**Question 2: The Economics of Sports**

**Figure 1: Change in export volume in Brazil (2008 to 2016)**

Source: *The World Bank*, accessed August 2019

**Extract 6: On your marks, get set, wait: traffic jams clog Rio ahead of Olympic Games**

Special traffic regulations giving priority to athletes and VIP visitors to the Rio 2016 games have caused 20-kilometre traffic jams in the streets of Rio de Janeiro, days ahead of the opening ceremony. (traffic jam is the negative externality – external cost – cost of traveling and inconvenience – dwl – loss of productivity, investment and employment)

City officials hope the congestion will be eased by a new metro extension, which opened on Monday – more than two years behind schedule. But for the duration of the Games, the gleaming new subway service will only be available to Olympic ticket and pass holders. Commuters will not be allowed to use the extension until the end of the year. The new metro is only a partial solution, however, because it stops more than 10 kilometres short of the Games venues. For the remainder of the journey, visitors will have to use buses or taxis.

To further reduce gridlock, schools will be closed for the duration of the Games and Mayor Eduardo Paes has declared four local holidays on key dates. Rio is the fourth worst city in the world for traffic jams, according to the TomTom Traffic Index. Even though the government has spent more than £800 million on new highways and rapid bus transport systems to alleviate the problems ahead of the Games, drivers often find journey times double or triple as a result of congestion, particularly around the Rodrigo de Freitas Lagoon (where the Olympic rowing will be staged) and on the road between the South Zone and Barra da Tijuca (the site of the Olympic Park).

Source: *The Guardian*, August 2016

**Extract 7: A City Transformed**

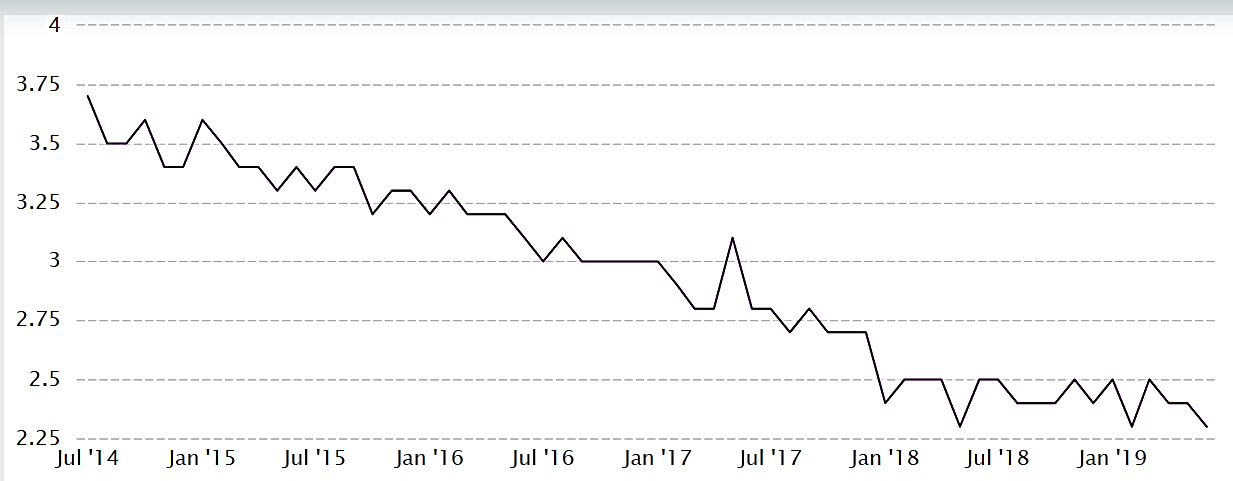
Since winning its bid for the 2016 Olympic Games seven years ago, Brazil’s Rio de Janeiro has undergone a construction boom, including new sports venues, subway connections, and more infrastructure. One of the flagship transportation efforts, Rio built a new subway extension linking popular beach areas with the neighbourhood where the Olympic Park is located. Enormous investment has been pumped into transportation infrastructure projects throughout the city, including the VLT Carioca (the Rio de Janeiro Light Rail) in the port district. The rail connects Rio’s domestic airport to a bus terminal and is aimed at revitalising the area.

The construction of the golf course, however, has stirred controversy. Golf is not widely played in Brazil, and though there is one small public course on the northern outskirts of Rio, Brazilian officials have touted the fact that after the Olympics, the course would become the first professional-quality public course in Brazil. But it was partially built on a protected nature reserve, angering local activists.

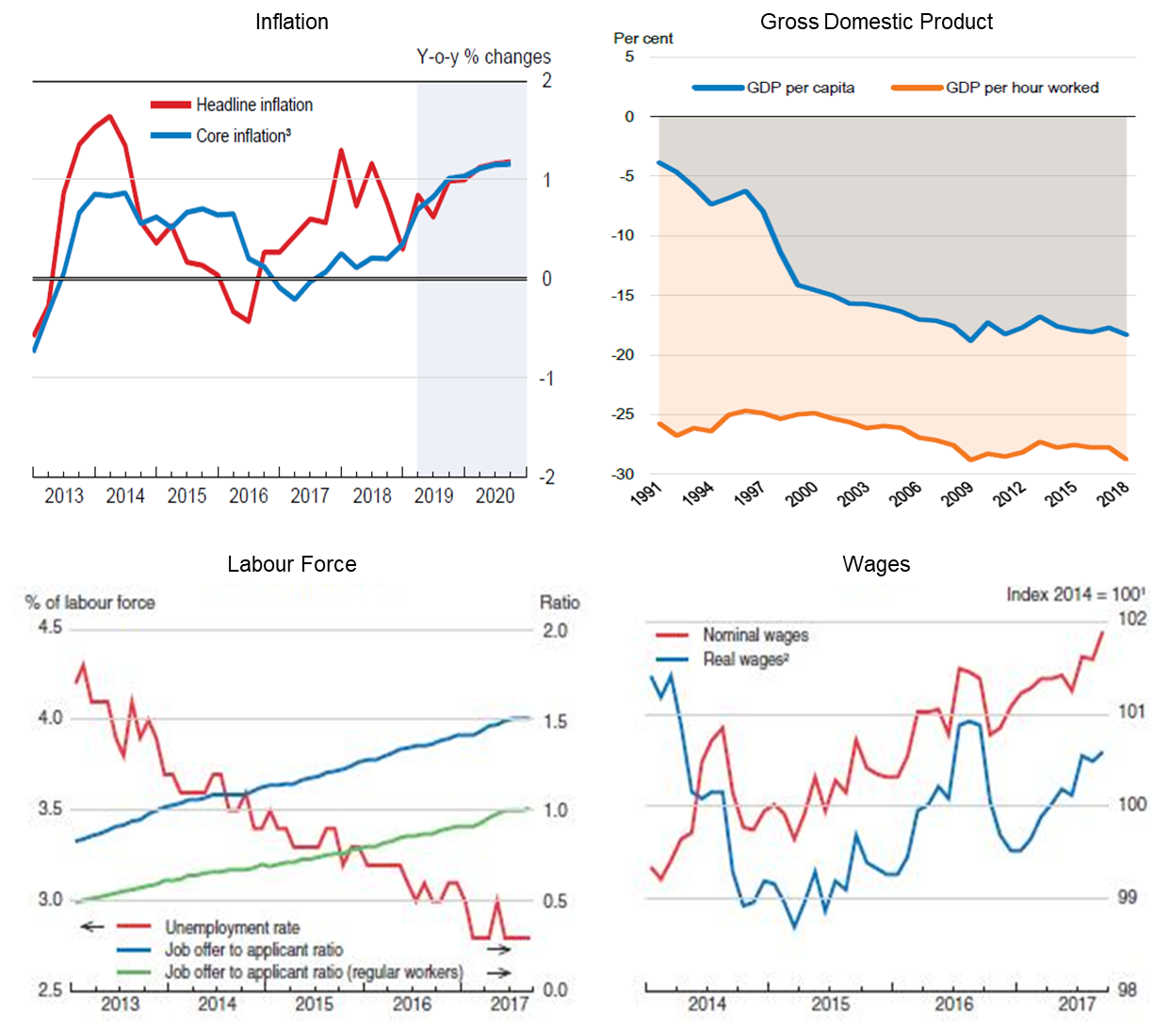
Source: *The Wall Street Journal*, August 2016

**Figure 2: Selected economic indicators for Japan**

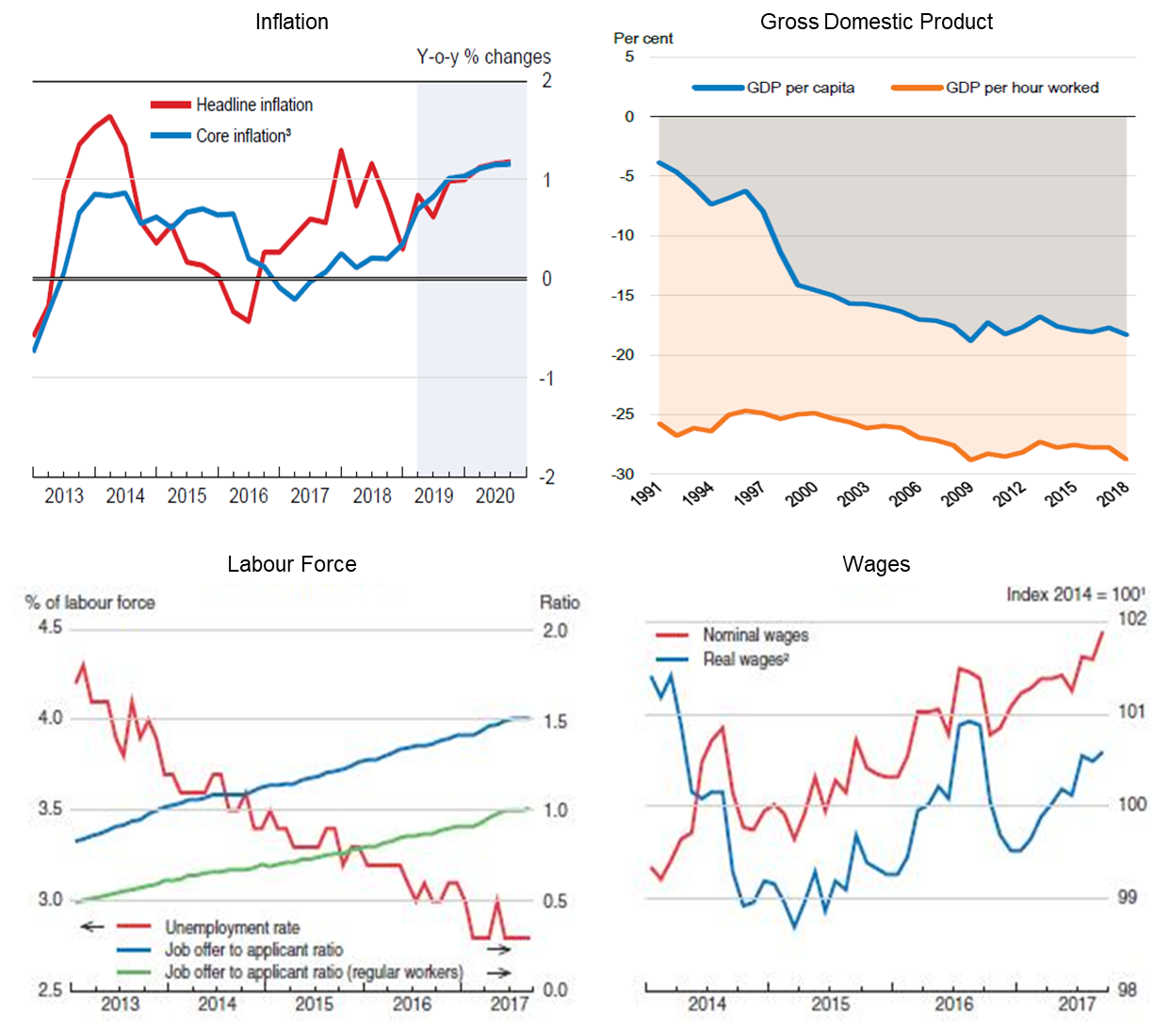
**Unemployment Rates**

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Sources: *CEIC* *data*, *Organisation for Economic Co-operation and Development*



**Gross Domestic Product**



**Extract 8: Tokyo 2020 Olympics will come and quickly go, but the legacy is all-important**

The legacy of an Olympics refers to the benefits that a host city and country gains once the event is over. That can take the form of new stadiums, redeveloped urban areas and updated transport networks. The history of Olympic legacies is a mixed one, filled with cautionary tales of overspending and waste. Understandably, Tokyo is anxious to avoid a similar fate. The huge cost of staging an Olympics, and the potential economic dangers for a host city, has thrown the issue of legacy into sharp focus in recent years. That was never more evident than at last summer’s Rio Olympics.

Transport was also the most recognisable legacy of the last time Tokyo hosted the Summer Olympics, with the debut of the shinkansen (high-speed rail) nine days before the start of the 1964 Games. Japan has hosted the Winter Olympics twice since then, in Sapporo in 1972 and Nagano in 1998. The 1998 Olympics prompted Japan to extend its shinkansen service from Tokyo to Nagano, cutting the three-hour journey in half. But the tourism boost that organisers hoped would follow failed to materialise, and the purpose-built hotels struggled to attract guests. “The shinkansen arrived and they built new roads, and it made Nagano closer to Tokyo,” said Ezawa, who authored two books criticising the cost of the Nagano Olympics. “But with less traveling time, it also meant the amount of people staying in hotels here dropped. There was also a lot of damage to the natural environment in Nagano.”

Source: *The Japan Times*, January 2017

**Extract 9: Growth is coming home – How a successful World Cup will boost the British economy as Brexit looms**

Obviously, England winning the World Cup would be a brilliant achievement in isolation, putting to bed decades of jokes and generally imbuing Britain with a sense of sporting pride not seen since the 2012 Olympics. There’s another reason, however, to hope that Gareth Southgate’s boys bring back the trophy – the economy.

In the two years since Britain voted to leave the European Union, the country’s economy has undoubtedly suffered. The pound dropped sharply, pushing inflation up. In tandem with stagnant wage growth, this created a scenario where workers were seeing their take home pay decreasing. That lowered the amount they were willing to spend, denting both consumer confidence and retail sales. As sales fell, the wider economy stuttered and growth stalled.

Things could improve in the second and third quarter of the year, and amazingly, the World Cup should be at least partially the reason why. The improving economic picture is one reason that three members of the Bank of England’s Monetary Policy Committee – the body responsible for setting interest rates in the UK – voted to raise rates at its June meeting.

The argument is simple, when England play well in the World Cup, England supporters are happier and are more inclined to spend on non-essential items. Furthermore, when the World Cup in general is happening, Brits are more likely to host parties and barbecues, spending significantly more on groceries than they otherwise would do. People are, of course, more likely to go to the pub and buy drinks. Britain is generally a consumer powered economy, so when people are buying, growth accelerates.

Source: *Business Insider Singapore*, June 2018

**Questions**

|  |  |
| --- | --- |
| **(a)** | 1. With reference to Figure 1, describe the trend in Brazil’s volume of exports from 2008 to 2016. [2] |
|  |  |
|  | 1. With the aid of a diagram, explain how the general trend above could have affected the external value of the Brazilian real. [3] |
|  |  |
| **(b)** | With reference to Extract 6, analyse how hosting the Olympics could result in market failure for the host country. [6] |
|  |  |
| **(c)** | Using Extract 7 and a production possibility curve diagram, identify and explain **two** benefits of hosting the Olympics to the host country. [6] |
|  |  |
| **(d)** | Assess how far the data provided suggest that hosting the 2020 Olympics will improve Japan’s employment rate. [8] |
|  |  |
| **(e)** | Discuss whether the decision made by the Bank of England’s Monetary Policy Committee (Extract 9) is appropriate for the UK economy. [8] |
|  |  |
| **(f)** | Using the information provided and/or your own knowledge, evaluate whether, on balance, a government should prioritise the pursuit of high rates of economic growth to raise the standard of living of its citizens. [12] |

[Total: 45]

1. **(i)** **With reference to Figure 1, describe the trend in Brazil’s volume of exports from 2008 to 2016. [2]**

**General trend** [1]: Brazil’s volume of exports generally increased from 2008 to 2016

**Refinement** [1], any 1 of the following:

* fluctuated during the period
* largest fall in export volume from 2008 to 2009
* greatest increase in 2010

1. **With the aid of a diagram, explain how the general trend above could have affected the external value of the Brazilian real. [3]**

**Increase in demand for the Brazilian real** [1]: As Brazil’s export volume generally increased from 2008 to 2016, there will be a general increase in the demand for the Brazilian currency in the same period. This is represented by a rightward shift of the demand curve for Brazilian real from D0 to D1 in Figure 4.

**Appreciation of the Brazilian real** [1]: The increase in the demand for the Brazilian currency puts an upward pressure on the external value of the Brazilian currency and results in an appreciation of the Brazilian real, represented by the increase in price of Brazilian real from P0 to P1.

USB/Brazilian real

O

Quantity of Brazilian real

P1

Q1

Q0

S0

D0

P0

D1

Figure 4: Market for Brazilian real

**Accurate diagram** showing increase in demand for the Brazilian currency and the appreciation of the Brazilian currency. [1]

1. **With reference to Extract 6, analyse how hosting the Olympics could result in market failure for the host country. [6]**

The hosting of the Olympics resulted in 20 kilometre traffic jams in the city. Visitors attending the Olympic events by car have contributed to these traffic jams. Thus, there is the problem of negative externalities being generated.

**Explain the private benefit and private cost (1 mark for an explanation of either the marginal private benefit or marginal private cost) - how private market equilibrium is attained (Qm) PMB = PMC**

* The marginal private benefit of road usage for visitors attending the Olympic events include the increased convenience they would gain from getting to the event by car
* The marginal private cost of road usage for visitors attending the Olympics include the price of the taxi fare

**Explain the external cost of road usage on third parties (EMC diverge PMC to SMC – Qm is not equal to Qs – At Qm – SMC > SMB – DWL between Qm and Qs – market failures) – external cost – rise in cost of traveling**

* The marginal external cost imposed on third parties, such as firms in the country (1 mark for identification of third parties), include a decline in productivity resulting from workers who are held up on the way to work as road users “often find journey times double or triple as a result of congestion” near Olympics venues (1 mark for explanation of external costs on third parties)

**Explain the market failure with reference to the over-allocation of resources and deadweight loss**

* This marginal external cost results in a divergence between marginal private cost and marginal social cost (1 mark)
* The visitors who attend the Olympics only consider their private benefits and private costs, and ignored the external costs imposed on third parties.
* The private equilibrium level of road usage occurs at Qp where MPB = MPC whereas the socially optimal level of road usage occurs at Qs where MSB = MSC. (1 mark)
* This results in an over-utilisation of roads and causes deadweight loss as well as allocative inefficiency as social welfare is not maximised. (1 mark)

\*It is also possible for candidates to explain that there was an overproduction of the Olympic games.

1. **Using Extract 7 and a production possibility curve diagram, identify and explain two benefits of hosting the Olympics to the host country. [6]**

**One benefit of hosting the Olympics is actual growth** [3]:

* Greater utilisation of resources [1] to meet the increase in investment and/or government expenditure as a result of hosting the Olympics [1]
* PPC to illustrate actual growth[1]: movement from Point A to Point B in Figure 1 (operating within the PPC to operating on the PPC)

**Another benefit of hosting the Olympics is potential growth** [3]:

* Increase in investment and/or government expenditure can increase productive capacity [1], such as infrastructure projects improving the quantity and/or quality of resources available in the economy [1]
* PPC to illustrate potential growth [1]: outward shift of the PPC from PPC1 to PPC2 in Figure 1

\*Cap at 4 marks for explanations involving ONLY potential growth or ONLY actual growth.

Consumer Goods

O

Capital Goods

PPC1

PPC2

A

B

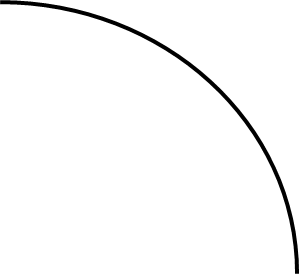
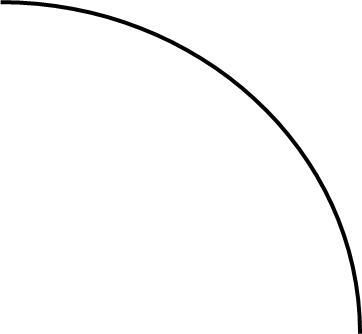


Figure 1: Production Possibility Curve for Brazil

**(d) Assess how far the data provided suggest that hosting the 2020 Olympics will improve Japan’s employment rate. [8]**

**Thesis: *The data suggests that hosting the 2020 Olympics can improve Japan’s employment rate***

* More labour is demanded in the construction industry, a relatively labour-intensive industry, to support infrastructure projects ahead of the Olympics (Extract 8: “new stadiums, redeveloped urban areas and updated transport networks”), which results in a fall in demand-deficient unemployment
* Anticipated surge in tourist arrivals (Extract 8: “purpose-built hotels” and “tourism boost”) may lead to firms hiring more factors of production and the derived demand for labour increases, reducing demand-deficient unemployment
* After winning the bid to host the 2020 Olympics, Japan’s unemployment rate has decreased (Figure 2 shows a decline in unemployment rate since July 2014), which suggests that hosting the 2020 Olympics might have contributed to improving Japan’s employment rate

**Anti-thesis 1: *The data suggest that hosting the 2020 Olympics does not improve Japan’s employment rate***

* While tourism-related industries anticipate a surge in tourist arrivals, past experience might have dampened business confidence (Extract 8: “But the tourism boost that organisers hoped would follow failed to materialise, and the purpose-built hotels struggled to attract guests”), hence firms might refrain from hiring new labour on a permanent basis and instead rely on technology and/or temporary workers

**Anti-thesis 2: *The data is insufficient to conclude that hosting the 2020 Olympics can improve Japan’s employment rate***

* While labour is needed in the construction industry to support infrastructure projects, the data does not provide information on the extent of impact on labour employment
  + The construction industry might be driven by new building technologies and the increase in labour employment might not be significant, and/or
  + The construction industry could be reliant on foreign labour instead of the local population
* The data provided does not indicate the extent of impact on permanent employment
  + While more workers might be temporarily hired before the Olympics to build infrastructure as well as during the Olympics to cope with the surge in tourist arrivals, higher unemployment results once the projects are completed and the subsequent contraction in economic activity after the Olympics
* While Figure 2 shows a fall in unemployment rate since July 2014, the data is insufficient to conclude if this was indeed due to hosting the 2020 Olympics or other factors, since no information is given about which industries had expanded and demanded more labour in this period

**Evaluative conclusion**

* **[Stand]** The data provided suggests that Japan’s employment rate might not improve from hosting the 2020 Olympics. The eventual impact depends on
* **[Situation]** The global economic situation plays a large part in determining the extent to which Japan’s employment rate can improve from hosting the Olympics as that would determine the extent of tourist arrivals, for example
* **[Magnitude]** extent to which Japan’s construction industry depends on local workers for the infrastructure projects

**(e) Discuss whether the decision made by the Bank of England’s Monetary Policy Committee (Extract 9) is appropriate for the UK economy. [8]**

**Command word/phrase** Discuss…(explain how it works and evaluation?)

Decision… Appropriate… Present key points for both sides of the argument (for and against) in detail and come to a conclusion. There should be some evidence of balance, though not necessarily of equal weighting.

The appropriateness of an action would require an analysis of the context in which it is being implemented in in order to determine how the decision would interact with other factors in order to determine the overall impact.

**Content** decision made by the Bank of England’s Monetary Policy Committee (Extract 9)… According to extract 9, England’s Monetary Policy Committee has decided to raise interest rates. This is a contractionary (interest rate) monetary policy.

**Context** UK economy The UK economy is currently facing:

* Depreciation of the pound 🡪 inflation
* Stagnant wage growth
* Poor consumer confidence and retail sales
* Stalled growth

The UK economy is also expected to grow **IF** England plays well in the **upcoming** World Cup

**Introduction**

* The Bank of England’s Monetary Policy Committee opted to raise interest rate (Extract 9)
* Context: the UK economy was recovering from a time where “the wider economy stuttered and growth stalled” (Extract 9)

**Thesis: *The decision to raise interest rate can benefit the UK economy***

* Reduce demand-pull inflation: Higher interest rate increased the cost of borrowing, resulting in fall in consumption expenditure and investment expenditure, which leads to a fall in AD and reduces any demand-pull inflationary pressures that the recovering UK economy might be experiencing
* Reduce cost-push inflation: Higher interest rate could make the interest rates in the UK relatively higher than in other countries, resulting in greater hot money inflows and an appreciation of the UK pound as the demand for the UK pound increased. Appreciation helps to reduce imported inflation (Extract 9: “The pound dropped sharply, pushing inflation up.” implies appreciation of the pound can reduce inflation)

**Anti-thesis: *The decision to raise interest rate might have a negative impact on the UK economy***

* Recovery in the UK is potentially temporary (Extract 9: “when England play well in the World Cup, England supporters are happier and are more inclined to spend on non-essential items”)
* In this case, consumption expenditure is a significant component of the UK’s AD (Extract 9: “Britain is generally a consumer powered economy, so when people are buying, growth accelerates.”) and the increase in interest rate was likely to have a significant contractionary impact after the world cup
* The fall in AD could hamper the economy’s recovery and cause it to slip back into slow/negative growth and raise demand-deficient unemployment

(interest rate causes AD to fall – therefore the rise in int rate cannot help to promote growth)

**Evaluative conclusion**

* **[Stand]** Whether the decision to raise interest rate by the Bank of England’s Monetary Policy Committee is appropriate depends on the state of the UK economy.
* **[Situation + Magnitude** Should the UK economy be operating near/at its productive capacity, the benefits of the Committee’s decision to raise interest rate (i**]**.e. reduce inflationary pressures) would likely outweigh the costs of doing so (i.e. slow/negative growth and higher demand-deficient unemployment), and hence the decision would be appropriate. – determine the degree of excess demand -> nearer to full employment – excess demand is greater – inflation is higher
* **[Situation + Time frame]** Given the broader economic context of Britain’s exit from the European Union (“Brexit”), however, the UK economy’s long-term economic outlook is likely to be pessimistic and the optimism that followed sporting excellence at the World Cup could be short-lived. As such, the decision to raise interest rate might not be appropriate as it could cause the economy to slip back into a period of weak/negative economic growth, higher demand-deficient unemployment and possibly deflation.

**(f) Using the information provided and/or your own knowledge, evaluate whether, on balance, a government should prioritise the pursuit of high rates of economic growth to raise the standard of living of its citizens. [12]**

**Main concerns of development**

“evaluate” Provide a balanced argument and a judgement at the end

**Content** “prioritise the pursuit of high rates of economic growth”

“standard of living” Need to consider actual growth. The term “prioritise” also hints at the need to consider other macroeconomic goals.

Material and non-material standard of living

**Context** “Using the information provided and/or your own knowledge” Examples can be from the case materials or from elsewhere

**Introduction**

* Define standard of living; consider material and non-material aspects
* State the macroeconomic aims of the government: sustained economic growth, price stability, full employment
* High rates of economic growth here refers to actual growth i.e high rates of increase in the real national output of an economy

**Development 1: High rates of economic growth can raise standard of living**

* Increase material SOL: higher real national income will result in higher real GDP per capita and households having higher incomes and purchasing power. This allows them to enjoy more goods and services. Thus, material SOL increases. For example, Brazil’s hope is that hosting the Olympic Games would result in additional stimulus for its economy via an increase in G and AD, resulting in higher incomes for its population and greater material SOL.
* Increase non-material SOL: higher real national income results in higher tax revenue for the government and increases its ability to spend on areas that improve non-material SOL, like education and healthcare. Increased government spending on education can result in increased literacy rates whereas raised spending on healthcare can possibly extend the life expectancy of the population. Also, the building of transport infrastructure can help to increase the convenience of people who travel about for work or leisure. For example, extract 7 mentioned that Rio built many transport infrastructure projects throughout the city.

**Development 2: High rates of economic growth might not improve standard of living**

* Material SOL might not improve for all citizens. This is because there could be the case of structural unemployment with high rates of economic growth. Structural unemployment is a case where there is a mismatch between the skills that unemployed workers possess and the skills that the job vacancies require. As sunrise industries expand, there would also be sunset industries that are declining and firms in these sunset industries might retrench their workers. If these workers do not have the right skill sets that the current job vacancies require, there would be a rise in structural unemployment. Therefore, the high rates of economic growth might only increase the material SOL of households employed in expanding industries but might worsen the material SOL of those who have become structurally unemployed.
* Worsen non-material SOL: higher levels of national output could result in greater environmental pollution, especially if the expanding industries use methods that generate pollution (Extract 7: “partially built on a protected nature reserve”; Extract 8; “damage to the natural environment”) and/or the firms fail to properly treat industrial waste before discharging them into the environment. Higher pollution levels may worsen the health of people in the country, thereby reducing their life expectancies.

**Development 3: Price stability and full employment (i.e. the other macro aims can also improve standard of living**

* Price stability can also have a positive impact on the material SOL of the country. Price stability prevents the erosion of the real value of money and helps to ensure that the purchasing power of households is maintained, thus having a positive impact on the material SOL.
* Full employment can improve standard of living too as it ensures that the benefits of high rates of economic growth are shared across more sectors/households in the country. With more people being employed, purchasing power of these consumers would rise and they would be able to buy more goods and services, thus raising the material SOL of the country. Furthermore, there would be a fall in the crime rates as the opportunity costs of committing crimes would increase, making the country a safer place to live in and improving the non-material SOL.

**Evaluative Conclusion**

* **[Stand]** Whether a government should prioritise the pursuit of high rates of economic growth to raise the standard of living of its citizens depends on the economic conditions of the country.
* **[Situation]** In countries that are operating below its productive capacity, the government can consider pursuing high rates of economic growth to raise the standard of living of its citizens. However, countries that are operating near full employment might want to prioritise other macroeoconomic aims such as price stability, to ensure that the benefits of the high rates of economic growth on standard of living can be sustained
* **[Situation]** It also depends on the stage of the development of the country. If the country is a less developed one like Cambodia, the high levels of poverty there would necessitate a higher focus on economic growth rates to lift the population out of poverty and improve their material standard of living. On the other hand, if the country is a more developed one like Japan, poverty levels are much lower and most people have their basic needs fulfilled. In such a situation, the focus could then be on improving their non-material standard of living. For example, the government could increase spending on healthcare and raise its efforts to reduce pollution levels, therefore increasing life expectancy.