they have an effective choice as between work and leisure hours. High marginal tax rates lead to fewer hours' worked and less productive behaviour in the economy. This effect is most noticeable for high-income earners. Furthermore, high tax rates inhibit small business formation and give rise to labour market discrimination against less-skilled workers.

Thirdly, lower marginal tax rates can raise more government revenue and stimulate growth at the same time. Of course, if government wished to maximise the economic growth rate they would have to lower tax rates and decrease government revenue too. Big government inhibits growth. While the Australian government is small by OECD standards, nonetheless it is probably bigger than the growth maximisation size.

Some readers may take the view that the 2005 budget, with its tax relief, is largely vindicated by the evidence discussed in this paper. As Gittins has argued, the government wants to encourage greater work effort and delayed retirement. But the economic literature is quite clear: *High tax rates cause the damage.* The 2005 budget did not modify tax rates; except for the very bottom it increased income thresholds instead. The top marginal tax rate remained unchanged. True, the government has put money back in people's pockets, but it has done so in the least efficient manner possible. Having incurred the political costs of tax relief, few of the economic benefits of tax reform will have been realised.<sup>114</sup> Inflation, economic growth and time will conspire to undo the 2005 tax relief, sooner rather than later.

#### ENDNOTES

- <sup>1</sup> I have discussed this in Peter Saunders 'What is fair about a fair go?' *Policy* 10:1 (2004), 3-10.
- <sup>2</sup> Sinclair Davidson, Who Pays The Lion's Share of Income Tax?, Policy Monograph 63 (Sydney: CIS, 2004).
- <sup>3</sup> Lauchlan Chipman, *The Very Idea of a Flat Tax*, Policy Monograph 66 (Sydney: CIS, 2004).
- <sup>4</sup> Peter Burn, *How Highly Taxed Are We? The Level And Composition of Taxation in Australia and the OECD*, Policy Monograph 67 (Sydney: CIS, 2005).
- <sup>5</sup> These data are updated from those presented in Davidson 2004a.
- <sup>6</sup> Paul A. Samuelson, *Foundations of Economic Analysis Enlarged Edition* (Cambridge, Mass.: Harvard University Press, 1947 [1983]), 227, fn. 26.
- <sup>7</sup> Arnold Jacob Cohen Stuart, 1889, 'On progressive taxation', In Richard A. Musgrave and Alan T. Peacock, *Classics in the Theory of Public Finance* (Macmillan: London, 1958 [1967]), 60.
- <sup>8</sup> As James M. Buchanan has indicated, 'to the extent that value judgements enter the discussion, genuine 'scientific' analysis comes to an end.' In *Public Finance in Democratic Process: Fiscal Institutions and Individual Choice* (Indianapolis: Liberty Fund, 1967 [1999]), 228.
- <sup>9</sup> Knut Wicksell, 1896, 'A new principle of just taxation' In Richard A. Musgrave and Alan T. Peacock, *Classics in the Theory of Public Finance* (London: Macmillan, 1958 [1967]), 83.
- <sup>10</sup> James M. Buchanan, 'Democratic values in Taxation', In *The Collected Works of James M. Buchanan*, Volume 14 (Indianapolis: Liberty Fund, 1999), 36-37.
- <sup>11</sup> See Davidson, *Who Pays The Lion's Share of Income Tax?*, ibid. Sinclair Davidson, 'Taxation with misrepresentation: Australia's revenue lobby in denial', *Policy* 20:4 (2004), 31- 37. For a New Zealand discussion see Sinclair Davidson, 'Personal income tax in New Zealand: Who pays and is progressive taxation justified?' (Wellington: New Zealand Business Roundtable, 2005).
- <sup>12</sup> The AES can be accessed via the Australian Social Science Data Archive. Those who carried out the original analysis and collection of the data bear no responsibility for my analysis or interpretation of the data. The AES consists of a stratified systematic random sampling of the Commonwealth Electoral Roll. The sample is selected by population weights. Data are collected by mail. A total of 4,250 surveys were posted out. The final response rate was 4 percent with 1769 completed returns. Full details are available at http://assdu.edu.au.
- <sup>13</sup> In Davidson 2004b I dealt with the notion that the total tax burden was proportional. This is incorrect, the income tax and the total tax burden, in Australia, is progressive.
- <sup>14</sup> A reviewer suggested that individuals are not ignorant of the tax system. Rather respondents were able to differentiate between gross income and taxable income. In other words, the 30 percent who thought low-income earners pay more tax than high-income earners might have been taking tax deductions into account. Tax deductions, however, cannot possibly explain this result. Using ATO data I calculated the ratio of taxable income to total income. This ratio rises as income rises. In order for the referees point to be correct the ratio would have to decline as income rises.
- <sup>15</sup> Comparing responses to G20 and D13. Table available on request.
- <sup>16</sup> Comparing responses to G20 and D1. Table available on request.
- <sup>17</sup> Comparing responses to G20 and D2. Table available on request.
- <sup>18</sup> Comparing responses to G20 and D14. Table available on request. Income tax rates have not risen since 2001. Many taxpayers, however, through the operation of bracket creep may have found themselves paying more tax.
- <sup>19</sup> Comparing responses to G20 and E1. Table available on request.
- <sup>20</sup> Comparing responses to G20 and I16. Table available on request.
- <sup>21</sup> Comparing responses to I18 and G20. Table available on request.
- <sup>22</sup> James M. Buchanan, 'Democratic values in taxation', In *The Collected Works of James M. Buchanan*, 42.
- <sup>23</sup> Cathy Buchanan and Peter Hartley, *Equity as a Social Goal* (Wellington: New Zealand Business Roundtable, 2000), 183.
- <sup>24</sup> Edward C. Prescott, 'The elasticity of labor supply and the consequences for tax policy', In Alan J. Auerbach and Kevin A. Hassett (eds) *Toward Fundamental Tax Reform* (Washington: The AEI Press, 2005), 127.
- <sup>25</sup> Ross Gittens, 'Economists forget their model when it suits them', *The Sydney Morning Herald* (23 May 2005).
- <sup>26</sup> Gittens, ibid.
- <sup>27</sup> Joel B. Slemrod, 'The Economics of Taxing the Rich', In Joel B. Slemrod (ed) *Does Atlas Shrug? The Economics of Taxing the Rich* (Cambridge, Mass: Harvard University Press, 2000).
- <sup>28</sup> Australian Bureau of Statistics, 'Forms of employment', Cat. 6359.0 (November 2004), 3. This implies there are more owner-managers in Australia than trade unionists in the non-public sector of the

economy.

- <sup>29</sup> Peter Martin, 'Tax cuts don't make us work harder', *The Sydney Morning Herald* (30 March 2005).
- <sup>30</sup> Henry S. Farber, 'Is tomorrow another day? The labor supply of New York City cabdrivers', *The Journal of Political Economy* 113:1 (2005), 46-82.
- <sup>31</sup> Colin Camerer, Linda Babcock, George Loewenstein, and Richard Thaler, 'Labor supply of New York City cabdrivers: One day at a time', *Quarterly Journal of Economics* 112 (1997), 407-441.
- <sup>32</sup> Mark H. Showalter and Norman K. Turston, 'Taxes and labor supply of high-income physicians', *Journal* of *Public Economics* 66 (1997), 73-97.
- <sup>33</sup> Unlike the NTR literature, this study is not employing a tax reform event as a natural experiment to observe behaviour. In this study, state income taxes provide cross-sectional variation.
- <sup>34</sup> The implications for rural Australia are obvious. To the extent this study is generalisable to Australia, high rates of taxation are partially responsible for poor medical coverage in rural and regional areas.
- <sup>35</sup> Purists may argue that this calculation is performed 'out of context' and is invalid. Perhaps. Oklahoma, however, had a 17 percent state income tax. If they were to abolish that state tax, the numbers would work out precisely as I have calculated here.
- <sup>36</sup> Edward C. Prescott, 'Why do Americans work so much harder than Europeans?', *Federal Reserve Bank* of *Minneapolis Quarterly Review* 28:1 (2004), 2-13.

- <sup>38</sup> Alberto Alesina, Edward Glaeser and Bruce Sacerdote, 'Work and leisure in the US and Europe: Why so different?' *NBER Macroeconomic Annual 2005* (Forthcoming). To be fair to the authors, my analysis is drawn from a working paper version. The final paper may differ from the version I have available to me.
- <sup>39</sup> Steven J. Davis and Magnus Henrekson, 'Tax effects on work activity, industry mix and shadow economy size: Evidence from rich-country comparisons', National Bureau of Economic Research Working Paper 10509 (2004) www.nber.org/papers/w10509
- <sup>40</sup> Donald Bruce and Tami Gurley, 'Taxes and entrepreneurial activity: An empirical investigation using longitudinal tax return data', (2005) United States Small Business Administration, available from http:// www.sba.gov/advo/research/rs252tot.pdf
- <sup>41</sup> Robert Carroll, Douglas Holtz-Eakin, Mark Rider and Harvey S. Rosen, 'Entrepreneurs, income taxes, and investment', In Joel B. Slemrod (ed). *Does Atlas Shrug? The Economics of Taxing the Rich* (Cambridge, Mass: Harvard University Press, 2000).
- <sup>42</sup> Robert Carroll, Douglas Holtz-Eakin, Mark Rider and Harvey S. Rosen, 'Income taxes and entrepreneurs' use of labor', *Journal of Labor Economics* 18:2 (2000), 324-351.
- <sup>43</sup> Robert Carroll, Douglas Holtz-Eakin, Mark Rider and Harvey S. Rosen, Personal income taxes and the growth of small firms', In James M. Poterba (ed). *Tax Policy and the Economy* 15 (Cambridge, Mass: MIT Press, 2001).
- <sup>44</sup> They still call Australia home: Inquiry into Australian expatriates. The Senate, Commonwealth of Australia (March 2005), ISBN 0 642 71502 5.
- <sup>45</sup> G. Hugo, D. Rudd and K. Harris, Australia's *Diaspora: Its Size, Nature and Policy Implications*, Final Report (Committee for Economic Development of Australia, July 2003).
- <sup>46</sup> M. Fullilove and C. Flutter, *Diaspora: The World Wide Web of Australians*, Lowy Institute Paper 4 (Sydney: Lowy Institute for International Policy, November 2004). Michael Fullilove kindly provided a copy of the report.
- <sup>47</sup> Business Council of Australia, *Taxation Action Plan for Future Prosperity* (April 2005). Available at www. bca.com.au
- <sup>48</sup> Australian Chamber of Commerce and Industry, *Taxation Reform Blueprint: A Strategy for the Australian Taxation System 2004 2014* (November 2004), ix.
- <sup>49</sup> Bolkus Report, ibid, 81-83.
- <sup>50</sup> Bolkus Report, ibid, 82.
- <sup>51</sup> Ross Gittins, 'Work: less an ethic, more an order', *The Sydney Morning Herald* (8 June 2005), (emphasis original).
- <sup>52</sup> Ross Gittins, 'Ponder higher taxes at your leisure', *Sydney Morning Herald* (13 April 2005).
- <sup>53</sup> Richard Layard, 'Happiness: Lessons from a new science', A Brookings Briefing (9 February 2005), available at http://www.brookings.edu/dybdocroot/comm/events/20050209happiness.pdf

- <sup>55</sup> James M. Buchanan, *Ethics and economic progress* (Norman: University of Oklahoma Press, 1994).
- <sup>56</sup> Buchanan, ibid, 5.
- <sup>57</sup> Of course, this is a value judgement on Buchanan's part and many economists—as he recognises—may not be convinced by his argument.

<sup>&</sup>lt;sup>37</sup> Prescott, ibid, 8.

<sup>&</sup>lt;sup>54</sup> Layard, ibid.

- <sup>58</sup> Max Moser, 'A comment on the Laffer model', *The Cato Journal* 1:1 (1981), 23-44.
- <sup>59</sup> Arthur B. Laffer, 'Government exactions and revenue deficiencies', *The Cato Journal* 1:1 (1981), 1-21.
- <sup>60</sup> John F. Kennedy, 'Address to the Economic Club of New York', 14 December 1962, available at http:// www.americanrhetoric.com/speeches/jfkeconomicclubaddress.html. James Buchanan and Richard Wagner describe the Kennedy tax cut as being 'purely Keynesian'. Irrespective of the debate between Keynesians and supply-side economics, the fact remains tax cuts lead to an increase in tax revenue. See Buchanan and Wagner, *Democracy in Deficit: The Political Legacy of Lord Keynes* (Indianapolis: Liberty Fund, 1977 [1998]), 50-52.
- <sup>61</sup> See Bob Schwartz, 'Throwing an economic curve ball', *Australian Financial Review* (19 July 2005), 55. He argues the 'Laffer curve itself is a joke' yet also concedes 'his intuition was not wrong'.
- <sup>62</sup> Don Fullerton, 'On the possibility of an inverse relationship between tax rates and government revenues', *Journal of Public Economics* 19 (1980), 3-22.
- <sup>63</sup> Fullerton, ibid, 20.
- <sup>64</sup> Charles E. Stuart, 'Swedish tax rates, labor supply, and tax revenues', *Journal of Political Economy* 89 (1981), 1020 -1038.
- <sup>65</sup> Laffer, ibid, Tables 1, 4 and 7.
- <sup>66</sup> Laffer, ibid, 11.
- <sup>67</sup> Laffer, ibid, 11.
- <sup>68</sup> Laffer, ibid, 3.
- <sup>69</sup> 'The notion that governments could raise more money by cutting rates is, indeed, a glorious idea. It would permit a Pareto improvement of the most enjoyable kind. Unfortunately for all of us, the data from the historical record suggest that it is unlikely to be true at anything like today's marginal tax rates. It seems that, for now at least, we will just have to keep paying for our tax cuts the old-fashioned way.' Austan Goolsbee, 'Evidence on the High-Income Laffer curve from six decades of tax reform', *Brookings Papers on Economic Activity*, 2 (1999), 44.
- <sup>70</sup> This was after George H. Bush had increased to the top marginal tax rate in 1991.
- <sup>71</sup> Martin Feldstein and Daniel Feenberg, 'The effect of increased tax rates on taxable income and economic efficiency: A preliminary analysis of the 1993 tax rate increases', National Bureau of Economic Research Working Paper 5370 (1995).
- <sup>72</sup> Alan Reynolds, 'Deficits, Interest Rates, and Taxes: Myths and Realities', *Policy Analysis* 517 (29 June 2004). Available at http://www.cato.org/pubs/pas/pa-517es.html
- <sup>73</sup> Stiglitz, ibid, 541.
- <sup>74</sup> Edward C. Prescott, 'The elasticity of labor supply', In Alan J. Auerbach and Kevin A. Hassett (eds) *Toward Fundamental Tax Reform* (Washington, DC: The AEI Press, 2005), 127.
- <sup>75</sup> General Government Accounts (OECD, 2004) available at http://www.oecd.org/ dataoecd/42/47/33784603.xls.
- <sup>76</sup> Prescott (ibid) points out that US government debt continued to increase until the late 1990s when, as a consequence of the high-tech boom 'people worked more, output increased, incomes climbed, and tax revenue followed suit. You cannot tax your way to that sort of prosperity' (127).
- <sup>77</sup> Data from the Cato Institute, available from http://www.cato.org/research/fiscal\_policy/2003/images/ int1-big.gif.
- <sup>78</sup> General Government Accounts (OECD, 2004), ibid.
- <sup>79</sup> A (one sided) t-test for the equality of means returned a p-value of 0.4084. In other words I am unable to reject the hypothesis that tax cuts across these two groups of economies were equal.
- <sup>80</sup> Stephen Moore, 'Laffing to the bank', Asian Wall Street Journal (14 June 2004), A13.
- <sup>81</sup> Unfortunately, the equivalent 1 percent figure for Australia is not public knowledge. Those Australians, in 2003, who earned above \$500,000 made up 0.12 percent of the taxpaying population had 2.73 percent of the total taxable income, contributed 5.01 percent of total net income tax and faced an average income tax rate of 45.82 percent.
- <sup>82</sup> Austan Goolsbee coined the phrase 'new tax responsiveness literature' in his 2000 paper 'It's not about the money: Why natural experiments don't work on the rich', In Joel B. Slemrod (ed). *Does Atlas Shrug? The Economics of Taxing the Rich* (Cambridge, Mass: Harvard University Press: 2000).
- <sup>83</sup> See Alex Robson, *The Costs of Taxation* (Sydney: CIS, 2005).
- <sup>84</sup> See Martin Feldstein, 'Behavioral responses to tax rates: Evidence from the Tax Reform Act of 1986', *American Economic Review* 85:2 (1996), 170 4 for an overview of the underlying logic to the NTR literature, and a discussion of early results.
- <sup>85</sup> Ross Gittens, 'Work: less an ethic, more an order'.
- <sup>86</sup> Jon Gruber and Emmanuel Saez, 'The elasticity of taxable income: evidence and implications', *Journal of Public Economics* 84:1 (2002), 32.

- <sup>87</sup> Daniel Feenberg, 'Commentary of chapter 6', In Joel B. Slemrod (ed). *Does Atlas Shrug? The Economics of Taxing the Rich* (Cambridge, Mass: Harvard University Press, 2000).
- <sup>88</sup> Joel Slemrod, 'My beautiful tax reform', In Alan J. Auerbach and Kevin A. Hassett (eds) *Toward Fundamental Tax Reform* (Washington: The AEI Press, 2005). 138.
- <sup>89</sup> Austan Goolsbee, 'Evidence on the High-Income Laffer curve from six decades of tax reform', *Brookings Papers on Economic Activity* 2 (1995), 1-64.
- <sup>90</sup> Lawrence F. Katz, 'Discussion and Comments' in Goolsbee, ibid, 56.
- <sup>91</sup> Robert E. Hall, 'Discussion and Comments' in Goolsbee, ibid, 51.
- <sup>92</sup> Joel Slemrod and Wojciech Kopczuk, 2002, 'The optimal elasticity of taxable income', *Journal of Public Economics*, 84(1), 91-112.
- <sup>93</sup> Paul A. Samuelson and William D. Nordhaus, *Economics*, Fifteenth edition (McGraw-Hill, 1995), 315.
- <sup>94</sup> Don Fullerton, ibid. See especially 15.
- <sup>95</sup> Samuelson and Bordhaus, ibid, 316.
- <sup>96</sup> N. Gregory Mankiw, *Principles of Economics* (Fort Worth: Dryden Press, 1997), 166-169. The Australian editions of the book contain the same wording.
- <sup>97</sup> James D. Gwartney and Richard L. Stroup, *Economics: Private and Public Choice* (Fort Worth: Dryden Press, 1997).
- <sup>98</sup> Gerald W. Scully, 'Tax rates, tax revenues and economic growth', National Center for Policy Analysis, NCPA Policy Report No. 98 (March 1991). Scully used a similar technique when advising the New Zealand government. This lead to substantial controversy in the late 1990s.
- <sup>99</sup> Colin Clark, 'Public finance and changes in the value of money', The Economic Journal 55:220 (1945), 371-389. He argued 'the critical limit of taxation is about 25% of the national income, or possible rather less' 376.
- <sup>100</sup> OECD in Figures 2004 Edition. These are unweighted numbers. Of course, when making intercountry comparisons a weighted comparison should be made. See Peter Burn, ibid. In this instance, however, I am interested in tax jurisdictions and not average tax rates, consequently unweighted data are used in the analysis.
- <sup>101</sup> Alex Robson, *The Costs of Taxation* (Sydney: CIS, 2005), 12, emphasis original.
- <sup>102</sup> Gerald W. Scully, 'Optimal taxation, economic growth and income inequality', *Public Choice* 115 (2003), 299-312.
- <sup>103</sup> James M. Buchanan and Dwight R. Lee, 'Tax rates and tax revenues in political equilibrium: Some simple analytics', *Economic Inquiry* 20 (1982), 344-354. James M. Buchanan and Dwight R. Lee, 'Politics, time, and the Laffer curve', *Journal of Political Economy* 90 (1982), 816-819. A simple version of these papers is set out in Geoffrey Brennan and James M. Buchanan, *The Reason of Rules: Constitutional Political Economy* (Indianapolis: Liberty Fund, 1985 [2000]), 94-101.

- <sup>105</sup> David Altig, Alan J. Auerbach, Laurence J. Kotlikoff, Kent A. Summers, 'Simulating fundamental tax reform in the US', *American Economic Review* 91 (2001), 574-595.
- <sup>106</sup> http://www.petrefoundation.org.au/
- <sup>107</sup> Daniel Petre, 'It's a bit rich: the wealthy can give far more', *The Sydney Morning Herald* (5 April 2005).
- <sup>108</sup> Denis Tracey and Christopher Baker, 'How the wealthy Give: Comparisons Between Australia and Comparable Countries (USA, Britain and Canada)' (Melbourne: Asia-Pacific Centre for Philanthropy and Social Investment, Swinburne University of Technology, October 2004).
- <sup>109</sup> Note the phrase 'our wealthy'. In Davidson 2005 I noted progressive tax policy becomes a perverse tragedy of the commons, where 'the wealthy' or 'our wealthy' become a community resource that can be tapped at any time, for any purpose.
- <sup>110</sup> This result should be treated with some caution. Correlations do not imply causation. In any event, while apparently large, the correlation is not statistically significant. On the other hand, the sample size is small. Increasing that sample may improve the significance of the correlation.
- <sup>111</sup> William C Randolph, 'Dynamic income, progressive taxes, and the timing of charitable contributions', *Journal of Political Economy* 103 (1995), 709-738.
- <sup>112</sup> Gerald E. Auten, Charles T. Clotfelter and Richard L. Schmalbeck, 'Taxes and Philanthropy among the Wealthy', In Joel B. Slemrod (ed). *Does Atlas Shrug? The Economics of Taxing the Rich* (Cambridge, Mass: Harvard University Press, 2000).
- <sup>113</sup> Auten et al. ibid, 417.
- <sup>114</sup> Although new research by economists at the ANU claims that the budget cuts will have substantial effects on work incentives, particularly for women and for lower income workers. See John Garnaut, 'Tax cut jackpot for hard workers' *Sydney Morning Herald* (11 August 2005).

<sup>&</sup>lt;sup>104</sup> Stuart, ibid, 1034.



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