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The number of marks is given in brackets [ ] at the end of each question or part question.
Question 1

The Global Pharmaceutical Industry

Extract 1: Research & Development (R & D) Woes for Pharmaceutical Giants

In the pharmaceutical industry, patent protection is an essential stimulant to research. The world’s biggest company Pfizer, has an annual R & D budget of over $7 billion.

R & D costs constitute substantial part of the cost of putting a product on the market. In general, the results of that R & D can be very easily copied because synthesis and manufacturing processes are comparatively simple. This means research costs become sunk costs which could not be recovered in the face of competition from imitators who have not had to incur the costs. Protection of intellectual property rights (IPRs) through patents or other means is, therefore essential if companies are to invest in research to develop new products.

However, when the patent on a particular drug expires, usually twenty years after the date at which it is granted, smaller generics companies are able to step in and exploit the lapse of the patent on the original drug to make their own special generics. Generics are different drugs containing the same active ingredients. For instance, the patent for Ventolin, an anti-asthmatic drug made by Glaxo has now expired and the active ingredient, salbutomol, is now being used by other smaller generics companies to make anti-asthma drugs.

Successful development of new drugs is becoming increasingly difficult. R & D is taking a growing proportion of companies’ revenues and yet spending more money on developing compounds is no guarantee of success. In addition, the market share of these pharmaceutical giants has been challenged by cheaper generic rivals. Over the next five years, a record $70 billion worth of drugs will face competition in America alone as their patents expire.

Source: various

Figure 1: Market Share of Pharmaceutical Manufacturers in the United States, 2006

Extract 2: Prescription for Change

On 26th Jan 2009, Pfizer announced that it is bidding for Wyeth, a large fellow American rival. Taking over Wyeth would cement Pfizer’s position as the world’s leading drugmaker. Pfizer clearly reckons that greater scale is an answer not only to the slower growth in the industry but also from competition by generic drug companies. In the next couple of years the threat will intensify as billions of dollars worth of branded drugs are set to lose patent protection.

The problem is acute for Pfizer. Lipitor, a blockbusting cholesterol drug that provides $12 billion in annual revenues, is set to go off patent in 2011. Getting hold of Wyeth would provide some protection: costs could be cut by bringing together research budgets and by reducing vast overlapping marketing operations of the two firms.

Six weeks after Pfizer’s $68bn acquisition of Wyeth, on 9 Mar 2009, a second high-profile merger was announced in the pharmaceutical industry. American company Merck announced a $41.1bn (£29.8bn) takeover of rival American drug firm Schering-Plough. Merck said the deal would mean savings of $3.5bn a year from 2011. Analysts expect the moves to put further pressure on other firms to do likewise.

There have already been thousands of job cuts across the pharmaceutical industry over the past year in an effort to lower costs, and the combined Merck and Schering-Plough, both based in New Jersey, expect to lose a further 16,000 people.

The combined company will benefit from a formidable research and development pipeline, a significantly broader portfolio of medicines and an expanded presence in key international markets, particularly high-growth emerging markets," said Merck chairman and chief executive Richard Clark, who will lead the combined company.

Source: Adapted from The Economist, 26 Jan 2009 and Guardian, 9 Mar 2009

Extract 3: Big Pharmaceutical Companies Caught 'Delaying' Cheaper Drugs

European patients, taxpayers and national treasuries are being fleeced of billions of euros because of the big pharmaceutical companies' elaborate campaigns to delay the marketing of cheaper generic drugs, the European commission said.

Neelie Kroes, the competition commissioner, unveiling the findings of an 18-month inquiry into the pharmaceuticals sector, said "Makers of original medicines are actively trying to delay the entry of generic medicines on to their markets." Investigations showed that major firms had struck at least 200 settlements with generics manufacturers, costing €200m (£173m) and mainly aimed at restricting the marketing of generic drugs. Another key tactic was for the major firms to sue generics companies and then stall the cases in court for several years, prompting calls for a new Europe-wide patent and a unified system of litigation to save time and money.

Millions of euros are spent on promotional activities to create brand loyalty, in legal disputes and settlement agreements instead of in the development of new medicines. This delays or prevents the entry of more affordable and innovative medicines into the market. It is estimated that generic drugs are on average 40% cheaper than their branded equivalents within two years of coming on the market.

Source: Adapted from Guardian, 8 July 2009
Extract 4: Spike in US Prices for Brand-name Drugs calls for New Measures

U.S. prices for brand-name drugs of big pharmaceutical companies are rising faster than ever as patents expire on top-selling medicines and the pharmaceutical industry nervously eyes the future of healthcare reform. Two thirds of the drugs saw double-digit price hikes, well above inflation of 1.6 percent in 2010 measured using the consumer price index. The analysis indicates drug makers are scrambling to make as much money as possible from blockbuster drugs before their patents expire, while taking advantage of the fact that last year's healthcare reform bill did not cap drug prices. Consumer groups are calling for price controls on individual pharmaceutical companies.

Drug makers argue they need the revenue to pay for developing new medicines. “Winning regulatory approval for a drug takes, on average, 15 years and $1 billion, but we only have 20 years of patents to make a return on our investments in R&D” said Karl Uhlendorf, deputy vice president of the Pharmaceutical Research and Manufacturers of America. “If the number of years of patents could be extended, prices could be lower”, he added.

Drug companies have a responsibility to their shareholders to maximize profits and that drives them to charge as much as they can for their drugs. It is their R & D investments that lead to pioneering advances that improve patient care. However, the cost of developing drugs is also skyrocketing and without higher prices, such investments may dry up. Drug companies suggest that if the government could subsidise their R & D cost so as to speed up the development of new and better drugs.

Source: Adapted from Reuters, 23 Mar 2011

Figure 2: Profitability** Among Pharmaceutical Manufacturers Compared to Other Industries, 1995-2009

*Data for Fortune 500 firms are not available for 2007-2009

**Profitability percent refers to median percent net profit after taxes as a percent of firm revenues for all firms in the industry.

Source: Kaiser Family Foundation
Questions

(a)  (i) Explain why the pharmaceutical industry in the United States is an oligopoly. [4]

(ii) With the use of a diagram, explain the impact of the expiry of patents on the profit level of big pharmaceutical companies. [4]

(iii) Explain how big pharmaceutical companies and manufacturers of generic drugs might compete against each other. [4]

(b) Discuss whether the trend towards mergers in the pharmaceutical industry is beneficial to pharmaceutical firms and consumers. [8]

(c) With reference to Extract 4, evaluate the effectiveness of the three measures a government could adopt to protect the interests of consumers. [10]

[Total: 30]
Question 2

International Trade in a Globalised World

Figure 3: World Trade Statistics

Extract 5: Globalisation changing the Composition of World Merchandise Trade

In the last few decades, globalisation has contributed strongly to a surge in trade and Foreign Direct Investment (FDI) flows prior to the financial crisis. It has also seen the flow of technological know-how and people across regions. As a result of globalisation, a long-term shift in the composition of world merchandise trade has occurred.

Firstly, the share of manufactured goods has been rising dramatically, against a decline in agricultural products and non-fuel minerals.

Furthermore, the domination of developed countries in world exports of manufactures has been greatly diluted, first in labour-intensive goods (such as textiles and clothing) and subsequently in electronic products and capital-intensive goods (such as automotive parts). The industrial countries accounted for 85 per cent of world exports of manufactured goods in 1955 but their share declined to about two-thirds in 2008. A highly diverse group of developing economies now account for more than two-thirds of world clothing exports and more than one-half of world exports of textiles and office and telecom equipment. For all manufactured goods, the developing countries’ share is slightly more than a third, double their share 25 years ago.

Source: Adapted from WTO: World Trade Report 2009
Extract 6: Mixed Reaction by ASEAN leaders as Recession Batters Regional Economy

Southeast Asian leaders pledged to cut trade barriers and open more service industries as the bloc struggles to overcome a global recession that has eroded export demand and boosted protectionist sentiment. The leaders reaffirmed their determination to ensure free flow of goods, services and investment and agreed to stand firm against protectionism and to refrain from introducing and raising new barriers.

However, there are ASEAN leaders who warned that measures are necessary to shield domestic industries and goods from overseas competition as the worldwide economic downturn threatens jobs and hurts manufacturing.

It is a “normal reaction” for countries to resort to protectionist tariffs in a slowdown, Malaysian Prime Minister Najib told the Bangkok Post in an interview. “If we are not supportive of our own industries, and do not buy our own products and services we will have a serious problem,” Najib said. “As it is, we are told that countries which have been importing our products before are not going to be importing the same amount anymore. We have to protect our people, our jobs”

Indonesia’s Trade Ministry issued a decree ordering statutory boards to use local products, Jakarta Globe reported, citing Trade Minister Mari Pangestu. The decree is aimed at boosting domestic demand and helping local industries including food, beverages, footwear, clothing and music, the report said.

Adapted from Bloomberg News 1 March 2010

Extract 7: Globalisation or Deglobalisation

For the past two decades, globalisation has been touted as an ideal concept that would bring about prosperity for the whole world. The idea is that countries can trade goods and services without many barriers in the international markets, and enjoy the free flow of cross-border capital investments. Also, globalisation will allow cross-border migration of workers and hasten the speed of technology and knowledge transfer. So, many countries have rushed towards financial and trade liberalisation to open up their economies and reap the benefits of globalisation.

And for the past 10 years, international trade has grown at breakneck speed while cross-border investments have risen rapidly. Skilled workers and professionals have moved easily to other countries for employment.

The developing countries, particularly those in Asia, benefited most from this process. Their economies have grown faster than those of the developed nations.

But today, since the world-wide financial crisis, the world’s economies are certainly slowing fast and globalisation is now in trouble.

World trade has plunged. The downturn has been sharpest in countries that opened up most to world trade, especially East Asia’s tigers. Singapore’s exports are 186% of GDP; its economy shrank at an annual rate of 17% in the last three months of 2008. Taiwan’s exports are over 60% of GDP; and its economy may fall as much as 11% this year. On average, says the IMF, rich countries will contract 2% this year.
As a result, some believe that this economic turmoil has given rise to a new phenomenon called deglobalisation.

The move to deglobalise, economists explain, is motivated by a country’s desire to minimise its dependence on trade, and to a certain extent, delink itself from the beleaguered global financial system. As the global crisis accelerates, many countries have begun to turn to their own resources to grow their economies.

Protectionist barriers are rising and governments are turning inwards. For instance, the Philippines has its own Buy Filipino campaign, while the US has a Buy American clause in President Barack Obama’s recently approved economic stimulus package.

But economists say although the processes of globalisation have slowed, it is still too early to conclude whether globalisation has shifted into reverse gear.

The biggest emerging markets which have benefitted much from globalisation with double-digit growth are doing less badly so far. In India, where exports are around 15% of GDP, the government recently said growth in the year to April 2009 would be 7.1%. China was still growing by 6.8% in the year to the fourth quarter. All these countries have large domestic markets and relatively stable banking systems, which have not been liberalised.

The economists believe this could just be a cyclical phenomenon that will fade away in time. And despite the downturn, the nations of the world have not shunned globalisation.

Source: Adapted from The Economist, 19 February 2009 and The Star Online, 14 March 2009

Questions

(a) With reference to Figure 3, between the period 1990 to 2008:

(i) summarise the change in the volume of world trade. [2]

(ii) explain two possible reasons for the change in the volume of world trade. [4]

(b) According to Extract 5, globalisation has brought about a "long-term shift in the composition of world merchandise trade".

Using the theory of comparative advantage, explain how globalisation has facilitated the change in the pattern of world trade. [6]

(c) Evaluate the measures adopted by the governments of Malaysia and Indonesia in view of the threats from free trade and global competition. [8]

(d) In light of the data provided, assess whether the view ‘globalisation is now in trouble’ is well-founded. [10]

[Total: 30]

End of Paper
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Question 1  Luxury Goods Retail Market

Extract 1: Retailers in the Age of the Internet

People seem to enjoy shopping on the internet, if high customer-satisfaction scores are any guide. Websites are doing more and cleverer things to serve and entertain their customers, and seem set to take a much bigger share of people's overall spending in the future. One of the biggest commercial advantages of the internet is a lowering of transaction costs and as long as the internet continues to deliver price and product information quickly and securely, e-commerce will continue to grow.

With shoppers' migration to the internet, retailers may have little choice but to create strong internet operations of their own. The biggest winners will be consumers as they can look forward not only to ever-greater convenience thanks to the internet but also find physical stores competing with online stores to make the shopping experience a pleasure.

In China, however, online shoppers are finding causes for complaint as consumers can only see product images and do not meet the actual sellers. Unlike malls, websites cannot give customers the chance to try goods before buying. Many of the complaints could, however, have been avoided if stricter government regulations and supervision had been established.

Adapted from Economist.com, China Daily, 2012

<table>
<thead>
<tr>
<th>Year</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Change in e-commerce sales</td>
<td>27.5</td>
<td>25.1</td>
<td>23.8</td>
<td>20.2</td>
<td>3.0</td>
<td>1.7</td>
<td>15.2</td>
</tr>
<tr>
<td>% Change in retail sales*</td>
<td>6.5</td>
<td>6.2</td>
<td>5.0</td>
<td>3.2</td>
<td>-1.3</td>
<td>-7.5</td>
<td>6.8</td>
</tr>
<tr>
<td>% Real GDP Growth</td>
<td>3.5</td>
<td>3.1</td>
<td>2.7</td>
<td>1.9</td>
<td>-0.3</td>
<td>-3.5</td>
<td>3.0</td>
</tr>
</tbody>
</table>

* Retail sales figure is not inclusive of e-commerce sales

Source: US Department of Commerce

Extract 2: Luxury Goods Enjoy Bumper Years Despite Rising Costs

Companies are concerned about high raw material and production costs. However, in the luxury space, high-end brands have little to fear from rising raw material costs that have added to the pressures on other sectors of the economy. Luxury is about quality detail and authenticity. The high raw material prices will also have a smaller impact than other non-luxury goods companies because they represent a smaller percentage of their cost base which also includes cost outlay on advertising and celebrity endorsements.

Comfortable profit margins of 55-75 percent, production mainly located in Europe where wages do not explode as in China, and strong pricing power offer luxury goods groups some shelter from cost pressures.

Luxury brands have all enjoyed bumper years. China is on pace to top Japan as the world's largest market for luxury goods with sales estimated to surge 18% annually. Chinese consumption of luxury goods have surged despite hefty consumption taxes being imposed on luxury items in China to lessen the income gap. Well-heeled Chinese shoppers have longed swarmed to Hong Kong and Europe for products such as Rolex watches to avoid the hefty tariffs.

Adapted from cna.com, cnn.com, 2012
### Table 2: Income Distribution in China

<table>
<thead>
<tr>
<th>Year</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
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<td>Gini Coefficient</td>
<td>0.457</td>
<td>0.457</td>
<td>0.462</td>
<td>0.473</td>
<td>NA</td>
<td>0.480</td>
</tr>
</tbody>
</table>

Adapted from Various Sources

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**Extract 3: Misleading Advertisement by Luxury Brand Banned**

The Advertising Standards Authority¹ (ASA) has banned a series of print advertisements for luxury fashion brand Louis Vuitton, ruling that they misled the public by suggesting its expensive leather bags were hand-made. Louis Vuitton, part of the LVMH group, ran advertisements showing workers using a needle and thread and other artisanal techniques. Wording emphasized the individual attention to detail lavished on each product.

While acknowledging the company's use of hand crafting, the ASA ruled that Louis Vuitton could not justify the message because it also used sewing machines and would not reveal how much work was done by hand. The ruling is a setback for the 156-year-old French firm, which markets its monogrammed bags as elegant examples of workmanship in an age of mass production.

Adapted from www.independent.co.uk, 2010

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**Extract 4: Survival Strategies for Luxury Goods**

Value has become an important consideration for consumers of luxury goods. With the rising popularity of online discount luxury good sellers that carry time-limited offers of off-season luxury items at high discounts, the need to avoid undercutting by competitors is high.

Several lower-end luxury brands are responding to the pressures of increased competition and price-conscious shoppers by aggressively investing in the expansion of discount outlets. Manufacturers such as Coach and Polo Ralph Lauren have a legacy of using discount outlets and online promotions to clear off-season goods without diluting the brand name.

High-end luxury retailers that have built brands on image and lifestyle can withstand greater competitive pricing differences. Although promotions and discounting can boost the financial performance of high-end luxury retailers in the short term, shrinking profit margins and loss of prestige among more traditional luxury shoppers are a real concern in the long run.

Brick-and-mortar channels will remain important, as they appeal more to the traditional prestige-hunting luxury consumers. However, given that new, younger luxury shoppers prefer to shop online, establishing a powerful online presence is a key step for luxury goods manufacturers and retailers. Online shopping also provides a more private experience especially during the financial crisis when flaunting newly bought goods can be considered to be insensitive.

While luxury brands experienced mixed fortunes in the financial crisis, not all premium labels have had to tighten their handcrafted belts. At Louis Vuitton (LV), sales remained robust throughout the economic turmoil. The brand never discounts or has a sale, translating to a good investment for customers as the brand holds its value. It also benefits from consistency in its marketing and production strategies as majority of its products are still made in France while its shoe production facilities are in Italy. French rival Hermès moved fast as markets changed, opening and renovating 32 stores worldwide and forging into new territories in Brazil, Panama, and Turkey.

Common factors keep customers coming back to luxury brands or help them to attract new buyers. It's all about a sense of belonging, ensuring the right celebrity is attached to the brand, maintaining exclusivity by never having a sale, being highly selective about where new stores are opened and providing a premium service.


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¹ ASA is the UK's independent regulator of advertising across all media. They work to ensure ads are legal, decent, and truthful by applying the Advertising Code written by the advertising industry.
Questions

(a)  (i) Compare the trend of total retail sales and e-commerce sales in the US from 2004-2010. [2]

(ii) Explain one reason for the above difference. [2]

(b) Explain how the increasing presence of retailers online has benefited consumers. [2]

(c) With reference to Extract 2,
   (i) distinguish the types of costs faced by firms in the luxury goods industry. [2]

   (ii) with the aid of a diagram, explain how the profits of luxury goods makers are likely to change with “rising costs”. [4]

(d) Assess whether government intervention in the luxury goods market is justified. [8]

(e) Discuss how firms in the luxury goods market might compete with each other. [10]

[Total: 30]
Question 2  Financial Crisis in Europe

The Financial Crisis sweeping across Europe is threatening to break up the European Union (EU). The crisis is due to a combination of factors, with one theory being the ease of credit conditions that facilitated high-risk lending and borrowing practices. Many of the economies in the EU are now drowning in an ocean of unsustainable fiscal debt and is hurting investors’ confidence. Germany and a few other "healthy" members of the EU are trying to contain the situation through a series of bailout packages.

Figure 1: Value of Euro (average rate per US$)

![Graph showing the value of the Euro from 2006 to 2010.](Source: European Central Bank)

Extract 5: An economy crumbles

Greece is one of those economies that borrowed heavily in the financial market during the era of low interest. The government spent massively on the public sector in the form of extremely generous pay and pension benefits. Following the tightening of credit conditions, Greece find itself facing the risk of defaulting on its massive debt. The EU rallied to lend Greece money. In return, Greece needs to reduce its debt to GDP ratio from the current 160% to 120.5% by 2020. It must agree to continue with tight austerity measures.

Few investors or businesses are brave enough to make long-term bets on the Greek economy in these conditions. Greece’s economic problems are too big to be fixed quickly. In addition, The Euro has come under pressure as investors wonder if Greece’s fiscal crisis will spread to other heavily indebted economies within the EU. The Euro in the past six months has fallen by about 17% against the US dollar as investors rushed to ditch the currency.

Source: various
<table>
<thead>
<tr>
<th>Table 3: Selected Economic Indicators for Greece, 2006 – 2011</th>
</tr>
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<tbody>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Annual rate of growth in real GDP (%)</strong></td>
</tr>
<tr>
<td>2006</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>5.5</td>
</tr>
<tr>
<td><strong>Gross Fixed Capital formation (Million EUR)</strong></td>
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<tr>
<td>2006</td>
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<tr>
<td>49,508</td>
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<td><strong>Final consumption expenditure of households (Million EUR)</strong></td>
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<td>2006</td>
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<td><strong>Current account for Greece (Million EUR)</strong></td>
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<tr>
<td><strong>Unemployment Rate (%)</strong></td>
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<td><strong>Life Expectancy</strong></td>
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<td>78.8</td>
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<td><strong>Infant Mortality Rate (per 1000 birth)</strong></td>
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<td>2006</td>
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<tr>
<td><strong>Inward FDI from rest of the world (% of GDP)</strong></td>
</tr>
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<td>2006</td>
</tr>
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*na: not available  
Source: Eurostat

<table>
<thead>
<tr>
<th>Table 4: Selected Economic Indicators for Germany, 2006 – 2011</th>
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<tr>
<td></td>
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<td><strong>Annual rate of growth in real GDP (%)</strong></td>
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<tr>
<td>2006</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>3.7</td>
</tr>
<tr>
<td><strong>Gross Fixed Capital formation (Million EUR)</strong></td>
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<td>2006</td>
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<tr>
<td>417,820</td>
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<td><strong>Final consumption expenditure of households (Million EUR)</strong></td>
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<td>1,339,540</td>
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<td><strong>Unemployment Rate (%)</strong></td>
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<td>2006</td>
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<td><strong>Life Expectancy</strong></td>
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<td>2006</td>
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<td><strong>Infant Mortality Rate (per 1000 birth)</strong></td>
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<tr>
<td>2006</td>
</tr>
<tr>
<td>3.8</td>
</tr>
</tbody>
</table>

Source: Eurostat
Extract 6: The Contagion of Austerity

Austerity is the new contagion, spreading across Europe beginning with Ireland, then Greece, Spain, Portugal and today it enveloped Italy. Some of these austerity measures include: cutting government spending by pay freeze for most public sector workers, government ministries to reduce expenses and cutting ministers’ salaries; and some higher earners will also face higher taxes.

New powers now give the European Commission the right to levy fines on countries that fail to comply with austerity measures to bring budget deficits to within the European Union’s 3 per cent target\(^2\). Some economists such as Paul Krugman however felt that slashing spending while the economy is still deeply depressed is both an extremely costly and quite ineffective way to reduce future debt. Costly, because it depresses the economy further; ineffective, because by depressing the economy, fiscal contraction now reduces tax receipts. For him, the right thing, overwhelmingly, reduce spending after the economy has recovered.

As a result of the harsh austerity measures, growth in EU is expected to be 0.2% this year. In the short term, Europe is being forced to demonstrate to investors it can manage its deficits to bring back confidence in the region. But in the longer-term, it will have to show a political will to increase productivity. That will mean tearing up some of the labour laws that make hiring and firing difficult.

Source: Adapted from BBC News, 25\(^{th}\) May 2010

Questions

(a) (i) How does the value of the Euro in 2010 compare to its value in 2008? \([1]\)  
(ii) With the use of an appropriate diagram, account for this change in the value of the Euro. \([3]\)

(b) (i) Describe the trend of Greece’s inward FDI from rest of the world from 2008 to 2010 in Table 3. \([1]\)  
(ii) In light of the data presented, comment on the likely impact of the change in the value of the Euro described in (ai) on Greece’s Balance of Payments. \([5]\)

(c) (i) Compare the unemployment rate for Greece and Germany over the period 2006 to 2011. \([2]\)  
(ii) Assess whether the data provided will lead one to conclude that the current and future standard of living for Germany is higher than Greece. \([8]\)

(d) Discuss how the austerity measures will help alleviate the recession in EU. \([10]\)

[Total: 30 marks]

---

\(^2\)In 1992, the Treaty of Maastricht set the fiscal criteria to be met in order to join European Union (EU): the limits of government budget deficit must be kept at 3 percent of GDP and the debt to GDP ratio at 60%.
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You are advised to spend several minutes reading through the questions before you begin writing your answers.

You are reminded of the need for good English and clear presentation in your answers.

This document consists 8 printed pages.
Answer all questions.

Question 1

The emerging markets of Mexico, Indonesia and Turkey

The inconsistent and unpredictable implementation of laws and rules in Brazil, Russia, India and China have prompted foreign investors to divert their attention to the emerging economies of Mexico, Indonesia and Turkey, which are currently experiencing more active government intervention and rapid development of their private sectors.

Table 1: Selected Economic Indicators: Mexico

<table>
<thead>
<tr>
<th>Indicators (%)</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth</td>
<td>1.0</td>
<td>– 6.0</td>
<td>6.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Inflation</td>
<td>6.2</td>
<td>4.0</td>
<td>4.1</td>
<td>3.4</td>
</tr>
<tr>
<td>Official interest rate</td>
<td>7.2</td>
<td>6.7</td>
<td>4.5</td>
<td>4.0</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>3.5</td>
<td>5.2</td>
<td>5.2</td>
<td>5.3</td>
</tr>
<tr>
<td>Population growth</td>
<td>1.2</td>
<td>1.2</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Government budget (% of GDP)</td>
<td>– 2.5</td>
<td>– 2.1</td>
<td>– 3.1</td>
<td>– 2.3</td>
</tr>
<tr>
<td>Gross fixed capital formation (% of GDP)</td>
<td>22.0</td>
<td>21.0</td>
<td>22.0</td>
<td>23.0</td>
</tr>
<tr>
<td>Foreign direct investment (% of GDP)</td>
<td>2.5</td>
<td>1.8</td>
<td>2.0</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Table 2: Selected Economic Indicators: Indonesia

<table>
<thead>
<tr>
<th>Indicators (%)</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth</td>
<td>6.0</td>
<td>4.0</td>
<td>5.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Inflation</td>
<td>10.0</td>
<td>3.8</td>
<td>5.1</td>
<td>5.0</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>8.4</td>
<td>7.9</td>
<td>7.1</td>
<td>6.6</td>
</tr>
<tr>
<td>Population growth</td>
<td>1.1</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Government budget (% of GDP)</td>
<td>– 1.3</td>
<td>– 0.1</td>
<td>– 1.6</td>
<td>– 0.7</td>
</tr>
<tr>
<td>Gross fixed capital formation (% of GDP)</td>
<td>28.0</td>
<td>31.0</td>
<td>32.0</td>
<td>32.0</td>
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Table 3: Selected Economic Indicators: Turkey

<table>
<thead>
<tr>
<th>Indicators (%)</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth</td>
<td>1.0</td>
<td>– 5.0</td>
<td>9.0</td>
<td>9.0</td>
</tr>
<tr>
<td>Inflation</td>
<td>10.0</td>
<td>9.8</td>
<td>8.5</td>
<td>10.0</td>
</tr>
<tr>
<td>Official Interest rate</td>
<td>16.0</td>
<td>14.0</td>
<td>6.5</td>
<td>6.0</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>11.0</td>
<td>14.0</td>
<td>11.9</td>
<td>9.8</td>
</tr>
<tr>
<td>Population Growth</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
<td>1.2</td>
</tr>
<tr>
<td>Government budget (% of GDP)</td>
<td>– 1.0</td>
<td>– 2.2</td>
<td>– 5.5</td>
<td>– 3.6</td>
</tr>
<tr>
<td>Gross fixed capital formation (% of GDP)</td>
<td>20.0</td>
<td>17.0</td>
<td>19.0</td>
<td>22.0</td>
</tr>
<tr>
<td>Foreign direct investment (% of GDP)</td>
<td>2.7</td>
<td>1.4</td>
<td>1.6</td>
<td>2.1</td>
</tr>
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</table>

Source of Tables 1, 2 and 3: worldbank.org
**Extract 1: Mexico**

Mexico's manufacturing sector was hard hit by China's rise as the “world’s factory floor” after the latter joined the World Trade Organisation in 2001. A study concluded that China’s rise chipped about 0.6 per cent off Mexico’s annual Gross Domestic Product (GDP) growth between 2002 and 2006. Some of the biggest casualties in Mexico's manufacturing sector were textiles, clothing and shoes. Mexico's export market took a further hit when its exports to the United States, Mexico's largest trading partner, fell from US$234.6 billion in 2008 to US$184.9 billion in 2009.

Now, thanks to soaring wages in China and the steady recovery of the United States economy, the tide is turning in Mexico's favour. While labour costs in Mexico were roughly 200 per cent higher than China’s a decade ago, wage inflation in China and wage stagnation in Mexico have combined to close the gap to nearly zero. Furthermore, optimism over Mexico’s growth prospects and receptiveness towards foreign direct investment have made the country a darling among international investors. However some economists are suggesting that a higher minimum wage should have been enforced to protect the exploitation of workers by investors.

Mexico’s largest exports are beer, flat screen televisions and cars. Unfortunately, there is little room for advancement for the average worker in these industries unless higher growth prevails. After so many years of mediocre economic growth and wage stagnation, there is a lingering mood of frustration amongst the Mexicans.

Sources: *Economy Watch & Financial Times*, 5 April 2013

**Extract 2: Indonesia**

Modern Indonesia boasts a substantial population and a wealth of natural resources. Being home to the world’s 16th largest economy, Indonesia is growing and urbanizing rapidly. While many other Asian emerging markets are reliant on exports, more than 60 per cent of Indonesia's GDP is generated by domestic consumption, shielding it from the volatility of the global economy such as the 2008-2009 global financial crisis.

Indonesia attracted record levels of new foreign direct investment in 2011. This helped to increase production to meet surging demand from the rapidly expanding wealthy middle class. Domestic firms are also expanding their businesses as family-owned conglomerates built new shopping malls and hospitals.

Meanwhile, Indonesia’s trade balance worsened sharply from a surplus to a deficit in 2012 because of slowing exports to the troubled developed world and robust import demand.

Another problem confronting Indonesia is increasing income inequality as the economy grows. The Gini index has been rising since 1999, reaching 0.38 in 2010 and 0.41 in 2011. Academics consider any Gini index above 0.4 to be dangerous to social stability.

Sources: *The Jakarta Post*, 5 June 2012 & Mckinsey.com, September 2012
Extract 3: Turkey

Turkey has enjoyed good trade relations with Europe after joining the European Community in 1963. Turkey has a special partnership with the European Union (EU) though it is still not a full EU member.

In the past nine years, Turkey has absorbed US$110 billion in foreign direct investment. Automobile manufacturers such as Honda, Hyundai, Renault, Toyota and Ford Motor have set up manufacturing plants in Turkey. This has enabled textiles and apparel to be overtaken by automobiles and machinery on the export front. Foreign direct investment is set to increase further as the Turkish government has recently liberalized laws for foreign direct investment, including an array of tax benefits and incentives.

It took Turkey less than a decade to see its GDP triple to US$772 billion in 2011. Alas, this has alarmed Turkish officials, as inflation has increased significantly and the current account deficit now stands at 10 per cent of GDP. All these looked unsustainable. The government is considering increasing interest rates to rebalance the economy.

In addition, as Turkey's economy experienced high levels of growth, the country's boom in industrial production resulted in higher levels of pollution. With domestic energy consumption on the rise, Turkey has been forced to import more oil and gas. The resulting increase in oil tanker traffic in the Black Sea and Bosphorus Straits has increased environmental threats there. These might hinder Turkey's bid to be a full-fledged EU member.

Sources: United Nations Development Programme, 15 August 2012
Financial Times, 28 February 2013

Questions

(a) (i) Compare the GDP for Mexico and Indonesia from 2008 to 2011. [2]

(ii) Account for the different GDP growth rates between Mexico and Indonesia from 2008 to 2009. [4]

(b) (i) Explain the inverse economic relationship between interest rate and investment. [2]

(ii) With reference to Mexico and Turkey, comment on whether the above relationship holds true for domestic investment and foreign direct investment. [4]

(c) Discuss the economic measures that the Mexican government could adopt to address the “lingering mood of frustration” in Extract 1. [8]

(d) Using data where appropriate, assess the extent to which economies should pursue high economic growth. [10]

[Total: 30]
Question 2

The global container shipping industry

Extract 4: Developments in the global container shipping industry

Back in the mid-2000s, when world trade was booming, big container shipping lines had ordered fleets of huge new mega-box ships, only to take delivery of them during a downturn. This led to overcapacity in the industry, and an all-out price war in 2011 as container lines sought to fill their new ships and defend their market share. To make things worse, oil prices were soaring despite the weak world economy, adding greatly to the container-shipping lines’ operating costs.

As an industry with low profit margin, container shipping is inherently sensitive to changes in cost and shipping rates. One of the ways to avoid market fluctuations and increase opportunities of success in the face of a fierce competition and rising costs is to form strategic alliances. In December 2011, several new alliances were announced. Rival lines agreed to share space on board their vessels, allowing the surplus ships to idle, thus saving on operating costs. A new group, G6 Alliance, brought together firms from Japan, South Korea, Hong Kong, Singapore and Germany. The G6 Alliance was the answer to competition posed by Danish container shipping giant Maersk Line on the Asia-Northern Europe trade routes. On these routes, the G6 Alliance plus Maersk Line had a market share of about 73%.

Competition laws stop such alliances from agreeing explicitly on prices. But no sooner had they been formed, the shipping lines began to announce rate rises one by one, and after successive rounds of increases, rates were soon back around their pre-slump levels.

Container shipping volumes are expected to grow by 5 per cent in 2013, compared to historical levels of 9 per cent per year. In addition, the extent to which growth in container volume exceeds GDP growth will weaken significantly. Annual growth in container volumes used to average 3 to 4 times of global GDP, but lower shipping rates are expected in the next two to three years. Yet on the horizon, volatile financial markets, continued turbulence in the Euro zone, and stagnating growth in the United States are some growing concerns for the industry.

Sources: The Economist, 9 June 2012 & Channel News Asia, 10 April 2013

Extract 5: A new global design

According to a United Nations (UN) report, the latest economic downturn and the subsequent recovery have highlighted new global trends that are impacting firms in the international maritime transport. One key trend identified is the “new global design”, which refers to a shift in global trade away from advanced economies toward emerging developing countries as these economies continue on their urbanization path, growing consumer demand, and a relocation of lower value manufacturing toward new locations (e.g. from China to Indonesia). These developments are likely to affect international transport patterns, with transport growing faster on some routes than others. This raises the opportunity of opening new markets. Besides the “new global design”, the other two key trends identified are rising fuel prices and cutting greenhouse gas emissions from international shipping.

Source: UNCTAD Review of Maritime Transport 2011
Extract 6: Reactions by APL and Maersk Line

Responding to the global trends, APL, a Singapore-based global container shipping line, launched a 10,000-TEU vessel, the APL Chongqing in December 2011. The APL Chongqing is the largest in the fleet under APL and it is the first of 32 vessels that will be launched by 2014 to gain economies of scale, fuel efficiency and competitiveness in the industry. The new vessels will consume less fuel and emit less exhaust than the ships they replace.

In a similar move earlier this year, Maersk Line ordered at least ten 18,000-TEU vessels — the biggest container ships in the world — which will be delivered between 2013 and 2015. The shipper will deploy these new vessels on the Asia-to-Far East routes. And, because these gargantuan ships are more efficient than smaller and older vessels, they are likely to ultimately force existing operators out of that trade lane into the already crowded Transpacific and intra-Asian lanes.

One of the reasons Maersk Line ordered the large vessels is to focus on serving their customers better. The company recently said 44 per cent of all containers shipped by the industry are late by one day, and 11 per cent are more than two days late. The company is now trying to introduce fixed transportation schedules every day for vessels going to and from the Ningbo, Shanghai, Yantian and Tanjung Pelepas ports in Asia to three European ports. Other shipping companies ought to follow its lead.

*TEU stands for Twenty-foot Equivalent Unit – a unit of cargo capacity often used to describe the capacity of container ships and container terminals. It is based on the volume of a 20-foot-long intermodal container, a standard-sized metal.

Sources: The Edge Singapore, 20 November 2011 & Neptune Orient Lines, 1 December 2011

Extract 7: Greenhouse gas emissions from shipping

Exhaust gases from ships are the primary source of greenhouse gas emissions. According to an important study in 2007, international shipping was estimated to have emitted about 2.7% of the global greenhouse gas emissions. Power stations account for a massive 24% and other forms of transportation (air, train and road) for 12.3%. Hence, shipping is considered the most energy efficient mode of mass transport and only a modest contributor to emissions. In fact, shipping produces lesser exhaust gas emissions for each ton transported one kilometre as compared to air or road transport.

Nonetheless, as sea transport will continue growing apace with world trade, global greenhouse emissions are expected to rise 2% to 3% every year over the next three decades. A global approach to further improve its energy efficiency and effective emission control is needed. And to compound the problem, greenhouse gas emissions from international shipping cannot be attributed to any particular national economy due to its global activities and complex operation.

Source: International Maritime Organisation, (www.imo.org), assessed 1 May 2012

Extract 8: Ship smog seen as next target to clear Hong Kong skies

Asia has the highest concentration of people at risk from ship pollution because of the combination of big ports, trade-centered economies and urban concentration. In Hong Kong, emissions from container ships are under rising scrutiny as the government seeks to fix a mounting smog problem at home. An estimated 519 premature deaths a year are linked to emissions from container ships that traverse the Pearl River Delta, a region shared by Hong Kong, Macau and China’s Guangdong province. Most of the deaths – 385 – are suffered by Hong Kongers. Moreover, such pollution is bad advertisement for Hong Kong as a tourist destination and many expatriates have since decided to work in cleaner countries.

Source: Bloomberg Business Week, 4 April 2012
Figure 1: Global container shipping rates and fuel price

Table 4: World's leading container shipping lines

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Liners</th>
<th>Country</th>
<th>Share of world total, TEU</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Maersk Line</td>
<td>Denmark</td>
<td>11.2%</td>
</tr>
<tr>
<td>2</td>
<td>MSC</td>
<td>Switzerland</td>
<td>10.8%</td>
</tr>
<tr>
<td>3</td>
<td>CMA CGM Group</td>
<td>France</td>
<td>6.6%</td>
</tr>
<tr>
<td>4</td>
<td>Evergreen Line</td>
<td>China (Taiwan)</td>
<td>3.7%</td>
</tr>
<tr>
<td>5</td>
<td>APL</td>
<td>Singapore</td>
<td>3.6%</td>
</tr>
<tr>
<td>6</td>
<td>COSCON</td>
<td>China</td>
<td>3.5%</td>
</tr>
<tr>
<td>7</td>
<td>Hapag-Lloyd Group</td>
<td>Germany</td>
<td>3.4%</td>
</tr>
<tr>
<td>8</td>
<td>CSCL</td>
<td>China</td>
<td>2.8%</td>
</tr>
<tr>
<td>9</td>
<td>Hanjin</td>
<td>Republic of Korea</td>
<td>2.8%</td>
</tr>
<tr>
<td>10</td>
<td>CSAV</td>
<td>Chile</td>
<td>2.4%</td>
</tr>
</tbody>
</table>

Source: UNCTAD Review of Maritime Transport 2011

Questions

(a) (i) With reference to Figure 1, describe the changes in container shipping rates over the period between 2010 and 2012. [2]

(ii) Account for the above changes in container shipping rates. [4]

(iii) Comment on the usefulness of the information presented in Figure 1 in predicting the impact on the profit earned by firms in the container shipping industry. [4]

(b) (i) With reference to Table 4, describe the type of market structure operating in the container shipping industry. [2]

(ii) In response to the "new global design", discuss whether it is in the best long term interest of firms in the container shipping industry to compete or cooperate with one another. [8]

(c) Reducing carbon emissions and limiting the market power of firms are some of the few challenges facing the container shipping industry. [10]

Using data where appropriate, discuss whether the above sources of market failure present in the container shipping industry are major concerns for a government.

[Total: 30]
ECONOMICS  
Paper 1  
2 July 2014  
2 hour 15 minutes  
Additional materials: Writing paper  

READ THESE INSTRUCTIONS FIRST  

Write your name and CT on all the work you hand in. 
Write in dark blue or black pen on both sides of the paper. 
You may use a soft pencil for any diagrams, graphs or rough working. 
Do not use staples, paper clips, highlighters, glue or correction fluid and tape. 

Answer all questions. 

At the end of the examination, you are to fasten the answer sheets to case study question 1 and question 2 SEPARATELY together with the respective cover page. 

The number of marks is given in brackets [ ] at the end of each question or part question. 

You are advised to spend several minutes reading through the questions before you begin writing your answers. 

You are reminded of the need for good English and clear presentation in your answers. 

This document consists 8 printed pages.
Question 1

Rare Earth and Hybrid Car Industry

Extract 1: Price of rare earth

Despite the name, rare earth elements are not actually rare in nature. The name refers to the fact that they are usually mixed with other minerals, which makes extraction complicated and costly.

Makers of hybrid and electric cars have sought to reduce use of rare earth, which are used in high-tech applications. This is, after China, which supplies more than 90 percent of the rare earth market, said in July 2010 that it would cut exports and clamp down on the industry.

While rare earth prices have fallen for a period in mid-2011, demand will outpace supplies even with the new mines in California and Australia, which are expected to start operation in 2014. New demand from emerging economies is likely to fuel the growth, especially with the use of rare earth in advanced consumer and industrial products. The ability to substitute many rare-earth applications will also be limited, as the new technologies are unlikely to be in place this quarter or the next.

Trade sources mention that “the market is poised to recover going into 2014 as consumer inventories dwindle, excess stocks are sold off and volumes show signs of growth.” Meanwhile, factoring heavily into the supply side of the equation is the Chinese government’s ongoing policy of cracking down on illegal rare earth mines and smuggling.

Adapted from Investing News Network, 24 December 2013

Figure 1: Rare earth Price Index

Source: Yahoo! Finance, Bloomberg
Extract 2: China's rare earth export quota

Communities scattered across China face heavy environmental damage from rare earth mining and refining. The resulting landslides, clogged rivers and even major accidents and disasters are causing great damage to people's safety and health and the ecological environment. To tackle the problem, China had quietly imposed export quotas on its rare earth.

This resulted in the filing of WTO complaint by the US in 2012, and it was joined by several countries, including Russia, Japan and the EU, stating that rare earth export quotas have significantly distorted the trade in China's favour. What China was really doing was to benefit domestic producers who produced goods using rare earth. While environmental concerns may be a valid non-tariff barrier to trade, it is unclear whether reduced Chinese exports cut mine production domestically, as China itself also consumes rare earths.

Adapted from Forbes.com, 27 March 2014

Table 1: Hybrid car global market share by car manufacturers, 2013

<table>
<thead>
<tr>
<th>Car Manufacturer</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toyota</td>
<td>68.1%</td>
</tr>
<tr>
<td>Ford</td>
<td>15.4%</td>
</tr>
<tr>
<td>Hyundai/Kia</td>
<td>5.7%</td>
</tr>
<tr>
<td>General Motors</td>
<td>5.6%</td>
</tr>
<tr>
<td>Honda</td>
<td>3.5%</td>
</tr>
<tr>
<td>Volkswagen</td>
<td>1.3%</td>
</tr>
<tr>
<td>Others (BMW, Mercedes-Benz, Mazda and Nissan)</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

Source: hybridcars.com

Extract 3: Rare earth recycling and reuse

As investors focus their attention on new projects aimed at increasing rare earth supply, a growing number of manufacturers are choosing to channel their efforts and capital toward recycling rare earth.

Japanese car manufacturer, Honda has announced that it has established the world's first process to reuse rare earth. However, it is not the only company focused on innovation. In 2012, Toyota announced that it had developed a method to manufacture hybrid vehicles without the use of rare earth, while General Motors confirmed it was "close to a breakthrough". Also, Ford announced that it would change the type of car batteries to cut 500,000 pounds of rare earth from its manufacturing process annually.

Nevertheless, these alternative processes and solutions are still in the very early stages, and they remain a long way off being able to rely on these methods completely. For this reason, a subsidiary under the Toyota Motor Group has entered a joint venture with a Quebec company to eventually supply Toyota rare earths to produce hybrid cars.

However, while officials from Toyota believe rare earth materials are a concern, they do not consider it a major or immediate one. There is a window of approximately five years before China is expected to increase its domestic consumption of rare earth and hence reduce its supply to foreign car manufacturers. Toyota will however be less vulnerable then, given that it has been stockpiling.

Source: Rare Earth Investing News, 18 March 2013
Extract 4: Competition in the hybrid car market

Honda is aiming to price its Fit Hybrid at 1.5 million yen (US$16,570) when it debuts later in Japan this year. If the price holds true, the Honda Fit Hybrid will become the country’s cheapest hybrid available, undercutting its nearest competitor, Toyota Prius by nearly US$8,000.

Honda’s price for the Fit Hybrid is significantly lower than industry analysts had expected, and it may spark a hybrid price war. A price war could lead to low profit margins, which in turn could drive some car manufacturers out of the hybrid market. While price wars are generally beneficial to buyers, a lack of competition in the hybrid market would severely hamper dreams of a larger, greener car manufacturing market.

On the other hand, the C-Max by Ford, a car that it hopes can compete with the Toyota Prius, will debut next year. According to Automotive News, the cost of the C-Max will be 30 percent less than the previous-generation hybrid technology in the 2010. How is Ford achieving those cost reductions? Ford developed its own in-house battery system, and brought system integration and software development in-house. All the parts are made common, and software and control systems are re-used as much as possible.

Beyond costs, Ford is hoping that its new C-Max can compete in terms of celebrity appeal. The Toyota Prius has captured the hearts and wallets of the green minded and wealthy. Prius owners include some famous Hollywood celebrities. Ford is hoping that the C-Max comes to eclipse the Prius in American pop culture and woo the young.

Slowly, Toyota has been losing market share of hybrids while Ford’s share has increased. And Ford is hardly Toyota’s only competitor in the market. Every car manufacturer seems to have a hybrid that’s new to the market or will be soon. One of the most eagerly anticipated is the Volkswagen Jetta Hybrid, which stands out because, the car is said to reach 60 mph from a standstill in less than 9 seconds, which is fairly quick for a hybrid.


Questions

(a) Describe the trend of price of rare earth from Jan 2009 to Jan 2012. [2]

(b) Using a diagram, explain why price of rare earth is likely to increase from 2013 to 2014. [4]

(c) With reference to Extract 1, explain the likely value of the cross elasticity of demand between rare earth and other materials used in high-tech applications. [3]

(d) Discuss the extent to which China’s export quota on rare earths is aimed at reducing the environmental impact of rare earth mining. [8]

(e) Identify the market structure that the hybrid car industry is operating in, and explain two reasons for your choice. [3]

(f) Discuss whether the control of supply of rare earth is a key factor in increasing sales volume of car manufacturers in the hybrid car industry. [10]

[Total: 30]
Question 2

Problems faced by European economies

Extract 5: Bitter end to Eurozone and China trade talks

Trade talks between the Eurozone\(^1\) countries and China ended with Chinese firms being accused of dumping solar panels into the Eurozone. In a bid to protect their domestic solar panel industries, the Eurozone countries proposed anti-dumping tariffs of nearly 50 percent on Chinese solar panels, which they claimed to be heavily subsidised by the Chinese government.

In response, China claimed that the tariffs are unfair as China has the abundant land, labour and capital required for solar panel production. Hence, the tariffs on Chinese solar panels and the beginning of a similar tariff against Chinese exports of wireless communications gear and other products would hurt Chinese industries and workers.

Some Eurozone countries view the tariffs as a way to boost their economies that suffered as a result of the Eurozone crisis, while others may disagree as they fear retaliation by China.


Extract 6: Globalisation and the Eurozone crisis

Globalisation and China’s rise have proven to be a huge asymmetric shock to the Eurozone. It is an asymmetric shock as different countries in the Eurozone are affected differently.

The asymmetric shock can be explained by the extent to which the exports from China are in competition with the exports from the respective Eurozone countries. The textile industry, which not so long ago was an integral part of Southern European economies such as Italy and Greece, has all but been wiped out by competition from low cost Asian producers such as China. On the other hand, both Germany and China produce machine tools and cars, yet affluent Chinese are willing to purchase German machine tools and cars, which they perceive to be of higher quality than those made in China. Comparing Greece and Germany, the Greek economy today is slightly smaller in real terms than it was in 2000. In contrast, Germany has since grown 15 per cent.

This has created the second Eurozone problem – government debt, as governments increased their spending in the hope of rescuing their economies. Excessive spending in relation to lower-than-expected GDP over many years has led to budget deficits which have accumulated into unsustainable debt in countries such as Greece, Portugal and Spain. This is further exacerbated by a third problem – the collapse of European banks as a result of banks engaging in high-risk lending and borrowing practices. These two problems have scared away some international investors, who fear a total collapse of some of the most vulnerable Eurozone economies.

Yet it is also said that globalisation has rescued the Eurozone. It is estimated that not less than 40 per cent of the Chinese government’s substantial overseas assets are in the Eurozone. China’s hefty investment in European assets, even as other international investors fled, definitely contributed towards the abating of the economic decline of the Eurozone.

Some critics insist that globalisation has brought all harm but no good to the Eurozone countries. However, we have to acknowledge that one of the consequences of globalisation probably saved the Eurozone from being wrecked.

Source: City A.M, 11 February 2014

\(^1\) The Eurozone is an economic and monetary union of 18 European Union (EU) member states that have adopted the euro (€) as their common currency and sole legal tender.
Extract 7: Eurozone crisis demands sound policies

Many Eurozone countries are currently plagued by fragile banks and indebted governments. Austerity measures implemented by these countries to reduce government debt is causing tremendous short term pain to their economies as cuts to public spending and higher taxes hit economic activity more than they reduce government deficits.

Austerity measures can restore confidence in the long run if it successfully reduces government debt, but conditions have to be right during the implementation process. Austerity measures help if a country's trading partners are growing robustly, because then the squeeze on domestic demand can be offset by rising exports. Some of the Eurozone's major trading partners, such as Hong Kong, Taiwan and Singapore, are experiencing decent growth. Unfortunately, the United States, the Eurozone's largest trading partner, is facing slow growth as a result of cuts in US government spending and higher tax rates imposed on consumers in January 2013. China, the Eurozone's second largest trading partner, is also slowing down after years of breakneck speed economic growth. Instead of gaping in fascination at the Chinese economy, economists are now debating if China would have a hard or soft landing.

In addition, austerity measures are useful if the central bank can compensate by easing monetary policy. The European Central Bank cut its key interest rate to a record low of 0.50% in May 2013, and signalled it would cut further to 0.25% to prevent the Eurozone from falling even deeper into recession. However, analysts predict that impact of the rate cut would be limited. In addition, the cut would provide only limited relief for the weakest Eurozone states as it would do little to reassure banks worried about lending to small and medium-sized firms grappling with deep recessions in their home markets.

On the other hand, critics have pointed out that the Eurozone countries should also improve on their outdated infrastructure and strive for greater efficiency in production of goods and services. These have contributed to lacklustre international demand for their exports and less than satisfactory inflow of foreign direct investment.

Sources: The Guardian, 1 April 2013, CNN Money, 2 May 2013 & Market Watch, 3 May 2013
Table 2: Selected Economic Indicators for Greece, 2010 – 2012

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual rate of growth in real GDP (%)</td>
<td>-4.9</td>
<td>-7.1</td>
<td>-7.0</td>
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<tr>
<td>Inflation rate (%)</td>
<td>4.7</td>
<td>3.1</td>
<td>1.0</td>
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<tr>
<td>Unemployment Rate (%)</td>
<td>12.6</td>
<td>17.7</td>
<td>24.3</td>
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<tr>
<td>Current Account (% of GDP)</td>
<td>-10.1</td>
<td>-9.9</td>
<td>-3.1</td>
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<tr>
<td>FDI, net inflows (% of GDP)</td>
<td>0.14</td>
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<td>0.67</td>
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<tr>
<td>Final Consumption Expenditure of Households at current prices (million Euro)</td>
<td>166,895</td>
<td>160,040</td>
<td>na*</td>
</tr>
<tr>
<td>Gini coefficient</td>
<td>0.329</td>
<td>0.335</td>
<td>0.343</td>
</tr>
</tbody>
</table>

(*not available)

Sources: Eurostat and The Statistics Portal

Table 3: Selected Economic Indicators for Germany, 2010 – 2012

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual rate of growth in real GDP (%)</td>
<td>4.0</td>
<td>3.3</td>
<td>0.7</td>
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<tr>
<td>Inflation rate (%)</td>
<td>1.2</td>
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<td>2.1</td>
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<td>Unemployment Rate (%)</td>
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<td>5.5</td>
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<tr>
<td>Current Account (% of GDP)</td>
<td>6.2</td>
<td>6.2</td>
<td>7.0</td>
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<tr>
<td>FDI, net inflows (% of GDP)</td>
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<td>1.18</td>
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<td>Final Consumption Expenditure of Households at current prices (million Euro)</td>
<td>1,361,520</td>
<td>1,420,570</td>
<td>1,451,960</td>
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<tr>
<td>Gini coefficient</td>
<td>0.293</td>
<td>0.290</td>
<td>0.283</td>
</tr>
</tbody>
</table>

Sources: Eurostat and The Statistics Portal

Questions

(a) Identify and explain the relationship between the volume of world merchandise trade in Figure 2 and world GDP in Figure 3. [3]

(b) Explain whether the data provided in Extract 5 is sufficient to determine if China is guilty of dumping solar panels into the Eurozone. [3]

(c) Explain whether a ‘tariff against Chinese exports’ (Extract 5) is beneficial to the Eurozone economies. [4]

(d) Compare the change in Greece’s real GDP between 2010 and 2012 with that of Germany’s over the same period. [2]

(e) Assess whether globalisation has brought “all harm but no good” to the material standard of living in Greece and Germany. [8]

(f) Discuss whether the austerity measures proposed in Extract 7 would be the most appropriate way of responding to the Eurozone crisis. [10]

[Total: 30]