



ECONOMICS STANDARD LEVEL PAPER 2

Thursday 20 May 2010 (morning)

2 hours

INSTRUCTIONS TO CANDIDATES

- Do not open this examination paper until instructed to do so.
- Answer three questions.
- Use fully labelled diagrams and references to the text / data where appropriate.

Texas oil tycoon aims to harness power of wind

- One of the biggest problems facing the United States (USA) in the next 50 years is how to satisfy its energy demands. This will require some tough choices involving **opportunity cost**. Currently the USA imports 70% of its oil needs. Should US oil drilling be increased or is the answer to expand the use of wind energy?
- T Boone Pickens, an American businessman is famous for thinking big. Over the next four years he intends to erect 2700 wind turbines across Texas at a cost of US\$54 billion. His scheme is five times bigger than the world's largest wind farm, and when finished will generate enough electricity for one million homes. His idea is to use wind-generated energy as a substitute for natural gas used to produce electricity. The natural gas will then be used to fuel cars in order to reduce the demand for oil. Pickens aims to make a gross profit of 25%, aided by a government subsidy for alternative energy creation.
- Texas, with its wide open spaces, low population and steady winds, should be perfect for wind-generated energy. Pickens has persuaded neighbouring farmers to join his scheme in return for annual payments of between US\$10000 US\$20000 for each turbine on their land, which will not interfere with farming. Pickens refuses to have any of the turbines on his own property because "they are ugly".
- The nearby town of Sweetwater is in the middle of a huge "construction boom" that is increasing **investment** demand. Two new companies have just opened, one to service the blades of the 2700 turbines, and another renting out cranes to build the new turbines. These new economic opportunities have increased the population of the town and created many new jobs, not only in the manufacture of the turbines and blades, but also in their maintenance. New roads and houses are being built, while local schools and medical centres have been renovated using the extra tax revenue from the energy companies.
- Supporters of the Pickens plan believe the US economy will benefit, through increased direct foreign investment, increased private domestic investment and a decreased need to import oil from overseas, all of which will contribute to economic growth.
- Opposition to the wind farm has come from environmentalists who are concerned with the negative impact on wildlife and the destruction of the habitat of a rare bird. Concern has also been expressed about the noise the turbines will make and the visual pollution to what was a scenic area.

[Source: adapted from *The Age*, 19 April 2008]

(Question 1 continued)

(a) Define the following terms indicated in bold in the text:

(i) opportunity cost (paragraph **1**)

[2 marks]

(ii) investment (paragraph 4).

[2 marks]

(b) Using an appropriate diagram, explain how a subsidy is likely to affect the price and quantity of wind-generated energy.

[4 marks]

(c) Using an AD/AS diagram, explain how increased private domestic investment and a decreased need to import oil from overseas are likely to contribute to economic growth in the US economy (paragraph §).

[4 marks]

(d) Using information from the text/data and your knowledge of economics, evaluate the decision to construct the world's largest wind farm in Texas.

[8 marks]

Pakistan's economy

- There was a positive transformation in the Pakistani economy in the early 2000s. The exchange rate was allowed to float, exports of primary commodities increased along with **foreign direct investment** and foreign reserves, while government debt fell.
- By 2007, however, Pakistan faced a number of political and economic problems. In addition to political instability, there were hailstorms and diseases destroying crops, which led to large increases in food imports. The price of imported raw materials continued to increase with 27% of the higher import expenditure due to the increase in oil prices. Industrial production began to fall. Foreign investment in shares fell from US\$1.5 billion in 2006 to US\$97 million.
- These events have led to Pakistan's highest current account deficit ever, amounting to 8.6% of Gross Domestic Product (GDP) (June 2008).

Table 1

	2007	2008	2009 (estimated)
Real GDP growth (%)	6.0	5.8	4.4
Current account balance (% of GDP)	-5.7	-8.6	-8.3
Exchange rate (Pakistani rupees to US\$)	61	66	64
Consumer price inflation (%)	7.6	19	11

- What is the government doing? The new budget (2008–2009) aims to reduce the budget deficit from 7% of GDP to 4.7% (by raising tax revenue and reducing government expenditure). It will also introduce tariffs and quotas. While the introduction of tariffs could help reduce the twin deficits (budget deficit and current account deficit), it could reduce consumer welfare and lead to an inefficient allocation of resources.
- The government is preparing a plan aimed at increasing foreign exchange earnings through export-led growth. The intention is to diversify production and exports in industries in which Pakistan has a comparative advantage, making better use of the country's abundant labour supply and natural resources.

[Source: adapted from http://www.economist.com, 14 June 2008]

(Question 2 continued)

(a) Define the following terms indicated in bold in the text:

(i) foreign direct investment (paragraph **①**)

[2 marks]

(ii) inflation (Table 1).

[2 marks]

(b) Using an appropriate diagram, explain how the continuing increase in prices of imported raw materials (paragraph ②) could have contributed to the impact on the general price level and output in 2008 (Table 1).

[4 marks]

(c) Using the data from Table 1, explain **two** factors that might contribute to the estimated fall in the inflation rate in 2009.

[4 marks]

(d) Using information from the text/data and your knowledge of economics, evaluate the impact on the Pakistani economy of the decision to introduce tariffs (paragraph 4).

[8 marks]

Ireland economy faces slowdown

- The Irish economy has performed well over the past decade, with Irish *per capita* income growth above the European Union (EU) average. Economic activity has been a result of strong domestic demand but this is now falling.
- The effects on Ireland's labour market of a deep slump in the construction sector, in particular, are increasing. Employment fell by 26800 in 2007, equivalent to 9.5% of the sector's workforce.
- The sharp fall in job numbers has led to an increase in the number of people who are unemployed. In the second quarter of 2008, the number of unemployed people increased by 15.2% (compared to the same period in 2007) and the **unemployment rate** increased to 5.2%.
- The fiscal position of Ireland has deteriorated rapidly since recording a healthy budget surplus of 3% of **Gross Domestic Product (GDP)** in 2006. Ireland is now expected to record a budget deficit of 5.8% of GDP in 2008 as the economy slows. It is likely to increase further if the government implements expansionary demand-side policies such as increased government spending and decreased taxation.
- The government, trade unions and businesses have been unable to agree on a new national minimum wage deal. The minimum wage is an example of a minimum price (price floor). Trade unions have rejected a 5% pay increase over 21 months, after seeking a 5% increase per year and a minimum wage for lower paid workers. Some economists argue that allowing an increase in the minimum wage will worsen the unemployment problem.
- Some economists have argued that greater labour market flexibility is needed to improve Ireland's unemployment problem. This could include supply-side policies such as abolishing the minimum wage, decreasing the power of trade unions and reducing unemployment benefits.
- Economists are divided on whether the government should stimulate economic activity using demand-side policies or instead focus on supply-side policies that concentrate on labour market reforms.

[Source: adapted from OECD Economic Outlook 83/The Economist, 21 October 2008]

(Question 3 continued)

(a) Define the following terms indicated in bold in the text:

(i) unemployment rate (paragraph 3)

[2 marks]

(ii) Gross Domestic Product (GDP) (paragraph 4).

[2 marks]

(b) Using an appropriate diagram, explain how falling domestic demand is likely to contribute to higher levels of unemployment.

[4 marks]

(c) Using an appropriate diagram, explain how an increase in the minimum wage could "worsen the unemployment problem" in Ireland (paragraph 5).

[4 marks]

(d) Using information from the text/data and your knowledge of economics, evaluate whether demand-side policies or supply-side policies should be used to reduce the current level of unemployment in Ireland.

[8 marks]

India faces rising currency

- The Indian economy has performed remarkably well in the past 10 years, achieving levels of growth only beaten by China. However, India is not without problems including rural poverty and the lack of infrastructure, which threaten to limit the gains from **economic growth**. Now the strength of the Indian economy and its attractiveness to foreign investors is causing a new and unexpected problem a rising currency. This week the Indian rupee reached its highest value against the US\$ since 1998.
- During 2007, foreign investment into India increased by more than 80% to a record US\$44 billion. India is an attractive place for investment because it is a developing economy with the potential for future economic growth. The relatively cheap labour available in India makes it an attractive place for manufacturing and call centres. For these reasons, the Indian rupee has appreciated 15% against the US\$ in the past year.
- While large capital inflows are beneficial for the economy, the rising currency may cause increasing hardship for exporters, especially India's labour-intensive manufacturing industries. Exports account for 10% of the US\$854 billion economy and the government is counting on strong exports to support economic growth in India. India's economy expanded by 9.2% in the past year, the highest growth rate in two decades.
- The nation's largest computer-services provider, said the Indian rupee's "drastic" gains will reduce earnings by over US\$7 billion. The Federation of Indian Exporters says "the currency is overvalued and we are asking the government to intervene".
- India's central bank, which sold a record US\$11.9 billion Indian rupees in February in a bid to slow the currency's gains, is, however, also concerned about India's rising inflation rate.
- The Reserve Bank of India is torn between the need to contain inflation, which accelerated at 7% in February, the fastest pace for more than two years, and the need to limit the appreciation of the currency. To reduce inflation, one policy response is to increase **interest rates** but this is likely to further strengthen the Indian rupee.

[Source: adapted from *The Economist*, 13 December 2007, *Bloomberg*, 17 April 2008, and *Economics Help*, 12 November 2008]

(Question 4 continued)

(a) Define the following terms indicated in bold in the text:

(i) economic growth (paragraph **①**)

[2 marks]

(ii) interest rates (paragraph 6).

[2 marks]

(b) Using an appropriate diagram, explain how increased foreign investment has impacted on the value of the Indian currency (paragraph ②).

[4 marks]

(c) Using an appropriate diagram, explain how strong exports will "support economic growth in India" (paragraph 3).

[4 marks]

(d) Using information from the text/data and your knowledge of economics, evaluate the impact of a rising currency on the Indian economy.

[8 marks]

Vietnam's changing economy

- Vietnam has achieved an impressive turnaround in its agricultural sector. Whereas in the mid-1980s the country was on the verge of famine, today it is the second-largest rice exporter in the world. In addition, it produces and exports a variety of farm, fishery and forest products, though these activities are not always consistent with **sustainable development**.
- Important factors behind the success of Vietnam's agriculture were privatization of farms and equitable distribution of land ownership, stabilization of the economy in the mid-1980s, liberalization (freeing) of farm prices and its policies based on **free trade**.
- Vietnam's economic transformation is often measured in terms of the declining share of the agricultural sector in Gross Domestic Product (GDP) and the corresponding increase in the shares of the industrial sector and the service sector. Where the primary sector (agriculture, forestry and fisheries) used to provide over two-thirds of all jobs 10 years ago, now it provides only about half of all jobs.
- Until recently, the government and international agencies were advising Vietnamese farmers to diversify their production, partly by moving towards non-farm industries, and partly by diversifying crops within agriculture. An example of the diversification suggested is the development of "craft industries" producing simple homespun products and tourism that would bring rich tourists who would buy these products. However, in recent months there have been rapid increases in rice prices due to increases in world demand for rice. This would provide large benefits for rice farmers. The government is now concerned that diversification has gone too far, as some rice farmers have already switched out of rice production.
- In the long term, Vietnam may face a far more serious danger. Scientists predict a rise in the sea levels along its coast that by the year 2100 could submerge one-eighth of its land area, as well as give rise to extreme weather conditions. As most of Vietnam's agricultural land and population are near the sea, such developments would be highly destructive to the country and its economy.

[Source: adapted from *The Economist*, "From basket case to rice basket", 24 April 2008]

(Question 5 continued)

(a) Define the following terms indicated in bold in the text:

(i) sustainable development (paragraph 1)

[2 marks]

(ii) free trade (paragraph 2).

[2 marks]

(b) Using the concept of income elasticity of demand, explain the change in relative importance of the agricultural sector in comparison to the industrial and the service sectors in Vietnam (paragraph §).

[4 marks]

(c) Using an appropriate diagram, explain the likely long-term impact of a rise in sea levels on the productive capacity of the Vietnamese economy (paragraph 5).

[4 marks]

(d) Using information from the text/data and your knowledge of economics, evaluate diversification as a policy option for improving export performance in Vietnam.

[8 marks]