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# *Exploring the Personal Income Tax System*

## *Paper One – Implementing a Dynamic Tax Rate Regime*



## ***Exploring the Personal Tax System***

This short paper is the first of a three-part series that explores opportunities to reform the Australian personal income tax system.

Many of the policy propositions for the reform of personal income tax recently debated in Australia have been framed within the current structure of our personal income tax system.

The intent of these short papers is to examine some elements of that structure and to ask whether they should be reformed.

Should we rely upon our current 'tax bracket regime'? Is our taxation treatment of capital income and labour income optimal? Should we allow some individuals to be entirely outside the personal income system through an elevated tax-free threshold?

There are many other elements of the personal income tax system, and of Australia's broader tax system, that warrant review. By inquiring into these few issues, we seek to expand the scope of our tax reform debate.



## Introduction

*The personal income tax system collects income tax on the income, profits and gains that individuals earn from their labour and their invested capital.*

*This system has long been the primary revenue source of the Federal Government. In 2017/18, this system contributed 59 per cent of Commonwealth revenue and its collections amounted to almost 12 per cent of our GDP. In the 2018/19 Budget, the tax collections from individuals were anticipated to be just over \$205 billion.*

*Despite some recent dips, collections of personal income tax have remained at near this level of GDP and as such a proportion of Federal Government revenue for at least 20 years.*

## What is the ‘tax bracket regime’?

The basis of the personal income tax system is a progressive tax rate and bracket regime applied to each individual’s entire personal income earned from their labour and invested capital.

Under this ‘tax bracket regime’, the rate of tax applied to each dollar of income earned by an individual depends upon the ‘bracket’ into which that dollar falls. This can be explained by two examples:

- In the 2019 Financial Year, every dollar earned by an individual up to \$18,200 has an applicable rate of nil. From the 18,201st dollar earned, a tax rate of 19 per cent applies to each dollar earned up to the amount of \$37,000. Therefore, an individual earning \$18,300 would pay \$19 of tax being 19 per cent of the \$100 earned in the 19 per cent bracket (on the proviso the impact of any low income offsets was overlooked).
- Higher rates apply to higher income brackets. For example, an individual earning \$40,000 in the 2019 Financial Year pays tax of \$4,547 comprising zero tax on the first \$18,200 of income, \$3,572 of tax on the next \$18,800 of income (taxed at 19 per cent) and \$975 of tax on the final \$3,000 of income (taxed at 32.5 per cent). This amounts to an ‘average’ tax rate of 11.4 per cent on the individual’s total income. This can be contrasted to their ‘marginal’ rate of tax of 32.5 per cent, being the rate of tax that would be payable on an additional dollar of income earned.



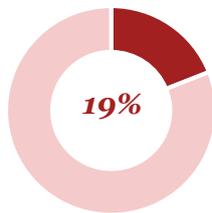
## The problems with this regime

Table 1 sets out the tax brackets and rates for the 2019 Financial Year.

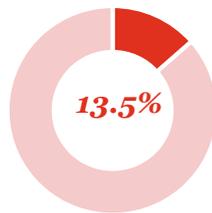
Table 1: Income tax brackets for the 2018-19 Financial Year

Taxable income	Tax on this income
0 – \$18,200	Nil
\$18,201 – \$37,000	19 cents for each \$1 over \$18,200
\$37,001 – \$90,000	\$3,572 plus 32.5 cents for each \$1 over \$37,000
\$90,001 – \$180,000	\$20,797 plus 37 cents for each \$1 over \$90,000
\$180,001 and over	\$54,097 plus 45 cents for each \$1 over \$180,000

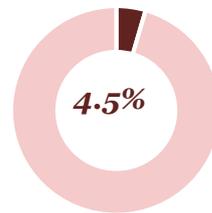
It can be readily observed that the rate differentials between tax brackets change significantly:



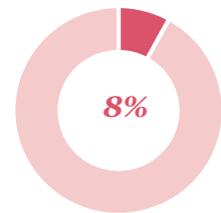
(change from 0% to 19%  
at **\$18,201**);



(change from 19% to  
32.5% at **\$37,001**)



(change from 32.5% to  
37% at **\$90,001**)



(change from 37% to 45%  
at **\$180,001**)

The position is further complicated when the Low Income Tax Offset (**LITO**), the Low and Middle Income Tax Offset (**LMITO**) and the flat 2 per cent Medicare Levy are factored into the analysis.

The existence of tax offsets and the rate at which they are withdrawn, or ‘taper out’, effectively leads to the creation of more tax brackets and hence a wider range of potential marginal tax rates. The marginal tax rate of an individual taking into account all these contributing factors is referred to as the ‘effective marginal tax rate’ (**EMTR**). For example, the nominal marginal tax rate for an individual on an income of \$92,000 in the 2019 financial year is 37 per cent. However, at that income level the individual is suffering from the withdrawal of the **LMITO**. The taper rate for that offset is 1.5 cents per dollar which means that the individual has an **EMTR** of **38.5** per cent.

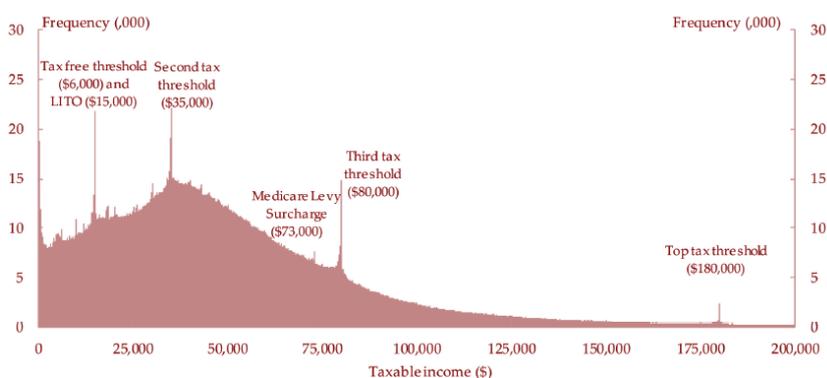
Significantly, under the rates and offsets for the 2019 financial year, the EMTR of an individual does not uniformly increase as their income increases – there are drops as well as jumps in the EMTR as income level rises. This means that an individual on a lower income can have a higher EMTR than an individual on a higher income – an individual on a lower income will pay more tax on the next dollar earned than a higher income individual. For example, an individual on an income of \$49,000 in the 2019 Financial Year has an EMTR of 34 per cent (a nominal marginal rate of 32.5 per cent plus 1.5 per cent in the form of the withdrawal of the LITO). By contrast, an individual on an income of \$69,000 has an EMTR of only 32.5 per cent being the nominal marginal rate without any withdrawals for any offsets. This outcome is inconsistent with Australia’s objective to operate a progressive personal tax system.

This regime raises other issues. While the current tax bracket regime may appear simple, it is actually difficult to work out the effective rate at which any individual pays tax. And the inconsistency with which EMTRs increase and sometimes decrease as incomes rise, means that taxpayers are inconsistently encouraged to participate in the labour force (e.g. to take on an additional job, work more over time, or otherwise be more productive).

This last issue is often known as ‘bunching’ and arises from the reluctance of individuals to work more if the additional income will be taxed at a higher effective rate. For example, an individual with an EMTR of 19 per cent may be dissuaded from taking on extra work if that would result in the individual’s EMTR jumping to 32.5 per cent. This behaviour is most prevalent amongst the self-employed and contractors who can choose the extent to which they work.

Figure 1 illustrates how taxpayers ‘bunched’ at incomes levels just before the next tax bracket in the 2009-10 Financial Year.

Figure 1: Distribution of taxable income, 2010<sup>1</sup>



<sup>1</sup> Johnson and Breunig (2015), *Taxpayer responsiveness to marginal tax rates: Bunching evidence from the Australian personal income tax system*.

## A possible solution: a dynamic tax rate regime

A solution to the issues identified above could be to replace the current tax brackets with a dynamic table of tax rates, setting out a single tax rate to be applied to every dollar earned by a taxpayer on any given income level.

Under a ‘dynamic regime’, the income of an individual in an income year would be subject to a **single** rate of tax to be applied to **every dollar** of that income. The level of that single tax rate would be determined by the level of the individual’s income. Consistent with Australia’s progressive tax system, the higher the amount of income earned by an individual, the higher the single rate to be applied.

The move to a tax regime based on dynamic rates would mean a simplification of the current calculation methods for tax and an improvement to the overall efficiency of the Australian income tax system. The methodology for calculating tax under a dynamic regime is demonstrated through the following example.

## Example

Nicola, an Australian resident taxpayer, works as a sous chef under a part time contract with a local restaurant. Nicola is occasionally offered additional work with this restaurant as well as other restaurants in the surrounding area. Nicola has a modest savings account from which she earns interest. Nicola earns a total of \$80,000 from her work and savings interest in the 2018-19 Financial Year.

The two worked examples below demonstrate how Nicola would calculate her liability to income tax under both the current regime and the dynamic regime.

### Bracket regime

Taxable income earned: \$80,000  
Tax payable calculation

Dollars earned in this bracket...	...are taxed at this rate	Amount of tax payable
\$0 – \$18,000	0%	\$0
\$18,001 – \$37,000 (\$19,000)	19%	\$3,512
\$37,001 – \$80,000 (\$43,000)	32.5%	\$13,975
<b>Total</b>		<b>\$17,547</b>
<b>Average tax rate</b>		<b>21.93%</b>

### Dynamic Tax Regime

Taxable income earned: \$80,000  
Tax payable calculation

Dollars earned in this bracket...	...are taxed at this rate	Amount of tax payable
\$0 – \$80,000	21.93%	\$17,547
<b>Total</b>		<b>\$17,547</b>
<b>Single tax rate</b>		<b>21.93%</b>

This example assumes that the single tax rate payable under a dynamic regime would be equal to the average tax rate currently payable on Nicola's income.

A dynamic regime has a number of additional benefits — It would:

- Address the current bunching problem by eliminating the EMTR 'jumps' and 'drops' that currently occur at tax bracket thresholds (including the additional thresholds introduced by incorporating the LITO and the LMITO).
- Allow individuals to grow their income without steep increases in tax rates applying to those additional earnings. That trajectory would involve a smoother incremental increase in tax with rising income levels. This would reduce the disincentives to work created by significant jumps in EMTRs and remove any regressive tax rate changes which exist under the current system.

What would the tax rates be under a dynamic regime? That would depend on a range of factors including how much revenue the regime was intended to raise and how the tax burden was to be spread. For illustrative and modelling purposes, we have chosen a schedule of single rates for the 2024/25 Financial Year that would raise approximately the same level of revenue as the currently contemplated tax bracket regime<sup>2</sup> and with a similar, but not identical, spread of the burden.

The illustrative schedule in Table 2 produces a range of single rates of tax that are broadly similar, but not identical, to the average rates of tax that would apply under the current tax bracket regime. It would smooth out 'bumps' in the average tax rates attributable to jumps and drops in EMTRs.

Table 2: Illustrative schedule of single rates

Income	Initial rate	Rate of income (per extra \$1,000)	Final rate
\$0-\$8,000	Nil	0.221%	1.768%
		for each extra \$1k of income	
\$8,001-\$18,000	1.768%	0.275%	4.518%
\$18,001-\$25,000	4.518%	0.327%	6.807%
\$25,001-\$37,000	6.807%	0.304%	10.455%
\$37,001-\$50,000	10.455%	0.263%	13.874%
\$50,001-\$67,000	13.874%	0.197%	17.223%
\$67,001-\$90,000	17.223%	0.157%	20.834%
\$90,001-\$130,000	20.834%	0.108%	25.834%
\$130,001-\$200,000	25.834%	0.072%	30.194%

<sup>2</sup> The application of the two models, as specified below, results in a 0.69 per cent difference in total revenue collected.

Under this dynamic regime, an individual earning \$50,000 would pay tax at the rate of 13.874 per cent on their entire income. This would mean the individual would pay tax of \$6,937. An individual earning \$200,000 would pay tax at a higher rate on their entire income. This individual would be subject to a 30.194 per cent tax rate and pay tax of \$60,388 on their income.

We stress that these rates are solely for illustrative and modelling purposes and they highlight obvious issues for consideration, such as the level of the tax-free threshold. If the Government was to introduce some kind of dynamic rate regime, a detailed review of the appropriate rate settings would be required. The key purpose of our example is simply to illustrate that a smoothing of the rate of increase in the rate of tax could be achieved.

## **Observations**

A dynamic tax rate regime would have the significant advantage of removing the large movements (both up and down) in EMTRs under the current tax bracket structure. This would remove the potentially steep increases in EMTR as a barrier to additional workforce participation. The exercise of smoothing out the rate of change in EMTRs in the existing tax bracket structure would involve changing the amounts of tax paid at different income levels. This would result in 'winners' and 'losers' within individual brackets, but it should result in a smoother transition to higher incomes for individual taxpayers.

One of the fundamental benefits of moving to a dynamic regime is that most taxpayers would then know and understand where they sat in the system and what their level of income meant for the amount of tax they paid.

While the current system gives the illusion of transparency and simplicity, when seeking to understand what it means to be 'in the 32.5 per cent bracket' it quickly becomes apparent that there is more to the picture than simply paying tax at 32.5 per cent. A dynamic regime would mean that every taxpayer would understand the rate at which their income was taxed and would be able to anticipate the higher rates at which they would pay tax as their income grew.

Of course, the introduction of such a regime would raise many practical issues. How would PAYG instalment rates be set? What issues would arrive for specific taxpayer groups such as pensioners? How should the offset regime be restructured? Policy makers would need to address these concerns in the development of any such regime.