The size of the government sector

There are a number of ways in which the size of the public sector might be measured revenue, expenditure and workforce being obvious ones In Australia, the number of public sector employees in 2019 was approximately two million (ABS: 6248.0), about 80 per cent of whom employed in state governments, 12 per cent in the Commonwealth government and 8 per cent in local governments. The government sector produces about a fifth of all the goods and service produced in the Australian economy each year. Government or its agencies own about a fifth of the transport and construction industries; communication; electricity, gas and water services, but less than 10 per cent of industries such as finance, manufacturing and agriculture.

Australia has a three-tier system of government. Each tier has different responsibilities. National governments take on broader functions such as defence, foreign affairs, international trade, currency and banking regulation and the provision of welfare. Over ninety per cent of the funds required come from taxation (on personal income, company profits and goods subject to excise). State or territory governments (in Australia there are eight) are usually responsible for the provision of law and order, health, education and transport. The majority of state revenue comes from Commonwealth transfers, but there are also state taxes (e.g. payroll tax; land tax; stamp duties on transfers of assets such as property; and motor vehicle taxes). Local and municipal governments (of which there are more than 700 throughout Australia) are typically responsible for functions such as urban planning, refuse collection, and the maintenance of parks and gardens for areas of varying size - sometimes just a few suburbs. Most of their activities are funded by rates paid by landowners in the district, supplemented by federal and state government grants.

The Australian taxation system

Most people complain about having to pay tax, even though they recognise that taxation finances a wide variety of goods and services that are central to the operation of the economy and civil society. **Income tax** has been the major method of raising government revenue since the late 1930s. Prior to that, the bulk of taxation was levied on sales of goods; property holdings; and customs duties. Uniform income taxation laws came into force in Australia in 1942, when the Commonwealth government took over the collection of income tax from the states.

Apart from raising revenue, the taxation system plays an important role in:

- the redistribution of income from the wealthy to the poor;
- influencing how resources are allocated among competing uses; and
- regulating the economic fluctuations associated with the business cycle.

Tax concepts

Taxes can be classified according to their impact and incidence. **Impact** means 'where the tax is levied or collected' and **incidence** means 'where the burden of the tax falls' - in other words, who pays the tax.

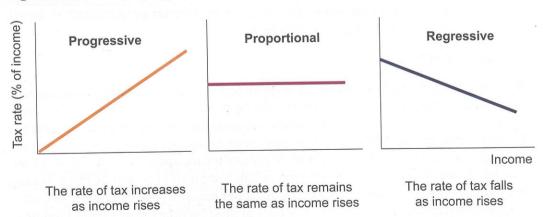
Another way to classify types of taxation is to study from whom they are collected. **Direct** taxation is collected from the taxpayer's (individual or corporate) income, so the impact and the incidence of direct tax fall on the same person. **Indirect** taxation such as excise tax and the Goods and Services Tax (GST) are collected from consumer spending on a wide range of products. The impact and incidence of indirect taxes fall upon different people. With excise taxes, for example, the seller or producer of the good pays the tax, but then passes it on to the consumer through higher prices. The seller collects the tax, but it is actually paid by the consumer.

We can also classify taxes according to how they are levied. **Progressive** taxes claim an increasing proportion of income as income increases. The burden of a progressive tax falls mainly on those who earn higher levels of income. The actual relationship between income and tax rates is not quite as direct as shown in figure 12.2. Australia, like many other countries, has a system of income tax 'brackets' which create a 'stepped' relationship between income and tax payable.

Regressive taxes, by contrast, place a greater burden on lower income earners, because they take a decreasing proportion of income as income increases. Consider an excise tax levied at a flat rate on an item such as a box of chocolates. The low income earner will pay the same dollar value of tax on the chocolates as does the high income earner. To the low income earner, however, the tax is a higher proportion of their income.

Proportional taxation takes a constant proportion of income, no matter what level has been earned. The best Australian example of a proportional tax is company tax, where large companies currently pay tax at the rate of 30 per cent of their profits and 'small' business firms pay 27.5 per cent.

Figure 12.2 Three types of taxes



Two other distinctions should be defined. 'Specific' taxes are charged on the volume of sales, regardless of price. 'Ad valorem' taxes are levied as a percentage of price.

Having outlined the types of taxation, it is important to understand the principles on which a tax system might be judged. The criteria against which any change to the tax system should be judged probably boils down to a simple question "is it fair, is it simple, and is it efficient?" These principles are not new. Adam Smith's "An Inquiry into the Nature and Causes of the Wealth of Nations" (1776) outlined four basic criteria to use in determining how 'good' a taxation system is. Smith's 'canons of taxation' were equity, economy, certainty and convenience. A taxation system that achieves these characteristics will help improve the standard of living, because it will efficiently provide revenue for the government at minimal overall cost to taxpayers.

Fairness can also be called **equity**. A 'good' tax system will feature both horizontal and vertical equity. Simply put, taxpayers who earn the same amount of income should pay the same amount of taxation (horizontal equity), and taxpayers who have a greater ability to pay tax should pay higher amounts of tax (vertical equity).

A good tax system should be relatively **simple**. This can be interpreted in two ways. Firstly, all participants in the system should be able to understand what taxes they are liable to pay, and how much they are liable to pay. Secondly, the process of collection should be as convenient as possible for both taxpayers and the collectors.

Finally, the tax system should be **efficient**. The benefits of the tax must outweigh the costs of its collection. This is the same principle we apply to all other economic decisions - go ahead with an activity if its benefits outweigh its costs. An economical tax must minimise 'excess burden', which occurs if the tax distorts decision-making or operates in a discriminatory manner. Consider two products, A and B, which are popular consumer items with similar characteristics (e.g. beverages). If A was taxed, but B wasn't, rational producers would produce more of B because sales revenue would be greater at the lower, non-taxed, price. This would place them at an unfair advantage compared to producers of good A.

Types of taxes

A useful way to discuss taxation is to identify the sources of tax revenue in Australia. Government finance statistics identify five different **tax bases**: income (3 sources); goods and services; and property and wealth.

Taxes on income

Personal income tax is levied on all wage and salary income, at rates which specify how much of the last (marginal) dollar will be paid as tax. Personal income tax is direct, as the impact and incidence of the tax both fall on the same person. Income tax has a progressive burden, as marginal rates of tax rise as income rises. People on higher incomes pay more tax, both in money terms, and as a proportion of their income. For example, a taxable income of \$30,000 for the tax year 2019-20 attracts taxation of \$2242 (an average rate of tax of 7.4 per cent). A person earning \$60,000 is required to pay \$11046 in tax (18.4 per cent of their income), and a gross income of

\$90,000 would attract a tax of \$17225 or 19.1 per cent of income. Someone on \$150,000 pays 28.4 per cent of their income in tax. These calculations do not include the Medicare levy - a surcharge on income tax used to finance the Medicare health program. The levy is currently 2.0 per cent of taxable income for most taxpayers.

Company tax is a proportional tax whose impact falls on the individual company, even though the incidence probably falls on consumers, because the tax is a cost of production that is passed on to buyers. Since 2001, the rate of company tax has been 30 cents in the dollar (although companies with turnover less than \$50 million pay 27.5 cents in 2019-20, and will pay 25 cents from 2021-22).

Fringe Benefits Tax (FBT) is levied (at the highest marginal tax rate) on the value of noncash benefits given to employees as part of their salary package (such as company cars, school fees for children, and low interest loans). FBT was introduced in the mid 1980s in the interests of vertical and horizontal equity – he notion that

Marginal rates of tax	
Income \$	MRT
2005-200)6
0-6000	nil
6001-21600	17
21601-63000	30
63001-80000	42
>80000	47
2009-20	10
0-6000	nil
6001-35000	15
35001-80000	30
80001-180000	38
>180000	45
2019-20	20
0-18,200	nil
18,201-37,000	19
37,001-90,000	32.5
90,001-180,000	37
>180,000	45

Source: Australian Tax Office

people should pay tax according to their ability to pay, and those on the same income level should pay similar amounts of tax.

Taxes on the provision of goods and services

Beginning in the 1930s, Australia applied regressive Wholesale Sales Taxes (WST). The rate of sales tax applied depended on how 'luxurious' the good was. Many 'essential' items, such as food and books, were exempt from sales tax. To this extent, WST helped to achieve 'vertical equity'. On the other hand, the WST was not levied on services. As the WST was 'concealed' in the price of the good, the consumer rarely knew how much she was paying to the taxman. Sales taxes are regressive, in that the same dollar amount of tax is paid on consumption, irrespective of the income earned by the payee.

The **Goods and Services Tax (GST)** is a broad-based tax levied at ten per cent of the price of most goods and services consumed in Australia. The GST replaced the WST on 1 July 2000. The impact of the GST falls on the seller of the good or services; the incidence (burden) falls on the consumer. GST revenue is collected by the federal government and distributed to state governments. It is thus regarded as a 'state tax'.

Excise duties are imposed at a flat rate on domestically produced goods such as alcohol; cigarettes; oil products; and LPG (gas). Excise raises a great deal of revenue for the government, often without affecting consumption patterns because they are levied on price inelastic goods (i.e. the quantity demanded is unlikely to fall by as

Excise tax rates	
Petrol	41.8 c per litre
Diesel fuel	41.8 c per llitre
Cigarettes	93 c per stick
Brandy	\$80.20 per litre
Beer	\$50.70 per litre

Source: Australian Tax Office, 2019

great a proportion as the increase in price caused by the tax). Apart from their revenue- raising function, these taxes are intended to reduce the social costs /externalities that these types of consumption may have on the community.

Customs duty is an indirect tax levied on imported goods (i.e. a tariff), often as a means of protecting Australian producers from overseas competition.

Taxes on property and wealth

Capital Gains Tax (CGT) is a progressive tax which is levied on capital gains (profits) from the sale of assets held for a period longer than 12 months (any asset sold within 12 months is subject to tax at the income earner's normal marginal rate). The CGT burden is adjusted for inflation, so any capital gain on the sale of an assessable asset is reduced to account for inflation over the period it has been held. The CGT does not apply to assets purchased before September 19, 1985, nor to 'personal items' such as houses, cars, or boats. CGT applies to shares, investment properties, business goodwill, and some personal items if they were purchased with the intention of resale (e.g. jewelry).

Resource taxes

The growth and profitability of the minerals sector in Australia has raised a number of equity issues about whether profits generated from the extraction and sale of nonrenewable resources should be taxable. A Petroleum Resource Rent Tax was levied on off-shore petroleum extraction activities in 1987, and was extended to on-shore extraction in 2012. A Minerals Resource Rent Tax (MRRT) was introduced in that year, but limited to iron ore and coal mining. The tax was abolished in 2014 due to controversy about its impact on business investment and its inefficiency - it raised very little revenue.

A number of countries apply resource rent taxes (RRT). In theory, they are progressive, neutral and equitable:

- the tax revenue share increases as the resource rent increases so the tax is based on ability to pay;
- the tax will neither encourage or discourage investment, and will not affect investor decisions on production, consumption or trade; and
- as natural resources belong to the public, some of the rents (profits) derived should be returned to the public.

In a similar vein, many countries now levy 'ecotaxes' in an attempt to address environmental market failure. A carbon tax, for example, is a tax levied on the carbon content of fuels, and works on the theory that higher prices discourage consumption of carbon and encourage cleaner energy sources - one of the main drivers of low-carbon innovation is the price of energy. Australia had a carbon pricing scheme (between 2012-2014) that required firms that emit over 25,000 tonnes per year of carbon dioxide equivalent greenhouse gases to pay \$23 per tonne of emitted gases. As carbon dioxide emissions are mainly produced by electricity generation, petroleum refining and gas processing, the tax increased the prices consumers pay for these products, theoretically reducing demand and cutting emissions.

The Government proposed an emissions trading scheme (ETS), in which firms would buy permits (carbon credits) to cover the amount of their emissions. They could then trade the permits, creating a market in which the buyer is paying a charge for polluting, while the seller is being rewarded for having reduced their emissions. In theory, those who can reduce emissions most cheaply will do so, thereby reducing pollution reduction at the lowest cost to society.

Tax reform

Over the last forty years, Australia's taxation system has seen many changes to address issues of efficiency and equity. These included the Capital Gains Tax (1985); Fringe Benefits Tax (1986); the introduction of the GST in 2000; and self-assessment of tax liability (the tax office relies on information provided by the taxpayer and no longer checks all tax returns). Tax reform remains an area of controversy, however. Even when arguments for reform are solid, governments of all persuasions find it a politically difficult task.

Income distribution

Chapter 12 The public sector

Income and wealth

Income and wealth are different concepts - one represents a flow of funds, the other a stock of assets. They are closely linked, however, because the more income a household has, the greater its capacity for building wealth over time. Figure 12.3 illustrates the key elements of 'income'. Most households have one or more sources of private income (e.g. wages and salaries, income from an investment, income from superannuation funds). Gross income is determined by adding any transfer payments a household receives from government, such as a pension or allowance. Direct and indirect taxes are deducted to determine disposable income. Most households also receive some form of indirect benefits (social transfers) such as assistance with school fees or health care costs, which add to final income.

Wealth, on the other hand, refers to the current value of the assets a household has accumulated over time through savings; financial investments; business dividends; and inheritance. Wealth is the difference between a household's assets and its liabilities. Household assets are generally held as property, shares, savings and superannuation, while liabilities include mortgages, personal loans and credit card debt. The mean household worth of the 'poorest' 20 per cent of households was \$35,200 in 2017-18; the wealthiest 20 per cent had average wealth exceeding \$3.2 million! The average household wealth was \$1.02 million!