

**Economic Fundamentals in Australia**  
**MacGregor and Salla**  
**Sample responses to questions contained in**  
**Activity Centre: Unit 4 Outcome 2**

**Practice SAC questions**

**Question 1**

- a) **Aggregate supply (AS) policies** refer to any policy initiative designed to reduce the costs of production and/or improve supply conditions for businesses. This includes measures that directly reduce business costs, such as a reduction in business taxes, or measures that are designed to improve the productivity or efficiency of businesses, such as government incentives for investment in new technology. AS policies work on the supply side of the economy and involves a shift of the AS curve to the right.

**Productivity** relates to the efficiency of our factors of production (primarily labour and capital) when producing goods and services. In a more technical sense, productivity refers to the volume of output (e.g. goods or services) that is produced from a given number of inputs (e.g. labour and capital resources). The most commonly used measure of productivity is labour productivity, derived by dividing total output by the number of labour hours employed.

**Productive capacity** is the maximum amount of output that can be produced in an economy with its given quantity of available inputs (or resources). It is equivalent to the boundary of an economy's production possibility frontier or the vertical section of an economy's Aggregate Supply curve. Once an economy reaches its productive capacity, it is impossible to achieve higher output levels.

- b) When AS policies are successfully employed (such as measures to lift national productivity levels or greater investment in infrastructure) it typically means that businesses can produce more output with existing inputs. This helps to reduce average costs of production and results in greater national output levels before capacity constraints become problematic. Accordingly, the AS curve shifts to the right (or the PPF expands).

By raising the nation's productive capacity (or improving supply conditions for industries), AS policies facilitate higher output and employment, alongside lower inflation. This occurs because lower production costs enable firms to reduce prices for any given output level, or increase output at any given price level – all without sacrificing profits. This results in lower inflation levels and an increase real GDP, employment and incomes in the longer term. In this respect, AS policies help to achieve an increase in material living standards as Australians have greater access to goods and services.

- c) Investment in infrastructure, such as funding to improve rail networks, will help to improve freight times for goods being transported via rail. This helps to boost output relative to the labour (or capital) time employed by a business. Accordingly, productivity increases because output per unit of input will increase. This helps to reduce the costs of production for businesses using rail as a means of transportation, and reduces pressure on the prices charged for these goods. This helps to directly reduce the CPI (or inflationary pressure) if the goods transported are final consumption goods (e.g. private motor vehicles). To the extent that the transported goods are used as inputs in the

*production process, it further helps to reduce the cost structure across the economy, reducing pressure on prices and minimising inflation.*

- d) *Microeconomic reform policies (MRPs) are concerned with initiatives that are designed to change the structure of industries in order to boost national levels of productivity, efficiency and international competitiveness. Like Aggregate Supply policies more generally, they help to lower the cost structure of the economy and improve our international competitiveness as inflationary pressure is minimised. With relatively lower prices, AD is boosted via higher levels of Consumption, Investment and Net Exports, thereby boosting economic growth.*

*The increase in international competitiveness assists in the achievement of external stability via the boost to net export demand (that is, more exports and fewer imports). The BOMT (or BOGS) will improve, helping to reduce the CAD (and NFD).*

*The Howard government's Workchoices (2006) legislation was a MRP that intended to further deregulate labour markets by moving to a system where wages and conditions were closely connected to the performance of (individual) workers. It was designed to make the system more flexible, with Australian Workplace Agreements (AWAs) and the removal of unfair dismissal laws (for small enterprises) two key features that were designed to provide the business sector with the ability to extract productivity gains from employees. With higher levels of labour productivity, technical efficiency across the economy was expected to improve, lowering the cost structure of the economy, boosting (international) competitiveness and generating a higher level of economic growth. The recent Labour government changes to the industrial relations system (Fair Work Australia) have sought to rebalance the system back towards one that is considered 'fair.' However, a number of elements of remain within the system such that reforms over the past 3 years (such as the general thrust towards greater enterprise bargaining and the relaxation of unfair dismissal laws) to ensure that labour market reforms have helped to improve efficiency, boosting economic growth and exerting downward pressure on the CAD.*

**Or** *Trade liberalisation is an example of a MRP that continues to be employed in Australia in order to expose domestic industries to increased competition and to ensure exporters are provided with greater incentives to penetrate global markets. It involves measure such as the continued tariff reductions (eg to 5% for MV in January 2010) which forces domestic MV producers to increase efficiency/productivity in order to reduce costs and remain competitive. With higher levels of productivity, technical efficiency across the economy should improve, lowering the cost structure of the economy, boosting (international) competitiveness, raising net exports and generating a higher level of economic growth. The increased value for net exports will increase any BOGS surplus and reduce the size of the CAD, helping to achieve external stability.*

- e) *The use of the government's skilled migration program can be effectively used to address the problems associated with capacity constraints. By identifying those skills in short supply and increasing the skilled migration intake for these particular skills, the government will help to reduce the extent of supply bottlenecks and minimise pressure on wages. This will enable businesses to*

*source scarce labour that they would otherwise not be able to secure, or only secure at high rates. This helps to increase national output/productive capacity.*

## **Question 2**

### **A.**

**Benefit:** *The higher tariffs will help to protect the sales and production volumes of domestic import competing producers, particularly in the short term. This is because the higher tariffs raise the price of imports, resulting in consumers purchasing fewer imports and more domestically produced goods.*

**Cost:** *The higher tariffs will tend to encourage lower efficiency levels, higher production costs and inflation over time. This is because the tariffs shield local producers from competitive pressures that help to raise productivity and lower prices. In addition, tariffs increase the costs for other producers in the economy reliant on the protected product, which ultimately leads to a higher cost structure in the economy.*

### **B.**

*The continuing government funds invested in the rollout of the broadband network will expand the nation's productive capacity over time as the cost and speed of telecommunications for businesses and households will improve. Faster broadband speeds will enable businesses to cut production costs as communications with clients, staff, suppliers, etc will be more efficient. This leads to greater productivity levels over time and an ability for the economy to produce more goods and services than before (i.e. an increase in AS and productive capacity).*

*The broadband investment should help to improve material living standards for Australians because faster broadband speeds should help to improve Australia's international competitiveness, creating jobs and income over time, which enables Australians to consume/purchase more goods and services as before. Non-material living standards are also likely to improve because Australians are able to spend less time telecommunicating, with more time for leisure.*

### **C.**

*Tax concessions, such as the 2012-3 tax breaks for small businesses purchasing capital equipment, can help to boost aggregate supply because they encourage businesses to purchase new capital to replace existing capital stock. This should help to boost (capital) productivity and enable the economy to produce a larger supply of goods and services. Over time this should help the government to achieve its low inflation goal of 2-3% inflation, on average, over the course of the economic cycle. This is because higher productivity means that production can occur with fewer inputs, reducing average production costs and enabling businesses to reduce prices without eroding margins. The reduction or containment of prices over time will therefore reduce cost inflationary pressures.*

### **D.**

*The granting of intellectual property rights/patents over the production of certain goods will enable firms to extract monopoly profits for a period of time as competing firms are prevented from entering the market to produce the same product. Protecting firms in this manner encourages innovation by making it profitable to undertake costly/large scale investment into innovative new products or technologies. This raises national productivity, increases competitiveness and boosts economic growth.*

**Question 3**

A.

*The introduction of the carbon tax package on the 1<sup>st</sup> of July 2012 is designed to 'price carbon' and cause a reallocation of resources away from carbon intensive production methods. It involves approximately 500 of the biggest polluting companies in Australia (such as electricity producers) paying \$23 per tonne of Co2 emissions, with the tax eventually being converted into emissions trading scheme (ETS) in 2015.*

B.

***Real GDP – the carbon tax will increase the costs of production for those businesses relying on 'carbon intensive' production methods. This increases prices and inflation, which in turn leads to a reduction in AD as Australia's international competitiveness is eroded and some businesses scale down investment and potentially relocate overseas. The reduced level of AD results in a lower level of GDP.***

***Living standards: Despite the reduction in real GDP, the carbon tax will ultimately result in a cleaner environment as resources are allocated away from the production of carbon intensive production methods to greener production methods (such as wind and solar). This can improve material living standards in the longer term if the rate of climate change is reduced and Australia experiences less damage to productive resources (such as agriculture) that would have stemmed from unmitigated climate change (e.g. via more severe natural disasters).***

C.

***In recent budgets the government committed \$652 million for the Renewable Energy Future Fund, which was designed to promote renewable energy projects such as wind and solar. The provision of funding to the private sector should result in greater investment in renewable energy projects due to the lower overall cost of these projects. This enables the production of wind and solar energy systems to occur at lower prices, resulting in a higher 'relative price' of dirty energy options (such as coal fired electricity). This should increase the demand for clean energy and more resources will ultimately be allocated to the production of cleaner energy and away from dirty energy.***

#### Question 4

- a) *The ageing population is likely to cause a significant drop in the nation's labour supply in future years as baby boomers, in particular, retire from the labour force. It means that a relatively smaller proportion of the future population will be forced to produce the output required by the economy, and to fund the increasing welfare budget of the federal government. This will have negative implications for wage costs (as the supply of labour will be lower), taxes (as the number of working Australians will be smaller), government expenditure (to support an ageing population) and future levels of real GDP. This is why the government is keen to boost the LFPR.*
- b) *A recent budgetary policy initiative to boost productivity growth includes greater funding for education and training, which should help to increase the skills of Australia's labour force and boost labour productivity (output per hour worked or real GDP per person employed) over time. By increasing productivity growth, future resources (including labour) will be able to produce higher output levels, reducing pressure on the labour force, minimising future wage growth and enabling real GDP to grow at a relatively faster pace. This should help to protect future government revenue and therefore limit the deterioration in future federal government budgets, raising living standards and addressing the problems stemming from an ageing population.*
- c) **Positive**  
*Higher levels for skilled immigration can help to alleviate capacity constraints that have been contributed to by skills shortages. Allowing immigrants to fill skilled vacancies helps to reduce inflationary pressure and enables economic growth to be sustained. In this respect, skilled immigration helps to achieve strong and sustainable rates of economic growth, supports incomes, and increases the ability of Australians to purchase goods and services, thereby boosting material living standards.*

#### **Negative**

*Higher levels of immigration more generally can contribute to excessive use of the nation's resources, leading to unsustainable development or over-development within certain parts of Australia (particularly city areas). Greater levels of congestion, pollution and resource shortages (such as water) that are associated with excessive population growth more generally can lead to a decrease in non-material living standards.*

#### Question 5

*Capacity constraints occur when the productive capacity of the economy is too small relative to the level of Aggregate Demand (AD). It will typically be evidenced by things like skills shortages (and/or a tight labour market) or inadequate infrastructure (such as ports being too small) and will invariably result in inflationary pressure. Government policy needs to focus on lifting productive capacity over time and alleviating the constraints, as well as constraining the growth in AD which is likely to be excessive.*

*Immigration policy could play a key role in alleviating capacity constraints. First, the government could reduce the pressure that higher immigration has on AD and inflationary pressure by changing the immigration mix. By reducing the migrant intake that is not skilled, such as the humanitarian or family*

*migration schemes, pressure on AD (and inflation) is likely to be lower. Second, it could seek to increase the numbers entering the country via the skilled migration scheme which allows businesses facing skills shortages to access labour. This should help to reduce capacity constraints because businesses will be more able to supply goods and services, thereby helping to contain inflationary pressures.*

*Monetary policy could also assist by the RBA adopting a more contractionary (or restrictive) monetary policy stance once it is evident that capacity constraints are beginning to emerge. So long as the capacity constraints are contributed to by excessive growth in AD, a tightening of monetary policy, via an increase in interest rates, should help to contain growth in AD and reduce demand inflationary pressure. This could be supported by the delivery of a more contractionary budgetary policy stance, where the government delivers a smaller (structural) budget deficit or a bigger (structural) budget surplus in order to further reduce pressure on AD. In addition, budgetary policy supply side initiatives could help to directly alleviate capacity constraints, such as increased funding for child care (allowing parents to return to the workforce), business tax cuts (to encourage an increase in investment spending which may add to capacity) and increased spending on government infrastructure (such as expanded ports and railways).*

*These supply side initiatives could be supported by other Aggregate Supply policies, such as further reform of labour markets, continued trade liberalisation and continued deregulation of markets, all helping to expand aggregate supply over time and delay (or eliminate) the onset of capacity constraints.*

**Question 6**

- a) *Climate change is considered a market failure because climate change is arguably caused by excessive pollutants emitted into the atmosphere (ie carbon or Co2) by consumers and producers around the globe. In this respect it is a classic example of a negative externality in consumption and production, where the costs imposed on 'the planet' are 'externalised' by consumers and producers, which means that each consumer/producer does not face the direct costs associated with the pollution or damage, instead they are passed onto third parties (or society more generally). Without direct government intervention, the market would clearly fail to achieve an efficient allocation of resources.*

*The government's proposed Carbon Pollution Reduction Scheme (CPRS) that is currently seeking Senate approval is an example of an ETS. It is a system whereby the government provides or sells a certain number of permits to businesses allowing them to pollute (ie release Co2 into the atmosphere) and enforces penalties for polluting without permits. Once the permits are held by businesses they can sell some of these to other businesses (or polluters) and a 'carbon market' develops, with a demand, supply and price for carbon. Over time, the government reduces the number of permits in existence (effectively reducing supply), forcing up the price of CO2 permits, and providing real incentives for businesses to reduce their Co2 emissions (eg by attaining the most efficient pollution abatement technology or processes). Overall, pollution levels drop in line with the reductions in permits and any existing level of Co2 emissions is achieved in the most efficient way.*

- b) *An economic cost of delaying an ETS is the continuing damage that Co2 emissions are having on the Australian and global environment, which negatively affects the living standards and welfare of current and future Australians and makes it even more difficult to tackle a an even bigger pollution/global warming problem in future years.*

*An economic benefit of delaying the ETS is the protection afforded to Australian businesses and employees who are currently experiencing lower incomes as a result of the global financial crisis. By imposing the extra costs associated with an ETS (eg purchasing permits), many businesses are forced to raise prices, which reduces demand, profits and employment.*

**Question 7**

*MRPs are designed to restructure parts of the economy in order to improve national productivity and achieve a more efficient allocation of resources. By achieving higher productivity/efficiency levels, the costs of production for businesses declines and they are able to lower prices over time (or contain any price pressure coming from other sources). This lowers inflationary pressure and – ceteris paribus - enables Australian businesses to experience a relative increase in international competitiveness as the price of exports (and import competing goods) is likely to be relatively lower than that of our foreign competitors. This then facilitates an increase in demand for net exports, boosting the balance on goods and services and reducing pressure on both the CAD and NFD.*

## Answers to crossword puzzle:

