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Budget explainer, 14 November 2024

Australia's Tax Mix

The roles played by different taxes and how they have changed over time

Executive Summary

Australians pay a variety of taxes, at different stages of their economic lives. Some are taxes on income, some are taxes on what we consume, and some are taxes designed to reflect the economic impact of what we do.

Most of the time, Australians discuss particular taxes, like income tax and what it means for them. But how do the different types of taxation relate to each other? Do some play a bigger role than others in generating revenue?

The common term for thinking about the taxes taken together is the 'tax mix'. It is ultimately the 'tax mix' that determines what we pay.

But many readers are less familiar with the 'tax mix' than they are with individual taxes. They also know that the tax system can work differently in other countries. They sometimes wonder if Australia's tax system could be different to what it is now. Could we have a different tax mix?

Some readers may be interested in the level in which individual taxes should be set, as they have varying beliefs about the role and size of government. Nevertheless, given any target level of tax revenue, it is likely that a combination of taxes will be needed to reach that amount.

This paper provides background information about how Australia's taxes work, and about what it would mean to change the tax mix in a significant way.

Changing the tax mix is not easy, and this paper shows that only very large policies would significantly change the relative shares of taxes within the mix.

We start by reviewing the composition of Australia's tax mix since Federation, introducing the major taxes that have funded Australian governments' expenditure over time.

Chapter 2 looks at the interplay between taxes, transfers (such as social assistance payments) and 'tax expenditures' (concessions) as tools governments can use to achieve policy outcomes.

Following this we describe several common methods for assessing the relative efficacy of taxes. Chapter 3 explains how any system of taxation involves trade-offs between multiple objectives and illustrate the various roles that taxes play within the overall mix.

Chapter 4 suggests other lenses for looking at taxes, particularly personal income tax, such as through industries, age and gender.
Finally, we consider some scenarios which illustrate what these trade-offs mean for the mix of taxation in Australia.

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Introduction

Governments raise taxes to fund spending commitments and redistribute resources in alignment with Australia's social and political values. Taxes are typically collected from multiple sources and through a variety of mechanisms. The relative sizes of those different taxes, and the way in which they are collected, is referred to as the tax mix.

Australia's tax mix has been relatively stable since the Second World War. It involves a strong and growing reliance on personal income tax, with 'bracket creep' resulting from increasing incomes, through both economic growth and inflation and a progressive tax scale. This pattern has been supported by periodic tax cuts to return a proportion of that bracket creep.

The relative contribution of personal income tax to the overall tax mix involves a high-degree of 'lock-in'. Major changes would be required if that reliance were reduced. Some of the changes that would achieve that result may have significant and broader benefits but would be very large.

This paper provides a brief introduction to Australia's tax mix. It is intended to assist those who are new to the topic in understanding this complex area of government finances.

Although this paper focuses on Australian Government taxes, we discuss taxes applied at various levels of government, particularly in our sketch of history in Chapter 1. Some taxes have switched from one level of government to another, within constitutional boundaries. In general, the impact of a particular tax does not depend on which level of government is responsible for its administration but in the way the tax works and is implemented.

Note that State and Territory tax revenue is sometimes referred to as 'State taxes' for brevity. The 'Australian Government' refers to the national government of Australia alone, not to the total of all governments.

The high-level modelling presented in this and other Parliamentary Budget Office (PBO) reports shows that, in the absence of government intervention, the tax mix will continue to be weighted more strongly towards personal income tax over time.

Tax data and definitions

The PBO's online budget glossary defines many of the technical terms used in this report. In general, a tax is a compulsory payment to government. Many taxes do not have the term 'tax' in their name (e.g. stamp duties and visa application charges). However, not all government revenue is tax. Non-tax revenue includes items such as interest, royalties, dividends, rents and fees for services. Over time, some government revenue items have been reclassified from non-tax to tax, and vice-versa. Common cases are various fees and fines. This means that total tax revenue may be revised from when first published. A list of all Australian government taxes is included in Appendix A.

For consistency, the primary source for tax revenue data is the Australian Bureau of Statistics, which publishes tax based on the *Government finance statistics* (GFS) standards. The GFS principles are issued by the International Monetary Fund (IMF) and the Australian Bureau of Statistic (ABS) publish an Australian version of the GFS manual providing guidance on the application of GFS by the Australian public sector.

As such, some amounts may differ slightly from those shown in Government publications such as the budget. For example, government financial reporting documents do not separately report interest and dividend withholding taxes, leaving them included within the category of 'individuals and other withholding taxes', while these are separately reported in the Australian Bureau of Statistics publication, *Taxation revenue*.

The spreadsheet published with this explainer includes data for taxes back to Federation for each State and Territory. Where possible, this data is shown on a consistent basis over time. However, it is sometimes not possible to precisely determine how reporting changes from year to year so small inconsistencies are likely.

1 How did we get here? A brief history of Australia's tax and transfer system

Australia's tax and transfer system is shaped by our history, the evolution of the economy, and shifting social expectations. We will briefly review this history in 4 periods: Federation to 1950; 1950 to 1980; 1980 to 2000; and 2000 to the present.

1.1 1901 to 1950: The early years of Australia's tax system

Prior to Federation in 1901, each colony administered their own tax system, with excise, customs duties and income taxes as the primary sources of tax revenue. Income tax represented a relatively small proportion of tax revenue.

At Federation, customs duties between the states were abolished. The power to collect customs duties on foreign imports and excise was passed to the Australian Government, but three-quarters of this revenue was paid back to the states over the next 10 years. Only the states imposed taxes on income.

In the decade following Federation, a range of excise and customs duties provided Australian Government's sole source of tax revenue. These played roles in shaping the behaviour of Australians, in addition to raising revenue. Some taxes played a significant role in Australia's policies to 'protect' local industry from foreign competition. Other taxes targeted behaviours considered undesirable, such as smoking, drinking and gambling, as well as items considered to be luxuries, such as taxes on musical instruments, jewellery and 'fancy goods'.

Similarly, the Australian Government introduced a federal land tax in 1910, with the intent of breaking up very large holdings of underutilised arable land.[1]

The Australian Government introduced its own personal income tax in 1915 to meet the rising costs of the First World War. This created a 2-tier system in which individuals paid income tax at both a state and federal level. To minimise the impact of 'double-taxation' (and to prevent the states from increasing their rates), the federal income tax rate was low and only applied to incomes above a certain threshold (£156 for adults). This 'tax-free threshold' is an example of a central component of our current tax system that originated in a particular historical context.[2]

Another major change in tax revenue was prompted by the rapidly increasing need for income support during the Great Depression. "Faced with a large budget shortfall, the government introduced the wholesale sales tax in 1930. Raising indirect taxes was favoured because the incidence was disguised, making the tax more politically palatable."[3]

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1 "The [land] tax will largely put an end to land monopoly, will check the aggregation of great estates, and enormously facilitate settlement on the land." *Taxation of unimproved value of land in Australia*, H. Heaton, Quarterly journal of economics (1925) page 422.

2 Most nations do not have a tax-free income threshold. In the US, for example, a 10% income tax rate applies from the first dollar earned. Some systems include tax relief components for low incomes, but these usually involve eligibility criteria and rarely operate as a simple tax-free threshold for all taxpayers.

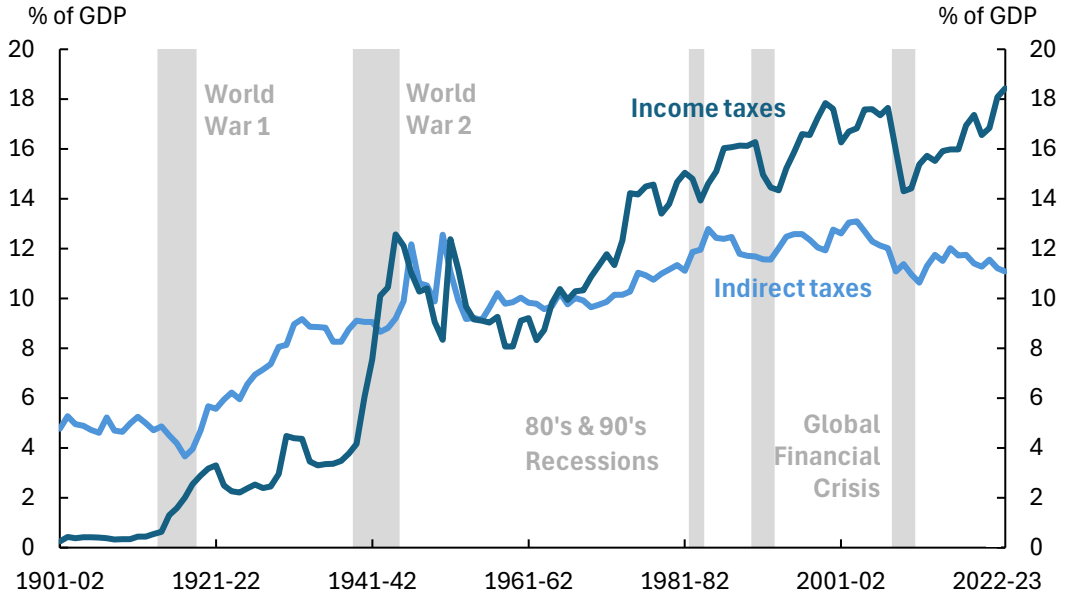
3 Sam Reinhardt and Lee Steel (2006), *A brief history of Australia's tax system*, Australian Treasury.

The Second World War saw the Australian Government increase personal income tax rates to fund the war effort. In 1942, the states relinquished their personal income tax powers to the Australian Government. By the end of the war personal and corporate income tax revenue had tripled, to around 12% of Gross Domestic Product (GDP) in 1945 (Figure 1-1).

Initially intended to be a temporary measure to support the war effort, the states did not receive their income tax powers back when the war ended. Instead, the states were partly compensated by 2 actions, 'reimbursement grants' which lasted until 1959 and the Australian Government withdrawing from land taxation in 1953. The states also increased stamp duties, motor vehicle taxes and estate taxes to fill the revenue gap.

Figure 1-1 depicts the evolution of Australia's tax revenue, showing the mix of tax between income taxes (or direct taxes) and indirect taxes, a common way to distinguish between the two major channels for charging taxes.

Figure 1-1: Australian Government tax revenue



Source: Australian Academy of the Social Sciences in Australia (ASSA), Australian Bureau of Statistics (ABS) and Parliamentary Budget Office (PBO) analysis.

Income taxes are levied on many different forms of income, such as wages, business profits and investment income, including interest and capital gains. In the 1950s Australia's income taxes distinguished between different forms of income. Income from 'personal exertion' was subject to lower rates compared to income from investments.[4]

Indirect taxes are generally applied to particular products and paid by businesses, with the value of the tax passed on to the consumer through higher prices. Chapter 3 discusses the relative advantages of different income and indirect taxes.

By the 1950s total tax revenue as a share of GDP had increased markedly and shifted away from a reliance on indirect taxes to a roughly equal reliance on indirect and income taxes, which were paid by both individuals and companies.

[4] For example, for the 1950-51 year a taxpayer with no dependents paid £135 tax on £1,000 of income from personal exertion, but £165 tax if the same amount was earned through investments ('property'). The rates also included amounts designated as 'social service contributions'. Unlike other countries with a similarly named item, these were recognised as tax.

1.2 1950 to 1980: Increasing demands on government

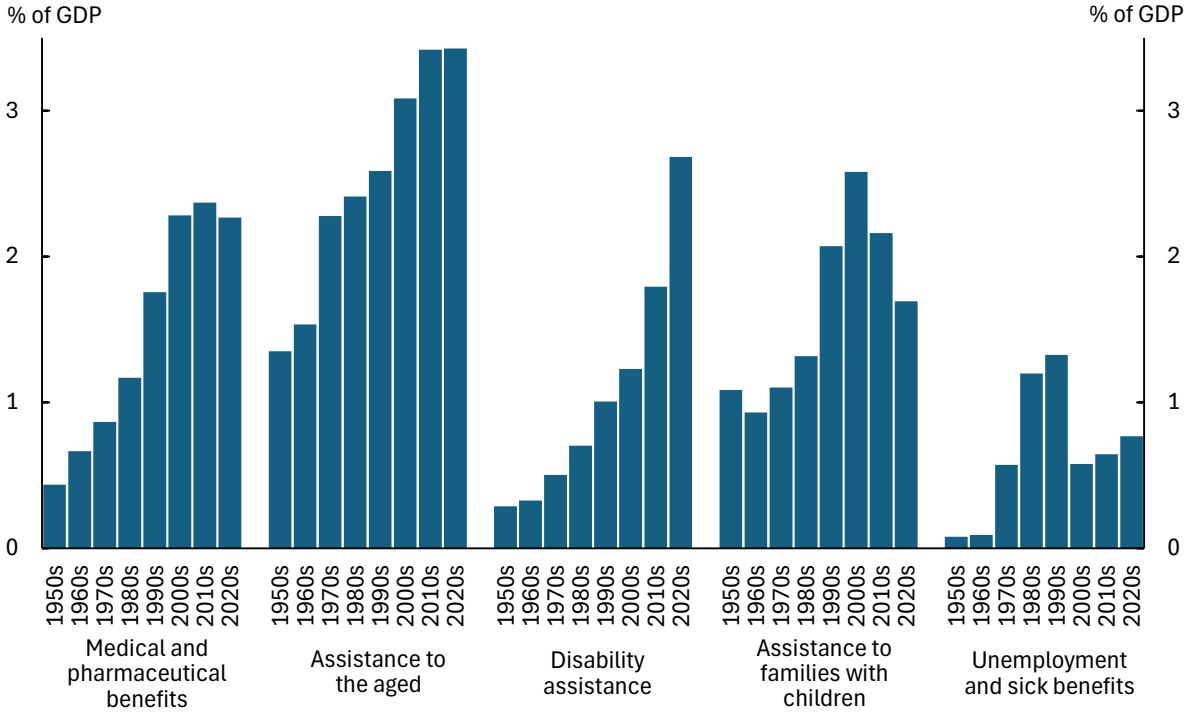
With war funding no longer needed, the total tax take was reduced the years immediately following the end of the Second World War. The real value of the large accumulated debt quickly declined with high inflation. Wool prices soared, resulting in a spike in revenue around 1951.

The tax mix evolved over the next 30 years in response to rapidly changing expectations on government, particularly in providing social assistance benefits.

Social assistance was not new to the post-war period. The Australian Government had introduced a national old age and invalid pension scheme in 1908. Due to long residency requirements and lower average life expectancies, the financial burden of the scheme on government was relatively low.[5] The Depression brought high demands for social assistance leading to special levies being imposed, but these were intended to be temporary.

Expectations of governments rose as the Australian economy underwent a rapid post war expansion. The general social safety net expanded, including through the introduction of the medical and pharmaceutical benefits schemes and increases to aged and disability pensions (Figure 1-2).[6]

Figure 1-2: Australian Government spending on social security and welfare



Source: PBO historical fiscal data, Australian Bureau of Statistics Year Books.

Some of these long-term changes were driven by demographic factors, including increased spending on the aged due to longer life expectancy. The 1960s and 1970s brought large social changes, such as increased participation of women in the labour market.

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5 Age and invalid pensions, National Museum of Australia (2024).

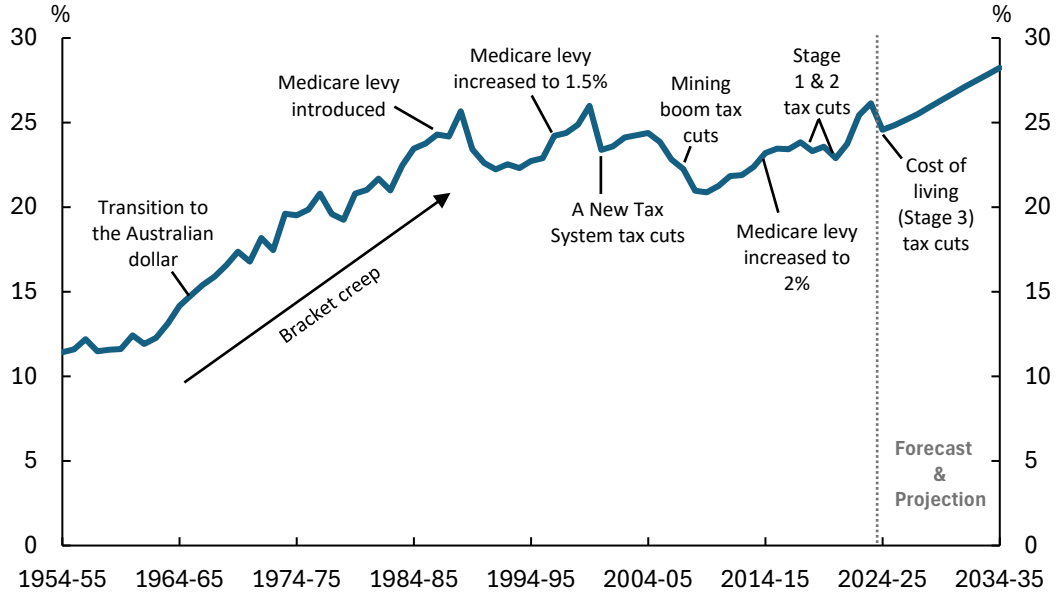
6 Including the establishment of the Pensioner Medical Service, the introduction of rent assistance, reduced residency requirements, standardisation of the pension rate, and the introduction of tapered means testing.

In the 1970s persistent unemployment brought a significant increase in unemployment benefits. Payments to families with children, the largest being 'child endowment', increased more modestly until the 1990s.

Most of the increasing revenue requirements during this period were met through bracket creep. High wage inflation meant that the lack of indexation of personal income tax thresholds pushed individuals into higher tax brackets.[7]

The average personal income tax rate doubled over 20 years from 1964 (Figure 1-3). Total personal income tax revenue also doubled over the same period, from around 6% to 12% of GDP. Except for 2 modest increases to statutory tax rates in the late 1960s, none of the increase in personal income tax was generated through actual policy changes.

Figure 1-3: Aggregate average personal income tax rate, 1954-55 to 2034-35



Source: ATO Taxation Statistics, 2024-25 Budget, ASSA, ABS and PBO analysis.
Note: For consistency across time, net tax before 2000-01 is calculated before allowance for franking credits. Data for non-taxable individuals is unavailable prior to 1978-79. The net tax rate prior to 1978-79 assumes that taxable income for non-taxable individuals has the impact of reducing the average tax rate by around 0.7 percentage points, the median amount from 1978-79 to 1987-88.

Periodic increases in income tax thresholds, or reductions in rates, were usually insufficient to offset the impact of growing incomes for any significant time. In fact, the top marginal tax rate was heavily reduced over the period. For the 1950-51 year, income above £10,000, the highest tax threshold, was taxed at a rate of 75% compared to a top rate of 49% for the 1987-88 year for income above $35,000, the top tax threshold in that year. Importantly, in 1987-88 around 11% of taxpayers were subject to the highest tax rate. In 1950-51, only 0.3% of taxpayers were subject to the top rate, and only around 2.5% of were subject to a marginal rate of at least 49%.

Cumulatively, the increase in personal income tax between 1964 and 1985 is the largest change to Australia's tax mix since Federation (see Figure 1-10 in Section 1.6).

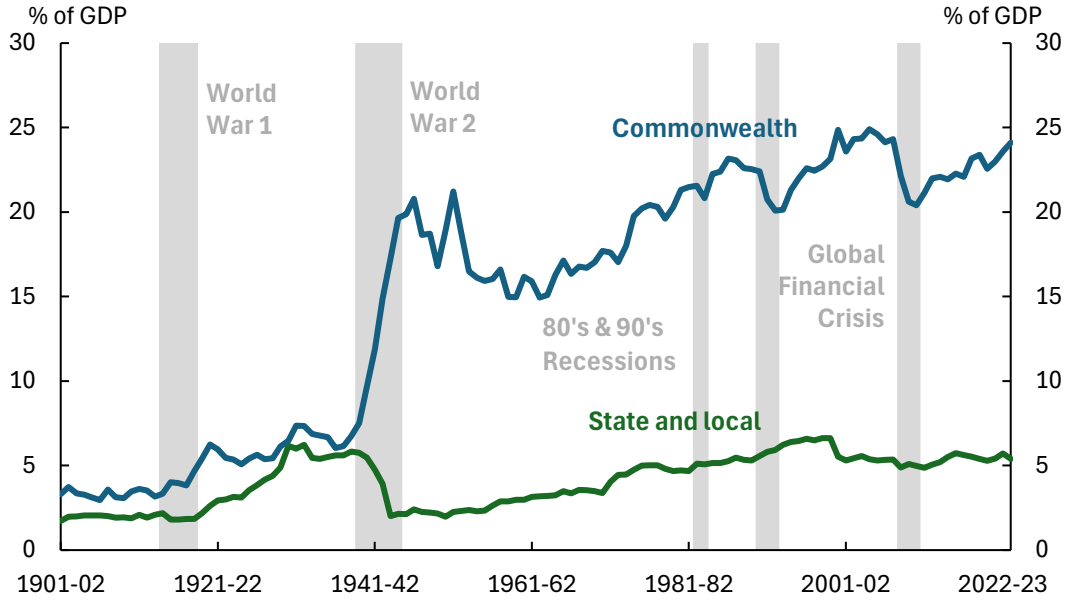
After the states handed their income tax collection powers to the Australian Government, their own taxes remained mostly narrow-based or transactional in nature, and they relied heavily on the Australian Government's financial distributions.

[7] See Bracket creep and its fiscal impact (pbo.gov.au) for a more detailed explanation of bracket creep.

This ‘vertical fiscal imbalance’ (Figure 1-4) was partly addressed through the handover of payroll taxes to the states in 1971, who uniformly doubled the rate to 5%. In addition, the states increased stamp duties and taxes on gambling and introduced taxes on insurance policies.

Following further changes in 2000 (see the following section), the states’ total tax take and mix has remained relatively stable as a share of GDP.

Figure 1-4: Total tax revenue, Australian Government and State and local



Source: ASSA, ABS and PBO analysis.

1.3 1980 to 2000: Tax reform

Throughout the 1980s, Australia underwent significant economic reforms, aimed at making Australia’s economy more competitive on the global stage. One change was the floating of the Australian dollar in 1983, which affected taxation on imports, such as wholesale tax and tariffs. Financial deregulation reduced the government’s control over the financial sector.

Another key reform was the introduction of the Prices and Incomes Accord, an agreement between the government and trade unions to moderate wage demands in exchange for ‘social wages’ of welfare and cuts to personal income tax.

Higher income tax rates for individuals exacerbated the difference between forms of income that were taxed and untaxed. Some individuals and companies moved to structure their income in ways which would minimise the tax paid. Multiple tax reviews[8], controversies[9] and a tax summit led to the introduction of broader taxes on capital gains and a specific tax on non-wage employee income, called the fringe benefits tax (FBT). These were integrity measures aimed to reduce behaviours that minimised tax paid. In the short term, the measures raised little additional revenue but protected the government against losing revenue. In the longer term, the measures broadened the range of income subject to tax. The top marginal tax rate was reduced from 60% to 49% in 1985.[10]

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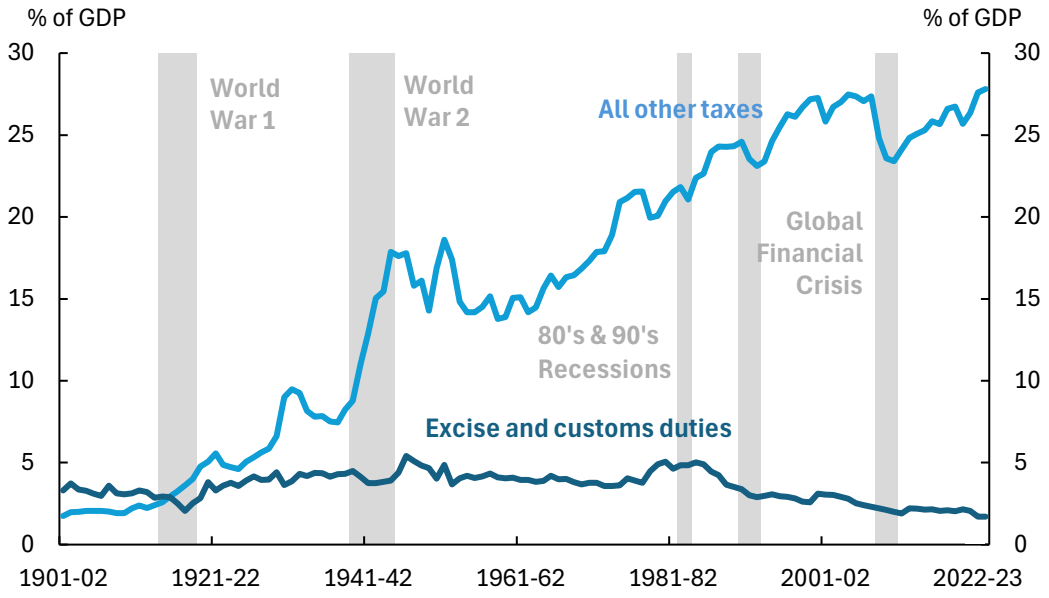
[8] These gaps in the tax base were the subject of 2 major reviews, the 1975 Asprey Review and the 1985 Reform of the Australian Tax System (RATS). Both recommended a broadening of the tax base and an increase in tax efficiency of both Australian Government and State Government taxes.

[9] Such as the “Bottom of the Harbour schemes” from the 1970s and early 1980s.

[10] 1985 reform of the Australian tax system, Paul Tilley (2021).

The reviews also considered the relationship between taxation and the performance of the economy. Customs duties (tariffs on imports) were identified as a dampener on economic growth. Reductions in tariff rates started with a rate cut equivalent to 20% of all tariffs[11] in July 1973 and continued with phased reductions in tariff rates through the late 1980s and 1990s. The coverage of Australia's bilateral and multi-lateral trade agreements also expanded,[12] resulting in a decline in revenue from customs duty and excise.[13] Tariff revenue raised averaged around 4% of GDP between Federation and 1985, before declining to 1.7% of GDP in 2022–23 (Figure 1-5).

Figure 1-5: Decline in excise and customs duties



Source: ASSA, ABS and PBO analysis.

A new treatment of taxation of corporate income was introduced in 1987, called 'dividend imputation'. This aimed to encourage investment in companies without both the company and the shareholder having to separately pay tax on the same income.[14] The company tax rate was reduced from 49% to 39%.

While the reviews led to changes in income tax and customs duties, they also examined how the tax system might address the need for national savings and business investment. Subsequent changes continue to play major roles in our tax system.

In 1992 the superannuation guarantee was introduced, requiring employers to contribute 3% of employee wages, concessionally taxed, into superannuation.[15] The superannuation guarantee

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[11] Ostensibly a 25% rate cut on all categories, tariff items matching excisable items were exempted as they were considered to be levied for revenue purposes not for protection. See 100 Years of Tariff Protection in Australia, The University of Melbourne.

[12] The first of these was the *Closer Economic Relations Agreement* with New Zealand in 1983, followed by Agreements with Singapore, Thailand and the US in the early 2000s. Australia is now member to numerous bilateral and multilateral agreements, with the most recent being the *Australia-United Kingdom Free Trade Agreement (A-UKFTA)* in 2023. See Australia's free trade agreements (FTAs), Australian Government Department of Foreign Affairs and Trade (dfat.gov.au).

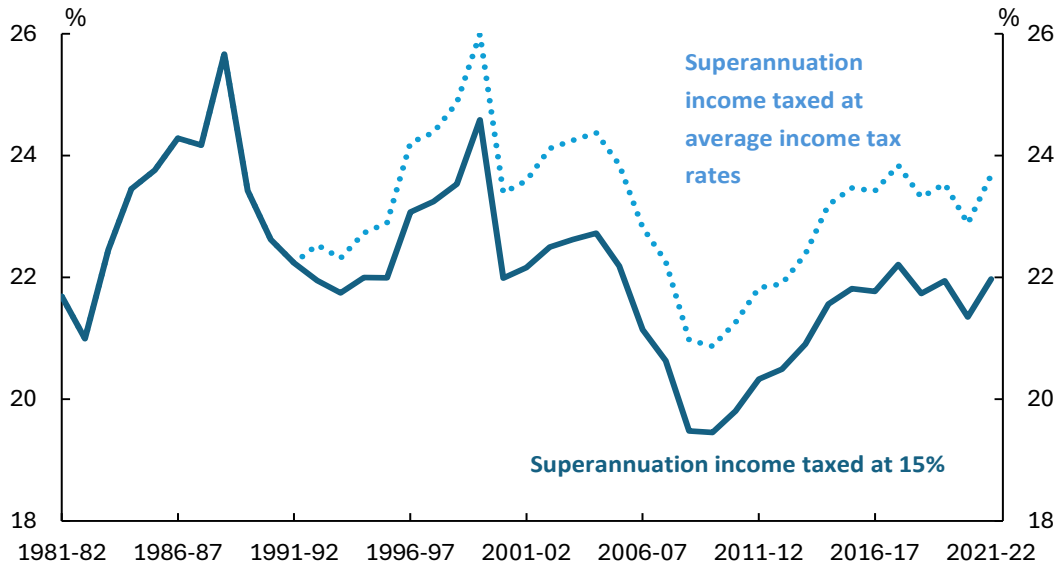
[13] Aside from some short-term increases amid the oil-price shocks of the 1970s.

[14] See Dividend imputation and franking credits (pbo.gov.au) for a more detailed explanation of dividend imputation.

[15] Initially 3%, the superannuation guarantee rate has been raised by successive governments to 9% in 2002 with additional staggered increases from 2021 which will see the super guarantee rate reach 12% in 2025. See Major superannuation and retirement income changes in Australia: a chronology, Parliament of Australia (aph.gov.au).

was introduced to boost national savings, reduce the cost of capital and increase investment,[16] and temper the wage-price 'spiral' that put upwards pressure on prices. The amounts were taxed at 15% rather than their marginal tax rates, which provided incentives to voluntarily make further contributions. This has lowered the effective average tax rate which Australians paid on their personal income (including superannuation) over the last 3 decades (Figure 1-6). By 2021-22 the difference between the effective average tax rate on personal income with and without the inclusion of superannuation income has grown to around 1.5 percentage points.

Figure 1-6: Average Tax Rate, with and without Superannuation



Source: PBO analysis.
Note: It is assumed that the total taxable income is identical with or without the superannuation policy in place.

The final major reform in this period was the introduction of a broad-based consumption tax in 2000. The Australian Government had levied taxes on goods at the point of wholesaling since 1930, but the wholesale tax system had become a complex array of rates applying to different products.

The different tax rates affected the prices of goods, distorting purchasing decisions of households. In addition, the consumption of services was growing faster than the consumption of goods, meaning that the wholesale sales tax was not keeping up with growth in the economy.

The Goods and Services Tax (GST) was introduced from 1 July 2000 at a rate of 10%, covering most household consumption except for fresh food, rent, and products where the government is a significant provider, such as health and education.

As part of an agreement between the states and the Australian Government, all GST revenue is passed on to the states. In return, the states abolished a range of highly inefficient taxes, and the Australian Government abolished wholesale sales tax. The GST raised sufficient revenue to entirely offset the revenue forgone from the abolished taxes.

While the income tax cuts associated with the GST may appear as a 'tax mix switch' between income and consumption taxes, the 2000-01 income tax cuts (and increases to welfare payments) were designed to compensate for the inflationary impact of the GST. In practice they returned the bracket creep that had assisted in repairing the budget over the previous 5 years (Figure 1-7).

[16] Compulsory superannuation and national saving (treasury.gov.au).

Figure 1-7: Personal income tax and GST revenue

Source: ABS and PBO analysis.

In the longer-term, personal income tax returned to the same share of GDP. The GST directly replaced the abolished taxes, but also effectively replaced other indirect taxes. This included the steadily vanishing customs duties as well as the 'franchise taxes' that had been levied by the states for over a century but in 1997 had been found by the High Court to be unconstitutional.

Further personal income tax cuts were delivered over the 2003-2009 period when company tax collections increased markedly with commodity prices, enabling a temporary switch between corporate and personal income tax.

The 1980-2000 period also featured the historical peak of personal income tax as a share of tax revenue, at over 48% around 1985 (Figure 1-8). Personal income tax subsequently declined to around 40% of all tax revenue, despite the average personal income tax rates remaining relatively stable.

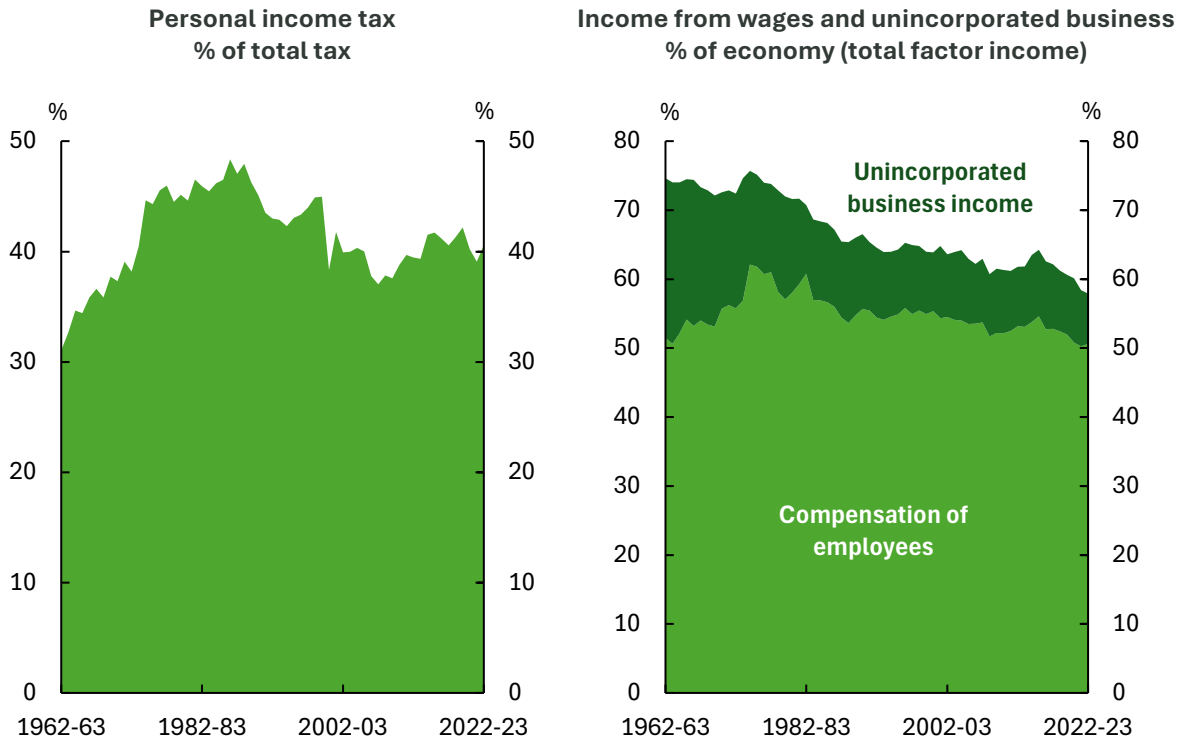
There are 3 key reasons for the decline. The first is that the share of total national income directly received by individuals has steadily declined since the late 1970s, as businesses have tended towards incorporation. Unincorporated businesses income, which is reported on a personal income tax return, has declined from around 25% of the economy in 1960 to around 8% of the economy now. Correspondingly, corporate income has increased from less than 20% of the economy to over 30% over the same period.[17]

The second reason for the decline is the gradual reversal of the rapid real wage increases that occurred during the 1970s.

The third reason is the rapid increase in company income tax associated with the mining boom since the early 2000s. Most of this tax is paid on behalf of foreign shareholders, with the income never appearing on personal income tax returns.

[17] The trend towards incorporation is the largest factor in the decline of the share of income directly received by individuals, with other factors including more income received by superannuation funds (and taxed there) and a gradual reversal of the rapid real wage increases that occurred during the 1970s.

Figure 1-8: Declining share of personal income tax since the 1980s



Source: Australian system of national accounts, ATO tax statistics and PBO analysis.

1.4 The 21st century

The 2000s brought with it rapidly rising incomes for Australia, with the international price of Australia's mining exports more than tripling over the 10 years to 2012.[18]

The increased revenues were utilised to implement a variety of tax concessions, including the *Simplified Super* package in 2006, which made most streams of superannuation benefits tax-free in retirement,[19] large personal income tax cuts in 2006-07 and a tripling of the tax-free threshold in 2012, from $6,000 to its current level of $18,200.[20]

Successive governments have attempted to partly wind back the concessional character of the 2007 superannuation tax changes[21], however these same reform packages introduced additional concessions[22] and incentives to maximise concessional contributions. While often

[18] The Effect of the Mining Boom on the Australian Economy (rba.gov.au).

[19] The *Simplified Super* package also halved the age pension asset taper rate and standardised concessional aged-based superannuation contribution rates and thresholds. See A plan to simplify and streamline superannuation (9 May 2006) (budget.gov.au).

[20] As part of what turned out to be a temporary carbon tax. The tripling also coincided with the reduction of the Low-Income Tax Offset from a maximum of $1,500 to a maximum of $445, this had the practical effect of changing the effective tax-free threshold from $16,000 in 2011-12 to $20,542 in 2012-13.

[21] Including the introduction of a transfer balance cap and lowering the threshold for Division 293 tax (which applies additional super contributions tax to high income earners) in 2017 (see Superannuation Reforms (treasury.gov.au)), and the introduction of Division 296 tax (which applies a higher concessional tax rate to earnings on super balances above $3 million) from 1 July 2025.

[22] Such as the low-income superannuation tax offset (LISTO) and an extension of the spouse offset.

targeted at reducing inequality,[23] these changes have also increased the complexity of the superannuation system. Chapter 2 discusses the increasing costs of tax concessions, including those relating to superannuation and GST. Chapter 3 discusses these kinds of trade-offs involved in tax policy design.

Another major event for tax in Australia since 2000 was the Global Financial Crisis (GFC). Since the mid-1990s, total tax revenue as a share of GDP had remained relatively stable but declined steeply between 2007 and 2010 during the GFC (Figure 1-9).

Figure 1-9: Australia's tax revenue as a share of GDP

Source: ABS and PBO analysis.

While the GFC caused a milder economic slowdown in Australia compared to the early 1980s and early 1990s recessions, the impact on tax revenue was greater. The exchange rate rapidly depreciated from historic highs, declining by almost 30% in a two-month period from late August 2008,[24] such that company tax fell by a record 15% over 2 years.[25] Growth in wages on tax returns fell to 4%, faster than during the 1990s recession. However, the large tax cuts promised at the 2007 election caused personal income tax to fall by 9% over 2 years, the largest decline for at least 50 years. Capital gains tax, which was a very small component of revenue in the early 1990s, fell 70% across all entities during the GFC. In addition to the immediate loss to tax revenue, the capital losses were carried forward, detracting from tax revenue for almost a decade after.

In the last decade social expectations of the government have continued to rise. Since its beginning in 2013, the National Disability Insurance Scheme (NDIS) has grown to be the third largest government spending program (Figure 1-2), projected to grow to $89.4 billion in 2031-32 (2.6% of GDP).[26] So far, personal income tax is again providing the additional revenue through bracket creep needed to fund the increasing demands on government, this time the NDIS.

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[23] The Government's *Retirement Income Review* found superannuation tax concessions to disproportionately benefit high income earners. See Retirement Income Review, Final Report (treasury.gov.au) and Who benefits? The high cost of super tax concessions, The Australia Institute.

[24] Fundamentals, Portfolio Adjustments and the Australian Dollar, 2009, Reserve Bank of Australia.

[25] Cash basis. The accrual measure of company tax goes back only to the late 1990s.

[26] The National Disability Insurance Scheme, Parliament of Australia (aph.gov.au).

1.5 2024 and beyond

In 2023-24, all levels of Australian government raised around $800 billion (29.5% of GDP) in taxation revenue.

The 2010 'Henry Review' reported that Australian governments levied a total of 125 different taxes[27], however just 3 of these taxes (personal income tax, company tax and GST) accounted for around three-quarters of the revenue raised, with personal income tax alone accounting for over a third.

The PBO's projections for the Australian Government's budget are published annually in *Beyond the budget*. The latest edition, published in June following the 2024-25 Budget, discussed Australia's significant dependence on bracket creep to achieve future budget surpluses.

Our analysis shows that if the Australian Government were to maintain average personal income tax rates at the 2024-25 level by increasing the income thresholds each year, the share of personal income tax would remain broadly stable. However, the budget would remain in deficit indefinitely without other revenue enhancing measures.[28] This is discussed further in Chapter 4.

Combined forecasts for state governments are published in our annual *National Fiscal Outlook*, published in October.

1.6 Summary

Tax revenue has increased markedly since Federation, from around 5% of GDP to around 30% of GDP in 2023-24 (Figure 1-9).

Ignoring the period during the Second World War, tax revenue as a share of the economy has grown relatively steadily between 1920 and 2000. Some periods saw more rapid increases, such as during the Great Depression, when governments introduced taxes to fund welfare spending, and some periods were more stable, such as the 1950s.

Governments have intervened to modify the size and composition of tax since Federation, although major changes have been mostly in response to particular events rather than with a broader and long-term view.

In terms of Australia's tax mix over more than a century (Figure 1-10), this Chapter has identified 4 broad periods.

The first 50 years were characterised by marked changes to the tax mix because the 2 world wars and the Great Depression resulted in governments proactively expanding their sources of revenue. Excise and customs duties originally provided the most revenue, but by the end of the period, income tax made up half of tax collections.

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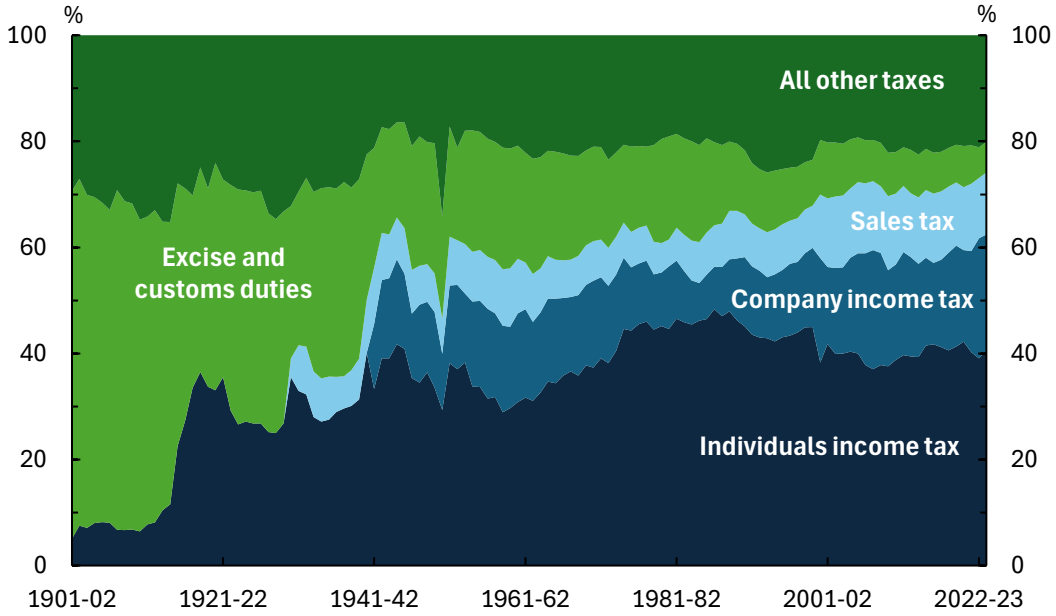
[27] Appendix A presents a list of all taxes levied by the Australian Government. We do not have a list of all taxes levied by each State Government.

[28] See the PBO report Beyond the budget 2024-25: Fiscal outlook and sustainability.

Figure 1-10: Major categories of Australian tax revenue (all governments)
Shares of total



Source: ABS and PBO analysis.

The second period was from the end of the Second World War to 1980, when tax revenue as a share of GDP increased, particularly after 1960. The tax mix remained relatively stable, with the major trend being unrelated to direct government action. The increase in personal income tax share observed during the 1960s and 1970s was a result of governments taking advantage of bracket creep to fund their expanding expenditure commitments. The larger tax take, particularly from individuals, highlighted the gaps in the tax base which could be exploited to reduce tax. These gaps were always present but had become more problematic.

The third period, from 1980 to 2000, focused on addressing these problems by making significant changes to the tax system, such as the introduction of fringe benefits tax and capital gains tax. However, changes to the overall tax mix were relatively minor. The share of tax from excise and customs duties continued to decline, partly through the removal of tariffs on trade, but mostly because of the increase in other taxes. The introduction of the GST in 2000 made a further adjustment away from the trend towards income tax.

Since 2000, some of the pressure on the adequacy of Australia's tax collections has been alleviated by high tax revenue from corporate profitability. Changes to personal income tax have largely centred on the size, distribution and timing of changes to rates and thresholds rather than on tax reform. Aside from higher company income tax collections, the substantial change to the tax mix has been the continuing decline of excise and customs duties, a trend likely to continue in the future.

2 Taxes, transfers and tax expenditures

Government revenue and expenditure are closely linked, and in some cases are effectively interchangeable. In many instances, both revenue and expenditure policies can be used to achieve the same aims. This Chapter explores the interrelation between taxes and transfer payments, 'tax expenditures', and how focusing on the government's tax take alone can be misleading.

Tax expenditures are a prime example of this interchangeability, whereby the government consciously chooses to reduce taxes in selected areas and foregoes revenue to achieve a policy objective that is analogous to spending.

This chapter takes a very broad perspective of taxes, transfers and 'welfare' which goes beyond how these terms are often used. In doing so, we aim to expand your thinking about how transfers and tax expenditures can play equivalent roles in achieving policy outcomes.

2.1 Taxes and transfers

Taxation is the compulsory imposition of charges on individuals and entities by governments. Transfers are amounts paid by governments in cash or in kind, mainly to individuals who meet a set of criteria. Examples of cash transfer payments include pensions, allowances, and family payments. Transfers in kind include education and health care.

The amount of tax a government collects partly depends on how the government chooses to provide welfare to its citizens. The design of these taxation and transfer systems, and how they are implemented can vary, but they ultimately aim to achieve similar outcomes.

For example, government may provide an individual with a payment of $5,000 per year or it may provide a tax concession of the same amount. The overall effect is identical but in the first case both taxation and spending are higher than in the second case.

Two examples of providing welfare through the tax system are the tax-free threshold, where the first $18,200 of income is tax free, and some of the exemptions to the GST. Without the tax-free threshold, governments would raise more tax revenue but also increase welfare payments (see Box 1) to achieve the same policy objective. Similarly, GST exemptions on some foods, health and education, could be replaced by payments to households of the equivalent amount. In both cases, the change in tax revenue is offset by the change in expenses.

Governments choose to provide welfare through a combination of tax concessions and transfer payments. Tax concessions carry the risks of being difficult to target, are relatively non-transparent and may result in unintended consequences such as introducing 'loopholes'. Direct transfer payments can be more accurately targeted but may be complex and expensive to administer. Governments may also be attracted to providing welfare through tax concessions because the size of the budget impact appears to be smaller.

Given that taxes and transfers work in tandem, it is important to consider them together. Without considering both, either component in isolation can be misleading.

Box 1: 'Welfare' and the personal income tax system

The personal income tax system is a special case of how the government provides a form of income support to individuals through a series of progressive tax rates, rather than applying a flat tax rate to personal income with direct welfare transfers.

As an illustration, consider an individual with income between $45,000 and $135,000. According to the 2024-25 personal income tax scales, the tax on this income is $4,288 plus 30 cents for each dollar earned above $45,000. Mathematically, the impact of the tax is identical to paying tax at a flat rate of 30% on all the income and receiving a direct welfare transfer of $9,212 from the government.[29]

For an individual with income above $190,000, the tax is typically shown as $51,638 plus the top rate of 45% on income above $190,000. This is mathematically identical to a flat tax rate of 45% on all the income and a direct payment from the government of $33,862.

Governments could apply either of these treatments with the same net result for both the Budget and individuals' tax liability. However, a flat rate with a flat welfare transfer would increase the Budget's revenues and expenses considerably although at an equal and offsetting amount.

In the Tax Expenditures and Insights Statement (TEIS), the progressive rates of the personal income tax system are considered as a "structural feature of the tax system" and, as such, are out of scope for the calculation of tax expenditures.

Taxes and transfers across age groups and time

People pay different amounts of tax and receive different amounts of government benefits depending on their circumstances. These amounts may also change over time for people with similar circumstances, as tax and transfer policies change.

One of the key demographic factors affecting taxes and transfers is age. Figure 2-1 shows the sizes of taxes and transfers for all levels of government, as a share of gross household income, for different groups according to the age of the head of the household (this means that, for example, government support for primary schooling is shown for the age of the parent rather than the child). While there have been some shifts in tax and benefits, the tax and transfer system has been in most part been stable for the last 40 years, particularly for those aged from 25 to 55.

For those under 25, 'direct' taxes have declined slightly as a share of household income over the last 40 years, as more of this cohort have remained in education rather than working.

[29] 2024-25 personal income of $45,000 is taxed $4,288 (excluding any offsets, credits and Medicare). If this same $45,000 income was taxed at a flat 30% this would equate to $13,500. If the government then provided a $9,212 tax credit or offset, the final amount of tax paid is equal to the current system at $4,288. Any extra income earned up to $135,000 would be taxed at 30% under both the current progressive system and a flat 30% system.

Figure 2-1: Distribution of income benefits and taxes (Share of household income)

Source: Government benefits, taxes and household income, Australia, 2015-16, Australian Bureau of Statistics (ABS), and PBO analysis.
Note: This data is based on the ABS' Household expenditure survey, which is based on households rather than individuals. The survey results include a margin of sampling error such that small movements between years and age groups may be unreliable.

Most of the changes over time have related to the older age groups, particularly since the early 1990s. For those aged 55 and over, the levels of both taxes and transfers as a share of income have remained relatively stable, but the composition has changed. Direct taxes and direct benefits have both declined, while indirect taxes and benefits have increased.

This is in part due to the age qualification for the age pension and other pension-based benefits increasing from 60 to 65 for women reaching this age between 1995 to 2017[30]. It also reflects rising incomes and the ability for people to work longer as more white-collar work replaces blue-collar work. These changes result in people over 55 receiving fewer direct benefits, such as the age pension, but the level of indirect benefits, such as the medical and pharmaceutical benefits scheme, has remained broadly similar.

Those aged over 65 are receiving a similar amount of benefits as in the past, although the split between indirect and direct has changed over time. While direct benefits such as the age pension have also decreased as a proportion of total income, the amount of indirect benefits have increased, perhaps related to a higher proportion of people aged 75 and over, who require more medical services.

Taxes paid by those aged over 65 have remained largely constant as a share of income over time, but the composition of the tax has changed. Decreasing income tax is partly related to the maturing of the superannuation system, where incomes are concessionally taxed, and the introduction of more generous concessions. Indirect taxes have increased as a share of income for this cohort.

[30] 3.4.1.10 Qualification for Age | Social Security Guide (dss.gov.au)

2.2 Tax expenditures

A tax 'concession' refers to cases where a form of income or spending is taxed at a lower rate than other forms of comparable income or spending. The tax revenue foregone due to the lower rate can be viewed similarly to a government expenditure. These are referred to as 'tax expenditures', because they are similar to direct government spending. They tend to receive less direct scrutiny because no actual money is exchanged.

For example, the GST imposes a 10% tax on goods and services, but with exemptions on some food, health and education, which are concessionally taxed at a zero rate. An alternative system, which would deliver a similar result, would be for the government to tax all goods and services by 10% and provide *all* households payments equivalent to 10% of the value of those goods and services exempt from GST. The net impact, ignoring compliance and administration costs, would be almost identical to the current system, but with more GST raised and more government transfers to households. In this example, the tax expenditure can be thought of as the value of the GST foregone due to the concession, or as the amount that would be required to provide the same impact through a transfer payment.

The *Charter of Budget Honesty* requires the Australian government to report on the size of tax expenditures in a separate report, called the *Tax Expenditures and Insights Statement (TEIS)*, and to also provide a summary of similar information in each annual budget.

The total amount of tax expenditures in 2023-24 was over $200 billion. If these concessions were administered by governments as additional tax and spending, the Australian government's budget would be over a third larger, though the budget balance would be unchanged if there was no additional administrative burden.

The largest group of tax expenditures itemised in the TEIS are the concessional tax rates on superannuation contributions and earnings. That is, the employer provided superannuation guarantee, any additional contributions - like salary sacrifice or deductible contributions paid into superannuation funds, and the subsequent investment earnings, are taxed at 15% (or zero in retirement), rather than the individual's marginal tax rate. The associated revenue foregone by the government was around $49 billion in 2023-24.[31]

The second largest tax expenditure relates to the exemption of main residences (owner-occupied housing) from capital gains tax, which represents revenue foregone of around $48 billion in 2023-24.[32] While estimates are not available, if taxes levied by States were also included (such as land tax), the exemption of owner-occupied housing from most taxes would, cumulatively, be the largest tax expenditure, with the amount likely to be around $100 billion of foregone tax revenue.[33]

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[31] TEIS 2023-24: Concessional taxation of employer superannuation contribution - C2, Concessional taxation of superannuation entity earnings - C4.

[32] TEIS 2023-24: Main residence exemption discount component – E8, Main residence exemption – E7. The calculation does not consider the impact on tax if home-owners could deduct their interest repayments or other property expenses from their taxable income.

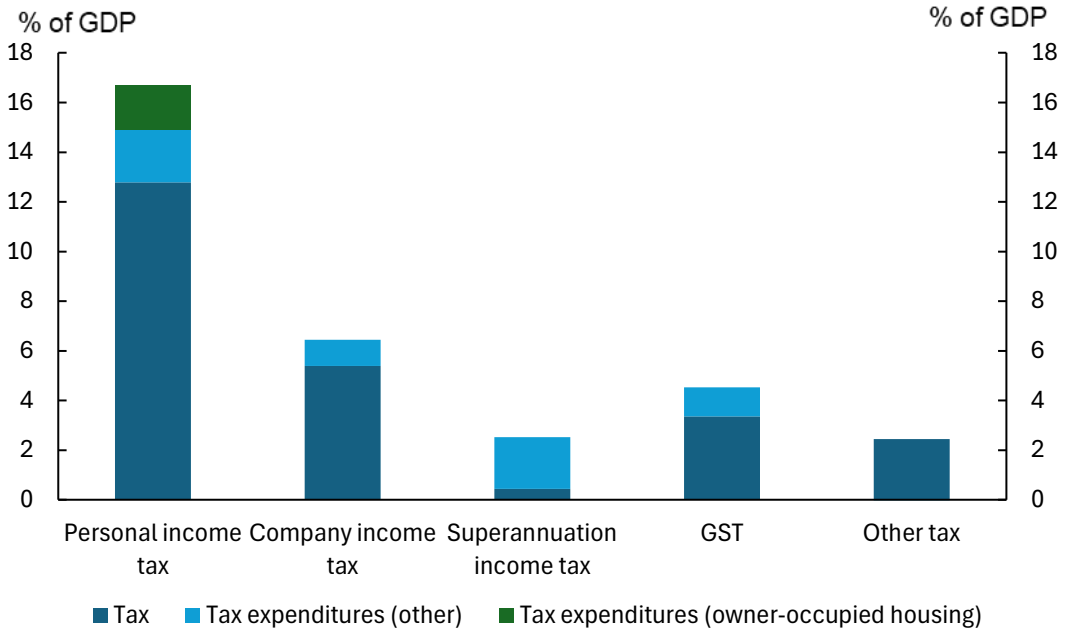
[33] Combining the $50 billion of tax expenditure for the exemption of CGT for owner-occupied dwellings with another $50 billion for exemption from land tax, based on estimates of actual rent and imputed rent consumed by owner-occupiers, reporting the *Australian system of national accounts*.

The third largest group of tax expenditures was the exemptions from GST, totalling around $30 billion[34]. This includes some food, health care and related services, financial supplies, education, water, sewage and a collection of other smaller exemptions.

All 3 of these tax expenditures have increased significantly over time because all have increased faster than the size of the economy. For example, superannuation balances have increased from the equivalent of 38% of GDP in 1991[35] to 137% in 2023[36], with the associated tax expenditure increasing proportionately. Similarly, house prices and spending on GST-exempt consumption have increased faster than GDP causing a similar proportional increase in the associated tax expenditure.

The largest share of tax expenditures relates to revenue forgone in the personal income tax category. The impact of these tax expenditures on revenue collections is exacerbated by the increasing reliance on this revenue source (Figure 2-2).

Figure 2-2: Australian government tax and tax expenditures, 2022-23



Source: 2022-23 Tax expenditures and insights statement.

A good example of the operation of taxes, transfers and tax expenditures is Australia's retirement saving system, which aims to provide individuals with an adequate standard of living in retirement.

[34] TEIS 2023-24: Food – H25, Health – medical and health services – H17, Financial supplies – input tax treatment – H2, Education – H14, Health – residential care, community care and other care services – H18, Financial supplies – reduced input tax credits – H13, Water, sewerage and drainage – H6, Health – drugs and medicinal preparations – H15, Private health insurance – H19, and a collection of smaller tax GST tax expenditure.

[35] Major superannuation and retirement income changes in Australia: a chronology, Parliament of Australia (aph.gov.au).

[36] 2406-Super-stats.pdf (superannuation.asn.au).

The retirement system is typically depicted as 3 'pillars': the age pension, compulsory superannuation savings, and voluntary personal savings (including home ownership).[37] Only the age pension, a transfer payment, appears on the Government's own books.

The superannuation system, which provides a vehicle for individual retirement saving, is underpinned by the superannuation guarantee, which sets out a rate that employers must pay to a nominated superannuation fund in addition to employee wages.

Contributions to superannuation funds are largely concessionally taxed, resulting in a tax expenditure of the value of the difference between the tax paid and the tax that would have been paid had the amount been taxed with other personal income.[38]

Box 2 discusses how different countries achieve similar policy outcomes through different mixes of taxes, transfers and tax expenditures, making comparisons between them more difficult.

In designing policies, governments consider a number of trade-offs between various mechanisms for collecting revenue and delivering outcomes, including simplicity, equity, efficiency and compliance. These are discussed next in Chapter 3.

Box 2: Taxes and tax expenditures: International comparisons

Many countries fund a similar social insurance objective in a different way. One scheme common across Europe and the United States is social security contributions. Social security contributions are compulsory payments paid to general government that confer entitlement to receive a future social benefit. For instance, the UK funds retirement through a National Insurance scheme, which is a tax on employee earnings and self-employed profits. The amount of State Pension received by an individual in retirement is determined by their total National Insurance contributions. These social security contributions are recognised as taxes, while Australia's compulsory superannuation guarantee is not.

As a result, these countries would record both higher tax revenue and higher transfers than in Australia. Both methods achieve the same goal: funding individuals in retirement, though the way these are reported in government budgets is very different.

Similarly, in Australia family benefits are mainly provided through transfer payments, where individuals pay their full amount of personal income tax and are handed back some money as a regular family payment where qualifying conditions are met.

(continued on next page)

[37] *Superannuation Policy for Post-Retirement*, Productivity Commission (2015).

[38] The relative sizes of the total age pension in the absence of compulsory superannuation and the tax expenditure incurred in reducing the total age pension depends on how much people would have saved anyway. PBO analysis was reported in *Would taxpayers be better off if superannuation never existed?* (Michael Read, Australian financial review, 17 June 2022).

In the United States, however, family benefits are provided in the form of Federal tax credits, reducing the amount of income tax paid. This mechanism reduces the tax take but also removes the need for the government to subsequently provide the benefit, so the net position is equivalent.[39]

Australia maintained a similar system in the past. In 1950-51, a single person earning £1,000 for the year would pay tax of £135, while someone with a dependent spouse and 2 children would pay only £83.[40]

These differences between how governments achieve their policy objectives complicates direct comparisons between taxes levied in different countries.

The *International comparison of Australia's taxes*, published in 2006, was a comprehensive statement on how Australia's taxes compare with those in other countries.[41]

[39] The OECD's *Taxing wages* report adds Australia's superannuation guarantee payments to tax when comparing different tax systems between countries.

[40] *Year Book Australia, 1957*, Commonwealth Statistician (page 813).

[41] *International comparison of Australia's taxes* RFE Warburton and P Hendy, 2006.

3 Characteristics of different taxes

Australia's tax mix involves a range of different taxes, each with different characteristics.

While approaches to tax design often focus on individual principles (such as simplicity, equity and efficiency), the operation of all tax and transfer systems involves trade-offs between those principles. A tax that is simple, for instance, may not be equitable. Those trade-offs can change over time as society's views of what is optimal for the system evolve.

Different taxes and transfers play different roles within the system. Not all taxes are necessarily implemented to increase revenue collections. Taxes may also operate as a protection mechanism for other taxes, act as an automatic stabiliser during economic cycles, or be designed to discourage certain activity. This complicates the debate around trade-offs.

Ideally, the tax system should be assessed as a whole (including all levels of government), but the interactions between the various components are complex. Some taxes rate poorly against particular principles but still make important contributions to the system. It is important to think about the entire tax and transfer system when evaluating the overall system against particular principles.

This chapter will discuss several common principles of tax design in the context of Australia's tax and transfers system including simplicity, equity, efficiency, influencing behaviour, volatility, compliance and visibility.

Examples are provided in Appendix B to assist in understanding each concept.

3.1 Simplicity

Simplicity is the idea that the tax and transfer system should be easy for most people to understand and interact with. Simplicity, by design, makes compliance easier and reduces costs for both taxpayers and administrators. Complicated tax rules or eligibility criteria make it harder for people to understand their obligations and entitlements. This may lead to aggressive tax planning and sub-optimal decision-making, resulting in greater marginal excess burden[42] on the economy and a reduction in efficiency.

Certainty is also linked to simplicity – it should be clear what is being taxed, the amount or rate of the tax, the timing and circumstances under which that tax is applied, and who pays it. Uncertainty and complexity can lead to poor decision-making by individuals, resulting in inefficiencies and inequities, as well as cases being litigated in the court system at the expense of taxpayers and the government.

Achieving simplicity in a tax system involves trade-offs with other characteristics. Some taxes are complex in order to achieve a simpler system in total and other taxes are complex to achieve different goal.

[42] Marginal excess burden is defined as the deadweight loss (or economic loss) for an additional dollar of tax revenue raised.

3.2 Equity

The principle of equity in a tax system is perhaps the most difficult principle to precisely define because it reflects the values of the community, may vary from individual to individual and may change over time. Equity is best considered from a holistic perspective of the tax and transfer system rather than by looking at each component individually. An equitable tax and transfer system does not require that each separate tax and transfer be equitable.

Tax design literature typically discusses 2 types of 'equity'. The first, called vertical equity, is where those with a higher ability to pay, pay proportionately more tax (or receive fewer benefits). This is also referred to as the progressivity of the tax (and transfer) system. The second, called horizontal equity, involves those with equal ability to pay in fact paying equal tax (or receiving equal benefits), regardless of the source of their income.

Vertical equity

Australia's personal income tax system is usually described as progressive, as the marginal tax rates increases as your income rises.[43] In combination with the tax-free threshold and low-income tax offset (LITO), this ensures that lower taxable income earners have a lower burden of tax while placing a ceiling on the rate paid for the highest earners (currently 45% for a taxable income of over $190,000, plus the Medicare levy of 2%). It achieves income redistribution, related to the idea of a person's capacity to pay.

By comparison, a flat income tax on all sources of income applied to everyone would be simpler to administer and arguably more economically efficient but would not achieve the vertical equity of a progressive system.

Horizontal equity

Horizontal equity is achieved when 2 people with the same income (or wealth) pay the same amount of tax and receive equivalent benefits. In practice this is rarely the case due to people's individual circumstances and the range of personal income, deductions, credits, offsets and exemptions present in the tax system as well as benefits available in the transfer system. Examples include tax arrangements for married couples, home ownership, capital gains tax discount, family tax benefits and childcare subsidies among others.

Another challenge in achieving horizontal equity involves who has access to benefits under the tax and transfer system. In general, eligibility for benefits delivered through the tax system is based on a person's taxable income. However, people with significant assets receiving non-wage income have a greater degree of control than a sole wage earner in how much taxable income they receive in a given year. These individuals can structure their income, particularly through a trust.[44] Two people can have the same taxable income, pay varying amounts of tax and receive varying amounts of benefits.

Means testing applies to many direct transfer payments in Australia and involves an individual assessment of a person's income, assets or both to determine eligibility. Means testing can ensure equity of a transfer payment by limiting access to payments to only those people who

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[43] Marginal means that the increased tax rate only applies to the income earned above a relevant threshold.

[44] Seethe discussion in the PBO's *Dividend imputation and franking credits* (page 33).

the government has determined genuinely need it. Equity concerns can arise when examining which transfer payments governments choose to means test, which assets are included in the means test (as well as the value of those assets) and for which societal groups.

Benefits available to people earlier in their lives such as youth allowance, unemployment benefits and parenting payments are strictly means tested. In contrast, benefits available to older people are less likely to be means tested and if they are, receive significant exemptions such as the principal place of residence for Age Pension assessments.

In this way means testing can be viewed as supporting horizontal equity by ensuring that eligibility for specific transfer payments is consistent.

In practice, the complexity of the tax and transfer system means that both vertical and horizontal equity are difficult to assess.

3.3 Efficiency

'Efficiency' refers to how the tax system distorts economic activity. Most taxes result in some economic efficiency loss. For example, a tax may reduce incentives for people to work or invest, or induce them to alter their consumption patterns. For the tax system to be efficient, it should aim to reduce distortions as much as possible.

For example, if different types of fuel are taxed at different rates, drivers may choose to buy vehicles that use the lower taxed fuel, even if they are otherwise less appropriate for the drivers' needs, or even pay to convert their vehicles to a different fuel.

The efficiency of the tax system is closely linked to its coverage and its rates. A system that applies a high tax rate to just a few items is less efficient than one that applies lower and equal tax rates to a broader range of items. A common mantra in tax policy design is to "broaden the base and lower the rates".

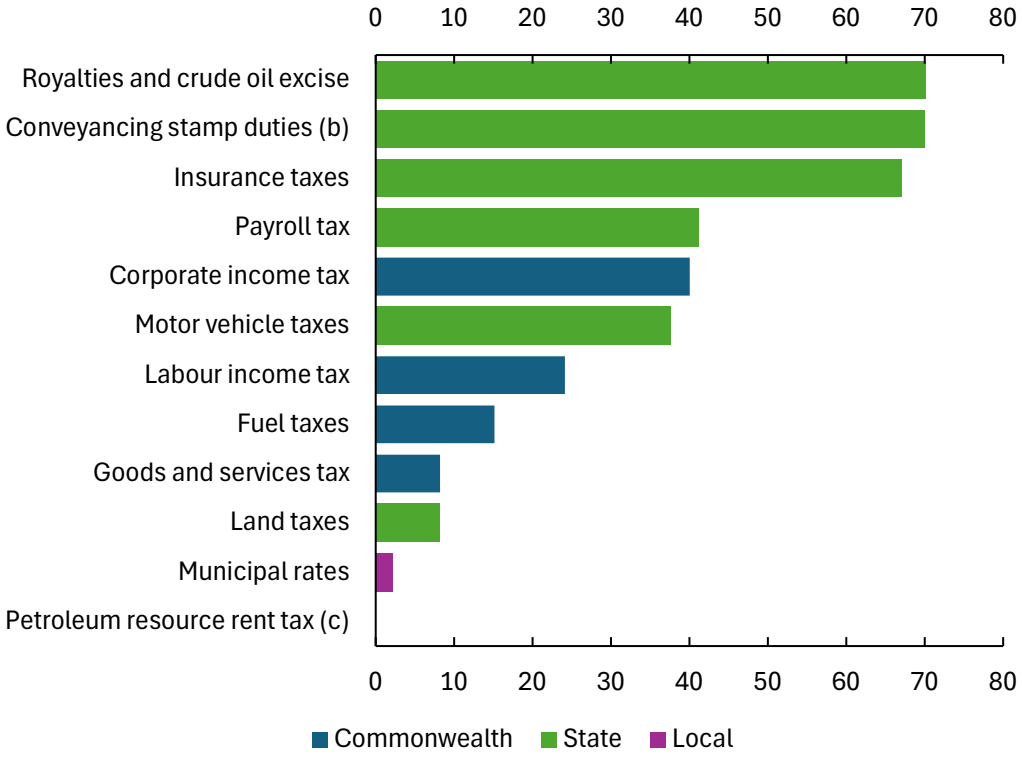
Another important factor for tax efficiency is the extent to which people can modify their behaviour to avoid paying the tax. A business subject to high taxes may relocate to a lower taxing country, even if other costs are higher. People wishing to move house to reduce their travel time and costs may choose not to because the tax on moving (stamp duty) is too high.

An efficient tax system has taxes that result in relatively low economic losses per dollar of revenue raised, called the 'marginal excess burden'. Figure 3-1 shows the marginal excess burdens for each additional dollar raised in a selection of Australian taxes.[45]

Taxes that are generally considered to be efficient include GST, land taxes and resource rent taxes. GST is efficient, as it applies a uniform 10% rate to a broad range of goods and services, with some exemptions. Taxing land, when applied uniformly and broadly, is efficient as the tax base is finite and immobile. In contrast, taxation via stamp duty on conveyancing is narrower (based on ownership transactions), mobile (consumers can influence when they engage in transactions) and volatile (subject to economic cycles).

[45] Most of the amounts shown are from the equivalent chart in Australia's Future Tax System Review, Final Report (Australian Treasury 2010). We have shown an updated estimate for conveyancing duties.

Figure 3-1: Marginal excess burden from selected Australian taxes[(a)] (cents per additional dollar raised)



Source: Understanding the economy-wide efficiency and incidence of major Australian taxes (Cao et. al., Australian Treasury) and Australia's Future Tax System Review (Australian Treasury).
(a) The welfare effect of varying each tax has been assessed using the KPMG Econtech MM900 general equilibrium model of the Australian economy. The welfare loss is the loss in consumer welfare per dollar of revenue raised for a small (5 per cent) increase in each tax, simulated individually. It is measured as the amount of lump sum compensation required to restore the representative consumers' level of satisfaction to its original level, after returning the revenue raised by the tax to the consumer as a lump sum transfer. The extent of such compensation reflects the distorting effect of the tax on the economy.
(b) The marginal welfare effect of stamp duty conveyancing uses an updated figure based on the *Understanding the economy-wide efficiency and incidence of major Australian taxes* Treasury paper.
(c) The petroleum resource rent tax is modelled as a pure rent tax giving rise to a zero-welfare loss. In practice, a small increase in this tax could be expected to induce some welfare loss. However, it would be expected to rank as one of the more efficient taxes in the chart.

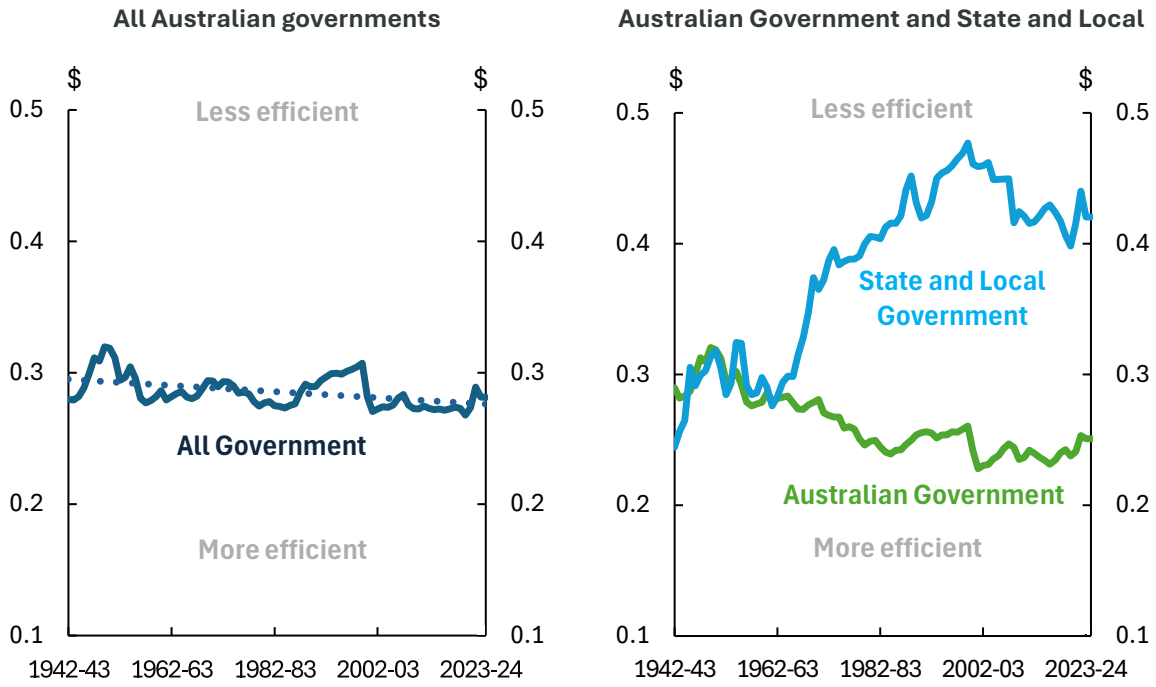
'Rent taxes' are designed to be economically efficient by taxing only the income earned above a benchmark rate of return. Applied to companies, these are often called 'super-profits' taxes.

Applying these marginal excess burdens to Australia's taxes over time produces a measure of the economic efficiency of the tax system as a whole. Note that this analysis assumes that the marginal excess burdens have remained constant over time, which is a significant simplification, and means that any conclusions from such analysis need to be carefully expressed.

While the overall average efficiency of Australia's taxes may have remained relatively stable over history, the total size of taxes (as a share of GDP) has increased over time, particularly up to 1980, meaning that the impact of taxes on the economy has increased.

Taxes levied by the Australian Government have tended to become more efficient on average, while taxes levied by states have becomes less efficient (Figure 3-2).[46] This is partly due to the relatively inefficient payroll tax being transferred from the Australian Government to the states in 1972. Declines in customs duties paid to the Australian Government have also contributed to increasing efficiency. For the states, the introduction of taxes on insurance and increases to stamp duty and taxes on gambling led to a large reduction in tax efficiency up to 2000.

Figure 3-2: Weighted marginal excess burden of Australian taxes (reduction in economic activity for each dollar of tax levied)



Source: Australia's Future Tax System Review (Department of the Treasury) and PBO analysis.

As mentioned earlier, the introduction of the GST effectively replaced a range of indirect taxes with another indirect tax. The impact on efficiency was significant as the GST is a much more efficient tax than most of those that it replaced.

With a growing proportion of revenue collected through personal income tax, the efficiency of the system as a whole is likely to continue to slowly improve.

3.4 Taxes which aim to change behaviour

While an 'efficient' tax is often considered to be a tax with less impact on behaviour, some taxes are deliberately designed to encourage or discourage certain behaviours desired by the community. 'Sin taxes' such as the excise tax on tobacco, are intended to be passed onto consumers (with no accompanying compensation) as pricing signals to discourage consumption of these products.

[46] This chart, and most of the analysis in this section, is highly simplified. In reality, marginal excess burdens will vary over time. Marginal excess burdens also only apply to small changes to taxes. Looking at large changes to taxes requires the application of average excess burdens, which receive less coverage in the literature. The broad points made here depend on the relative sizes of the marginal (or average) excess burdens. For example, while the marginal excess burden for stamp duty may vary over time, it is likely to remain significantly higher than the marginal excess burden for a broad-based consumption tax or a land tax. The quantifications in this explainer are illustrative of the broader points, rather than being technically precise.

In contrast, tax concessions on income paid into superannuation are intended to encourage household savings by providing concessional tax rates for contributions. Similarly, capital allowances for business are intended to encourage capital investment.

Tax concessions may also be targeted to promote particular industries. For example, tax offsets for the Australian film industry allow businesses to offset qualifying Australian production expenditure.

Transfer payments can also be utilised as a mechanism for change. For example, a variety of 'baby bonuses' had been implemented in many countries, including in Australia between 2004 and 2014,[47] in an attempt to increase the fertility rate.

Despite what may be seen as positive impacts when individuals smoke less, reduce carbon emissions, save more for retirement, promote local business prosperity and have more babies, taxes which aim to change behaviour are generally inefficient for the economy. They can also skew equity and add complexity to the overall system.

3.5 Volatility

Volatility is another important factor to consider in the tax mix. Some sources of revenue, just like spending, are more reactive to fluctuations in economic activity. Revenue volatility can be a significant challenge for governments as they try to manage budgets. However, volatility can assist if it functions as an 'automatic stabiliser' for the budget and economy, where the tax and transfer system operate to decrease spending (or increase the tax take) during 'boom' periods and increase spending (or decrease the tax take) during economic downturns without requiring any direct policy intervention.

For example, during a recession income tax receipts decline as wages and profits fall, and spending on unemployment benefits increase with rises in unemployment, cushioning the financial stress for households and the economy.

The net impact of these automatic responses by the tax and transfer system is the transfer of the debt generated by the downturn from households, which are often poorly placed to manage it, to the government, which has significant capacity to deal with rapidly changing economic circumstances.

The Australian Government has a much larger budget than the states and provides fewer essential services such as hospitals, schools, utilities and emergency services, and therefore is better placed to manage the debt.

In this context, an effective mix of taxes may be relatively non-volatile taxes levied by the states, together with some taxes levied by the Australian Government which respond promptly and strongly to economic booms and downturns.

For state and local government taxes, land tax and council rates are consistent sources of revenue, while stamp duties are highly volatile and sometimes disconnected to broader economic activity.

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[47] See 3.6.4 Maternity payments - historical rates | Family Assistance Guide (dss.gov.au).

The GST is highly responsive to economic activity, being a tax on household spending. Concessions for stable spending items such as some food, health and education enhance the GST's effectiveness as an automatic stabiliser. The narrower base means that the GST in part acts as a tax on discretionary spending which increases in times of prosperity and decreases in downturns.

Income taxes act as automatic stabilisers, although tax payment systems can slow their impact. In Australia, businesses usually pay tax in regular instalments based on the previous years' income, such that when income suddenly changes the tax system will take some time to 'catch up'. While income taxes are somewhat less effective at responding rapidly to economic downturns, bracket creep can act effectively in response to an economy steadily approaching capacity constraints. Bracket creep has also often resulted in significant budget repair in the years following a downturn.

3.6 Compliance

Compliance involves following guidelines, specifications or, in the case of the tax system, the tax laws that govern the system. Compliance protects the integrity of any tax system and allows it to act and achieve against the principles on which it was designed. In theory, tax systems are designed to capture taxes without being over-reliant on those taxpayers who comply readily, compared to those who comply only reluctantly.

The 'tax gap' is the difference between taxes collected against the amount of taxes collected if all taxpayers were fully compliant. The ATO estimates the net tax gap to be $37.5 billion or 7% of tax revenue (in 2020-21).[48] The 2 taxes with the largest tax gaps are *small businesses income tax*, and *individuals income tax*, measured at around $16.2 billion (43.2% of the total tax gap) and $10.9 billion (29%) respectively. A smaller amount of around $4.8 billion (12.8%) of the tax gap is attributed to large corporate groups. However, seeking to collect on this gap in its entirety is not costless, and to extract every dollar would require considerable resources and intense scrutiny by the ATO.

Figure 3-3 compares the relative shares of the different sources of the tax gap with the shares of total tax collected by the ATO.

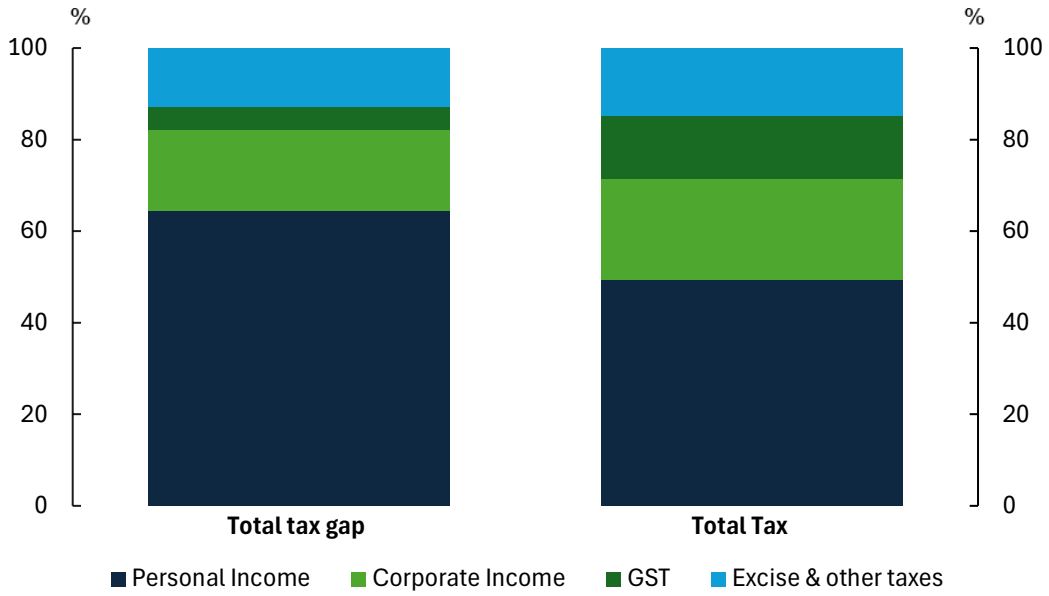
One important area of consideration in the tax gap is the shadow economy. The shadow economy refers to dishonest or criminal activities and includes items such as unreported personal income, unreported business income, unreported GST, illegal alcohol, illegal cigarettes and tobacco. In aggregate, the ATO estimates the shadow economy makes up around $16.3 billion or 43.5% across the income categories of the tax gap, a significant portion of which is spread across a very large cohort making it difficult and costly to close.

A related issue is that of the tax 'policy gap', where the tax system does not operate as intended. Cases of policy gaps often relate to where an individual or business is compliant with tax law but reduces the tax they pay by utilising various mechanisms not available to all taxpayers. This may include mechanisms to transfer income to a jurisdiction with a lower tax rate.

[48] For this and later references to the tax gap, see: Australian tax gaps – overview | Australian Taxation Office.

While the tax gap is a result of inability to effectively police tax laws, the tax policy gap is a result of either being unable to make effective tax laws or preferring to offer concessions.

Figure 3-3: Share of total tax gap and total tax collections, 2020-21



Source: ATO tax gap statistics and 2020-21 Final Budget Outcome.

3.7 Tax visibility

The politics of taxation are complex, but they are at least as influential on tax design as the factors already discussed. The community's perceptions of tax and how those perceptions are formed is highly contested. This section focusses on one aspect of perceptions of tax, often called 'tax saliency', a technical term for visibility[49]. We acknowledge that other aspects are at least equally as important, particularly the public's sense of how much tax is paid by the highly affluent.

Most people don't like paying taxes, but some taxes appear to be more tolerated than others. A salient tax is obvious when it is applied, particularly when individuals need to actively remit the amount, such as taxes on capital gains, which usually result in a tax bill on assessment. By contrast, for other taxes the impact is either hidden or unclear, such as payroll tax. Highly salient taxes may attract more debate, prompt stronger behavioural responses and may be subject to lower rates of compliance.

3.8 Tax system design: principles in practice

This chapter, and the examples shown in Appendix B, illustrate that the design of many taxes involves trade-offs between various principles.

Governments may make choices to tax a new revenue source such as introducing a wealth tax, or increasing resources to improve compliance with existing taxes. However, these changes are unlikely to raise enough revenue to materially change the composition of Australia's tax mix (discussed further in Chapter 4).

[49] See *Economic Fundamentals: Tax Salience* (The Tax and Transfer Policy Institute) for more information.

These choices always involve trade-offs between the tax system design principles, but all taxes are different in how they reflect the principles. Table 3.1 shows a selection of the highest revenue generating Australian taxes and short descriptions of each against some of the principles discussed above.

One commonly discussed tax idea is the proposal to reduce stamp duty in favour of an increase in land tax, on the basis that land tax is simpler, more equitable and more efficient (by lessening the barrier to entry created by stamp duty), and that it is a more stable revenue source. Another common suggestion is the reduction in income taxes in favour of increases in consumption taxes, which are simpler to administer and are economically efficient.

The final chapter of this report explores future trends in Australia's tax system and presents simple scenarios based on the tax debates above which illustrate some of the challenges and potential ways Australia's tax mix can be shifted through policy change.

Table 3.1: Summary of Australian Government taxes by selected taxation design principles

Tax	Simplicity	Volatility	Efficiency	Equity
Personal Income Tax (PIT)	Regular tax affairs are increasingly simple to navigate, partly due to pre-filling and other administrative initiatives. Complex filers may require additional data/evidence and use of a tax agent/accountant.	Somewhat connected to the economic cycle, predominately held up by salary and wages growth. Swings in the share market can introduce volatility unrelated to the 'real' economy.	When average taxation levels are high it results in more excess burden on individuals due to the broad tax base. Differences in marginal tax rates enable tax planning strategies, distorting decisions.	Vertically, subject to progressive taxation system. Horizontally, complex. For the well-informed taxpayers, they have more opportunity for tax planning & minimisation strategies.
Company Income Tax (CIT)	Quite complex due to a range of different income types, deductions, offsets and rebates. Options for substituted accounting periods. Maintenance of Franking Accounts for dividends.	Quite stable for most sectors (banking and large retailers) but subject to normal business cycle and domestic and international economic conditions. Mining sector is subject to volatility via global commodity prices.	Corporate taxes can distort economic activity by affecting future investment decisions.	The secondary small business rate makes the system somewhat more progressive. However, company tax is ultimately passed onto Australian shareholders as a franking credit. Foreigners will often pay tax both in Australia and in their own country for the same income.
Goods and Services Tax (GST)	No complexity for consumers. Some complexity for businesses owing to exemptions and reporting requirements.	Directly connected to the economic cycle, responds rapidly to economic shocks partly owing to exemptions since the GST is approximately a tax on discretionary spending.	Broad stable consumption tax factored into pricing over time. Some distortion from exemptions.	Generally neutral. Essential spending such as fresh food, health and education are exempted.
Superannuation	Relatively complex with different rules applying for certain ages and superannuation balances.	Contributions are generally consistent. Investment earnings are volatile as they are dependent on economic conditions.	Due to the nature of the superannuation system, changes in tax rules, rates and timing can have a greater negative excess burden.	Somewhat inequitable. Those with more income have a greater opportunity to gain tax benefits from the superannuation system.

Tax	Simplicity	Volatility	Efficiency	Equity
Excise & Customs Duties	Simple for consumers. Some complexity for producers and importers, as the amount of tax is based on production levels, and depending on the use, there are varying rates.	Stable but trending downwards due to behavioural change over time	Has a direct economic distortion effect, as it is a tax on production that is passed onto consumers. It can be used to reduce consumption i.e. for alcohol & tobacco. Customs duties are now very small, but previously they increased prices for consumers.	Applied equally to all excisable products. Consumers can avoid the tax by changing consumption behaviour. Excise tax typically applies disproportionately to lower income consumers, due to alcohol, tobacco and fuel making up a larger share of their spending. As such the ability to change behaviour to avoid the tax (e.g. electric vehicles and interaction with excise) is not equitable.
Payroll	Simple for wage earners. Levied on larger firms, due to the tax-free threshold exemption, which already have an established payroll process in place.	Quite stable, impacted by business exit and entrance rates.	Can be considered a direct tax on business employment creating economic distortions, though similar to consumption taxes as the costs are passed on. More of an impact in labour intensive industries. The wage bill threshold may distort business structure decisions.	Applies to all businesses at same rate when above the threshold regardless of ability to pay. Not all employers are impacted the same, exemptions for government and academia.
Stamp Duty (property, motor vehicle, insurance)	Simple rate applied to asset transactions based on valuations - variation on rate and bases between jurisdictions	Highly volatile as based on discretionary spending.	Inefficient as the tax base is mobile and transactions are largely discretionary. Households may choose not relocate even if this is otherwise in their interest.	Mostly equitable, as it is applied on certain transactions. It is generally factored into the price, and applies to those with the capacity of pay. Some exemptions for first home buyers and elderly.
Land tax/rates	Generally simple but can vary across jurisdictions. Valuation process may be complex.	Very stable and predictable due to land being fixed and immobile.	Highly efficient as tax base is immobile. The exclusion of owner-occupied land joins other policies in encouraging loading saving into owner-occupied housing.	Broadly equitable. Applied to all land and ratepayers equally, with exemptions for owner-occupiers. The rate only varies by jurisdiction.

4 Alternative perspectives and taxonomies of tax

When this report refers to the 'tax mix', we mostly mean the categories of tax according to their legislative basis or their mechanism of collection, sometimes referred to as 'heads of revenue'.[50] For most of the analysis here, this is a suitable split of taxes into categories.[51]

The tax mix can, however, be observed and analysed through many taxonomies. This section briefly explores the perspectives of industries, age and gender cohorts as well as taxes faced over one's lifetime.

4.1 Industries

The composition of the Australian economy has changed markedly since Federation. One of the most striking changes is the decline of the share of output from the agriculture industry, from around a quarter of the economy until 1950 to around 3% only 30 years later.[52] Another major change was that manufacturing output rose to nearly 30% of the economy in 1960 before falling back as international production became more competitive. Over the same period, the services sector grew strongly.

More recently, the industry composition has remained relatively stable, the exception being output from the mining industry, which has increased from a long-term contribution of 5% of the economy in 2005 to 15%, and manufacturing, which has decreased its share by the same amount, around 10 percentage points. The share of output from the health industry has also increased, but to a lesser extent.

There are several implications of these changes for the tax system. Economic activity is taxed through 3 broad avenues: taxes on the inputs to the production process, such as payroll tax; taxes on the income of the agents who generate the activity, which are the owners of businesses ('capital') and their employees ('labour'); and taxes on the products that the businesses produce, such as GST and excise.

Governments in Australia collect around 11% of tax from the inputs to economic production, around 22% from products, and the remainder from labour and capital income.

Three simple examples of how industry composition affects tax illustrate how the composition of the economy can affect tax, now and in the future.

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50 This term was inherited from 19th century budget reporting in Great Britain. It has since been abandoned there but continues in Australia.

51 The 'heads of revenue' split is most problematic for company tax. For domestic shareholders, Australia's imputation system operates such that 'company tax' is a pre-payment of tax on behalf of the shareholder. When a company, which is taxed at 30%, distributes dividends to a superannuation fund, which is taxed at 15%, the 'heads of revenue' recognition approach means that the superannuation fund is refunded the excess tax which was paid on its behalf. This gives the false appearance of a 'negative tax'.
For historical data, the split into the heads of revenue is also the only readily available option for presenting tax back to Federation. The analysis shown in this section is limited by availability of data, which we have taken back as far as we can.

52 *Australia's century since Federation at a glance*, Economic Roundup – Centenary Edition, Australian Treasury (2001).

Firstly, mining is an industry with a relatively low reliance on labour compared to capital while manufacturing is much more reliant on labour. As these industries change their shares of the economy, the share of tax will naturally switch between taxes on profits and taxes on wages.

Secondly, the health industry is highly reliant on labour, which may mean that share of taxes from labour income may increase in the future, as the ratio of working age individuals to support each person over 65 continues to decline from around 7.5 in the 1970s to around 5 today. This decline is expected to continue to be 2.7 working age individuals for each individual over the age of 65 by 2050. [53]

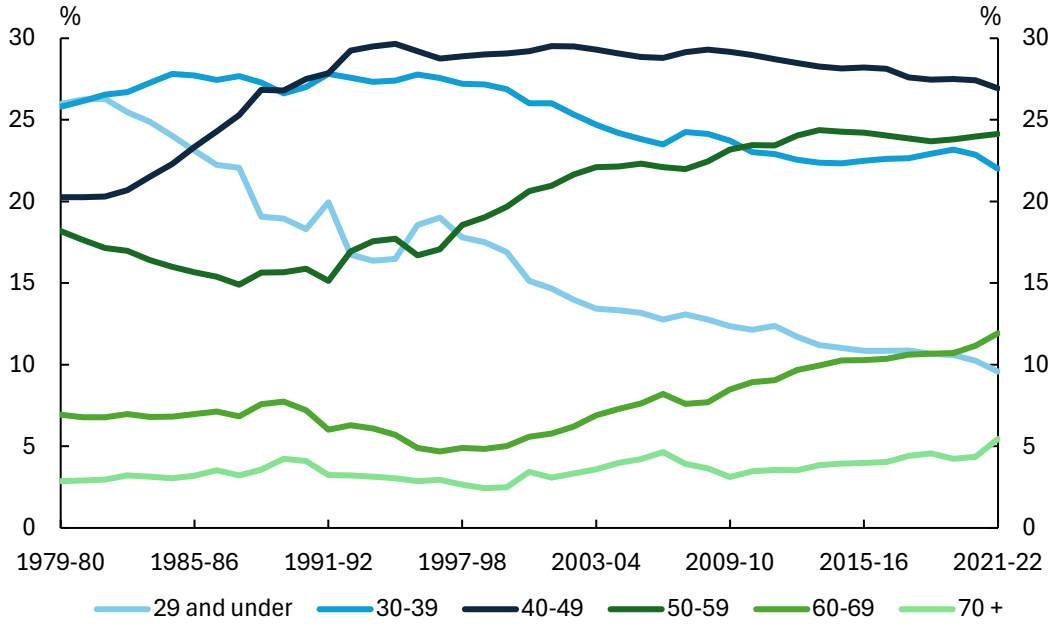
Thirdly, exported goods and services are not subject to the GST, and any GST paid on creating those products are refunded. Most of the outputs from the mining industry are exported, so as mining's share of the economy increases, less GST is raised compared to the same output from another industry.

As the industry evolves overtime, so too will the tax mix.

4.2 Age and gender

The tax mix can also be examined through the split between different genders and age cohorts. The last 4 decades have seen a significant shift in the share of personal income tax paid by each age cohort (Figure 4-1). Since 1980, the share of personal income tax paid by people aged under 30 has fallen from around 26% to less than 10%. The share of personal income tax paid by the 30- to 39-year-olds remained relatively stable throughout the 1980s and 1990s but declined from 2000 onwards. These trends reflect both the smaller share of the population in these cohorts and that a larger proportion chose to continue to study in post school education[54] reducing their availability for work.

Figure 4-1 Share of personal income tax, 10-year age groups



Source: Source: ATO Taxation statistics and PBO analysis.

[53] Face the facts: Older Australians, Australian Human Rights Commission.

[54] "Back in my day" – comparing Millennials with earlier generations | Australian Bureau of Statistics.

For all the other age groups, there has been an overall increase in the share of personal income tax paid since 1980. The rise in the share of tax burden reflects an increase in workforce participation over the last four decades, largely driven by women. Older cohorts have remained in the labour force for longer.[55]

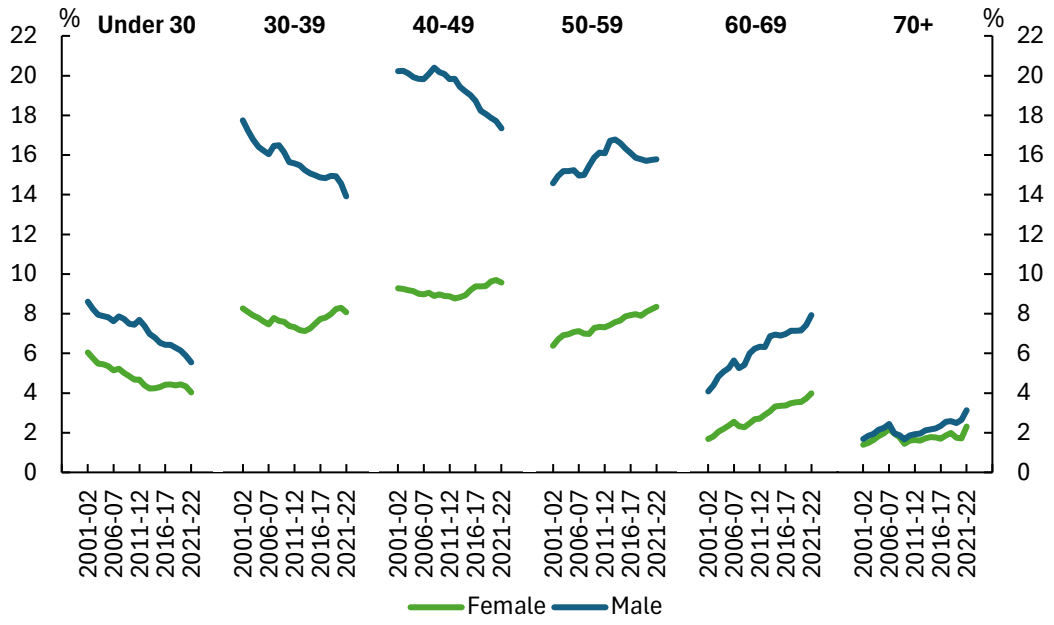
These trends occurred as those born during and immediately after the Second World War have progressed through the workforce during major social changes, particularly the increase in women's participation in the 1960s and 1970s. For instance, until 1966 women's employment by the Commonwealth ceased when they got married. With the average age that year for women at their first marriage at 21, these women appear in Figure 4-2 when in their 40s during the 1980s and their 50s during the 1990s.

More recent trends in tax paid by gender and age cohorts are shown in Figure 4.2. The males in the 3 younger cohorts (29 and under, 30s and 40s) and the females in the 29 and under cohort have decreased in their share of personal income tax from 2001-02 to 2021-22.[56]

By contrast, older males and females 50 plus have increased their share. In the case of the 60 to 69 cohorts, they have doubled their share. For the 2 oldest cohorts, their share of tax falls around 2008.

Since 2017, the pension age has increased from 65 to 67 years, while the superannuation 'preservation age' (the minimum age you can generally access your super) has also increased, from 55 to 60. These changes have contributed to older men and women remaining in the workforce (and paying income tax) for longer.

Figure 4-2 Share of personal income tax, 10-year age groups, by gender



Source: Source: ATO Taxation statistics and PBO analysis.

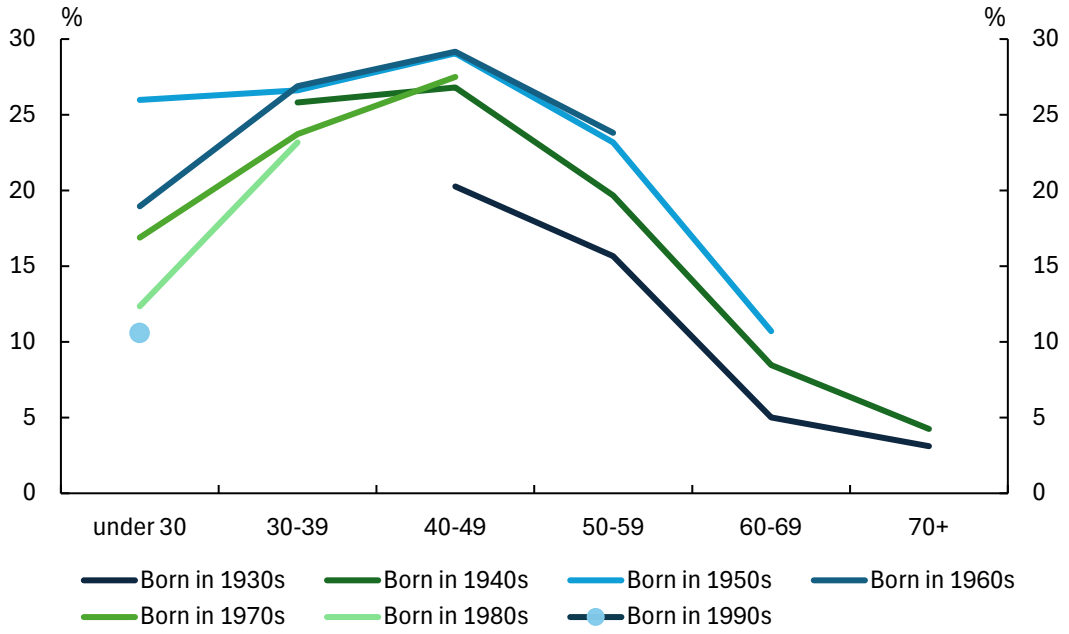
[55] Box B: The Recent Increase in Labour Force Participation.

[56] The most recent 20-year period for which consistent age and gender ATO Taxation statistics data is available.

4.3 Lifetime perspective

Over one's lifetime, individual's contribution towards the total pool of personal income taxes takes an inverted U-shape, where it increases with age and peaks in the 40-49 age cohort, this then falls in their 50s and 60s, and moderates in their 70s (Figure 4-3).

Figure 4-3 Share of tax by ten-year cohorts



Source: ATO Taxation statistics and PBO analysis.

The 40-49 age cohort represents the peak years for paying income tax, because of the combination of the number people working and the size of their incomes. While there are as many working in the 30-39 age cohort, their incomes are generally lower.

On average, each successive generation born in the 1930s, 1940s, and 1950s is contributing more to the overall personal income tax pool in their later years. As mentioned above, this may be due to the older cohort remaining in the workforce for longer.

On the other end of the spectrum, the curve is becoming steeper for those entering the workforce. Those aged 29-years-and-under are contributing less for each successive generation but appear to quickly match the cohort before them in the 30s and 40s.

In general, people are taking longer to build up to income earning, their mid-life earnings have tended to be higher than their older cohorts, and they appear to be working longer. If this trend does not continue, for example, that mid-life income does not rise like it has traditionally, then to obtain the same level of expected government revenue, either average tax rates or other taxes will need to increase.

5 Future scenarios

This chapter presents selected scenarios to bring together a number of themes set out in the earlier chapters. While the scenarios all have a connection to various policy discussions that have taken place over the years, they are designed to illustrate and inform, rather than to advocate or provide a comprehensive analysis.

Governments may make choices to tax a new revenue source (such as wealth), increase resources to boost compliance with existing taxes, remove some existing tax concessions, drive (or discourage) certain behaviours via taxation, and continue to shore up the integrity of areas of the tax system.

However, these changes, even taken in combination, are unlikely to raise enough revenue to materially change the composition of Australia's tax mix.

As we saw earlier, even the most substantial tax policy of at least 50 years – the introduction of the GST – did not significantly shift the overall tax mix. In fact, the introduction of the GST and the associated personal income tax cuts did not result in any significant change to Australia's mix of indirect and direct tax.

Only significant policy or other changes would materially change the tax mix. Below, we examine some scenarios which would be significant enough to make such material changes.

5.1 The 'baseline': bracket creep increasing personal income tax

The PBO's annual medium-term fiscal projections, presented in *Beyond the budget*, have highlighted the role of bracket creep in repairing the budget over the next decade. Governments present their budgets on a 'no policy change basis', incorporating only announced policy decisions. As such, fiscal projections do not assume any further personal income tax cuts, which is a key driver of the budget being expected to return to surplus around 2034.

Personal income tax is therefore projected to increase to around 46% of total Australian tax revenue (Figure 5-1). While this represents a large increase from the post-GST low of 36%, it is still below the high point in the mid-1980s of over 47%. Future governments may choose to repeat past approaches to fund increasing spending through allowing continued bracket creep.

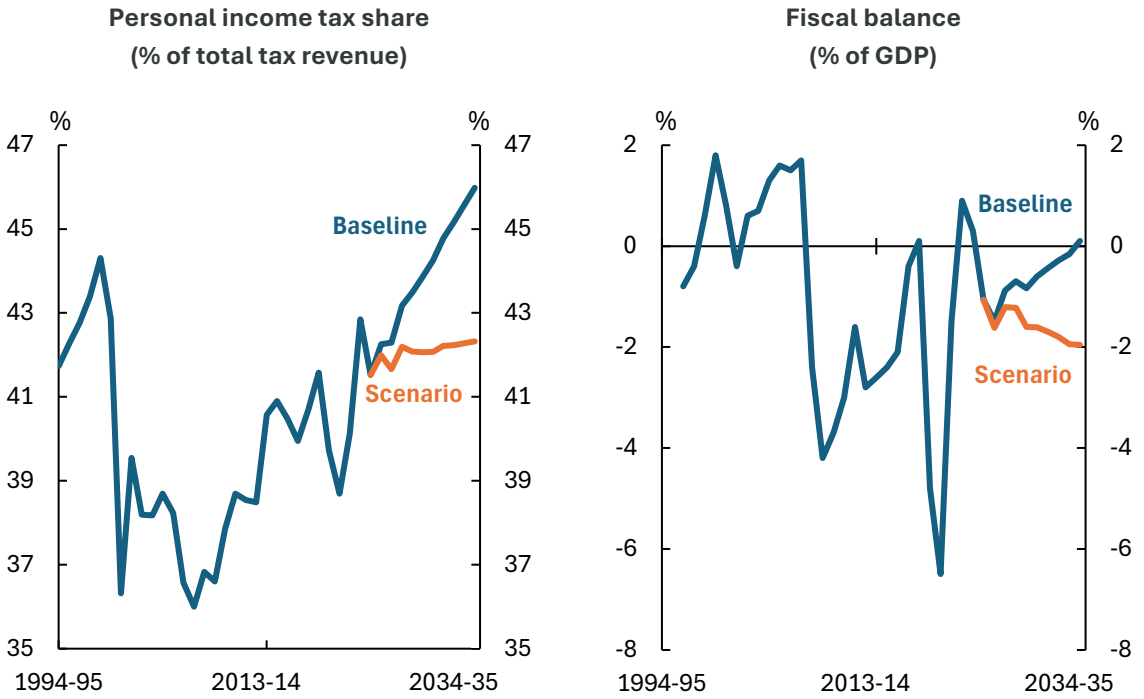
Returning bracket creep

Alternatively, governments may prefer to adjust rates and thresholds to avoid average tax rates increasing to record levels.

In this scenario, if government fully returned bracket creep the average personal income tax rate would stay at its current level of 24.9% rather than increasing to 28.5%. Personal income tax would remain at around 42% of total tax revenue.

In this scenario, unless other sources of revenue were found, the trajectory of the Australian Government's fiscal balance would reverse and threaten the projected return to budget surplus in 10 years (Figure 5-1).[57]

Figure 5-1: Returning bracket creep



Source: ABS and PBO analysis.

5.2 Shrinking revenue bases in excise taxes

Making future governments' task even more difficult is that the long-run decline in excise will continue over the next 25 years. In the absence of any changes to the vehicle fleet, fuel excise would raise around $50 billion in 2050. However, the CSIRO predicts that 97% of light passenger vehicles on Australian roads will be electric by 2050.[58]

This would result in fuel excise of effectively zero in 2050, noting that while machinery and some large vehicles may still be powered by fossil fuels, these will still receive fuel tax credits, offsetting some of the tax.

Tobacco excise is also in decline due to a long-run reduction in smoking rates. In recent years, the decline in excise volumes has been offset by large increases to the rate. This may have resulted in an increase in illicit tobacco products to avoid the tax, illustrating the trade-offs between using tax to motivate behavioural change and the motivations for non-compliance.

In addition to fuel excise declining to zero, our scenario assumes that tobacco excise remains at around $10 billion per year indefinitely. This is therefore a steady decline as a share of GDP and total tax revenue (Figure 5-2). On this basis, by 2050 tobacco excise would be half what it would have been had it grown with GDP.

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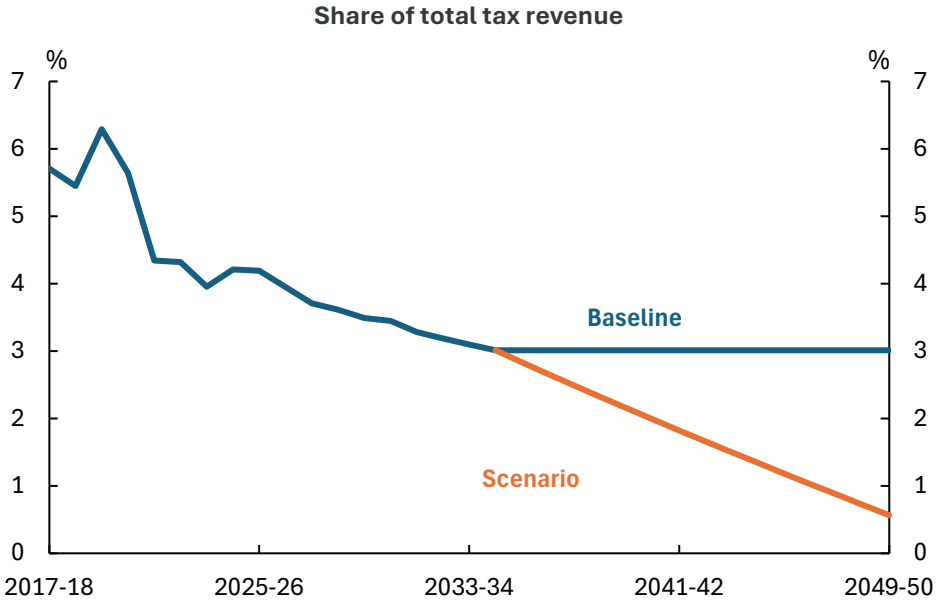
[57] *Beyond the budget 2024-25*, Parliamentary Budget Office (2024).

[58] Unlocking electric vehicles, CSIRO (2024).

The scenario is for the share of total tax revenue from fuel and tobacco excise to fall from 6% less than a decade ago to 0.5%, a sizeable change to the tax mix. Combined, these 2 shrinking revenue bases represent $60 billion in lost revenue by 2050.

Figure 5-2: Projections for fuel and tobacco excise



Source: Budget papers and PBO analysis.

Governments will need to consider if they would prefer to compensate for this lost revenue through continued bracket creep, by raising taxes from other sources, by reducing spending or some combination of all 3. Should they choose to find additional funds through bracket creep, average personal income tax rates would need to be around 1.5 percentage points higher than otherwise. Under our baseline, where average personal income tax rates rise to 28.5%, the decline in excise would lead to these rates increasing beyond 30%.

5.3 Shifting the tax mix through policy – (a) from income tax to consumption tax

A large but relatively simple illustration of a change to the tax mix from policy is to increase the GST and decrease personal income tax, being the largest indirect and direct taxes in the mix.

For example, if the GST rate doubled from 10% to 20%, the amount of GST collected would increase from around $100 billion to $200 billion per year (although consumers would likely shift their spending somewhat to products not subject to GST).

The corresponding decrease to personal income tax would not be exactly the same because an increase to GST would also increase the consumer price index (CPI). The corresponding increases to a range of government payments, such as the age pension, would total around $14 billion.

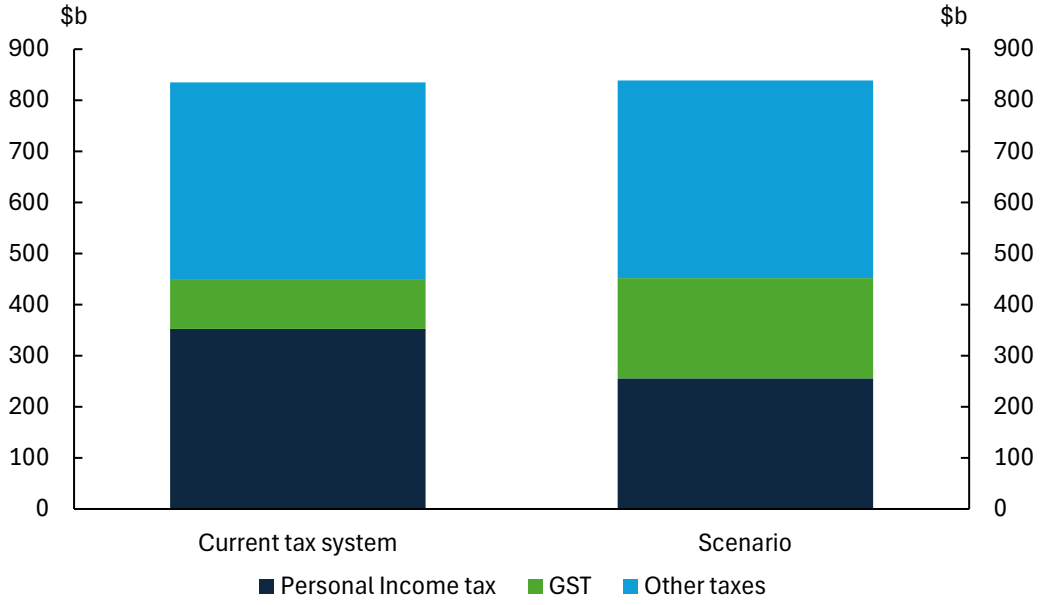
To maintain the same budget balance, the reduction to personal income tax would therefore be less than the increase in GST revenue.

As GST is the more efficient tax, the change from personal income tax to GST would also have secondary benefits to the budget. As described in Chapter 3, all taxes distort the efficient allocation of resources, but a broad-based consumption tax is less distortionary than personal income tax.

The marginal excess burden for GST is around 8 cents for every dollar collected, compared to 25 cents for every dollar collected of personal income tax (see Figure 3-1). Shifting $100 billion of tax to GST would therefore improve the size of the economy, and therefore incomes, by around $17 billion. This equates to 0.5% of GDP (around $500 per person). This additional income would also generate tax, which we assume is split evenly across the various sources.

All up, the change would reduce personal income tax from making up 42% of all tax in Australia to around 30% (the same share as in the 1950s) and increase the GST share from 11.5% to 23% (Figure 5-3).

Figure 5-3: Impact of doubling the GST rate and reducing personal income tax



Source: PBO analysis.

In addition to increasing economic efficiency, a change of this magnitude would decrease the average complexity in the tax system for individuals and make the tax system somewhat more responsive to economic shocks.

In a scenario like this the impact on the equity of the system, and the inflationary effects as a whole, would depend on how cuts to personal income tax were applied across the income distribution. For example, a government could choose to provide smaller income tax cuts and increase government income support instead.

This scenario is for an enormous change. It illustrates that a policy of this magnitude would be necessary to produce a very obvious change to the tax mix.

5.4 Shifting the tax mix through policy – (b) replacing all state taxes with a land tax

The second scenario 'replacing all state taxes with a land tax' is often discussed, including in the Henry review. The review recommended the replacement of many of the taxes levied by the states with an expanded land tax.[59]

The illustrative scenario here is to eliminate all state taxes and increase land tax by the same amount. This change does not involve any switching between direct and indirect taxes, so that the overall tax mix remains unchanged at that level. However, the scenario is a significant shift away from taxes with high efficiency costs to a single tax with a near-zero efficiency cost (see Chapter 3).

Total taxes paid to the states are estimated to be around $150 billion in 2025-26. The average economic cost of these state taxes is around 42 cents per dollar raised, or around $63 billion, which equates to over 2% of GDP (or the equivalent of $2,200 per person).

The taxes that contribute most to the economic cost are stamp duties, payroll tax, and taxes on gambling and insurance.

Raising the entire amount of state tax revenue through land tax would increase GDP by over 2%, but the states themselves may not see a large increase to revenue because land prices are not closely linked to GDP growth.

The Australian Government would benefit by around $15 billion of additional tax revenue because the increased economic efficiency would generate more income and consumption, and hence more tax.[60]

Land taxes (and municipal rates) are simpler, more efficient and less volatile than most other taxes. The impact of this switch in the tax mix on equity depends on the difference between the characteristics of those affected by stamp duties, payroll tax and taxes on gambling and insurance, as compared to those affected by land tax:

- Payroll tax affects a very broad population, through the prices of most goods and services.
- Insurance taxes (also known as insurance duties) affect a broad population, as insurance on homes, cars and possessions are all subject to the tax (except in the Australian Capital Territory).
- Taxes on gambling and stamp duty have a narrower base. This switch is similar to where tobacco excise is replaced by personal income tax, where the same amount of tax is spread over many more people. For most 'sin taxes', the target population is effectively subsidising slightly lower taxes for the rest.

In this scenario, land tax is more obvious than many of the taxes it would replace.

Taxes on business payrolls, insurance and gambling are generally remitted by businesses and passed onto households in the form of higher prices, with the impact of the tax hidden. Partly reflecting this issue, many discretionary changes to tax policy to increase revenue have focussed on less direct taxes. The key example of that was the introduction of wholesale sales tax in 1930 (see Chapter 1).

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59 See also Rose, T. and Breunig, R. (2022), *Paying back Australia's COVID-19 debt*.

60 This analysis likely overstates the economic gains from the change because the calculations use the *marginal* excess burden rather than an *average* excess burden, which is generally lower (but more uncertain).

6 Conclusion

Australia's tax mix has evolved since Federation in response to significant events such as 2 world wars and the Great Depression. Since 1950, direct policy intervention has played a relatively small role in the tax mix. Increasing community demands of government, particularly during the 1960s and 1970s, have largely been funded through allowing personal income tax to increase through bracket creep.

The tax mix has remained relatively stable since 1980, with regular changes being made to personal income tax rates and thresholds to return some bracket creep. The composition of Australia's indirect taxation has changed somewhat as tariffs and wholesale sales tax have declined or been replaced by a broader based consumption tax (the GST).

Importantly, the tax mix is dependent on how governments approach their economic and social policies, either through tax concessions or direct spending. Different governments may effectively pursue the same net outcomes through significantly different methods.

Australian governments have often pursued their policy objectives through the tax system. For example, the Australian approach to retirement savings relies on tax concessions rather than higher taxes (or 'social contributions') and higher government pensions.

Similarly, Australia's GST does not apply to certain items, such as some foods, health and education. An alternative would be a broad tax with higher transfer payments to compensate target populations for the higher prices.

All taxes impose costs on the population, but the nature of these vary such that the choice between taxes always involves trade-offs. Taxes that aim to increase equity are often more complex, while taxes that aim to change behaviour are usually economically inefficient. Highly volatile taxes may assist fiscal management in some cases but hinder it in others. Taxes which are conceptually attractive, such as a those on owner-occupied properties, may also be unpopular. In the absence of government action, future increases in public spending (and revenue shortfalls as some taxes decline) will be funded through bracket creep, further increasing the share of personal income tax.

Changing Australia's tax mix by only 5% in any form would involve policies worth around $40 billion per year, roughly the size of the entire medical and pharmaceutical benefits system, and almost the size of Australia's defence spending.

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Appendix A: Australian government taxes

The 2010 review of taxes, *Australia's Future Tax System*, estimated that Australians pay 125 different taxes, across all levels of government. The below list covers every tax levied by the Australian government. We do not have a similar list for State and Territory governments.

Note that some government revenue is sometimes referred to as a separate tax when this is technically not the case. The most common example is 'capital gains tax', which is not a separate tax. Capital gains income is taxed through the income tax system, together with other income such as wages and business income.

Tax	Who pays	Who collects	2022-23 ($m)
Personal income tax	Individuals with income above a threshold	ATO	301,220
Company income tax	Corporate entities with profit	ATO	153,158
Goods and Services (GST)	Consumers	ATO	87,908
Excise and levies - gas and petroleum	Producers and manufacturers of gas and petroleum products	ATO*	21,702
Customs duty	Importers of good and services	Home Affairs*	17,079
Superannuation income tax	Superannuation funds on behalf of members	ATO	10,356
Excise and levies - other	Businesses, mainly alcohol and tobacco manufacturers and importers	ATO	4,579
Fringe benefits tax	Employers providing non-cash benefits to employees	ATO	4,147
Visa application charges	Applicants for visas	Home Affairs	3,156
Income tax - non-residents	Non-resident individuals with Australian sourced income	ATO	2,459
Resource rent tax	Resources businesses on oil and gas profits over a threshold	ATO	1,725
Major bank levy	5 major banks (Commonwealth Bank of Australia, Westpac Banking Corporation, Australia and New Zealand Banking Group Limited, National Australia Bank, Macquarie Bank)	ATO	1,542
Superannuation guarantee charge	Employers that do not fulfil their superannuation guarantee obligations	ATO	1,243
Luxury car tax	Businesses that sell or import, and by individuals that import cars above a certain value	ATO	1,187
Wine equalisation tax	Wine producers and wholesalers	ATO	1,141
ASIC fees	Businesses and regulated entities	ASIC	1,014
Passenger movement charges	Airline, shipping companies and air charter operators on all travellers leaving Australia	Home Affairs	829
Regional broadband scheme	Telecommunications carrier licence holders	ACMA	799

Tax	Who pays	Who collects	2022-23 ($m)
Agricultural levies	Agricultural businesses, growers, primary producers, processors, importers or exporters of leviable goods.	DAFF	677
Import processing charges	Importing businesses	Home Affairs	450
Offshore petroleum levy	Certain registered holders of petroleum production licenses	ATO	360
Renewable energy target shortfall charges and interest	Entities in non-compliance to Renewable Energy Target Scheme	CER	307
Foreign investment fees	Foreign investors	ATO	220
Telecommunications industry levy	Telecommunications carriers	ACMA	220
Coal mining industry levy (long service leave funding)	Employers in coal mining industry	Coal LSL (for DEWR)	166
Radio communication taxes	Telecommunications providers with transmitter, and/or receiver and/or spectrum licences.	ACMA	153
SMSF levy	Self managed super funds	ATO	142
Industry contribution levies	Entities in the financial, gambling, bullion or digital currency exchange services industries with income and transaction volumes over certain thresholds	AUSTRAC	99
ASIC supervisory cost recovery levies	Entities and individuals regulated by ASIC	ASIC	61
Telecommunication numbering charge	Telecommunications providers	ACMA	60
Broadcasting licence charges	Telecommunications industry	ACMA	44
Land tax equivalents and other levies	Various entities on the commercial use of Commonwealth owned land, tax equivalence payment in Indian Ocean Territories and Jervis Bay, and entities mining on Christmas Island	DITRDCA	32
AFSA charges	Various entities using services (eg. Realisations charge in bankruptcies and insolvency)	AFSA	27
Other ATO penalties	Penalties not included in taxes listed above	ATO	11
Education levies	Education and training providers	Education	6
DCCEEW levies	Businesses importing equipment or bulk shipments of ozone depleting substances or synthetic greenhouse gases	DCCEEW	5
Other DAFF levies	Producers, manufacturers, sellers or distributors of certain goods	DAFF	2
Total			618,288

*Small amounts of customs duty are collected by the ATO

Appendix B: Assessing the tax mix – further examples

Chapter 3 of this explainer describes various criteria for assessing different taxes. This appendix provides several examples that illustrate the concepts and trade-offs.

Simplicity and compliance: Fringe benefits tax

Ideally, income tax would be simple but defining 'income' in a complex economy is not easy. Income can be earned through a variety of mechanisms, including in cash (such as wages, interest and rent) and in kind (known as 'fringe benefits' in the tax system). For example, an employee may be provided with a car rather than wages. As described in Chapter 1, as personal income tax rates increased during the 1960s and 1970s, taxpayers sought alternative forms of income to reduce their tax. Fringe benefits tax (FBT) was introduced in July 1986 to capture these in-kind benefits. The FBT rate is set at the highest marginal income tax rate, greatly reducing the incentive to receive income other than as wages.

The FBT is an 'integrity' or 'back-stop' tax, meaning that its primary purpose is not necessarily to raise revenue but to protect the integrity, equity and simplicity of those taxes that do raise the majority of revenue. While FBT may be necessary, its inclusion increases complexity and reduces certainty. Concessions in the FBT system are frequently used to encourage a type of behaviour, such as the FBT exemption for providing certain types of vehicles, or the exemptions for employees of public hospitals, health promotion charities and public benevolent institutions.

Simplicity: Expenses and deductions

Most people who earn income also incur costs. An income tax needs to specify which costs, if any, may be deducted against income. In Australia, most expenses relating to the generation of assessable income are deductible[61], but the lines between income-producing and private expense are not always clear and they can vary between different occupations or business structure.

For example, our tax system allows a delivery driver to deduct the costs of fuel when making deliveries but not when driving between home and work. But what if a delivery is made on the way between work and home? An income tax system that includes deductions considers such situations, generating more complexity, particularly as these deductions change over time. For example, work from home deductions evolved before, during and after COVID. With time, the complexity of the tax law increases to handle new situations.

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[61] INCOME TAX ASSESSMENT ACT 1997 - SECT 8.1 General deductions (austlii.edu.au)

Simplicity, equity and efficiency: Goods and services tax (GST)

Exemptions from the GST both increase and decrease complexity. No nation with a GST (or other value-added tax)[62] taxes residential rent on real estate because there is no simple way to equivalently tax the rents paid by a tenant to a landlord and the 'imputed' rents paid by owner-occupiers to themselves.[63]

Instead, the economic value of housing is exempt from GST but taxed through a variety of mechanisms, such as municipal rates, land taxes and stamp duties. Residential rents being exempted from the GST increases the tax's simplicity.

By contrast, the exemptions from GST for some food introduce complexity. Businesses need to apply GST to some products and not others, increasing their administrative costs more than if every product were subject to a single rate of GST. In this case, the additional complexity is generally not experienced by households. This was a deliberate decision by policymakers, who opted for a more complex GST over a simpler GST that would have required a complex system of transfer payments to achieve a similar result for households.

Exemptions from GST also alter the prices of some products relative to others, such that consumers modify their purchase decisions. While the GST is a largely efficient tax, the exemptions are not costless for the economy.

Simplicity and visibility: The Medicare levy

Another example of complexity in tax design is the Medicare levy.[64] Introduced in 1984, the levy was intended to fund the ongoing costs of establishing the Medicare system. Its design is complex as there are exemptions for low-income individuals and households, is phased in quickly, and has exemptions for certain groups of individuals (e.g.: non-residents, Defence force personnel, and the blind).

The Medicare levy might seem like a 'hypothecated' tax (a tax where the funds are directly attributed to a certain purpose), but there is no direct link between the levied monies and the funding of the Medicare system. The additional funds raised have always been pooled into the government's consolidated revenue fund, meaning the additional complexity of administering a separate levy could be removed if the levy was simply built into personal income tax rates. Such an action would also improve transparency of marginal tax rates.

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62 The GST is a form of a 'value-added tax', where 'value added' is the difference between the sale price of a good or service and the cost of the inputs used to create that good or service. In most cases the final purchaser, who bears the full burden of the tax, is an individual consumer.

63 Imputed rent is a measure of the 'services' that dwellings provide to their resident owners. In the same way that rent, as commonly understood, is the payment by a tenant to a landlord for the provision of a dwelling service, imputed rent is the amount that would have been paid if the dwelling were tenanted rather than occupied by the owner.

64 The Medicare levy is an additional 2% tax on individuals' income above a threshold.

Complexity and equity in transfers

Complexity exists on both sides of the tax and transfer payments system. The example from Chapter 2 sets out 3 cases, one from contemporary Australia, receiving a transfer payment in the form of family tax benefit, another from 1950s Australia, when different tax rates applied for different family compositions, and a third from the United States, where families receive a tax credit to reduce tax liability. All of these approaches add complexity, reduce transparency and potentially introduce mechanisms to skew or improve equity outcomes.

Tax compliance and the 'tax gap'

Determining the size of a tax policy gap is dependent on judgements on which tax-minimising activities ought not to exist. Judgements like this are likely to be controversial, as some may view an activity as a legitimate and desirable feature of the system while others may take the opposite stand.

For example, following changes to the taxation of superannuation in 2006, most superannuation earnings after retirement are not subject to tax. This means that an individual can accrue large superannuation capital gains before retirement but not pay capital gains tax when the assets are sold the day after retirement, realising those gains. There would be different views about whether this is or is not an intended consequence of the 2006 changes.

Another example is the tax-free income threshold, currently $18,200. An individual earning $90,000 in one year would pay around $11,500 tax. If that individual earned that same amount but through a trust, and the trust paid them, their spouse, and 3 adult children with zero taxable income, $18,000 each, then no tax would be incurred. Some may consider this an intended feature of the tax system while others do not.

Tax gaps are closely connected to both simplicity and equity. A portion of the tax gap can be attributed to misinterpretation of complex tax laws, particularly regarding individuals and small businesses, who may not have the resource available to obtain the best tax advice. Policy tax gaps may be unintended consequences of the complexity of tax law.

Non-compliance may reduce horizontal equity in the tax system, where individuals with the same income may pay different amounts of tax depending on the form of that income and the ease of being able to avoid the tax. Underreporting of income affects vertical equity, where individuals with different actual incomes may pay the same amount of tax.

Income taxes are particularly prone to both forms of tax gap because of complexity and also the difficulty in defining and identifying the tax base of income-less-expenses. That is, the taxes which are most relied on to provide equitable tax outcomes are also those where the administration challenges are most significant.

Taxes which are less prone to both forms of tax gap are those where the tax base is simple to understand and hard to alter behaviour to avoid paying, such as taxes on land. Compliance challenges are also reduced for taxes where the agent remitting the tax is not the entity liable for the tax. For example, the GST is remitted by businesses but borne by consumers. Withholding taxes on wages are also remitted by businesses on behalf of employees. Both taxes have relatively low measured tax gaps and are likely to operate largely as intended by the law.

Tax visibility and compliance

The majority of taxes in Australia are not paid directly by individuals, but indirectly by businesses on their behalf. The most common mechanism for the payment of income tax, pay-as-you-go withholding tax on wages, is remitted to the ATO by employers, with the amount taken out of wages before it is paid. The employee never receives the 'tax' part of that money. At the end of the year, the employee submits a tax return which reconciles the various incomes and deductions, often resulting in an additional payment or refund. These amounts on assessment typically receive more attention than the tax paid throughout the year by the employer.

Taxpayers are typically pleased to receive a refund, despite the refund representing an interest-free loan to the government during the year. Similarly, taxpayers are unhappy to pay more on assessment, despite this effectively meaning that they had received an interest-free loan from the government. Taxpayers react more strongly to the taxes they directly pay than those that are paid on their behalf.

The taxation of corporate income in Australia is based on a system called dividend imputation, where company tax is effectively a pre-payment of tax on behalf of the shareholders.[65]

For indirect taxes, such as wholesale sales tax, payroll tax, excise and GST, the tax is remitted to the ATO by businesses. The impact of the tax is passed on to consumers through the prices of the goods and services. Chapter 1 mentioned the introduction of wholesale sales tax in 1930, chosen by the government in part as being less obvious to consumers.

A key advantage of taxes being remitted to the ATO by an entity not directly affected by the tax is that the incentive for non-compliance is relatively low. A disadvantage is that those affected by the taxes (either directly or indirectly) may be unaware of their impact. In some cases, these people may have made alternative decisions.

Only around 20% of tax is paid by individuals directly, rather than by businesses on their behalf. The largest of these taxes are: tax on unincorporated business income and investment income[66], vehicle registration tax, stamp duty on the purchase of real estate, and municipal rates and land tax.

While land taxes are otherwise attractive, being simple, highly efficient, difficult to avoid and equitable (depending on the details of the design), they are also highly salient because they are paid directly by the landowner rather than through an intermediary.

A related issue is the perception that some taxes are dedicated to particular spending. Examples are fuel excise, which may be perceived to still be linked to the upkeep of roads[67], and the Medicare Levy, which may be perceived to be linked to funding of health spending. In reality, almost all tax is paid into consolidated revenue.

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[65] This is discussed in detail in the PBO's explainer, *Dividend imputation and franking credits*.

[66] These are taxed through the personal income tax system but remitted either through pay-as-you-go instalments or on-assessment.

[67] Fuel excise has been linked to road funding in the past. Currently, the Australian Government pays an amount equal to the net revenue from reintroducing fuel excise indexation to a special account for payment to the States and Territories for road infrastructure.