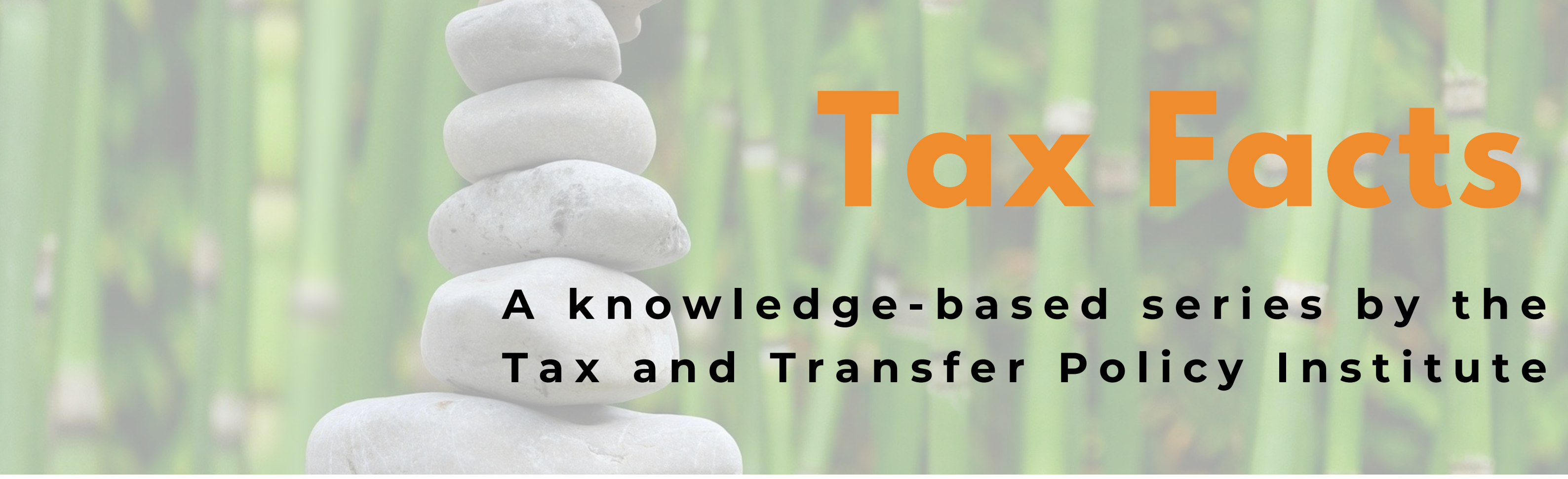

What is a progressive tax (and transfer) system?

Debates about the progressivity of individual taxes can often be misleading since the progressivity of a single tax is not necessarily indicative of the progressivity of an overall tax system. What is a progressive tax system and how can one be designed? What are some different ways that the degree of progressivity can be measured? How does the transfer system influence the way we think about the progressivity of the tax system? Is the Australian tax system progressive?

What is the tax system? How is a progressive tax system defined?

In Australia, the overall tax system refers to all of the taxes in place at the national, state, and local levels. The Henry Review estimated that Australians paid at least **125** different taxes annually. Of these 125 taxes, the government attains 90% of its revenue from ten (in descending order): the personal income tax, the company income tax, the goods and services tax (GST), the fuel excise, payroll taxes, conveyance and stamp duties, local government rates, superannuation funds, the tobacco excise and land taxes. The tax system also includes **hundreds of** tax expenditures, more commonly known as tax exemptions, deductions and offsets. These treat certain types of income or consumption differently, thereby also impacting the progressivity of the overall tax system. For example, the GST does not apply to all goods and services.

An individual tax is progressive if people with higher incomes (or wealth) pay a larger percentage of their income (or wealth) in tax than people with lower incomes (or wealth). A tax and transfer system is progressive if the preceding statement remains true after the design of the broader tax system and its relationship with the social transfer (welfare) system are also considered.

How are progressive tax systems designed?

Progressive taxes are often associated with graduated marginal tax rates **[see our Tax Fact #19, "What is a progressive tax?"]** Tax A in Table 1 is an example of a graduated marginal tax system. Most developed countries, including Australia, apply graduated marginal tax rates to their personal income taxes. However, graduated marginal income tax rates alone do not necessarily equate to a progressive tax system.

For example, in combination with other parts of the tax system, it is possible to achieve a progressive tax system without an explicit graduated tax schedule. Tax B from Table 1 is an example of a proportional flat tax rate combined with a tax deduction **[see our Tax Fact #6, "Tax Offsets or Tax Deductions?"]**. Despite using a flat rate tax, the average tax rate goes up as an individual's income increases (the average tax rate is higher for Jill).

A similar outcome could be achieved by including the transfer system. For example, a government could impose a flat income tax rate with no deductions (which would be a proportional tax) and spend all of its tax revenue on rent assistance for low-income households. This type of tax and transfer system would also be progressive, despite the lack of individually progressive taxes.

By contrast, it is also possible to design a tax system with individually progressive taxes that, when combined with other features of the tax system, creates a non-progressive outcome. For example, Tax C is the same as Tax A, but entirely exempts all income greater than $60,000 from tax. Under Tax C, the highest income taxpayers would have an average tax rate that gets closer to 0% as income increases. While this is a fictional and simplistic example, in practice, a similar outcome could also be achieved by not taxing (or very lightly taxing) assets disproportionately held by high income (or high wealth) households, such as owner-occupied housing.

Table 1. Average tax rates for Jack, Jill and Joe by different types of tax

	Jack ($10,000 income per year)		Jill ($50,000 income per year)		Joe ($90,000 income per year)	
	Tax payable	Average Tax Rate	Tax payable	Average Tax Rate	Tax payable	Average Tax Rate
Tax A: 10% on first $10,000, 20% on each dollar between $10,001 - $50,000, 50% above $50,000	$1000	10%	$9,000	18%	$29,000	32%
Tax B: 50% Flat Rate Tax with $10,000 Tax Deduction	$0	0%	$20,000	40%	$40,000	44%
Tax C: 10% on first $10,000, 20% on each dollar between $10,001 - $50,000, 50% $50,001 - $60,000, tax exempt from $60,001+	$1000	10%	$9,000	18%	$14,000	16%

In summary, the progressivity of individual taxes and the existence of graduated marginal tax rates are often mistakenly conflated with the progressivity of the tax system as a whole. Evaluating the progressivity of a tax system and understanding the evolution of its progressivity over time are significantly more nuanced and complex calculations. They require an understanding of the rates and exemptions that apply across all parts of the tax system. In addition, while there is a public expectation that aspects of our tax system, notably the personal income tax, are progressive, it may be preferable to consider the progressivity of the tax and transfer systems together, given their interactions.

Is the Australian tax system progressive?

Researchers have attempted to measure the progressivity of the tax system, taking into account its complexity.

- Some existing studies focus on the personal income tax system (Kakwani 1977; Smith 2001; Hodgson 2014; Tran and Zakariyya 2019). The personal income tax system includes the personal income tax rates, but also encompasses the exemptions, offsets and deductions that apply to personal income tax. The studies all conclude that the personal income tax system in Australia is progressive and that the magnitude of progressivity has varied over time since Federation, becoming more progressive in some years and less in others, without a clear trend in one direction.

- Other studies have considered both the personal income tax system and the transfer system (Whiteford 2010, 2014; Wilkins 2014; Herault and Azpitarte 2015; Tran and Zakariyya 2019). These studies reach the same conclusion; combined, the personal income tax and transfer system are progressive, and the magnitude of progressivity varies over time (without a consistent trend over time towards more or less progressivity).

- Varela, Breunig and Sobeck (2020) only consider the taxation of savings in Australia. Unlike the other studies, this research shows that the taxation of savings in Australia varies widely and is not progressive—it is in fact regressive. This is largely attributed to the fact that savings are taxed at lower rates than labour income and disproportionately held by wealthy individuals.

None of the existing studies include the impact of the GST, payroll taxes, stamp duties or land taxes in their analyses. Incorporating these taxes into the analyses would add complexity since these taxes are not based on a taxpayer's income level. For the GST, for example, both a low and high-income taxpayer pay the same amount of tax on a specific good, despite their income difference.

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Contact the director at robert.breunig@anu.edu.au | Contact us at tax.policy@anu.edu.au
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