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# Economics Update

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The purpose of the Economics Update is to provide teachers and their students with contemporary examples which can be applied to the relevant key knowledge points from Areas of Study 1 of the VCE Unit 3 Economics Study Design. [Charts are from RBA Chart Pack Feb 2022 or SOMP February 2022 unless indicated otherwise.]

## A focus on AOS 1

### Opportunity cost, economic choices and RATs

At the beginning of your studies you would have learnt that economics is about the way a society allocates its limited resources to satisfy the unlimited wants and needs of its members. **Relative scarcity** means there will never be enough resources to satisfy all the needs and wants in that society, and consequently **choices** must be made between allocating resources to competing purposes. All such choices lead to **opportunity cost** - the value of the next best alternative use of the resources that is foregone (given up) when an economic decision (choice) is made. Opportunity cost is an **inevitable consequence of all economic decision making**, and occurs at an individual, community and economy-wide level.

In recent months there have been numerous high-profile examples of opportunity cost in action. After almost two years of the pandemic, in late 2021 and early 2022, governments across Australia (both state and federal) shifted attention from suppressing the spread of COVID-19 to a strategy of 'living with' the virus. This was in line with Australia meeting specific vaccination rate targets. Then in January 2022, very lengthy queues at formal testing stations (which use PCR – polymerase chain reaction - tests) indicated the inability of the testing system to cope with the extreme infectiousness of the Omicron variant. This led to a renewed focus on rapid antigen tests (known as RATs), which could be administered at home.

As the focus shifted to difficult-to-get RATs, there was significant debate about whether these should be provided for free to all Australian households, provided for free or discount rates to some groups, or simply be available to those who were able to find them and chose to purchase them.

Ultimately, the Federal Government decided to provide a certain number of RATs for free to all concession card holders (which would include aged pensioners and those on other welfare payments, as well as some low-income earners). Several state governments, including the Victorian Government, also announced it would provide sufficient free RATs to all schools to enable all students and staff to self-administer the tests twice weekly for the first four weeks of Term 1. Later, early childhood education attendees were also added to this list.



Any time the government chooses to provide a free service or good to the community, this means the resources used to provide those services or goods are no longer available to be used for another purpose. In each of the cases above, the opportunity cost associated was the net benefit that would have been derived if the money was spent, or the resources were used, on the next best alternative government initiative. In the case of the money spent (or resources used) to provide free RATs, alternative uses include other education or health spending, or even spending on permanently increasing the Newstart (now JobSeeker) allowance for those unemployed and actively seeking work. While each of the above alternative represents a potential trade-off, there is only one opportunity cost - the net benefit (value) foregone by not choosing the next best alternative option.

Determining the merits of the government's decision to allocate resources towards the particular spending priorities will depend on evaluating the costs and benefits associated with competing

alternatives, and if the 'best' alternative is chosen, it necessarily means that the value or net benefits of the next best alternative project that is foregone (i.e. opportunity cost) must be lower. It is in this respect that the government is keen to minimise the opportunity costs associated with decision making. Of course, calculating the opportunity cost of an economic decision is extremely complex, where the ultimate value of the missed opportunities depends partly on value judgements about what is perceived to be the decision that would best satisfy the wants and needs of the largest proportion of society. At the time of the decision to provide free RATs to concession card holders, there was also debate about whether it would be better to just provide RATs to everyone for free – and this will be discussed later in this Update when considering externalities.

## Production possibility frontier

Very few students would be unaware of recent concerns about labour shortages, supply chain interruptions and shortages of items on shelves in supermarkets and other retail outlets. This is, in part, due to significant shortages of labour in recent months, as larger numbers of workers in essential industries have become exposed to the virus, or tested positive for the virus, and been required to isolate. This includes workers in the retail and transportation sectors of the economy. For example, articles from early and mid-January this year provided the following statistics:

- 20-40 per cent of staff were absent from Woolworths distribution centres
- 30-35 per cent of staff were absent from Coles distribution centres
- Coles and Ritchies IGA estimate about 10 per cent of in-store staff were in isolation
- Up to half of all truck drivers were absent, according to trucking and logistics companies
- In addition, producers of food and consumer products were facing staff shortages, due to staff testing positive and isolating

At the time, there was an expectation that shortages of some products would last up to 3 weeks.

Unlike the product shortages in the early stages of the pandemic in 2020, which were driven by panic buying (significant spikes in demand where supply could not keep up), the current shortages are very much a result of supply-side constraints. Between the shortages of staff in logistics, delivery, warehousing, distribution and the customer-facing side of the business, many retailers were really struggling.

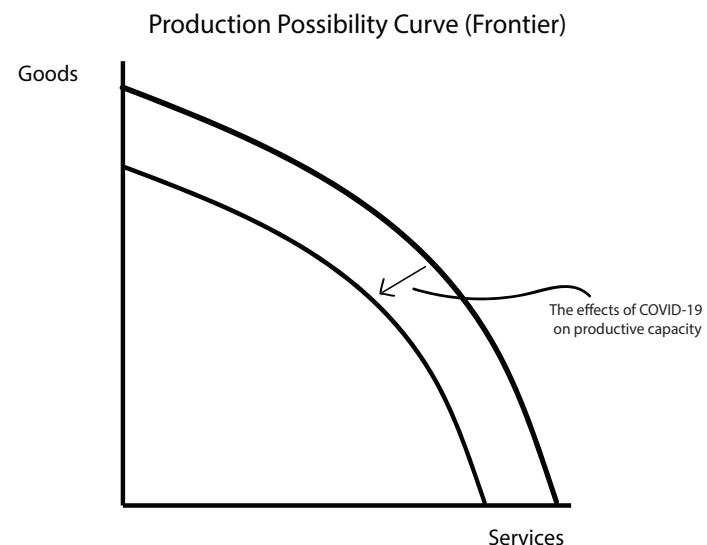
Added to those issues was a shortage of workers in agriculture. Following the closure of Australia's borders in March 2020 there was a massive fall in the supply of imported labour. As a result of the closed border, Australia's productive potential was reduced due to the lower supply of imported labour. In a normal year, around 160,000 permanent migrants move to Australia, with almost 70% of them being skilled migrants able to fill gaps in the labour market (e.g. shortages of labour in some industries). In addition, there would normally be numerous short-term and temporary migrants, including the seasonal worker program and

a significant number of 'backpackers'. These groups provided essential labour in the agriculture industry. Since the closing of the border, this source of labour has 'dried up'. The capacity of farmers to pick crops has been significantly impaired, evidenced by numerous news stories about unharvested crops going to waste, particularly in the fruit and vegetable market. Other employers who rely on skilled migrant labour to fill job vacancies have also struggled.

Overall, the constraints on immigration reduced Australia's productive capacity, combined with the ongoing worker shortages due to employees isolating due to COVID-19 infection or exposure, limited the capacity of the economy to produce goods and services.

All of these are real world examples of another introductory economic concept encountered early in Unit 3, Area of Study 1 – the productive potential (or productive capacity) of the economy.

This has resulted in a shift of our production possibility frontier inwards slightly, as shown in the diagram below. Over time, as the government slowly re-opens our borders (announced for late February 2022), international students return, backpackers arrive, and the current wave of Omicron subsides (as it seems to be doing), our economy's productive capacity should again improve, but this may take some months or even years.



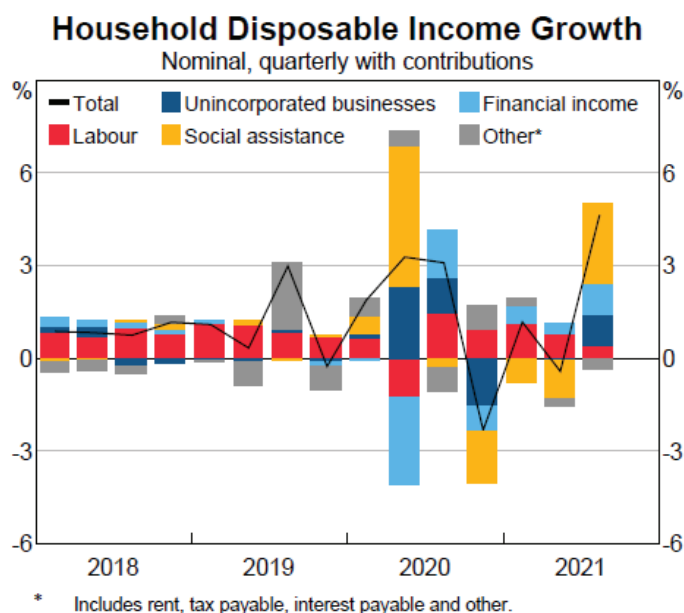
## Recent factors affecting demand

### Disposable income

**Disposable income** is the reward received by households from their contribution to the production process (income from working plus income from other productive resources) plus government transfers (for example, pensions and parenting payments) minus direct taxes (i.e. income tax). It represents the total amount that consumers have to spend on goods and services. As a result, changes in disposable income have a significant impact on the demand for most goods and services across all markets.

The RBA chart below taken from the *Statement on Monetary Policy (SOMP)* February 2022, shows that growth in household

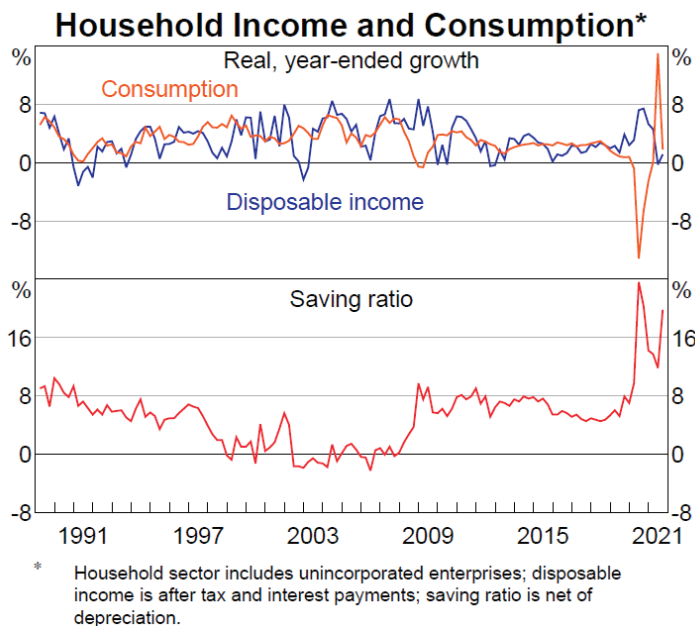
disposable income had been low leading up to the events of 2020. The slow income growth was a result of subdued growth in wages, weak growth in income from other sources (such as interest on savings) and growth in payments of tax.



[The RBA also includes interest payments - for example on mortgages - in the calculation of disposable income, so the reductions in the cash rate in recent years have also contributed to increases in disposable income.]

In March 2020 it became clear the Australian economy would be battered by the COVID-19 pandemic, and in response the government introduced numerous support measures for businesses and to support household spending. Students will no doubt be aware of the JobKeeper subsidy, which operated from March 2020 and tapered out to finish in March 2021. The Newstart unemployment benefit was also temporarily increased (effectively doubled with the addition of a COVID-19 Supplement) and renamed JobSeeker. The government also provided one-off payments to existing welfare recipients. These 'social assistance' payments combined to result in household disposable income growth of over 6% in the June quarter and over 3% in the September quarter of 2020. Over the later part of 2020 and into the middle of 2021, the rate of growth in household income fell. However, with the arrival of the Delta variant in the second half of 2021 several government forms of 'lockdown support' through 'COVID-19 disaster payments' to households and businesses. This accounted for the significant rise in household disposable income in the September 2021 quarter. This occurred despite the fact that the economy actually shrank over the same period, with GDP growth of -1.9%.

However, despite the rising household disposable income growth, consumption growth actually fell in late 2021, as shown in the chart below. According to the RBA, total additional savings accumulated by households during the pandemic are around \$200 billion (reflected in the bottom half of the chart by an increase in the savings ratio (i.e. the percentage of disposable income that is not spent on goods and services).



The reinstating of numerous lockdowns (most especially in Melbourne and Sydney) contributed to the collapse in consumption spending coming into the second half of 2021. Firstly, consumers were unable to go shopping as easily as before. A number of opportunities for spending money – hospitality, entertainment and travel – simply ceased to be available. People also consumed much less petrol and spent less on public transport, as many were forced to work from home for extended periods. While online spending certainly picked up (discussed in detail later in this section), this did not make up for the fall off in 'bricks and mortar' sales.

The RBA February *Statement on Monetary Policy* reported that household Consumption recovered strongly over the December quarter of 2021 as restrictions eased.

## Preferences and tastes

The last twelve months have provided numerous examples of changes in preferences and tastes affecting the demand for goods and services.

As the COVID-19 lockdowns persisted, numerous people who were living in Australia's larger cities (e.g. Melbourne and Sydney) made the decision to relocate to regional areas – for a 'tree change' or a 'sea change'. The result of this was that over the last two years, there has been substantial growth in housing prices in those regional areas. Housing prices in metropolitan areas also grew but the regional housing price growth was highly notable. According to the Real Estate Institute of Victoria (REIV), in 2021 regional Victorian house prices grew at the fastest rate in 20 years, with median house prices increasing by 27%, and by 42% over the last five years. An increasing desire for more space, and the changing nature of work such that more people discovered they could 'work from home' meant a change in preferences and tastes for housing. For some it was also a desire to be out of the large cities, which had become somewhat 'lockdown prone' (Melbourne exiting its sixth lockdown in October 2021). In addition, during the height of COVID over 2020-21, many people became concerned about the heightened (health and

welfare) risk associated with high density living and shifted their living preferences away from high rise apartment towers and towards lower density properties, such as stand along houses. This resulted in both a fall in high rise apartment rents, as well as lower property values. However, there has been somewhat of a reversal over the past 6 months, as concern about the virus wanes somewhat and the threat of future lockdowns is reduced.

A market that experienced enormous growth in demand during lockdown over the last 18 months is the market for puppies and dogs. Over 2020 and 2021, more people sought the companionship of pets during the various COVID-19 lockdowns. People also had more time to spend at home with their new pets. As a result, there was also an increase in the price of puppies on the market. Overtime, if this change in tastes persists, there should be a reallocation of resources towards the market for puppies, as profit-motivated providers (e.g. breeders) reallocate resources into supplying them, to take advantage of the higher relative price of puppies.

As it became impossible for Australians to travel overseas over the last two years, domestic tourism became the only option for those wishing to take a holiday away from home.

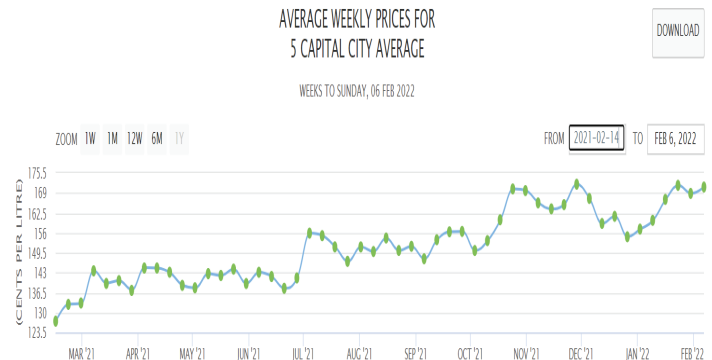
Many shoppers have moved their demand for retail 'online'. During the extended COVID-19 lockdowns across 2020 and 2021, this change in 'preferences' was actually unavoidable, as those wishing to continue buying non-essential items were forced to move their purchases to online platforms. However, since the end of lockdown, there is evidence that some consumers continue to prefer to use e-commerce for some of their shopping needs.

Prior to the pandemic, larger companies already offered home delivery or online shopping (such as department stores and supermarkets), but in the last two years they have also adjusted quickly, by offering 'Click and Collect' or 'Contactless pickup' services. Increasingly, supermarkets, liquor stores, hardware chains, office supply stores and even sandwich shops have offered contactless pickup. Some small businesses have reduced the extent of their delivery service but have persisted with some delivery options. Some experts have observed this period of changed trading may permanently change consumer preferences around how they access retail products.

Research from PayPal Australia, released in November 2021, confirmed an ongoing shift in consumer preferences around shopping. It reported that increasing numbers of Australian are doing their shopping and paying bills online compared to pre-pandemic levels. The report predicted that while some consumers will shift a small amount of their shopping back to in-store, almost 50% will continue to undertake at least some of their shopping online. For example, grocery delivery in Australia has grown by 81% in the last 5 years. Beauty, fashion and variety stores (think Kmart, Big W and Target) continue to be the most popular categories in online shopping.

## Prices of complements and substitutes

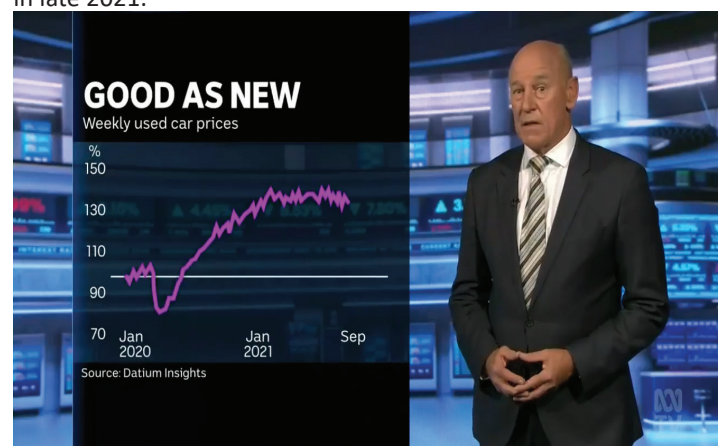
In recent weeks there have been rapid rises in the price of petrol, with many consumers paying over \$1.80 a litre for standard unleaded petrol. As the chart below shows, there has been a fairly steady upward trend in average petrol prices over the last year.



Source: Australian Institute of Petroleum, <http://www.aip.com.au/pricing/ulp/national/5-Capital-City-Average>

A combination of rising petrol prices (which add to the cost of running a petrol vehicle) and concerns about environmental issues (changing tastes and preferences) has seen a rise in the demand for Electric Vehicles (EVs) across Australia. For those who are concerned about the environment, a key selling point is that an EV generates less carbon over its lifetimes than a petrol car generates in just two years (although EVs are more emissions-intensive to manufacture). Globally, the uptake of EVs has been much more rapid than in Australia – for example Norway where they make up 74% of new vehicle sales, and the UK where they are close to 15%. In Australia, EVs remain less than 1% of the market, but that is expected to grow over time as the price of EVs falls (expected to fall to an average price of around \$41,000 by 2030) and governments continue to improve access to charging station infrastructure and increased subsidies and rebates for EVs.

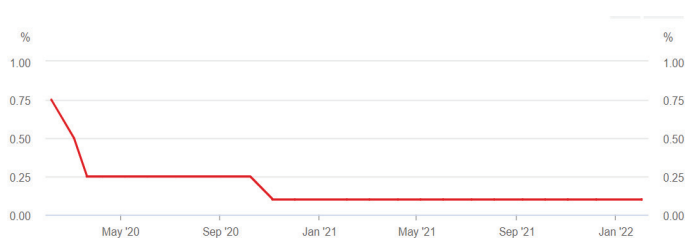
A lack of new cars available for purchase global (due to supply chain interruptions explained in the 'supply factors' section below), there has been increasing demand for second-hand vehicles, resulting in a very significant increase in their price, as shown by the screen grab below, from the ABC 7pm Nightly News in late 2021.



## Interest rates

Decreases in the official RBA cash rate typically flow on to a reduction in interest rates charged on credit by financial institutions, including mortgages, personal loans and credit cards. From early 2020, the RBA lowered the official cash rate three times. In both February and March 2020, it lowered the target cash rate by 25 basis points (0.25 percentage points). Then in November 2020, it lowered the target cash rate again, this time by 15 basis points. As can be seen in the chart below, the cash rate was lowered from 0.75% to 0.10% over this period. It has remained at 0.10% since November 2020. (In March 2020, the RBA also announced a package of 'unconventional monetary policy' actions that resulted in increased stability and liquidity in the financial markets in the face of the unprecedented shock to the economy caused by COVID-19 and the related government actions – but more on this in Update 3 later in the year.)

Chart: Cash Rate Target 2021-22



Source: RBA

In his opening statement to the House of Representatives Standing Committee on Economics in early February, RBA Governor, Philip Lowe, noted that the different elements of monetary policy in place over the last two years (including the cash rate but also other elements) '... have lowered funding costs, supported asset prices and led to a lower exchange rate than otherwise. As a result, more people have jobs and inflation is closer to target.'

(The link between interest rates and the **exchange rate** is considered in much more detail later in Unit 3 (Update 2), but it is worth noting that the lower-than-otherwise exchange rate in response to lower Australian interest rates can help support Australia's exporting industries and those local industries that compete with imports (in normal times tourism and education).)

As a result of the extremely low cash rate, retail interest rates charged on credit (particularly mortgages) are now well below the long-run average interest rates charged on borrowing in Australia. Interest rates impact on household **purchasing power** and as such they have an impact on how much money households have left over after paying income tax and covering unavoidable expenses, such as mortgage servicing (i.e. discretionary income). Therefore, lower interest rates should have a positive effect on markets which sell products whose purchase is more affected by the level of **household discretionary incomes** – such as entertainment, travel and leisure, and retail. The reverse will be true for rising interest rates.

In his presentation to the Committee referred to above, Dr Lowe noted that since the onset of the pandemic, the RBA Board has said it will not increase the cash rate until inflation is sustainably in the 2-3% range – which was expected to be around 2024.

However, the economy has performed better than expected, and inflation has also been higher than expected. While markets are expecting interest rates to rise earlier than RBA predictions, Dr Lowe noted that underlying inflation is in fact only at the midpoint of the target band now, and this is the first time in seven years. He observed that much of the inflation is the result of disruptions to supply chains and distribution networks and expected to be only temporary. In addition, wages growth is still very low, and the RBA is keen to see unemployment fall further and wages rise more before they act on raising the cash rate. As a result, it may be some time before the RBA Board lifts the cash rate, thereby encouraging higher interest rates across the economy.

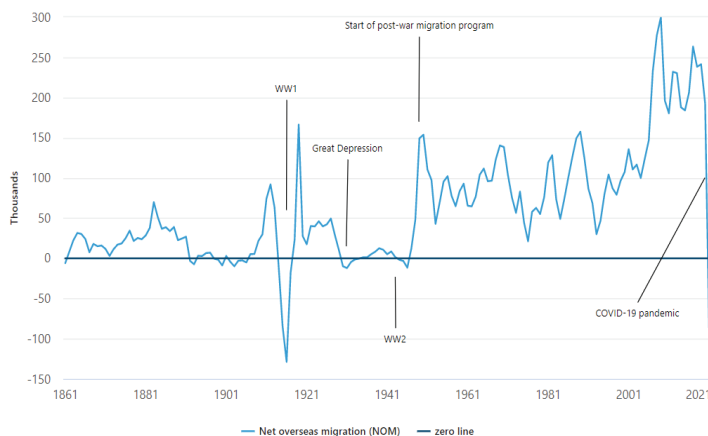
If interest rates stay low, this *may* encourage increased consumer spending and impact positively on some markets, particularly those providing goods or services that are highly **credit sensitive**, including the markets for consumer durables such as whitegoods and motor vehicles. Clearly, the lower interest rates for mortgages also encourages more borrowing to buy housing, and increased demand for housing, which is pushing up housing prices.

## Changes in population and demographics

Increases in the size of the population, along with changes in the composition of the population, can impact the demand for a variety of goods and services. Any growth in Australia's population is made up of a combination of net overseas migration (usually around 55-60% of the increase) and natural increase (usually around 40-45% of the increase).

One of the most notable features of Australia's population growth is what has happened since the beginning of the pandemic. Overseas migration in 2020-21 resulted in a net loss of 88,800 people. What this means in simple terms is that 88,800 more people emigrated **from** Australia (left Australia) than migrated **to** Australia (moved from overseas to Australia). This is the first loss since 1946. Immigration also fell by 71% from 506,900 arrivals in 2019-20 to just 145,800 in 2020-21. This massive drop should come as no surprise to students given the closing of Australia's borders and the subsequent inability of potential new migrants to arrive in Australia. The extent of this collapse in net overseas migration is clear in the diagram below.

Chart: Net overseas migration (NOM) – Australia (historical)



Source: ABS, <https://www.abs.gov.au/statistics/people/population/overseas-migration/2020-21>

Negative net overseas migration meant that the overall annual growth rate of Australia's population fell from 1.5% in the year to June 2019 to 0.2% in the year to June 2021. Much slower than usual population growth (including the plummeting rate of net overseas migration) is likely to impact on a number of markets. Firstly, the reduced demand for housing from new migrants was expected to have dampening effect on prices in the housing market (although as has been observed above, record-low interest rates and the desire to live in more spacious accommodation have served to boost housing prices in both large cities and regional areas). Secondly, there will be reduced demand across a number of goods markets like whitegoods and cars. Thirdly, the labour market has become tighter as fewer new arrivals entered the market. And finally, the inability of international students to enter Australia reduced the demand for education services, particularly from universities and other higher education providers.

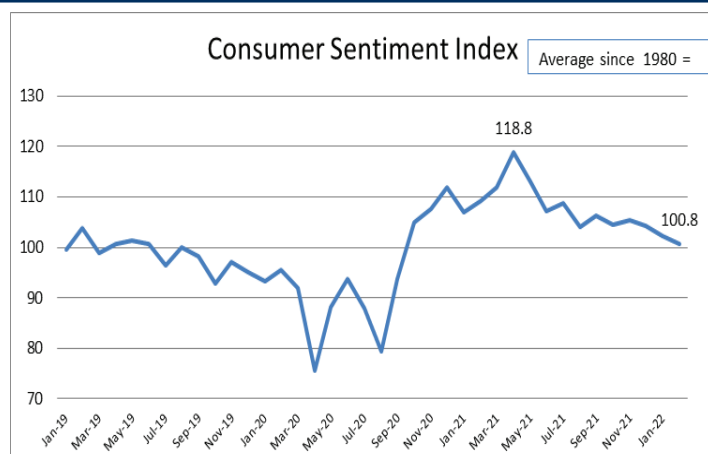
Clearly, the recent announcement by the Federal Government the international borders would reopen later in February will see an increase net overseas migration, but it may take some time before the levels of immigration (and population growth) return to pre-pandemic levels.

## Consumer confidence

Since the emergence of the Omicron wave of the COVID-19 virus and the decision of governments to move away from official lockdowns, there has been much discussion of a 'shadow lockdown' – where larger numbers of consumers are choosing to avoid those venues they consider at most risk of resulting in exposure to the virus. This includes people avoiding some retail environments, choosing not to return to office work locations, and avoiding hospitality venues and restaurants.

Consumer confidence (also referred to as consumer 'sentiment') is measured by Westpac and the Melbourne Institute's **Consumer Sentiment Index** and released monthly. **A measure of more than 100 on the index indicates that positive sentiment outweighs negative sentiment among those surveyed, and vice versa.** If consumers feel more positive (optimistic) about future economic conditions, they will be less inclined to save and more inclined to spend more. If, however, they feel more negative (pessimistic) about their future economic prospects, they will likely save more and spend less. One of the most important influences on consumer sentiment/confidence is whether workers feel secure in their employment. If workers (who are also consumers of course!) believe they may lose their job, they are likely to become more pessimistic, spend less, and save more, to provide a buffer of savings in case they do lose their job in the future. (This pattern was evident in the savings ratio figures discussed earlier in this Update.)

The chart below shows Consumer Sentiment since the beginning of 2019. Between early 2019 and early 2020 confidence fluctuated between 95 and 105 points, with an overall downward trend. This all changed in 2020. The plummeting of Consumer Sentiment in early 2020 illustrated in the chart is unlikely to be a surprise to students. Many Australians began to feel insecure about employment as the unemployment and underemployment rates both rose significantly.



After the initial collapse in consumer confidence during the early months of the pandemic, it recovered over late 2020 and into early 2021. In April 2021 it reached an eleven-year high of 118.8, but has been on a steady decline since then, albeit remaining above 100 through the year, indicating that optimists continue to outweigh pessimists. Some reasons for fluctuating confidence include the tapering off of government support measures like JobKeeper and JobSeeker supplement and the introduction of lockdowns (worsening sentiment) and the end of lockdowns and rising vaccination rates (improving confidence).

The mildly positive consumer sentiment can be expected to have a positive impact on discretionary spending. This can include decisions about purchasing new, larger **consumer items**, such as taking out loans to buy **new cars** or take **holidays**, and spending on cafes, hotels, recreation and culture, having a slightly favourable impact on the demand for a host of goods and services.

## Recent factors affecting supply

### Changes in the cost of production

#### Low wage cost pressures

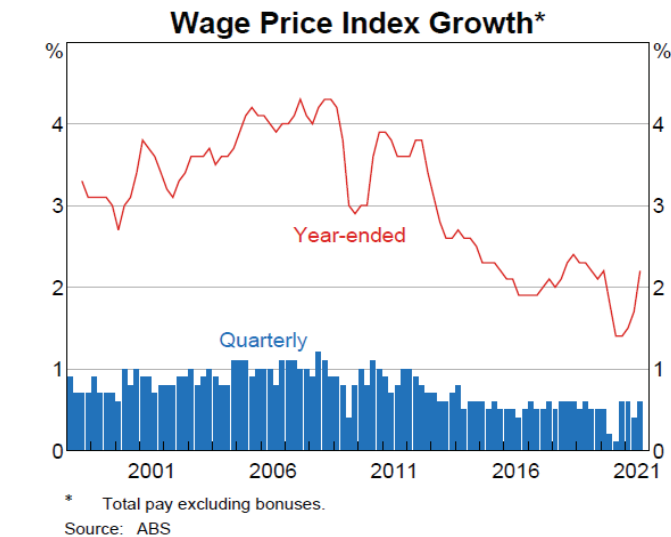
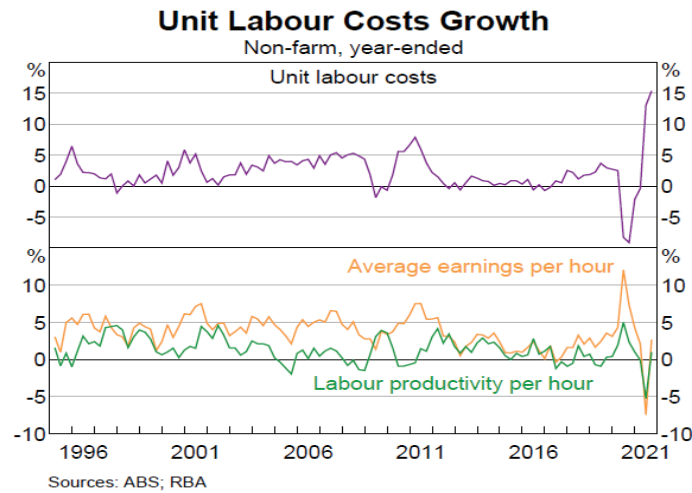
A key factor affecting the supply of goods and services is the cost of the factors of production (inputs) used in their production. One very significant input to production for all goods and services is labour.

As discussed above, there was very low growth in household incomes in recent years to early 2020. The rapid growth in household incomes during 2020 stemmed from generous government wage subsidies and other supports, rather than from rising wages and salaries. From a business (supply) perspective, low growth in disposable income is reflected by **relatively low wage growth** in recent years. However, this appears to be changing, based on the latest ABS Wages Price Index (WPI) figures revealed that in the 12 months to September 2021, in seasonally adjusted terms, **wages rose by 2.2%**.

While it is important to remember that the WPI is not representative of every wage change across every industry in Australia, the WPI is constructed, like the Consumer Price Index, to give a picture of the rise in average wages across the economy. The increase of 2.2% is the highest since prior to the pandemic. Additionally,

the quarterly figure of 0.6% translates to an annualised growth of 2.4%, indicating increasing pressure on wages.

The WPI indicates the average rise in *nominal* wages. As students of economics, you should be aware that, in order to determine the change in *real* wages, the rate of inflation needs to be subtracted from the rise in nominal wages. Over the same twelve-month period to September 2021, the headline CPI rose by 3.0%. This means that over that twelve-month period, *real* wages actually fell.



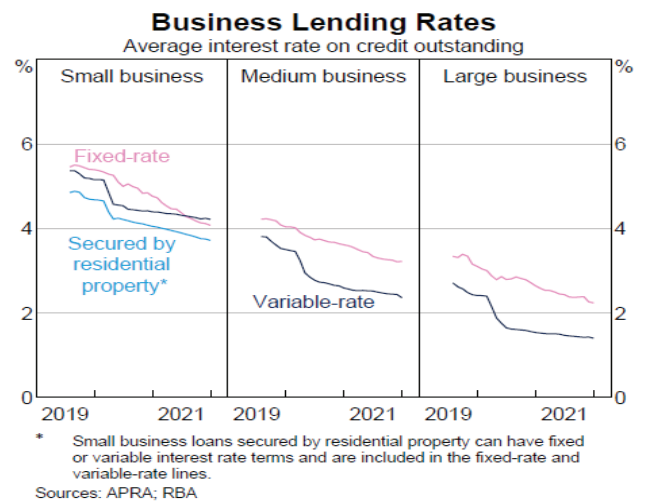
In addition to wages and salaries, the cost to businesses of employing labour (labour costs) also include additional costs such as Workcover, sick leave and payroll taxes. Unit Labour Costs Growth (shown in the chart above) represents the growth in the total cost of labour, which takes into account labour costs as well as the productivity of labour. If the increase in labour productivity (the real value of the output gained for each hour worked) is greater than the increase in labour costs, then unit labour costs will fall and businesses will benefit as a result. Between 2015 and 2017, unit labour costs remained largely unchanged because labour productivity (the output per hour worked) grew at around the same rate as average earnings. By early 2018, average earnings per hour were growing more rapidly than productivity, and unit labour costs were rising. Until mid-2020, unit labour

costs fell dramatically, in line with a rapid growth in productivity. However, since mid-2020, labour productivity growth has fallen, and actually become negative, only moving back into positive territory in late-2021. Concurrently, **RULCs have skyrocketed since mid-2021.**

In early 2022, there is much anecdotal evidence that labour shortages are causing employers across many markets to offer higher wages to attract staff. Rising growth in wages and other labour costs is likely to have a negative impact on supply in those markets where labour is a significant proportion of the cost of production, such as services like tourism, hospitality, the finance sector and, of course, health and personal care.

**Cost and availability of credit for business**

Low-cost funding from the RBA-operated Term Funding Facility has contributed directly to lower funding costs for banks, and the Bank’s latest SOMP indicated it would continue to do so until mid-2024. Additionally, banks have been able to access low-rate funding to support their loans, due to other RBA measures. This has kept interest rates charged on loans historically low and supported the willingness of banks to loan to business customers.



The chart above shows that interest rates on loans to all businesses have fallen to very low levels. As a consequence, those businesses with existing loans, as well as those who remain eligible for credit, will experience an improvement in supply side conditions as the loan servicing costs will be lower.

**Cost of imported inputs**

Many businesses that import inputs to their production have experienced **an increase in the cost of imported inputs due to a steadily depreciating dollar** over the last twelve months. Following its recovering from a plunge to below 56c US in March 2020, the AUD rose to nearly 79c US in February 2021, but has trended downwards in value to be around 71c US in February 2022. The lower AUD exchange rate means that any businesses that import inputs to their production, such as manufacturers, retailers and industries dependant on imported capital goods, will be paying noticeably higher prices, increasing their cost of production and decreasing their willingness to supply.

## Availability of inputs/resources

In addition to rising costs for imported inputs, global supply chain disruptions and negative impacts on distribution processes from the pandemic have also restricted the supply capacity of some producers. Motor vehicle retailers, for example, have faced significant shortages in the availability of new cars. This stems from interruptions to the global supply chain for car components, and especially computer chips which are key to their manufacture, along with significant delays in global shipping. This has reduced the supply of new cars available on the market. The following extract from an article on the issue explains the problem:

*'A global computer chip shortage – sometimes referred to as "chippageddon" – means carmakers are competing with other industries for chips. Modern cars can have more than 1,000 chips – for control of everything from mirrors to airbags and tyre pressure gauges.'*

## Increased operating costs for service businesses

As the economy has continued to reopen following various lockdowns, many service and retail businesses have experienced significant increases in their costs of production due to government-imposed regulations. For example, all businesses serving customers have been required to institute increased cleaning regimes, with regular cleaning of high-contact areas and increased 'deep cleaning'. For some time, cinemas, restaurants and cafes were required to restrict the number of customers they could serve, due to the imposition of lower occupancy rates. There are still low occupancy rates in many Melbourne CBD offices. Every Victorian business is still legally required to have a COVIDSafe Plan, and to follow the six principles of COVIDSafe workplaces: physical distancing, face masks, increased hygiene, enhanced record keeping of all occupants and visits to the workplace, creating workplace 'bubbles' in large workplaces, and moving large gatherings outdoors or increasing airflow in enclosed spaces. All of these extra requirements added to the costs of operating every workplace and business, representing an unfavourable supply side factor for most industries.

## Restrictions on availability of labour

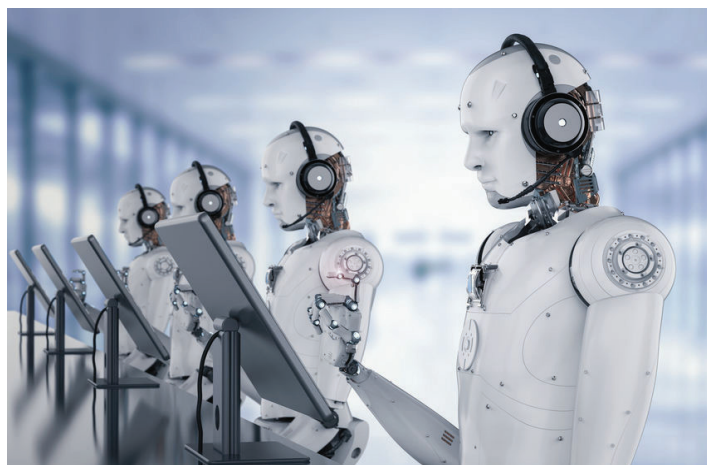
As discussed earlier in relation to the nation's PPF, the closing of Australia's international border and the interruptions to worker availability due to high rates of COVID-19 transmission and isolate requirements, has reduced the availability of both imported and local labour. The agricultural sector has been particularly badly affected by the lack of imported labour, as farmers have found it difficult to source the seasonal workers and 'backpackers' who harvest the nation's fruit and vegetables. As noted earlier, there have been numerous news stories about crops going to waste, a negative supply side effect on these markets.

## Technological change

On-demand mobile phone apps have become increasingly common as platforms for customers to interact with businesses. Most adults have a smart phone capable of operating such apps, and the data required to run the apps (i.e. as part of a mobile phone plan) is becoming increasingly cheap. It is estimated that the mobile app economy was USD\$6.3 trillion in 2021. [To put that

into perspective, the size of Australia's economy (measured by GDP) was around USD\$1.4 trillion!] The apps provide businesses with many benefits. Although the apps can be costly to develop, once in place they reduce the cost of providing customer service by having 'DIY' options for activities like updating personal information or providing service delivery (e.g. through ordering). They also allow businesses to collect significant amounts of data about their customers – which is a valuable commodity.

As ride-sharing service, Uber, has become a recognised global brand, it has also spurred an increasing fixation with firms creating 'the Uber of \_\_', as new businesses arise to take advantage of increased opportunities for providing on-demand services using an app-based platform like the model followed by Uber. Over time, such platforms have reduced the costs of new suppliers entering the market for some products - such as food delivery and small tasks. Apps like Menulog, Deliveroo, DoorDash, Ubereats, Airtasker, and GoFetch all take advantage of technological developments in this way. These apps have transformed the supply of labour and the provision of service in many industries.



The 'Internet of Things' (IoT) is another technological change that has major implications for the willingness and ability of companies to supply. The IoT refers to the idea that any machine with an on-off switch may eventually be able to be connected to the Internet. Clearly, this already encompasses our smartphones and smart TVs and streaming devices (e.g. for Netflix and Stan). However, advances in automation and machine learning mean that, increasingly, components of machines (e.g. drills on oil rigs or machines in factories) will be controlled from remote locations using this technology. For example, much of the production on large mine sites in the Pilbara (far north-western WA) is directed and monitored from control centres in Perth.

Technological change represents both a favourable and an unfavourable supply factor for businesses. On the one hand, it can significantly **decrease the operating costs of many firms** as they replace labour with automation, or move from physical retail stores to online retail and use apps for service delivery. Another example is the rise of 'Fintech' – app-based banking that removes the need for customers to use traditional major banks, and reduces the cost of banking for some small businesses. On the other hand, it can require significant investment and encourage



new competitors to enter the market (i.e. lowers the barriers to entry for competitors as set up/operating costs are reduced), which has the potential to **reduce the viability of incumbent (existing) businesses**. An example of this may be delivery apps like GoFetch undermining established courier and delivery services like Startrack and Australia Post. In recent years there has also been a proliferation of streaming video-on-demand and specialty providers – with Disney+, Binge, Amazon Prime, Paramount+, Apple TV Plus, Kayo Sports, Shudder and Hayu all arriving in the market in the last three years – and presenting a challenge to the market dominance of Netflix and Stan.

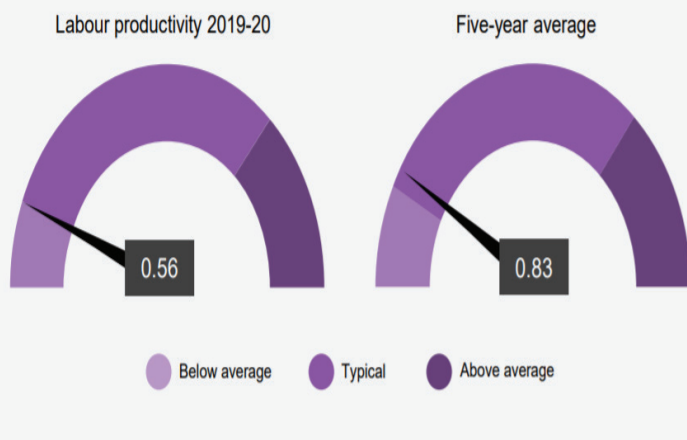
### Productivity growth

By increasing the volume of output per unit of input, technological developments also have the capacity to improve productivity.

If we examine data back until 2010, the average labour productivity growth has been 1.4% per year, which is approximately what would be expected over the medium term. The improved average labour productivity growth since the end of 2010 compared to the preceding five years is discernible in the chart below. It is also worth noting, however, that the current growth rate in labour productivity is much lower than during the 1990s and into the early 2000s. As the coloured diagram shows, over 2019-20, labour productivity (GDP per hour worked) grew by only 0.56%.



### Labour productivity performance



To a significant extent, productivity growth and the investment of capital in the production process are connected. It is accepted that productivity of labour is mostly driven by improved investment in capital. Labour will become more productive (produce more for each hour worked) when more capital is used in the production process. Improvements in productivity are a favourable supply side factor because businesses can produce more output for the same cost of inputs, which encourages businesses to increase supply.

### Climatic conditions

Despite Australia’s relatively positive climate conditions later in 2020 and during 2021, climate change remains an ongoing challenge for the whole country, now and into the future. In January and February 2021, enormous bushfires damaged large numbers of homes and significant farming areas around Perth, Western Australia, and bushfires also struck the Adelaide Hills. Then in March 2021, extreme storms struck New South Wales, causing widespread flooding and infrastructure damage, along with damage to crops and interruptions to supply routes. Despite a mild summer on the Australian east coast, bushfires again caused significant damage in southern WA in early February 2022.

The ongoing threat of bushfires, storms and floods in Australia is likely to have numerous negative impacts on supply. Direct effects include:

- Destruction of stock and crops, along with feed sources, on farms
- Destruction of businesses and buildings in rural towns
- Destruction of farm infrastructure including fencing, sheds and equipment
- Closure of roads and interruptions to electricity supply and communications systems

Indirect effects, such as those experienced during the early-2020 bushfires in Victoria and NSW include:

- Loss of potential productivity in major cities due to smoke pollution
- Loss of work days due to volunteer firefighters being required in the field for weeks at a time
- Disruptions to regional supply networks

Over time, climate change, with its risk of more severe droughts, bushfires, extreme storms and other extreme weather events, will continue to contribute to significant supply-side difficulties including:

- Lower rural production overall
- Higher input costs (especially for water and feed)
- Closure of rural businesses

The likely impact on agricultural markets includes a reduction in the supply capacity for many products, including grains, fruit and vegetables, and meat. In each case, there will be a direct impact on the prices of products in these markets, as supply falls. The increased cost of inputs will also flow through the markets like restaurants and take away food, where input prices will rise, pushing up prices.

## The role of relative prices in markets on resource allocation and the effect on living standards

When the conditions of demand or supply change in markets, it is useful to note the role that relative prices play in shifting the allocation of resources away from the production and/or consumption of some goods and services and towards the production of others. When demand and/or supply change for any of the reasons covered in the previous section, it necessarily leads to a change in the price of one good or service relative to others. This change in relative prices then sends important signals to both consumers and producers that their economic position can be improved by changing their demand or supply for goods and services. For example, in relation to the lower relative price of high rise apartments we covered earlier, it sent a signal to producers (e.g. property developers) that perhaps they should invest fewer resources (e.g. labour and capital) in the development of high rise apartments given that the returns on the investment (e.g. profits) are expected to be lower. In relation to puppies, we also saw that the higher price of puppies encouraged greater breeding (more resources allocated to the production of puppies).



The ability and speed of markets to respond to the changed market conditions relates to both allocative efficiency and dynamic efficiency and has important implications for living standards. For example, if producers are able to respond to the changed market conditions, such as the higher demand for and price of puppies, then this is allocatively efficient because resources will be used to produce the goods and services that satisfies consumers and society more generally. Similarly, if producers can quickly respond to the changes in demand and (relative) prices, then the economy is considered to have a high level of dynamic efficiency. Overall, the change in relative prices has helped to improve living standards.

The same type of analysis can be applied to any of the shifts in demand and supply that was covered in the preceding section, such as the higher (relative) price of petrol helping to shift demand away from traditional motor vehicles towards electric vehicles, or how the lower exchange rate (the 'price' of Australia's currency on global markets) causes demand for exports to rise relative to imports. As you proceed through the course this year,

it is worthwhile paying attention to the many shifts in demand or supply for goods and services, and the resulting change in relative prices that will occur. Importantly, try to make some connection to resource allocation, economic efficiency and living standards.

## The benefits of more competitive markets and costs of market concentration

### Benefits of competition

For many students the idea that more competitive markets lead to improved efficiency remains in the realm of theory, but some economists undertake research to 'test the theories' students learn in their economics classes. In an article published in the June 2019 RBA Bulletin, RBA economist Matthew Carter reported evidence that the pricing power of Australian retailers had been reduced by increased competition in the retail trade sector. This had led to declining net profit margins for both food and non-food retailers in recent years.

The increase in retail trade competition has resulted from two key factors:

- The rise of online shopping
- The entrance of new international firms into the market

While increased competition has affected many industries, retail trade has been particularly affected. Businesses in the retail trade sector state that these changes have **increased competitive pressures** and they have **had** to adjust their pricing behaviour to **compete for sales and market share**. It has been observed that consumers in the retail sector are increasingly price sensitive and so retailers have had to increase the size of the price discounts, as well as the frequency of discounting. About 60 percent of retailers surveyed by the RBA economists indicated they review their prices either daily or weekly, and this was much higher than the same types of firms just over 10 years ago. (Students may have noticed the almost-constant 'sales' in some shops in recent times.)

There is evidence, also, that firms are increasingly trying to **compete by offering the 'lowest price position'** in the market. When making a decision to decrease the price of their products, the most common reason cited by firms was that their competitor had changed the price of their product in the market. In addition, the research found that the arrival of more competition in the retail trade sector had reduced the 'mark-up' of most retailers (the gap between the retailer's costs and the price they charge the customer.) Retailers have also tried to improve their competitiveness by 'improving their inventory management and stock monitoring processes' (i.e. improving productivity), and also by innovating to increase the range of their own-brand products to attract more customers (increasing allocative efficiency).

As is clear from the above brief coverage of the research findings, increased competition in markets works to decrease costs for customers and improve efficiency, not just in theory but also in practice in some markets.

(The article 'Competition and Profit Margins in the Retail Trade

Sector' can be found here: <https://www.rba.gov.au/publications/bulletin/2019/jun/competition-and-profit-margins-in-the-retail-trade-sector.html>)

## Increased market concentration

Market concentration refers to a market being characterised by a small number of firms that are able to exert market power – they have the ability to influence the price or quantity in the market, and therefore are price makers rather than price takers (as occurs in less concentrated markets or more perfectly competitive markets.)

There are many examples of highly-concentrated markets in Australia. As noted in The Saturday Paper (11-17 September 2021 edition):

*'Woolworths and Coles control 76 per cent of dry groceries in Australia. Telstra has 45 per cent of telecommunications and together with Optus and Vodafone, that figure goes to 87 per cent. Qantas has more than 65 per cent of the domestic market. Anheuser-Busch and Kirin control more than 90 per cent of the beer market. Medibank and Bupa together control 52 per cent of the private health insurance market. The Big Four banks have more than 70 per cent of the lending market.'*

<https://www.thesaturdaypaper.com.au/news/politics/2021/09/11/monopoly-mon-ey-australian-market-concentration-under-scrutiny>

Australia's steel industry is dominated by one company, BlueScope - formerly part of BHP, but its own entity since 2002. The company is the only supplier of some steel products in the country, with its only competition coming in some areas from imports. In 2021, the Australian Competition and Consumer Commission launched a case against a former executive at BlueScope, Jason Ellis, for 'attempted price fixing'. As reported by the media, the behaviour alleged against Mr Ellis is 'a classic example of what can happen in Australia's concentrated markets.' Mr Ellis is accused of attempting to induce various steel distributors in Australia and overseas manufacturers to enter agreements containing a price fixing provision. In other words, he encouraged wholesale buyers of BlueScope steel products to charge a certain rate as a resale price – therefore exerting power over the price of the product further down the supply chain and restricting competition between the resellers.

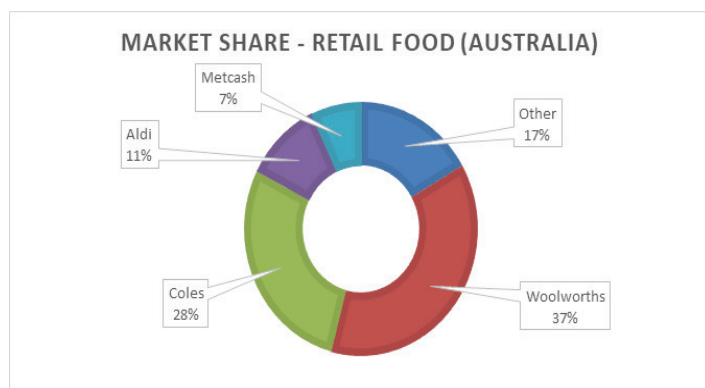
This type of behaviour contravenes the very nature of efficiently operating free markets in that it can result in higher prices for buyers of products since those companies that should be competing against each other (namely on the basis of keeping prices as low as possible) are able to act together (albeit secretly) to keep prices higher for all sellers in the market. As the ACCC Chair, Rod Sims, argues, market power can contribute to economic inequality by promoting the interests of the few with power of over the interests of many. He notes 'it also undermines trust in the operation of markets and encourages wasteful rent-seeking activities to protect monopoly profits.' In addition, concentrated markets have a dampening effect on innovation, reducing the potential for dynamic efficiency.

Without the discipline of competition, producers no longer need to be as responsive to buyer demand (allocative efficiency) or focus on improving productivity in order to keep prices down and compete (productive efficiency) or even focus on the changing market to adjust their products and services in response to

price signals and market conditions (dynamic efficiency). All of this means that customers are more likely to get an inferior deal compared to the past – fewer of the products they want, not always in the quantities they want, and often at an elevated price.

The large tech giants have come under fire in recent years over their monopoly market power. Apple, Facebook, Google and Amazon have all been widely criticised for their dominance of their respective markets. In Australia in recent years, the government has attempted to force Google and Facebook to compensate media for content used on their platforms. Since those reforms came into place, other countries and regions (US, EU and South Korea) have continued this battle to 'reign in' the tech giants by curbing some of their market power.

As mentioned earlier, supermarket retail is a highly concentrated market in Australia and NZ. Data reported on the ABC nightly news in August 2021 showed the extent to which mega-businesses dominate the food retail markets in both countries. The Australian data is reproduced below.



Evidence was also produced that this has an effect on the prices paid by Australian consumers – who face some of the highest costs in the world for their regular food, alcohol and tobacco spending. We face among the highest costs in the world, just behind Luxembourg and NZ and much higher than Japan, France, the USA, Germany and UK – which all have less concentrated retail food markets.'

## Market failure and government intervention

Market failure occurs when the free operation of the market leads to an allocation of resources such that the national living standards or welfare are not maximised.

A very useful recent example of market failure has been the use and provision of Rapid Antigen Tests (RATs). During the earlier stages of the Omicron wave of the COVID-19 pandemic, it became evident that formal PCR testing facilities were incapable of dealing with the increased need for testing and the rising positivity rate. In response, RATs became a more popular means of testing for infection, to enable those infected to isolate and reduce the further spread of the disease. As noted at the start of this Update, there was much discussion over whether RATs should be provided to all Australians for free, or whether the provision of them should be 'left to the market'.

Those in favour of free provision of RATs used the argument that RATs (in as much as they enabled easy access to testing) yielded a 'positive externality'. A **positive externality** occurs when a benefit is experienced by a third party not involved in the transaction (or activity). Because the parties to the transaction don't experience the full benefit of the activity (taking the RAT test), there is an under allocation of resources to the production or consumption of goods and services that create negative externalities, relative to the level of production that would maximise the benefit to society.

In the case of RATs, as economist Angela Jackson explained in a very accessible article, 'the fact is that the whole community benefits when an individual buys and takes a test. As individuals we find it hard to properly account for these community-wide benefits when making decisions about how much we are willing to pay for a good or service – meaning we buy less tests than is 'optimal'.'

In a pandemic, the community-wide impacts of taking infection tests, and responding by isolating and avoiding further spread is what really matters, since it stops our health system being overwhelmed, and reduces the healthcare costs and economic fallout from the outbreak. Jackson goes on to note: 'Moving to providing free RAT tests would help ensure businesses can stay open, with staff not having to unnecessarily isolate, and lift confidence of consumers to go out and spend their savings from the pandemic. The Prime Minister is right in saying that someone has to pay to make the tests free, but the price of not doing so will be much higher in both lives and economic growth. There is indeed no such thing as a free lunch.' Angela Jackson, 'Why it makes economic sense to make RATs free', *The Age*, 5<sup>th</sup> January 2022, <https://www.smh.com.au/national/why-it-makes-economic-sense-to-make-rats-free-20220105-p59lzn.html>

## Contemporary example(s) of government intervention that unintentionally leads to a decrease in efficiency

### JobKeeper waste

Very few students will not have heard of the federal government wage subsidies (JobKeeper) and the temporary increase to the unemployment benefit (JobSeeker) which were both introduced in March 2020. The government's intention in introducing both programs was to support the economy as it faced the economic catastrophe of the COVID-19 pandemic, since the government enforced the closure of many service businesses, shut down whole sectors of the economy, and enforced work-from-home arrangements, alongside closing Australia's international border.

The payments were primarily aimed at supporting household incomes and business revenues, and supporting spending to reduce the depth of the economic collapse. Businesses were eligible for the payment if they could demonstrate a substantial fall in their revenue over the specified period. Every eligible employee would receive the same wage subsidy (\$1500 per fortnight) regardless of full-time, part-time or casual employment status so long as they had been employed in that role for at least the last 12 months. It was intended that the payment of \$1500

per fortnight for each eligible employer, paid to the employer and then passed on to the employees, would prevent many businesses offloading employees and adding to the pool of unemployed persons in the economy. In addition, it would mean businesses would not need to bear the costs of re-hiring employees once the economy began to improve.



However, the introduction of the payment unintentionally led to a decrease in efficiency. The speedy introduction of the JobKeeper payment and blanket payment of \$1500 per eligible employees, regardless of the pre-pandemic hours of work, resulted in some casual workers (e.g. in the hospitality industry) reducing their willingness to work additional shifts since they would receive the \$750 per week payment regardless of the hours they worked. This resulted in some businesses struggling to find labour once the COVID-19 lockdown restrictions were relaxed. This potential problem was highlighted by a number of economists, who observed the difficulty of enticing workers in struggling businesses (e.g. hospitality) who were in receipt of JobKeeper to move across to industries that were experiencing higher demand and were desperately in need of staff – such as supermarkets. Workers were very reluctant to move across from better paid 'jobs' (i.e. paid by JobKeeper) to less lucrative (real) jobs. Clearly this would impede dynamic efficiency as resources would not quickly be reallocated based on changing market conditions.

Economists have observed other unintended consequences of the government intervention. In some cases, the subsidy allegedly encouraged firms to limit actual or recorded sales in order to reduce revenue to a low enough level that they would qualify for the turnover threshold to receive the subsidy. As one economist observed, this might mean that some firms chose to artificially lower their supply of products to market (e.g. airline flight routes or delivery locations) in order to reduce their turnover and continue to qualify for the subsidy, despite demand for those products increasing.

And finally, one unintended consequence has come to pass as a result of choosing to include some of Australia's largest businesses in the scheme. Businesses suffering at least 30% reduced turnover were eligible, apart from those businesses with a \$1 billion or more turnover, which had to demonstrate a 50% reduction in turnover. The only outright exclusion from the JobKeeper scheme was the major banks and universities. ABS data showed that **company profits actually soared by a record 15% in the June quarter of 2020, despite record declines in economic activity**

**across Australia.** A number of large corporations which received millions of dollars in JobKeeper also paid record bonuses to their executives and large dividends to their shareholders. Some have drawn a direct link between the reduction in costs as a result of JobKeeper payments, and the rising profits, dividends and bonuses of some large corporations.

Since the end of the JobKeeper program, the government's Parliamentary Budget Office (PBO) undertook analysis of the program. Some of its key findings were:

- The wage subsidy program was the largest economic support in Australia's history, costing \$89 billion by the time it ended
- At least \$38 billion in JobKeeper went to companies where turnover **did not fall below the thresholds**
- \$1.3 billion went to companies where **turnover tripled during the quarter** for which they claimed JobKeeper
- \$1.2 billion went to companies that **doubled their turnover** in that time period

Reporting and public pressure eventually led to a number of corporations repaying the wage subsidy to the government. The head of the Business Council of Australia has said companies receiving JobKeeper wage subsidies should not give executive bonuses and should think twice before paying dividends. Many critics of the companies have argued that, while they are legally entitled to the payments, the 'spirit' of the subsidy was to support those companies at risk of having to dismiss employees and close down, and clearly corporations making a record profits do not fit that description. It is clearly an inefficient use of taxpayer funds to subsidise large corporations that have made large (record) profits.

## REVIEW QUESTIONS:

1. Define 'opportunity cost'.
2. Explain the potential opportunity cost of the federal government decision to provide free Rapid Antigen Tests (RATs) to various concession card holders and school students and staff.
3. Describe the impact of the government's decision to close Australia's international border on the country's PPF.
4. Construct a fully-labelled demand and supply diagram to illustrate the impact of the coronavirus outbreak on Australia's international student market.
5. Explain the difference between discretionary income and disposable income.
6. Explain the relationship between consumption and the household saving ratio.
7. Describe the trend in the cash rate since early 2020 and explain how this trend is likely to have impacted on demand for items that are bought using credit.
8. Explain the likely impact of the trend described in Qn 7 on three specific markets.
9. Explain how the change in relative price of puppies is likely to influence resource allocation over time.

10. Describe the recent trend in consumer sentiment in Australia. Explain whether this means that overall, consumers are feeling more or less confident about their future economic prospects than previously.
11. Explain the potential impact of the changes described in Qn 10 on the market for housing in Australia. Illustrate your response with a fully labelled demand and supply diagram.
12. Describe and explain the reason for the recent changes in population growth in Australia and examine one implication for relative prices, efficiency and living standards.
13. Identify whether recent WPI and unit labour cost figures would be considered a favourable or unfavourable supply side factor for many Australian producers. Justify your choice.
14. Look closely at the chart titled 'Unit labour cost growth'. Explain the relationship between unit labour costs, labour productivity and earnings per hour.
15. Explain how the use of technology can improve productivity and lead to more favourable supply side conditions for producers. Use an example to illustrate your response.
16. Explain the impact of the recent trend in the AUD exchange rate on the costs of production of Australian retailers.
17. Explain how changes in productivity influence the willingness of businesses to supply.
18. Explain the key supply-side impacts of climate change on a market of your choice.
19. Explain two ways in which increasing competition in Australian retail has led to improved efficiency.
20. Explain how price fixing / cartel behaviour would affect the level of competition in Australia's steel market, and the likely impact on efficiency in the market in the longer term.
21. Explain what is meant by the term 'market failure' and explain how leaving the provision of RATs to the market could represent a market failure.
22. Explain how the government could choose to intervene to counteract the associated market failure identified in Q21.
23. Explain two ways in which the federal government's JobKeeper program may have unintentionally resulted in a less efficient allocation of resources.

## Application Exercise:

Read the sections of the Update relating to factors affecting supply and demand in markets in Australia and complete the tasks that follow.

**Task 1:** Draw a fully-labelled demand-supply diagram illustrating **each** of the following scenarios. Write a brief justification of the changes shown, and explain what has happened to the equilibrium price and quantity in each case. Note that in some cases both demand and supply is likely to be impacted.

### Scenarios:

- The impact of increased disposable income growth in the September 2021 quarter on the market for consumer whitegoods like fridges.

- The effect on the market for fruit and vegetables of recent flooding in NSW.
- The effect on the market for caravans of the government's decision to re-open international borders, making overseas travel possible.
- The impact on the market for housing in regional areas as a result of repeated capital city lockdowns throughout 2020 and 2021.
- The impact on the market for new houses as a result of record-low interest rates.
- The impact on the markets for residential properties in rural/regional areas over 2020 compared to the market for high rise city apartments.
- The impact on the market for online retail during the pandemic.
- The impact on the market for petrol-fuelled cars as a result of the trend in petrol prices over the last two years.
- The impact on the market for electric vehicles (EV) as a result of the trend in petrol prices over the last two years.
- The impact on the market for new cars of interruptions to global supply chains and distribution networks.
- The impact on the retail clothing market following a significant depreciation of the Australian dollar.
- The impact on the market for Westpac in-branch services following the adoption of new online banking technology.
- The impact on the local cinema of government rules imposing social distancing and capacity limits.

**Task 2:** One key skill in Unit 3, AOS 1 is that students are able to: **evaluate the role of the market in allocating resources.**

Based on the information in the Update, respond to the following question:

Evaluate the impact of the level of competition in Australian markets on the efficient allocation of resources. Use evidence to support your evaluation. (8 marks)

## Memorable quotes:

*'The Australian economy has bounced back strongly from the lockdowns associated with the outbreak of the Delta variant of COVID-19 in the second half of 2021. GDP is expected to have grown by 5 per cent over the year despite these lockdowns. In light of this strong recovery and signs that the effect of the Omicron outbreak on spending has been relatively small, the outlook for the Australian economy has been upgraded.'*

RBA, 'Statement on Monetary Policy', February 2022, p. 1

*'... the Board is prepared to be patient as it monitors how the various factors affecting inflation in Australia evolve. It is committed to achieving the inflation target, which remains at the centre of the monetary policy framework. It will do what is necessary to maintain low and stable inflation, which is important not only in its own right but also as a precondition for a sustained period of full employment.'*

RBA, 'Statement on Monetary Policy', February 2022, p. 1

*'We're now in a stage of the pandemic, where you can't just make everything free, because when someone tells you they want to make something free, someone's always going to pay for it and it's going to be you'*

Prime Minister Scott Morrison, interview on Channel 7's Sunrise program, 3<sup>rd</sup> January 2022.

*'Twenty months of closed borders has left the (hospitality) industry with a staffing crisis as foreign students and migrant workers left in droves. Last week, there was a 65 per cent increase in hospitality job ads from the week before, as Melbourne's re-opening triggered a mad rush for workers. Pubs, bars and restaurants are offering workers their pick of shifts and roles and hourly rates in some cases over \$40, costs a key industry body said would have to be passed on to patrons. ... 'Some businesses are offering up to \$45 an hour for positions that would normally pay in the 20s.'*

'Scramble for hospitality workers may mean better wages ... and higher prices,' Rachael Dexter, The Age, 24/10/21

*'If you're in the market for a slightly used secondhand car, be prepared to pay up. A computer chip shortage and shipping delays have kept new car supplies tight, and (...) second hand car prices have been soaring since last year and there's no sign they'll drop any time soon.'*

Ian Verrinder, ABC Victorian Nightly News, 13<sup>th</sup> September 2021

*'It is alleged that BlueScope and Mr Ellis attempted to induce agreements with BlueScope's competitors, to fix and/or raise the level of pricing for flat steel products supplied in Australia. ... This matter involves allegations of serious cartel conduct.'*

Statement on 'Action against BlueScope for alleged cartel conduct', ACCC, 30 August 2019, <https://www.accc.gov.au/media-release/action-against-bluescope-for-alleged-cartel-conduct>

*'Of course, JobKeeper was a good idea,' federal Labor MP Andrew Leigh said. "But the way in which it was administered has led to some of the biggest waste in the nation's history ... Every dollar paid out on JobKeeper needs to be paid by Australians, either in the form of higher taxes, lower services or more debt." '*

Dan Conifer, 'At least \$38b in JobKeeper went to companies where turnover did not fall below thresholds, data finds', ABC Online, 2<sup>nd</sup> November 2021

*'Federal Treasurer Josh Frydenberg said a recent report by his department showed businesses that received JobKeeper were heavily impacted by the pandemic. "It saved lives and livelihoods and supported more than four million Australians and a million businesses during the greatest economic shock since the Great Depression," Mr Frydenberg said.'*

Dan Conifer, 'At least \$38b in JobKeeper went to companies where turnover did not fall below thresholds, data finds', ABC Online, 2<sup>nd</sup> November 2021

*'Australians who can't resist smashed avo for breakfast may have noticed a welcome change to the price of their favourite fruit. For weeks, the price of avocados has consistently dropped - dipping as low as \$1 for an avocado at supermarkets or greengrocers. That's a far cry from the summer of 2018 when a single avocado would set you back \$9. The difference between now and then, ..., is a large oversupply. Fuelled by a bumper harvest and months of lockdown keeping millions out cafes, there's more avocados in farms than there are on supermarket shelves.'*

'Australian avocado prices plummet amid oversupply spurred by bumper harvest', <https://7news.com.au/lifestyle/food/australian-avocado-prices-plummet-amid-oversupply-spurred-by-bumper-harvest-c-4225482>

*'It was once a rule as sure as gravity: buy a 2012 Toyota in January and it would be worth significantly less by December. But if you've bought a secondhand car anytime over the last two years, it should be pretty obvious that rule hasn't held true during the pandemic as prices have been driven up by 50% on some models in Australia and overseas.'*

Royce Kurlmelovs 'Secondhand cars: why are they so expensive and when will prices drop?', The Guardian, 30<sup>th</sup> January 2022, <https://www.theguardian.com/australia-news/2022/jan/30/secondhand-cars-why-are-they-so-expensive-and-when-will-prices-drop>

*'The ACCC has significant concerns about the retail price of rapid antigen tests, reportedly often costing between \$20-30 per test and sometimes over \$70 a test through smaller retail outlets, despite wholesale costs ranging between \$3.95 and \$11.45 a test. ... ACCC Chair Rod Sims said "There are several businesses that have repeatedly come to our notice thanks to the information provided by the public. We are asking those businesses to urgently explain the prices they are charging.''*

ACCC, 'Concerning pricing of rapid antigen tests', 17<sup>th</sup> January 2022, <https://www.accc.gov.au/media-release/concerning-pricing-of-rapid-antigen-tests>

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