# Australia's marginal tax rates, tax offsets and the Medicare levy

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Australia has a progressive personal income tax schedule with a seemingly simple five rate structure (including a zero rate). Overlaying the statutory tax schedule are more than 40 offsets designed to reduce tax liability for certain taxpayers. These offsets add complexity to the tax system and result in a person's tax liability being determined by several factors, not just their level of income as implied by the statutory schedule.

In this article, we discuss the adverse impacts of high levels of tax system complexity and list the offsets which are available in the personal income tax system. We describe the operation of the low income tax offset and the Medicare levy to illustrate how offsets and other features of the tax system can add complexity and reduce transparency.

1 The authors are from the Tax System Division, the Australian Treasury. This article has benefited from comments and suggestions provided by numerous colleagues, particularly Chris Barron, Aaron Bennett, Conan Brownbill, John Burge, Greg Clark, Anna Dawson, Amy Little, Daniel Nethery, Ed O'Halloran, David Parker, Greg Pinder, Sam Reinhardt, Mathew Toohey and Sean Vittadello. The views in this article are those of the authors and not necessarily those of the Australian Treasury.

## Introduction

Since the introduction of income tax at the federal level in 1915, Australia has had a progressive personal income tax schedule.[2] The earliest income taxes in Australia took the form of 'continuous income taxes', where each successive pound of income was taxed at a slightly higher rate. By the 1950s there were 29 tax rates and a top rate of 75 per cent. By the late 1970s the rate schedule had been stripped back to four rates with a top rate of 61.5 per cent.

Australia now has five published, or statutory, rates (including the zero marginal tax rate), making for a relatively simple rate schedule. However, overlaying the statutory schedule are over 40 tax offsets and the Medicare levy and Medicare levy surcharge. The tax offsets range from those which are claimed by large numbers of tax payers, such as the low income tax offset (LITO) to the relatively obscure (for example, dependent child housekeeper tax offset). Each offset has its own set of rules covering thresholds, withdrawal rates, value and interaction with other parts of the tax system.

The Australia's Future Tax System (AFTS) Review Panel (2009) recommended that tax offsets which alter personal income tax scales for a large number of tax payers, and the Medicare levy, be removed and incorporated into the personal income tax rate scales (Recommendation 5). It also recommended that most other tax offsets be replaced or rationalised in order to remove complexity and ensure that assistance is properly targeted (Recommendation 6). The Panel considered that both tax offsets and the Medicare levy introduce unnecessary complexity into the tax system and that tax offsets are not the most transparent, timely or well targeted mechanism for delivering assistance.

2 A progressive tax rate schedule is one where the tax rate increases, at set thresholds, as the taxable amount increases. This has the effect of increasing the average rate of tax paid.

In this paper we list the tax offsets available in the personal income tax system. As an illustration of how the personal income tax schedule can be affected by these offsets, we describe the operation of two of the most widely applicable features of the income tax system — the LITO and Medicare levy (for the 2009-10 income year[3]). We show that these two features introduce complexity into the tax system and move effective tax rates away from the simple five-rate schedule to a nine-rate schedule which has both increasing and decreasing marginal tax rates.

We begin with a description of Australia's statutory personal income tax schedule and a discussion of the costs, in general, of complexity and reduced transparency in the tax system.

## Australia's marginal tax rate schedule

Personal income tax is the single largest source of tax revenue and provides over 40 per cent of total Australian Government revenue collections and over 30 per cent of revenue from all levels of government (ATO 2010).

Australia has a progressive personal income tax system, achieved with a tax free threshold and four rising tax rates above this (shown in Table 1). Progressive personal income tax systems are commonplace throughout the OECD, with all but three of the 32 OECD countries adopting some form of progressivity in 2009 (OECD 2010).[4]

Chart 1 shows statutory and average tax rates over the income range of $0 to $200,000 and clearly shows the 'stepped' increases in the statutory rate scale.

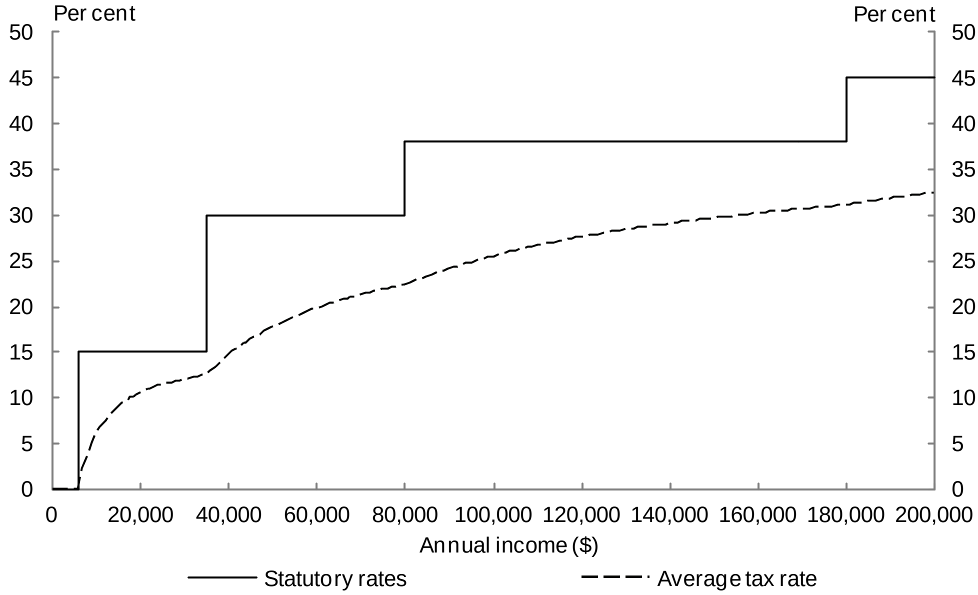
**Table 1: Statutory tax rates 2009-10**

| | Statutory |
|---|---|
| Income level | Marginal tax rate (per cent) |
| $0 - $6,000 | 0 |
| $6,001 - $35,000 | 15 |
| $35,001 - $80,000 | 30 |
| $80,001 - $180,000 | 38 |
| Above $180,000 | 45 |

3 As the Medicare levy low-income threshold (discussed later) is usually adjusted and published in May of each financial year, 2009-10 rates are used in this paper to ensure consistency between the statutory tax rates, LITO and Medicare levy. The tax schedules used in this paper are for Australian resident taxpayers only.

4 The Czech Republic, Iceland and the Slovak Republic have flat rates of tax.

**Chart 1: Statutory marginal and average tax schedule 2009-10**




At this point it is useful to define some concepts used in this paper. **Statutory marginal tax rates** are the legislated personal income tax rates as shown in Table 1. They are the amount of tax paid on each additional dollar earned over a threshold level in the absence of other taxes or transfers. For example, from the statutory rates in Table 1, an individual earning $35,001 per year has a marginal tax rate of 30 per cent and pays 30 cents of tax on the next dollar they earn. **Effective marginal tax rates** are the amounts of tax an individual pays on an additional dollar of income when all other government taxes, offsets and transfer payments are taken into account. Finally, **average tax rates** are the total amount of an individual's tax divided by their total income.

## Transparency and complexity

In a recent address, the Secretary to the Treasury noted that '… the [Australia's Future Tax System] review panel identified the complexity of the tax and transfer system as one of the key areas that posed a challenge to the equity, efficiency and sustainability of the tax system.' (Henry 2010).

While there is no single, universally accepted measure of complexity, making it difficult to determine actual levels, a large amount of complexity can create difficulties for those who interact with it.

A high level of complexity in the personal income tax system can reduce its transparency, making it difficult for individuals to understand its impact or respond to intended incentives. Dunstall and Reeson (2009) argue that when faced with complexity or uncertainty, individuals delay or avoid making decisions, choose (less than optimal) defaults and are more likely to follow misleading advice.

A highly complex tax system can create costs for taxpayers attempting to understand it. Individuals may be eligible for a number of offsets, depending on their characteristics and personal situation, not all of which are automatically applied. This provides opportunities for some taxpayers to pay less tax than similar individuals if they have greater knowledge of the tax system or the resources to acquire it, such as through engaging a tax agent.

Rather than bearing the costs of trying to understand the tax system, or paying an agent to meet compliance requirements, some individuals may provide inaccurate information, choose not to comply or pay more tax than they are required to. The AFTS Review noted that complexity has its greatest impact on those with the least capacity to deal with it (Australian Treasury 2008).

Holtzman (2007) finds that complexity and a lack of transparency can magnify doubts about a tax system’s fairness and decrease public confidence in a country’s tax laws and administration. Holtzman explains that if taxpayers do not believe that the tax system is credible, fair and easy to understand, voluntary compliance is likely to decline. Complex tax systems can also make it difficult for policy makers to effectively design policies while avoiding complex and unforseen interactions between different parts of the tax system.

The AFTS Review Panel (2009) discussed two broad approaches to addressing complexity. The first approach is to address complexity directly through changing the structure of the tax system itself. The second approach involves improving the interface between citizens and the tax and transfer system in order to filter the complexity in the underlying system. An example is the increased use of ‘pre-filling’ where third party information is provided to the Australian Taxation Office to be included in taxpayers’ returns.

These two broad approaches are not mutually exclusive and can be pursued simultaneously. However, it is important to ensure that in progressing the user interface approach sufficient attention is paid to reducing the underlying causes of complexity. Even the best designed system is unlikely to have an unlimited capacity to absorb complexity while maintaining a simple interface for end users.

The Australian tax system includes over 40 tax offsets, all of which have their own rules and consequences. Taxpayers are also required to pay a Medicare levy with complicated phase in arrangements and differential treatment for singles and couples.

This introduces complexity and reduces the transparency of the tax system creating higher compliance costs for taxpayers and administration costs for the government.

This paper examines the low income tax offset (LITO) and the Medicare levy (as they affect the majority of Australian tax payers) to illustrate the complexity that can be introduced into the tax system.

## Tax offsets

A tax offset is a mechanism for providing targeted tax relief to taxpayers with particular characteristics or particular types of income or expenses. Offsets reduce the amount of tax which a taxpayer is otherwise liable to pay. In contrast, deductions reduce the amount of taxable income on which a taxpayer has to pay tax.

More than 40 tax offsets have been introduced into Australia's personal income tax system by successive governments to provide benefits to particular groups of people.

The purpose of these offsets varies quite significantly, for example:

- The LITO has the effect of increasing the tax free threshold for low income earners only.
- The pension income tax offset and the beneficiary tax offset ensure that tax is not payable by certain taxpayers on transfer payments.
- The mature aged worker tax offset aims to encourage mature aged workers (aged 55 and over) to stay in the workforce.
- The entrepreneurs tax offset aims to provide tax relief to the owners of small businesses with annual turnover less than $75,000.
- The medical expenses tax offset and the education tax offset reduce the costs of medical expenses and educating children, respectively.

As illustrated above, tax offsets use the tax system to achieve policy objectives such as promoting progressivity, rewarding or encouraging certain types of behaviour or to reducing the costs of certain expenses.

The effectiveness of tax offsets to provide assistance can be limited as they only benefit people with a tax liability. Also, to the extent that tax offsets are not readily understood, and so are not claimed by all taxpayers who are eligible to claim them, their effectiveness can be reduced.

Offsets also introduce complexity into the tax system as they result in a person's tax liability being determined by a range of factors (for example, residential location, age, and living arrangements) other than their level of income. Thus there is a trade off between providing assistance through tax offsets and the complexity that they introduce.

The major tax offsets, their total value to taxpayers and the number of recipients for the 2007-08 income year are shown in Box 1. A list of other tax offsets that are available to Australian taxpayers are in Attachment A.

## The low income tax offset

The LITO is the most widely available offset and is effective for all resident taxpayers who have incomes below $63,750 (in 2009-10). In 2007-08 the LITO was received by around 6.9 million taxpayers (ATO 2010).

The LITO was originally introduced in 1993 as a maximum non-refundable offset of $150. It has been increased several times since 2003-04 and now provides a maximum non-refundable offset of $1,350 in 2009-10[5] for taxpayers with incomes of $30,000 or less.[6] This provides lower income earners with a higher effective tax free threshold ($15,000 compared with a statutory threshold of $6,000). For incomes above $30,000, the LITO amount is clawed back (tapered) at a rate of four cents in the dollar until it completely phases out at $63,750.

The effect of the LITO on the tax schedule is shown in Chart 2. Individuals with incomes between $30,000 and $63,750 face higher marginal tax rates than would be the case if only the statutory marginal rates were applied. Chart 2 shows that marginal tax rates rise and fall as income increases, a move away from the 'stepped' scale given by the statutory rates (though average tax rates continue to rise with income).

The LITO reduces transparency as it makes it more difficult for taxpayers to understand what their marginal tax rate is at any given level of income. The statutory marginal rates are readily available on the Australian Taxation Office website; however, the effective rates incorporating the LITO are not.

5 This amount has increased to $1,500 in 2010-11.
6 In contrast, the tax free threshold has remained at $6,000 since 2000-01.

**Box 1: Major tax offsets (2007-08 income year)**

| Offset | Value of entitlement ($million) | Number of recipients |
|---|---|---|
| Franking tax offsets | 11,381 | 3,484,210 |
| Low income tax offset | 3,714 | 6,867,635 |
| Senior Australians tax offset | 1,239 | 652,530 |
| Termination payment tax offset | 840 | 145,060 |
| Spouse tax offset | 648 | 401,625 |
| Superannuation contributions tax offset | 580 | 227,280 |
| Mature age worker tax offset | 546 | 1,264,380 |
| Pension income tax offset | 495 | 302,695 |
| Medical expenses tax offset | 493 | 766,095 |
| Private health insurance tax offset[(a)] | 259 | 259,320 |
| Zone and overseas forces tax offset | 258 | 591,910 |
| Entrepreneurs' tax offset | 184 | 397,785 |
| Beneficiary tax offset | 149 | 293,935 |
| Averaging tax offset | 130 | 85,655 |
| First child tax offset | 95 | 175,650 |

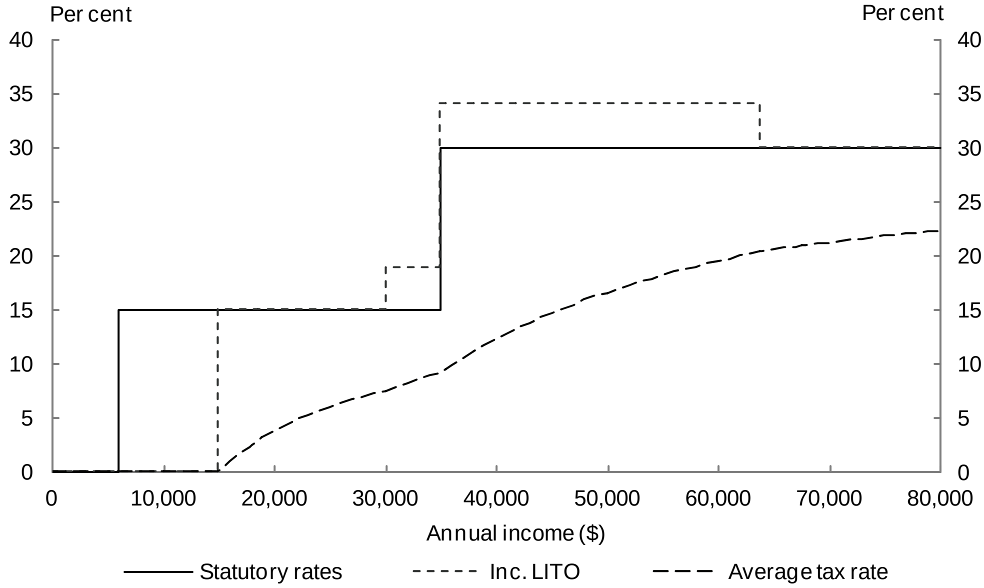
(a) This refers to the amount of the private health insurance rebate which is claimed as a tax offset in tax returns. The majority of taxpayers claim the rebate as a reduction in premiums payable.
Source: Australian Taxation Office 2010, *Taxation Statistics 2007-08*, Personal tax, Table 14, Part D Tax offset items.

**Table 2: Statutory tax rates and effective tax rates including LITO 2009-10**

| Statutory | | Effective rates including LITO | |
|---|---|---|---|
| Income level | Marginal tax rate (per cent) | Income level | Marginal tax rate (per cent) |
| $0 - $6,000 | 0 | $0 - $15,000 | 0 |
| $6,001 - $35,000 | 15 | $15,001 - $30,000 | 15 |
| $35,001 - $80,000 | 30 | $30,001 - $35,000 | 19 |
| $80,001 - $180,000 | 38 | $35,001 - $63,750 | 34 |
| Above $180,000 | 45 | $63,751 - $ 80,000 | 30 |
| | | $80,001 - $180,000 | 38 |
| | | Above $180,000 | 45 |

The LITO also interacts with other parts of the tax system. For example, through its interaction with the unearned income of minors, the LITO effectively allows an increase in the amount of unearned income (such as a distribution from a trust) that a minor can receive which is not subject to tax (from $416 to $3,333 for the 2010-11 income year).

**Chart 2: Effective rates including LITO 2009-10[(a)]**




(a) Annual incomes up to $80,000 shown. The marginal tax rates above $63,750 are unaffected by the LITO.

# Medicare levy

The Medicare levy is a levy of 1.5 per cent on all taxable income.[7] It was originally introduced in 1984 to assist with funding the Medicare system. In 2008-09, the Medicare levy raised around $8 billion. With the cost of Medicare for 2008-09 at around $19 billion, the majority of its funding is met from general tax revenues. The following discussion explores the Medicare levy and the complexities that it introduces into the effective tax rate schedule.

## Medicare low-income threshold for individuals

The Medicare levy low-income threshold provides an exemption from the Medicare levy for people with incomes below $18,488[8], higher thresholds apply for taxpayers eligible for the Senior Australian tax offset and the Pensioner tax offset. To date, the government has increased the Medicare low-income threshold each year in line with CPI growth.

Between $18,488 and $21,750 the Medicare levy is effectively shaded-in and collected at a rate of 10 per cent of taxable income. The shade in is effectively a revenue catch-up

7 Certain superannuation lump sums are exempt.
8 For the year 2009-10.

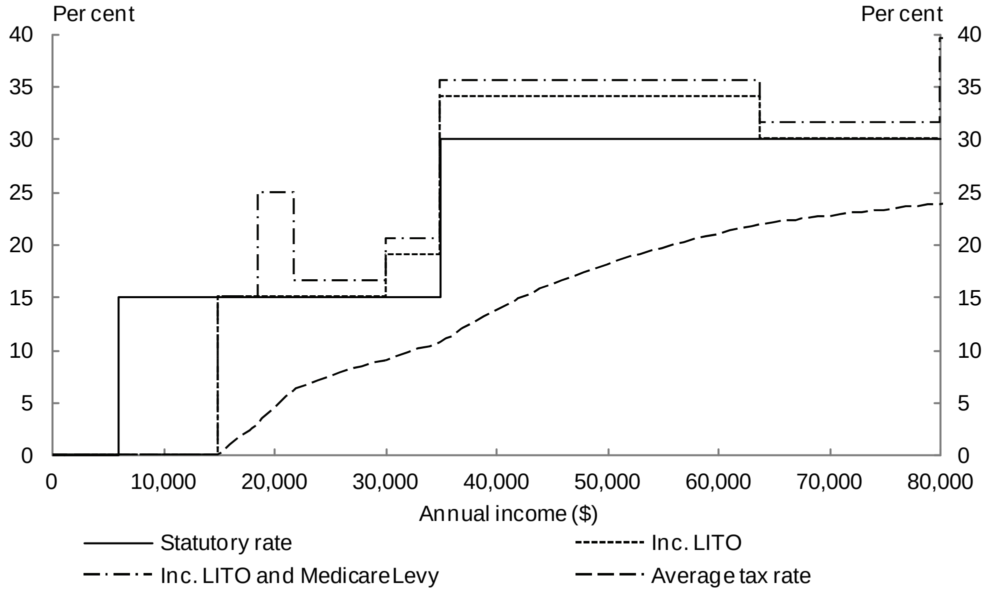
for incomes above the Medicare levy low-income threshold. Once the amount of Medicare levy paid is equivalent to 1.5 percent on all income (at $21,750), the standard Medicare levy rate applies.

The low-income threshold and shade-in range increases the number, and level, of effective tax rates and decreases the transparency of the marginal tax rate schedule. Table 3 shows the tax rate schedule for a combination of the LITO and Medicare levy for a single individual with no dependants. The LITO and Medicare levy combine to produce nine marginal tax brackets.

**Table 3: Marginal rates of tax for an individual with no dependants 2009-10**

| Statutory | | Effective rates including LITO | | Effective rates including LITO and Medicare levy | |
|---|---|---|---|---|---|
| Income level | Marginal tax rate (per cent) | Income level | Marginal tax rate (per cent) | Income level | Marginal tax rate (per cent) |
| $0 - $6,000 | 0 | $0 - $15,000 | 0 | $0 - $15,000 | 0 |
| $6,001 - $35,000 | 15 | $15,001 - $30,000 | 15 | $15,001 - $18,488 | 15 |
| $35,001 - $80,000 | 30 | $30,001 - $35,000 | 19 | $18,489 - $21,750 | 25 |
| $80,001 - $180,000 | 38 | $35,001 - $63,750 | 34 | $21,751 - $30,000 | 16.5 |
| Above $180,000 | 45 | $63,751 - $ 80,000 | 30 | $30,001 - $35,000 | 20.5 |
| | | $80,001 - $180,000 | 38 | $35,001 - $63,750 | 35.5 |
| | | Above $180,000 | 45 | $63,751 - 80,000 | 31.5 |
| | | | | $80,001 - $180,000 | 39.5 |
| | | | | Above $180,000 | 46.5 |

**Chart 3: Effective rates for a single individual with no dependants 2009-10[(a)]**




(a) Annual incomes up to $80,000 shown. The marginal tax rates above $63,750 are unaffected by the LITO and would simply be 1.5 per cent higher than the statutory rates.

## Medicare levy — schedule for couples and those with dependants

In contrast to the statutory personal income tax rates which apply to individual income only, there is a mixture of income treatments for individuals and families for Medicare levy purposes. The levy paid by an individual is determined by reference to their marital status, number of dependants, income, partner's income and, depending on certain conditions, the ratio of these incomes. For example:

> Andrew and Rebecca are married with no children. Andrew earns an annual income of $19,000 and Rebecca earns $17,000. In this situation Rebecca would not be liable for any Medicare levy but Andrew would pay a levy reduced by a 'reduction amount' from the levy otherwise payable. The reduction amount equals 1.5 per cent of the relevant family income threshold minus 8.5 per cent of the excess of the family income over the threshold (in this case, the reduction amount is $59.60). The levy otherwise payable by Andrew is $285 (1.5 per cent of $19,000) which falls to $225.40 once the reduction amount is subtracted.
>
> However if Andrew's annual income increases by $800 to $19,800, the levy payable is 1.5 per cent of the family income, or $552 (1.5 per cent of $36,800).[9]

This example shows the difficulty in identifying which levy bracket the family falls into. It also highlights the distortions created by the shade-in process. The increase in Andrew's income leads to a disproportionate increase in levy payable. A small increase in Andrew's annual income doubles the Medicare levy for which his family is liable.

Table 4 and Chart 4 illustrate the effective marginal tax rates for a person with two children and a partner who earns $17,000. This shows an underlying nine-rate schedule that is significantly different from the five-rate statutory schedule. In this situation the Medicare levy shade-in 'spike' occurs at a higher income.

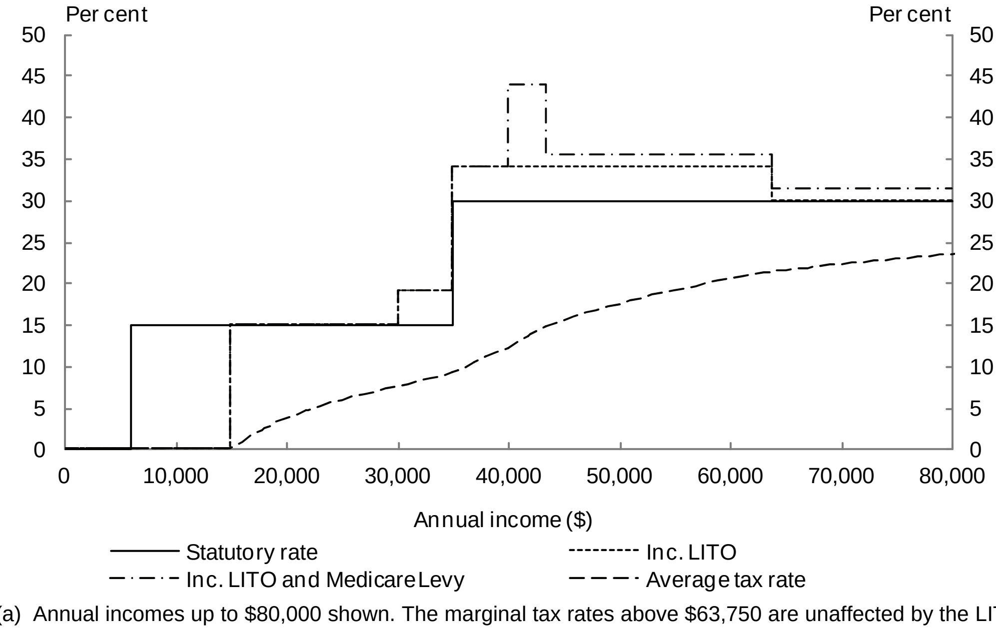
9 Refer to *Australian Master Tax Guide 2010*, p 43.

**Table 4: Marginal tax rates for an individual with two dependants and a partner who earns $17,000 per year 2009-10**

| Statutory | | Effective rates including LITO | | Effective rates including LITO and Medicare levy | |
|---|---|---|---|---|---|
| Income level | Marginal tax rate (per cent) | Income level | Marginal tax rate (per cent) | Income level | Marginal tax rate (per cent) |
| $0 - $6,000 | 0 | $0 - $15,000 | 0 | $0 - $15,000 | 0 |
| $6,001 - $35,000 | 15 | $15,001 - $30,000 | 15 | $15,001 - $30,000 | 15 |
| $35,001 - $80,000 | 30 | $30,001 - $35,000 | 19 | $30,001 - $35,000 | 19 |
| $80,001 - $180,000 | 38 | $35,001 - $63,750 | 34 | $35,001 - $39,963 | 34 |
| Above $180,000 | 45 | $63,751 - $ 80,000 | 30 | $39,964 - $43,484 | 44 |
| | | $80,001 - $180,000 | 38 | $43,485 - $63,750 | 35.5 |
| | | Above $180,000 | 45 | $63,751 - $80,000 | 31.5 |
| | | | | $80,001 - $180,000 | 39.5 |
| | | | | Above $180,000 | 46.5 |

As with the LITO, the operation of the Medicare levy increases the number of effective tax rates, moving the personal income tax system further away from the relatively simple stepped scale implied by the statutory schedule. The Medicare levy low-income threshold and the use of household income as a unit of assessment for some taxpayers add considerable complexity to the tax system.

**Chart 4: Effective rates for an individual with two dependants and a partner earning $17,000 a year 2009-10[(a)]**




(a) Annual incomes up to $80,000 shown. The marginal tax rates above $63,750 are unaffected by the LITO and would simply be 1.5 per cent higher than the statutory rates.

## Conclusion

Australia's statutory personal income tax schedule is overlaid with over 40 tax offsets and the Medicare levy. While these offsets provide benefits to particular groups of people, they add complexity to the tax system. In this paper, we have described the operation of two of the most widely available features of the personal income tax system, the LITO and Medicare levy, to show how they can add complexity and reduce transparency. The operation of the LITO and Medicare levy increase the number of marginal tax rates, creating spikes and a marginal rate schedule which both increases and decreases as income rises.

High levels of tax system complexity can increase compliance and administration costs, undermine public confidence in the tax system and provide opportunities for some taxpayers to pay less tax than similar individuals. Complexity also makes it difficult to easily design changes to the tax and transfer system, or to make changes in isolation. In a complex system, considerations of interactions between a policy proposal and other parts of the tax and transfer system can be as difficult as considerations about the proposal itself.

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# ATTACHMENT A: OTHER TAX OFFSETS

| Other tax offsets | | |
|---|---|---|
| Child housekeeper tax offset | Invalid relative tax offset | Student tax offset (notional) |
| Child housekeeper (with dependent child or student) tax offset | Landcare and water tax offset | Overseas civilian tax offset |
| Child tax offset (notional) | Life assurance bonus tax offset | Parent/ Parent in law /invalid relative tax offset |
| Dependent spouse (with child) tax offset (notional) | Lump sum payment in arrears tax offset | Unused annual leave tax offset |
| Education expenses tax offset | Medicare levy surcharge (lump sum payment in arrears) tax offset | Unused long service leave tax offset |
| Foreign income tax offset | Sole parent tax offset (notional) | Housekeeper tax offset |

| Superannuation tax offsets |
|---|
| lump sum from a taxed source for a taxpayer below age 60 but above preservation age |
| income stream benefit for a taxpayer below age 60 but above preservation age |
| income stream benefit for a dependant below age 60 of a deceased who died under age 60 |
| income stream benefit from an untaxed source for a dependent above age 60 or for a dependent of a deceased who died above age 60 |
| lump sum for a non-dependant of a deceased |
| lump sum from a taxed source for a taxpayer under preservation age |
| income stream for a taxpayer under preservation age (if a disability superannuation benefit) |
| lump sum from an untaxed source for a taxpayer aged more than 60 |
| income stream from an untaxed source for a taxpayer aged more than 60 |
| lump sum from an untaxed source for a person under age 60 who has reached preservation age |
| lump sum from an untaxed source for a person under preservation age |
| spouse superannuation contributions tax offset |