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Economics Update

Timmee Grinham
The Mac.Robertson Girls' High School

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.

Unit 3, Area of Study 1

Relative scarcity, opportunity cost and an efficient allocation of resources

Your teacher will have impressed upon you that Economics is about the need for economic choices and resource allocation. This occurs because of relative scarcity – the fact that our unlimited needs and wants will always outweigh the limited (scarce) resources available to satisfy them. As a consequence, choices must be made between allocating resources to competing purposes. We need to be aware that when resources are used for a particular purpose, they cannot be used for a different one, so we sacrifice the benefit we would have gained from using the resources for that alternate purpose. This occurs at an individual and an economy-wide level. This is the 'opportunity cost' of an economic decision, defined as the value of the next best alternative use of the resources that is foregone (given up) when an economic decision (choice) is made.

Recently there has been a perfect example of opportunity cost at work in economic decision making. In February, the Federal Government unveiled an industry and innovation statement, involving changes that are designed to help support small and medium manufacturing enterprises that are struggling, in part as a result of the persistently high Australian dollar.

One part of that changes include the decision to prevent companies with a yearly turnover of $20 billion from accessing the government's research and development (R&D) tax incentive. This benefit would no longer be available to a small number of companies (15 to 20), many of them in the mining industry. The savings, expected to be around $1 billion dollars, would be used to build innovation precincts modelled on ones in Silicon Valley. These are aimed at developing new products and skills to allow manufacturers to break into new markets.

The policy has been characterised as taking '$1 billion from Australia's richest companies in order to fund a jobs plan for smaller ones.' However, as economists, we are aware that reallocating resources between competing uses is never as simple as that. The R&D tax incentive is designed to encourage companies to engage in R&D by allowing them to claim a deduction against their taxable income of up to 133% of the cost. Such R&D could potentially improve a company's performance, including new discoveries, new or improved products and improved production methods. As economists, we are aware that such outcomes, if achieved, may help a company to improve its productivity, and its productive capacity, and could contribute to an outwards movement in the economy's production possibility frontier. It could also contribute to positive externalities in production that would benefit those beyond the company, such as new pharmaceutical discoveries that reduce ill-health in the community, or innovation that reduces pollution.

By removing this R&D tax concession for some businesses, there is a possibility that the 'opportunity cost' is excessive. Put in another way, the opportunity cost of using $1 billion to build innovation precincts (which becomes the benefits that could have been derived from the R&D spending that has been foregone) may be greater than the benefits that will be enjoyed by establishing innovation precincts. If this is true, then the government policy is not sound.

Material vs non-material living standards in action

A close look at the 2012 VCAA Economics examination reveals that the assessors were very interested in students' ability to talk about living standards, including how they are measured and the impact of market structure, policy decisions and demand and supply factors on living standards in Australia. In fact, the overall purpose of economic activity is to increase the living standards of the individual and society.

Material living standards refers to the availability of and access to goods and services. The most common way of measuring material living standards is income or GDP per capita (per person). We can assume that, as GDP per person increases, on average people in an economy will receive more income (in return for their contribution to the productive process), and therefore will be able to access more goods and services. In contrast, non-material living standards relate to those factors that affect a person's quality of life, beyond access to goods and services. These are many and varied and can include the quality of interpersonal relationships, levels of happiness, access to a clean environment, crime rates, living in a democratic society and many more.

When we consider material and non-material living standards, we need to acknowledge that sometimes maximising our material living standards will lead to a deterioration of our non-material living standards. Few Australians would dispute the incredible material benefits that have accrued to Australia as a result of the recent mining boom, including the flow-on effect beyond the mining industry of increased national incomes, through higher share prices, dividends for investors and increased incomes for suppliers. However, a recent Parliamentary Inquiry report highlighted a serious downside of the boom, particularly in remote regional Australia where the mining activity is concentrated.

In recent years, many resource companies have preferred to fly-in and fly-out their workers, who actually live in other areas of the country. These workers fly in to the community, stay there for the duration of their shift (usually two weeks at a time), then fly out, returning to their home base for an extended period off (usually two weeks), before again returning to their mining jobs.

There are many material benefits of the fly-in-fly-out (FIFO) workers specifically, who earn very big money - even entry-level salaries are between $80,000 and $100,000 per annum. Families and businesses will benefit in the towns where FIFOs are based, as does the broader economy, since each dollar of spending by a FIFO becomes income for someone else.

However, the report showed that FIFO workforce practices had a serious downside for rural and regional Australia. Economically, a shortage of housing in the mining towns and surrounding cities has pushed rents to incredible heights, and much of the money earned by FIFOs leaves the mining towns, to be spent in the cities on the coasts where the FIFO workers and their families are based.

Even more challenging for some has been the impact on non-material living standards caused by FIFO work. The report identified that FIFO work has contributed to the breakdown in community in remote rural towns. Most small towns are surrounded by single people's accommodation, row upon row of cabins where the mining workers sleep temporarily. Often workers don't even have their own bed – the beds are used at different times of the day by other workers. When workers are in the town they are working, and there is no connection to the community in that place. They never feel at home in the towns where they are working, and the workers also don't really feel at home in their 'homes' (away from the mining towns), namely because they are never there long enough. There is even evidence that there is an increase in mental health issues in these remote communities as people are increasingly disconnected. Some of the problems include family difficulties and relationship breakdown.

So, as you can see, sometimes an improvement in material living standards does not necessarily lead to an improvement in non-material living standards. Studying Economics at VCE level, it is important that we are aware of, and can explain, the impact of policies and economic decisions or factors on both material and non-material living standards.

Unions influencing economic decision making

Unions are one of the groups that influence the operation of decision making in the Australian economy. Often referred to as 'trade unions', these organisations represent the interests of their members, workers from various industries, in respect to the workers' wages, benefits and working conditions.

The AEU represents teachers in Victorian government schools, and the employment conditions and wages of teachers, principals and support staff in those schools is governed by a collective agreement negotiated between the AEU and the Victorian state government. The last agreement expired on 31 December 2011, and the AEU and the government have been in negotiations over a new agreement since that time. The AEU is concerned by the workload of teachers, the number of teachers on short-term contracts, class sizes and the salaries of teachers, which are below those paid in a number of other states. The union has demanded improvements in these areas as part of the new agreement, including initially a 30% pay increase over 3 years. The AEU argues that the disparity in salaries between Victorian government school teachers and those in other states is contributing to an increasing number of teachers leaving the public system each year, placing pressure on schools and leading to teachers having to work outside their area of expertise. It also makes Victorian teachers vulnerable to recruitment drives from other states looking to meet their teacher shortage, such as WA where wages of highly skilled teachers can be up to more than $7000 more per year than in Victoria. On the other side of this battle is the Victorian government, which wants to introduce performance-based pay for teachers, and has asked for productivity gains to offset any salary increases above a minimum of 2.5% per year.

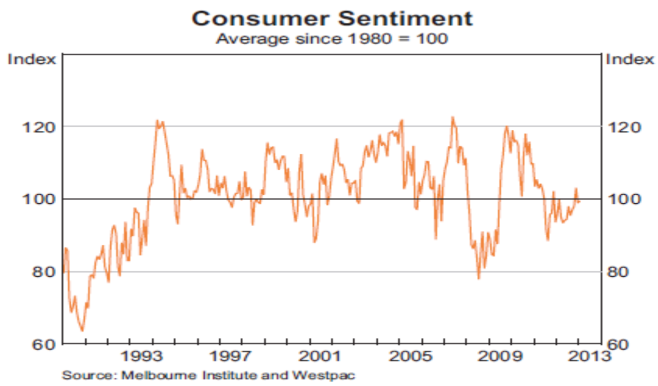
The result has been a number of stop work days (full day strikes) and work bans on extra activities that are undertaken by teachers outside the normal 38-hour work week. This has a significant impact on schools. On 14th February, over 30,000 Victorian government school teachers and support staff walked off the job, forgoing pay for the day. This forced 173 schools to close for the day, and most other government schools to operate on a skeleton staff, and limit programmes offered at school for the day. In addition, a further flow-on effect to the economy was the impact on parents who were unable to attend work for the day, as they were not able to find alternate care for their children who were unable to attend school.

Some demand factors affecting markets

There are a number of key microeconomic demand-side factors that influence the prices and quantity of goods and services, and the willingness of consumers to purchase goods and services. Several of those currently having a significant impact are discussed below.

Consumer sentiment (confidence) and household saving ratio

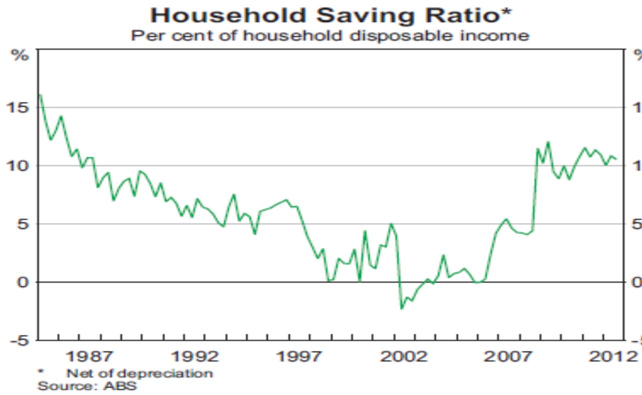
The RBA reported in its February Statement on Monetary Policy that measures of consumer sentiment (confidence) have moved to be at or above long-run average levels in recent months. Consumer confidence is measured by Westpac's Consumer Sentiment Index, and a measure of more than 100 indicates that positive sentiment outweighs negative sentiment among those surveyed. If consumers feel more positive (optimistic) about future economic conditions, they will be more inclined to save less and spend more. If, however, they feel more negative (pessimistic) about future economic conditions in Australia, they will likely save more and spend less. Many things can influence whether consumers feel optimistic or pessimistic, and one of the most important is whether they 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. As the chart below shows, consumer sentiment sank to very low levels following the Global Financial Crisis (GFC) of 2008-9, and has risen to stay around or below 100 since. Late 2012 saw a small pick-up in sentiment – as optimists outweighed pessimists, and by February 2013, consumer sentiment had risen to 108.3.



Economic commentators have suggested that the small improvement in consumer sentiment is an indicator that lower interest rates over 2012 are starting to have a positive effect. It is also likely that the improved sharemarket performance and improvements in the local property market positively influenced consumer sentiment. One other possible factor is the perception that the global economy may be stabilising, including recent good economic growth data from China. The recent improvement in consumer sentiment is likely to increase the demand for goods and services across numerous markets. Indeed, the RBA has observed that motor vehicle sales were about 15% stronger during 2012 than they were in the previous year.

On the other hand, the labour market in Australia has weakened in the last few months, and the RBA predicts that the unemployment rate will edge higher over the next year or so. The fear of rising unemployment could have a negative effect on consumer confidence in the future.

Changes in consumer sentiment affect the propensity (likelihood) of consumers to save, rather than spend, their income, thus affecting the household saving ratio – the proportion of disposable income that is saved by households. The RBA noted in its Statement that, while the household saving ratio was still at levels much higher than those during the 1990s and 2000s, the ratio currently remains relatively steady at around 10% of income. This can be seen in the chart below. A high household saving ratio means consumers are deferring their consumption, and this could have a negative effect on demand in some markets.



Changes in interest rates

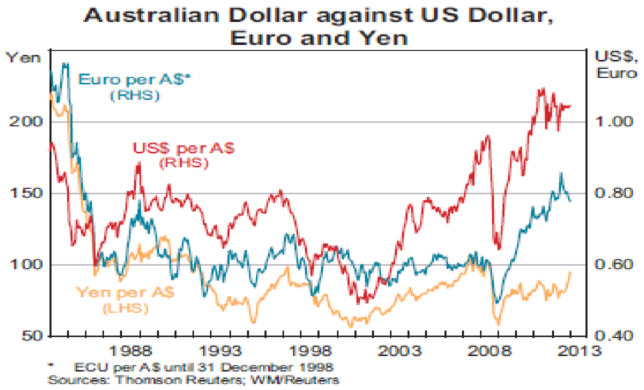
Decreases in the official RBA cash rate often flow on to a reduction in interest rates charged on credit by financial institutions, including mortgages, personal loans and credit cards. When interest rates are reduced, households that are heavily indebted will have more discretionary income after meeting the debt servicing obligations. This can potentially lead to an increase in demand and a shift to the right of the demand curve for some products. From mid-2012, the RBA reduced the cash rate from 4.25% in April to 3.00% in December 2012, a reduction of 125 basis points. In response, many banks also decreased retail interest rates charged on credit, and those rates are now below the long-run average interest rates charged on borrowing in Australia. The reduction in interest rates should encourage increased consumer spending and impact positively on many markets, particularly those providing goods or services that are highly credit sensitive, such as the markets for consumer durables such as whitegoods and motor vehicles.

Fiscal consolidation by governments

The Federal Government and many state governments have indicated they are keen to reduce spending in order to move from budget deficits to budget surpluses. As governments reduce their spending, this may have an effect on demand in many different industries, including construction. Furthermore, if the reduction in spending by governments also includes a reduction in employment by government agencies and departments, it impacts negatively on labour markets and increases pressure on unemployment. Higher unemployment can then result in reduced spending across the economy which can impact on markets in various ways. For example, higher unemployment can reduce demand for non-essential items such as holidays, which then impacts negatively on tourism markets.

Persistently high Australian dollar

An extremely important factor currently affecting the Australian economy, and many markets within the economy, is the persistently high Australian dollar. One of the most common ways used to measure the value of the Australian dollar (AUD) is against the US dollar (USD), as well as the Trade Weighted Index (TWI – the average value of the AUD compared to a weighted basket of the currencies of Australia's major trading partners). The AUD has been around or above equal value (referred to as 'parity') with the USD since late 2010, which represents a very rapid appreciation (increase) in the value of our dollar compared to its historical average since it was floated in the early 1980s. This can be seen in



A persistently high or appreciating currency is considered an unfavourable demand factor. A rise in the value of the dollar means that domestically-produced (Australian-made) goods and services are less competitive with foreign-produced (imported) goods and services. This is because, when overseas buyers wish to purchase Australian-made products, an appreciation in the AUD means they need to exchange more of their currency to buy the same amount of Australian products. This makes our exports relatively more expensive. It is also the case that when people in Australia wish to purchase imports from overseas, they need to exchange fewer of their Australian dollars to buy the same amount of imports, making imports relatively cheaper, and therefore more attractive.

The law of demand would predict that the rising relative price of Australian exports causes demand for exports to fall, and the falling relative price of imports into Australia will cause the demand for imports to rise. It is important to remember that these changes in relative prices occur independently of any change in the foreign price of the imports, or the Australian price of the exports.

The most negatively-impacted markets are those which export goods and services (particularly if those goods and services are readily available from countries with lower exchange rates), or which produce goods and services that compete with imports, called import-competing industries. It is important to remember that imports and exports take the form not only of goods, but also services such as tourism, education, financial and telecommunications services. The high AUD has been blamed by a number of companies that have recently announced plans to downsize or close manufacturing plants, which will be discussed in more detail in the discussion of Relative Prices below.

Some supply factors affecting markets

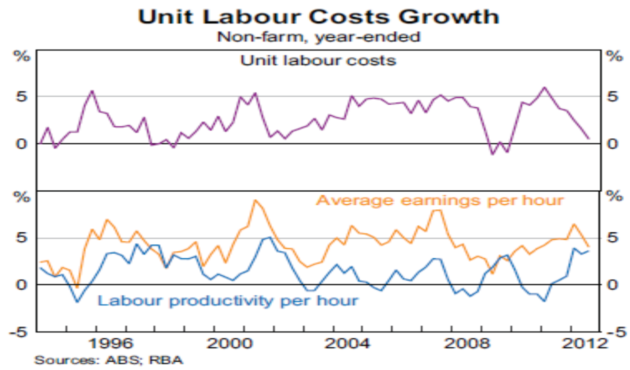
Weather/climatic conditions

In early 2013, there was wide-spread flooding across Queensland and northern NSW, along with bushfires in Tasmania and rural areas of Victoria. Each of these weather-related events had a negative supply-side impact on those areas. The flooding in particular damaged rail infrastructure, which had a noticeable impact on the transport of coal to ports, reducing the supply of coal available for export. While it is not expected to be as extreme as the impact of the 2011 floods, it is a negative supply-side factor for this particular market.

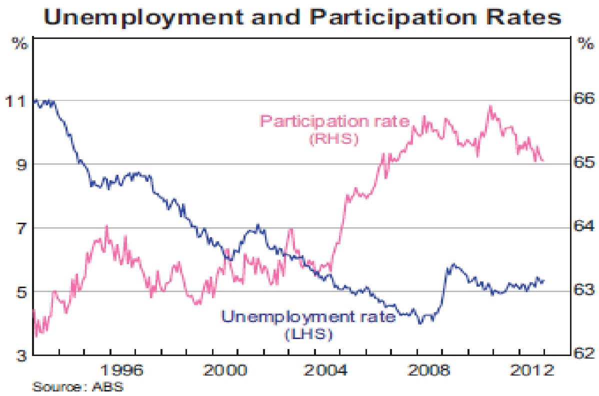
Availability and cost of inputs – labour

A key factor affecting the supply of goods and services is the availability and cost of the factors of production (inputs) used in their production. One very significant factor of production for all goods and services is labour. The RBA has reported that labour market conditions have remained 'subdued' in recent months in Australia, indicating that there is increasing 'spare capacity' in the market. No growth in total hours worked across the economy, a very small increase in employment (1%), and a gradual increase in the unemployment rate have indicated that there is increased availability of labour, which could potentially have the effect of keeping the cost of labour from rising.

Labour costs represent the cost to businesses of employing labour, and include not only wages or salaries, but additional costs including Workcover, sick leave and payroll taxes. The RBA has observed that the **growth in the cost of labour fell** in the second half of 2012 (which is highlighted in the chart below), which was caused by slower growth in earnings and rising productivity. One way to measure the cost of labour is the unit cost of labour, which is the cost of labour relative to labour productivity. 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. In Australia in the second half of 2012, there was only a moderate increase in unit labour costs, as a result of above-average growth in labour productivity during that time. This has been a noticeable improvement in recent times, after many years of declining productivity growth in Australia. The modest increase in unit labour costs will be a favourable supply-side factor for many industries in Australia, by helping to keep cost increases in check.



In addition to the cost of labour, the available supply of labour is also a significant supply factor affecting many Australian markets. The labour force participation rate (LFPR) is an important indicator of the supply of labour. It measures the proportion of the working-age population either working or looking for work. The LFPR has risen over recent decades, reaching its peak in late 2010. However, in the last two years, the LFPR has declined, as is clear from the chart below. As many economists have noted, this is partly because of a small increase in the unemployment rate. (The relationship between the unemployment rate and the LFPR will be considered in more detail in Update 2). However, of much more concern is the longer, structural change in the labour force that is taking place as a result of demographic change, namely the ageing of the population. In the last two years, the first of the 'baby boomer' generation (those born as part of the increased birth rate following the end of WWII) began to retire. The impact of this reduction in the available supply of labour is expected to be significant across many industries and markets, and will likely persist into the future. The impact will be most severely felt in those industries which have a large number of workers close to retirement, including teaching.



Relative prices, resource allocation and efficiency

Relative prices play an important role in the allocation of scarce resources in a market-based economy like Australia. 'Relative prices' is one of the building blocks of economic theory, and an extremely important concept to understand as a student of Economics.

The relative price is the price of any one good or service measured in terms of the price of another good or service. In a market economy, resources will be allocated to the production of those goods and services that are in high demand. This is because, as demand for one product rises, it should cause an increase in the price of that product, relative to other products. Firms are driven by the profit motive and will therefore produce goods and services most preferred by consumers. When a change in relative prices occur (for example, due to stronger demand for a certain good), it sends a signal to firms that profit opportunities exist if they reallocate their resources into the production of that good, since, if the cost of inputs remain the same, increased profits can be attained. In response to this 'price signal', firms will re-direct their resources. Therefore a change in relative prices will result in a reallocation of resources.

An example of the impact of relative prices on resource allocation came to light in a report by Bloomberg New Energy Research (BNER) in February. It showed that the cost of financing carbon emissions-intensive energy generation, for example by building new coal-fired power stations, is rising, while the price of renewable energy is falling. The report suggests that, because wind farms can now generate electricity more cheaply than either new coal-fired power stations or new gas ones, Australia is unlikely to build any new coal-fired power stations in the future. The cost of electricity generated by solar panels has fallen even further, and further advances in technology will push the cost down more. Part of the reason is because the rising demand for both coal and natural gas on the export market have pushed up their price, increasing the costs of production for the electricity generators using that fuel, and pushing down their profit margins.

As you can see, as the relative price (and profitability) of the different energy sources changes, resources will be re-allocated to areas of production that provide the greatest profit opportunities. In this case, the increase in the price of coal-fired electricity relative to the price of electricity using renewable methods (like wind and solar) has caused consumers to switch demand towards renewable. This results in further investment in the renewable sector and a re-allocation of resources away from more dirty forms of energy production to cleaner (or greener) sources of energy. Although renewable prices are falling, they are still relatively much more expensive than electricity generated by **existing** coal-fired power stations, built in the 1970s and 1980s. So, while the carbon price and the changes in demand are affecting decision about how resources will be allocated to electricity production in the future, for the time being coal-fired power will continue to play a significant part in electricity generation in Australia.

Price elasticity of demand and supply in action

The law of demand tells us that, as the price of a good or service rises, the quantity that consumers demand of that product will fall, and that as the price falls, consumers are likely to want to increase their consumption of that product. This is described as an inverse relationship between the price and quantity demanded. On the other hand, as price rises, profit-maximising firms will increase the supply of a good or service in line with that price rise. This is described as a positive relationship between price and quantity supplied.

However, something which is harder to predict is **by how much** a change in the price of a product will change the quantity demanded or supplied. The answer can be predicted by the price elasticity of demand or supply, which describes the change in quantity demanded or supplied relative to a change in price. Price elasticity is about the responsiveness of quantity demanded or supplied to changes in prices. You will have learnt in class that the gradient of the demand or supply curve indicates the relative price elasticity of a product.

As discussed in the previous section, the fall in the cost of producing alternatives to coal-fired electricity has made the building of new coal-fired power stations unfeasible, because of their relatively higher costs of production. If these higher costs of production were to be passed on to the consumers of electricity, the rise in relative prices would encourage consumers to reduce their consumption of electricity from this source and find an alternative or substitute, namely renewable energy.

The availability of substitutes is one of the factors that affect the price elasticity of demand for a good or service. In the case of electricity generation, prior to the advent of large-scale renewable energy generation (through wind farms and solar panels), there were few alternatives to coal-fired electricity. Since electricity is a necessity in a modern economy such as Australia, an increase in the price charged for coal-fired electricity would have resulted in a less than proportional decrease in the quantity demanded. For example, say if the price of coal-fired electricity had increased by 10%, there would have been a less than 10% decrease in the quantity of coal-fired electricity demanded.

However, as other alternatives have become more readily available, the price elasticity of demand for coal-fired electricity has increased. Therefore, any increase in the price charged for coal-fired electricity would result in a fall in demand for coal-fired electricity. With the increasing number of alternatives, demand for coal-fired electricity is likely to fall by a greater proportion than the increase in price.
A current example of how recent events might affect the price elasticity of supply can be seen in the impact of the 2011 & 2013 floods on the price elasticity of the supply of coal in Queensland.

In the short term, the damage to infrastructure such as railway lines and roads is likely to result in a decrease in the price elasticity of the supply of coal. This is because that damage will prevent coal producers from increasing the supply of coal to the market in response to any increase in the price of coal. Normally, an increase in the world price of coal would see producers respond with large increases in supply to the market, but in this case, the damage to infrastructure means they are less able to deliver the coal to ports for shipping, and supply will not increase in proportion with the increase in price. However, in the longer term, the responsiveness of coal supply will increase as infrastructure is repaired, allowing coal producers to increase their supply of coal as the price of coal rises.

Market Failure in action – Market power, Coles, Woolworths and the ACCC

As students of VCE Economics, there are four sources of market failure that you are required to study and understand: market power, public goods, externalities and asymmetric information.

Market failure is defined as a situation where the free operation of the market delivers outcomes that are inefficient and therefore do not maximise the satisfaction of society's wants and needs – an efficient allocation of resources is not achieved.

Recent developments have refocused media and public attention on the concentration of market power in the grocery market in Australia. Economics predicts that such a concentration of market power can lead to market failure, and this has been highlighted by the recent action of the ACCC to investigate claims of inappropriate use of market power on the part of the two big players: Coles and Woolworths.

Market power occurs when the absence of competition in a market leads to one or a few firms being in a position to 'control' the market. On its own, this does not constitute a market failure. However, it does constitute a market failure if those firms 'abuse' that market power through strategies such as predatory pricing or cartel conduct. Competition imposes a discipline on businesses that helps to ensure that consumers' wants and needs are met at the lower possible price. However, in a highly concentrated market (one with few producers), producers have an incentive to restrict supply as this can lead to greater profitability, especially if their product(s) has a low price elasticity of demand. Also, firms are able to make very high profits without being forced to innovate or increase their productivity because few or no competitors exist.

You may have studied the significance of monopolies and oligopolies in creating market power and market failure. Australia's supermarket industry is often described as a duopoly – a market dominated by two major producers. Between, Coles and Woolworths (owned by Wesfarmers) control at least 70 per cent of the grocery market. As a consequence, they are under very little pressure to reduce their prices or improve their service, or even to develop their product range. The fact that consumers have few real alternatives to buying many of their grocery items at one of the big two retailers means that these companies also have a large influence over the selling price. International comparisons have shown that Australians pay more for standard grocery items than consumers in many other countries.

As you will have studied, the government actively intervenes to address market failure. The Australian Competition and Consumer Commission (ACCC) is the Australian government agency tasked with enforcing compliance with the Competition and Consumer Act (2010), and actively discouraging or preventing any anti-competitive behaviour in Australian markets. The ACCC has long been concerned about the concentration of market power in the supermarket industry, and for a number of years there has been a push to investigate rumours of collusion and other anti-competitive behaviours.

While consumers who buy from Woolworths and Coles may be concerned about the negative impact of market power on variety and prices for products, more recently it has been the impact on suppliers to the supermarkets that has raised concern. In this case, the big two represent a duopsony – they are the only two buyers of the majority of output of suppliers of fresh food in Australia, mainly from food manufacturers and farmers.

In 2012, ACCC Chairman Rod Sims offered anonymity to any supplier of the big two that was prepared to come forward and provide evidence to support rumours and claims about their potential misuse of market power. Then in February this year, he revealed that around 50 suppliers had come forward with 'fairly credible and consistent issues'. For a long a time there have been accusations of abuse of market power by the big two in dealings with their suppliers – that they use their buying power to drive down the prices paid to suppliers. The new claims revealed by Mr Sims include:

- Claims that suppliers are being forced to make extra payments (including penalties above and beyond the contracts previously negotiated with the supermarkets) or risk having their products removed from the supermarket shelves.
- Accusations of failure to pay the prices that had been agreed to in supply contract negotiations.
- Claims that supermarkets are favouring their home brand or private labels over branded products in the supermarket. These private label products are more profitable for the supermarkets, as they do not have to pay the premium for the supply of branded products from other suppliers. Removing branded products decreases effective competition and reduces consumer welfare because less choice and variety is available.

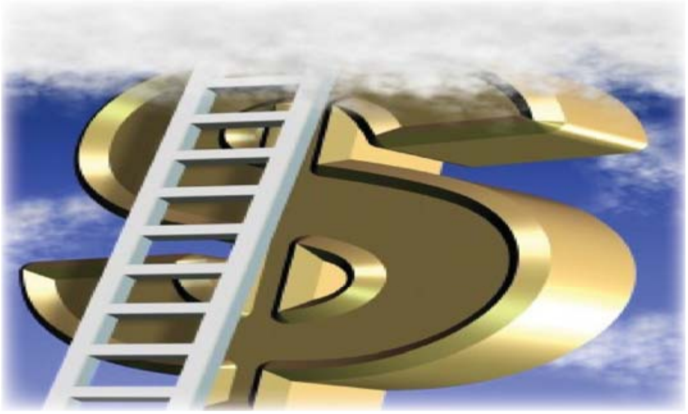
Concern has been expressed that in the longer run, this could reduce the incentive to operate in these industries (e.g. farming), leading to an under-allocation of resources to the production of goods valued by households, such as fresh, Australian-produced food. It also has implications for future food security (Australian self-sufficiency), particularly if the supermarkets rely increasingly on foreign food supplies.

REVIEW QUESTIONS:

1. **Explain how relative scarcity results in the need for economic decision making and creates opportunity cost.**
2. **Explain the opportunity cost of the government's recent policy decision to change to research and development tax incentives.**
3. **Explain why an increase in material living standards does not always have a positive impact on a society's non-material living standards. Illustrate your answer with a recent example.**
4. **Explain the impact of the recent Victorian teachers' industrial action on the Victorian economy.**
5. **Explain how changes in consumer sentiment affect the household saving ratio, and how this may affect demand in some markets. Use a recent example to illustrate your answer.**
6. **Describe how one market in Australia may be positively impacted by lower interest rates over 2012.**
7. **Define the term labour force participation rate. Explain the impact of a falling labour force participation rate on the market for teachers and the market for education services.**
8. **Explain how the increased availability of electricity generated from renewable sources (wind and solar) has impacted the price elasticity of demand for coal-fired electricity.**
9. **Outline the accusations that have been made against Australia's two largest supermarkets by the ACCC. Explain how these might represent an example of market failure. In your answer, define market failure.**
10. **Explain what is meant by market power, and explain the difference between a duopoly and a duopsony.**
11. **Explain how the misuse of their market power by the two big players in Australia's grocery market contributes to an inefficient allocation of resources. In your answer, refer to specific types of efficiency. (Hint: you could discuss allocative and productive efficiency in your answer.)**

APPLICATION EXERCISE:

The persistently high Australian dollar, relative prices, resource allocation and efficiency



One of the major news stories for Australia this year has been the persistently high value of the Australian dollar on foreign currency markets. The high price of Australia's commodity exports (the 'mining boom') has been identified as the main cause of the high currency, but other factors contributing to the high dollar are instability in the global economy and high domestic interest rates in Australia relative to the rest of the world.

The 'two-speed' nature of the Australian economy has been blamed on the persistently high AUD, where some sectors have 'boomed' (resources) while others have faltered (manufacturing, retail, tourism). This phenomenon has been coined 'Dutch Disease', to describe the double-edged effect of a resources boom, in this case the discovery of large natural gas deposits in the Netherlands in the 1950s. The observation was that, while the resources sector boomed, the rest of the economy contracted, at least in part as a consequence of the high foreign exchange rate making all exports apart from resources uncompetitive.

We can trace this effect back to changing relative prices. As was discussed earlier, the persistently high Australian dollar is a factor that is having an impact across the whole Australian economy. It has served to change the relative price of many goods and services, and therefore the relative profitability of the businesses operating in the industries that produce those goods and services. As was explained, the appreciation of the AUD in recent years has increased the price of Australian-made products relative to those that can be imported from overseas. The high dollar has seen a reallocation of Australian spending into the consumption of now relatively-cheaper imported consumer goods, including technology like iPhones and iPads and luxury vehicles, and services, such as outbound tourism (travelling overseas). In education, previously a boom area for Australian exports, statistics show reduced enrolments of overseas students in schools and universities as the relative price of an education in Australia rises, compared to other possible overseas study locations, such as Europe or the United States.

The question for Australia is: how will this development in our economy affect resource allocation, now and into the future?
There has been much media coverage of the impact of these changing relative prices on the manufacturing sector, with many companies announcing job cuts and factory closures. In February 2013, there have been announcements of job losses as Amcor closes its beverage seal manufacturing plant in Thomastown. Many of the companies closing or restructuring have cited the high AUD as a factor in their decisions. (It is important to recognise, however,

that, in the case of the manufacturing and retail industries, the high AUD has served to exacerbate an already-existing problem of higher costs (including wages) relative to competitors, and the rise of technology that promotes international competition in retail.)

Some economists have argued that the high dollar is here to say, and consequently it represents an ongoing challenge to the Australian economy. While the Reserve Bank of Australia has indicated that the AUD has remained higher in recent months than it might have expected, the RBA and the Federal Government have both signalled they will not intervene to depreciate the currency's value. Economists assert that the only appropriate response will be to allow the change in relative prices caused by the dollar's appreciation to bring about a change in the allocation of resources across the economy. They have argued that any attempt to protect manufacturing and other affected industries through subsidies or bailouts will simply defer the inevitable restructuring that must take place in the longer run.

In class you will have studied the concept of efficiency, and learnt that there are in fact at least four types of efficiency that can be considered. One of these is dynamic efficiency, which refers to how quickly an economy can reallocate resources between difference uses, in order to best meet the needs and wants of society. In the case of the impact of the high dollar, we could consider how quickly the resources currently allocated to the production of goods and services which may no longer be competitive, such as, for example, the labour and capital used in some types of Australian tourism, could be reallocated into those industries which have become relatively more profitable, such as mining. However, as you can see, this adjustment of the Australian economy to the major influence of the high AUD may take time. Some economists have argued that, rather than provide subsidies or protection to industries negatively impacted by the persistently high dollar, the Australian government should focus on helping these industries adapt to the changing structure of the economy.

Questions:

1. **Describe what is meant by Dutch Disease.**
2. **Explain how the rising Australian dollar has affected relative prices in Australia.**
3. **Discuss two industries/markets that have been negatively affected by the high Australian dollar.**
4. **Explain if there have been any 'winners' from the persistently high Australian dollar.**
5. **Describe how the high Australian dollar has affected resource allocation in the Australian economy.**
6. **Explain what is meant by dynamic efficiency, and how dynamic efficiency could be improved in Australia as it faces the impact of the persistently high Australian dollar.**
7. **Explain why economists believe that it would not be an efficient use of resources for the Australian government to subsidise or bail out industries which are negatively affecting by the high Australian dollar.**

Memorable quotes

"As the global economy still splutters, unlike the rest of the world we have managed our economy so we have low inflation, low interest rates, low unemployment, solid growth, strong public finances and a triple-A rating with a stable outlook from all three of the major ratings agencies."

Prime Minister Julia Gillard, Address to the National Press Club, 30th January 2013.

"In the six months since the August hearing, economic and financial conditions abroad have generally improved.... First, the threat perceived in the middle of last year of extreme financial instability arising in the euro area – and, in the eyes of some, possible disintegration of the euro – has abated. ... Second, the United States has continued its gradual recovery and has avoided the worst of the so-called 'fiscal cliff'. Some of the headwinds for the US economy are subsiding... Third, the slowdown in China's economy has come to an end."

RBA Governor Glenn Stevens, Opening Statement to the House of Representatives Standing Committee on Economics, 22 February 2013

"... the exchange rate remains somewhat higher than one might have expected given the decline in export prices so far observed. This has been a relevant factor in the setting of interest rates. It is not that interest rates are seeking a particular exchange rate response, but they are being set with a recognition of the exchange rate's effect on the economy."

RBA Governor Glenn Stevens, Opening Statement to the House of Representatives Standing Committee on Economics, 22 February 2013

"It's fair to say that we've got some fairly credible and consistent issues that we now believe we need to investigate in some detail. One is the issue of unconscionable conduct and that, as being alleged to us, is conduct that involves seeking extra payments and that can come up in various ways. The other set of allegations that we need to look at is the issue of favouring home brands over, or private labels over branded products in the supermarkets. That is, favouring their own products."

Rod Sims, ACCC Chairman, speaking to the media regarding launch of enquiry into allegations of abuse of market power by Coles and Woolworths.

"The strong Australian dollar and an increase in global competitors are hurting many Australian businesses and threatening jobs.... Innovation is central to the success of our industries and our capacity to respond to the needs of markets in Australia and overseas."

Opening statement, A Plan for Australian jobs: Industry and Innovation Statement, February 2013, http://aussiejobs.innovation.gov.au/pages/plan-overview.aspx

"In Australia today, nearly one million people are working in manufacturing. ... Our manufacturing industry supports other big Australian industries, like mining, agriculture and construction. But Australia's economy is experiencing structural change. There are pressures from the mining boom, the high Australian dollar and intense global competition. And these pressures put particular pressure on manufacturing. This new package will help the manufacturing industry get back on its feet, and will make important changes to help local companies compete in the future, keeping Aussie jobs here."

Opening statement, A Plan for Australian jobs: Industry and Innovation Statement, February 2013, http://aussiejobs.innovation.gov.au/pages/plan-overview.aspx

"... even without a carbon price, (generating) wind energy is now 14 per cent cheaper than a new (base load) coal-fired power station... Electricity can be supplied from a new wind farm in Australia at a cost of $80 per megawatt hour, compared with $143 a megawatt hour from a new coal-fired power plant or $116 from a new station powered by natural gas when the cost of carbon emissions is included."

Bloomberg New Energy Finance (BNEF) report, 7th February 2013

"It's very unlikely that new coal (power stations) would be built in Australia."

Kobad Bhavnagri, head of clean energy research for BNEF in Australia, quote in The Sydney Morning Herald, 7/2/2013.