# **2016 C2 H2 Economics P-cube revision lectures**

# Schedule

Session Dates and Time	Venue	Questions
1. 17 May (Tues)	LT3	Micro
3:30pm - 5pm		- 2012 BT2 Question 1
		- 2013 BT2 Question 2
2. 24 May (Tues)	LT3	Micro
3:30pm – 5pm		- 2014 BT2 Question 1
3. 20 June (Mon)	LT3	Macro
9am – 10:45am		- 2012 BT2 Question 2
		- 2014 BT2 Question 2
4. 20 June (Mon)	LT3	Macro
11:15am – 1pm		- 2013 BT2 Question 1
		- TYS 2013 Question 2

Answers will be uploaded on Moodle for those who are unable to attend the sessions. The sessions will be recorded too.

For those who are attending, please be prepared for the sessions by completing the questions.

ECONOMICS 9732/01

PAPER 1

26 June 2012

2 hour 15 minutes

Additional Materials: Answer 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, fasten all your work securely together.

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.



## Answer all questions.

# 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 1: Year on Year Change in Retail Sales & GDP Growth in the US, 2004-2010

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

<sup>\*</sup> 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

Year	2004	2005	2006	2007	2008	2009
Gini Coefficient	0.457	0.457	0.462	0.473	NA	0.480

Adapted from Various Sources

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

The Advertising Standards Authority<sup>1</sup> (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

# **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 prestigehunting 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.

Adapted from: Accenture.com, http://knowledge.asb.unsw.edu, 2011

<sup>&</sup>lt;sup>1</sup> 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)	(1)	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)	Expl	ain how the increasing presence of retailers online has benefited consumers.		[2]
(c)	With (i)	reference to Extract 2, 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 likely to change with "rising costs".	are	[4]
(d)	Asse	ess whether government intervention in the luxury goods market is justified.		[8]
(e)	Disc	uss how firms in the luxury goods market might compete with each other.		[10]
			[Tota	al: 30]

[Turn over

# 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.

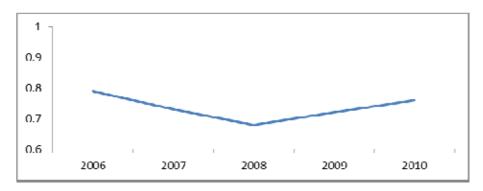


Figure 1: Value of Euro (average rate per US\$)

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 3: Selected Economic Indicators for Greece, 2006 – 2011

	2006	2007	2008	2009	2010	2011
Annual rate of growth in real GDP (%)	5.5	3	-0.2	-3.3	-3.5	-6.9
Gross Fixed Capital formation (Million EUR)	49,508	53,444	51,568	44,141	37,770	30,012
Final consumption expenditure of households (Million EUR)	145,362	155,827	169,124	168,169	167,363	162,320
Current account for Greece (Million EUR)	-23,759	-32,602	-34,798	-25,814	-22,971	-21,093
Inflation rate (%)	3.3	3	4.2	1.3	4.7	3.1
Unemployment Rate (%)	8.9	8.3	7.7	9.5	12.6	17.1
Life Expectancy	78.8	78.7	79.2	79.5	79.9	na*
Infant Mortality Rate (per 1000 birth)	3.7	3.5	2.7	3.1	3.8	na*
Inward FDI from rest of the world (% of GDP)	2	0.7	1.3	0.8	0.1	na*

\*na: not available Source: Eurostat

Table 4: Selected Economic Indicators for Germany, 2006 – 2011

	2006	2007	2008	2009	2010	2011
Annual rate of growth in real GDP (%)	3.7	3.3	1.1	- 5.1	3.7	3
Gross Fixed Capital formation (Million EUR)	417,820	447,,880	460,740	409,260	433,580	467,690
Final consumption expenditure of households (Million EUR)	1,339,540	1,356,730	1,387,700	1,387,430	1,423,020	1,474,420
Current account for Germany (Million EUR)	144,739	180,912	153,634	140,559	150,668	147,656
Inflation rate (%)	1.8	2.3	2.8	0.2	1.2	2.5
Unemployment Rate (%)	5.4	5.3	5.6	7.6	7.8	8.1
Life Expectancy	79.2	79.4	79.5	79.6	79.8	na*
Infant Mortality Rate (per 1000 birth)	3.8	3.9	3.5	3.5	3.4	na*

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<sup>2</sup>. 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<sup>th</sup> May 2010

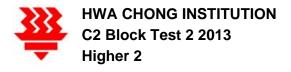
#### Questions

- (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 [3] the Euro.
- **(b) (i)** Describe the trend of Greece's inward FDI from rest of the world from 2008 to [1] 2010 in Table 3.
  - (ii) In light of the data presented, comment on the likely impact of the change in [5] the value of the Euro described in (ai) on Greece's Balance of Payments.
- (c) (i) Compare the unemployment rate for Greece and Germany over the period [2] 2006 to 2011.
  - (ii) Assess whether the data provided will lead one to conclude that the current [8] and future standard of living for Germany is higher than Greece.
- (d) Discuss how the austerity measures will help alleviate the recession in EU. [10]

[Total: 30 marks]

# **End of Paper**

<sup>2</sup>In 1992, the Treaty of Masstricht 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%.



ECONOMICS 9732/01

Paper 1

2 hour 15 minutes

2 July 2013

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 <u>fasten the answer sheets to case study</u> <u>question 1 and question 2 SEPARATELY</u> 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.



# 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** 

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

Table 2: Selected Economic Indicators: Indonesia

Indicators (%)	2008	2009	2010	2011
Real GDP growth	6.0	4.0	5.0	6.0
Inflation	10.0	3.8	5.1	5.0
Unemployment rate	8.4	7.9	7.1	6.6
Population growth	1.1	1.0	1.0	1.0
Government budget (% of GDP)	- 1.3	- 0.1	- 1.6	- 0.7
Gross fixed capital formation (% of GDP)	28.0	31.0	32.0	32.0

**Table 3: Selected Economic Indicators: Turkey** 

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

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 16<sup>th</sup> 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 & Mckinsev.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 Bosporus 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 [4] from 2008 to 2009.
- **(b) (i)** Explain the inverse economic relationship between interest rate and [2] investment.
  - (ii) With reference to Mexico and Turkey, comment on whether the above [4] relationship holds true for domestic investment and foreign direct investment.
- (c) Discuss the economic measures that the Mexican government could adopt to address the "lingering mood of frustration" in Extract 1.
- (d) Using data where appropriate, assess the extent to which economies should [10] pursue high economic growth.

[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

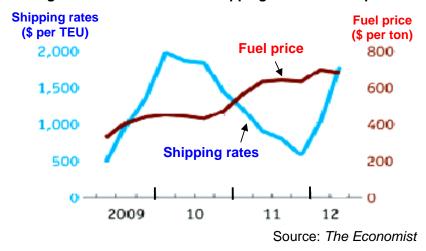


Table 4: World's leading container shipping lines

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

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.
  - (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.
- (b) (i) With reference to Table 4, describe the type of market structure operating in the [2] container shipping industry.
  - (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.
- (c) Reducing carbon emissions and limiting the market power of firms are some of the few [10] challenges facing the container shipping industry.

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]

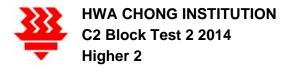
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Question 1 Extract 1: Economy Watch, 5 April 2013
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Question 1 Extract 2: The Jakarta Post, 5 June 2012
Question 1 Extract 2: Mckinsey.com, September 2012
Question 1 Extract 3: United Nations Development Programme, 15 August 2012
Question 1 Extract 3: Financial Times, 28 February 2013
Question 1 Tables 1, 2 & 3: worldbank.org
Question 2 Extract 4: The Economist, 9 June 2012
Question 2 Extract 4: Channel News Asia, 10 April 2013
Question 2 Extract 5: UNCTAD Review of Maritime Transport 2011
Question 2 Extract 6: The Edge Singapore, 20 November 2011
Question 2 Extract 6: Neptune Orient Lines, 1 December 2011
Question 2 Extract 7: International Maritime Organisation (www.imo.org), assessed 1 May 2012
Question 2 Figure 1: The Economist
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Question 2 Table 4: UNCTAD Review of Maritime Transport 2011

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ECONOMICS 9732/01

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 <u>fasten the answer sheets to case study</u> <u>question 1 and question 2 SEPARATELY</u> 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.



## Answer all questions.

#### 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

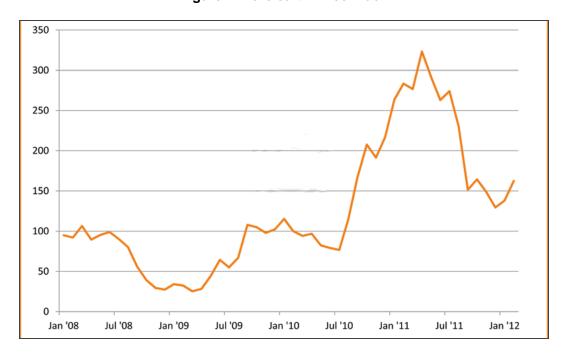


Figure 1: Rare earth Price Index

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

Toyota	68.1%
Ford	15.4%
Hyundai/Kia	5.7%
General Motors	5.6%
Honda	3.5%
Volkswagen	1.3%
Others (BMW, Mercedes-Benz, Mazda and Nissan)	0.4%

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 Volkwagen 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.

Sources: Reuters, 24 June 2010, http://green.autoblog.com, 28 June 2010, and http://autos.aol.com, June 2011

#### Questions

(a) Describe the trend of price of rare earth from Jan 2009 to Jan 2012. [2] Using a diagram, explain why price of rare earth is likely to increase from 2013 to (b) 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] Discuss whether the control of supply of rare earth is a key factor in increasing (f) 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<sup>1</sup> 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.

Source: The New York Times, 27 May 2013

#### 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

<sup>&</sup>lt;sup>1</sup> 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.

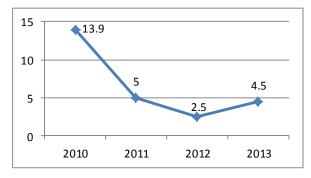
In addition, austerity measures are useful if the central bank can compensate by easing monetary policy. The European Central Bank cut its key interest rate to a record low of 0.50% in May 2013, and signalled it would cut further to 0.25% to prevent the Eurozone from falling even deeper into recession. 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

Figure 2: Growth in volume of world merchandise trade, Years 2010-2013 (in percentage)

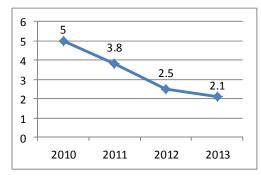
#### Percentage (%)



Source: World Trade Organization

Figure 3: Growth in world GDP, Years 2010-2013 (in percentage)

# Percentage (%)



Source: The Economist

Table 2: Selected Economic Indicators for Greece, 2010 – 2012

	2010	2011	2012
Annual rate of growth in real GDP (%)	-4.9	-7.1	-7.0
Inflation rate (%)	4.7	3.1	1.0
Unemployment Rate (%)	12.6	17.7	24.3
Current Account (% of GDP)	-10.1	-9.9	-3.1
FDI, net inflows (% of GDP)	0.14	0.38	0.67
Final Consumption Expenditure of Households at current prices (million Euro)	166,895	160,040	na*
Gini coefficient	0.329	0.335	0.343

(\*not available)

Sources: Eurostat and The Statistics Portal

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

	2010	2011	2012
Annual rate of growth in real GDP (%)	4.0	3.3	0.7
Inflation rate (%)	1.2	2.5	2.1
Unemployment Rate (%)	7.1	5.9	5.5
Current Account (% of GDP)	6.2	6.2	7.0
FDI, net inflows (% of GDP)	1.44	1.18	0.79
Final Consumption Expenditure of Households at current prices (million Euro)	1,361,520	1,420,570	1,451,960
Gini coefficient	0.293	0.290	0.283

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]

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#### Copyright acknowledgements:

Question 1 Extract 1: Investing News Network, 24 December 2013

Question 1 Figure 1: Yahoo! Finance, Bloomberg

Question 1 Extract 2: Forbes.com, 27 March 2014

Question 1 Table 1: hybridcars.com, 2013

Question 1 Extract 3: Rare Earth Investing News, 18 March 2013

Question 1 Extract 4: Sources: Reuters, 24 June 2010

Question 1 Extract 4: http://green.autoblog.com, 28 June 2010

Question 1 Extract 4: http://autos.aol.com, June 2011

Question 2 Extract 5: The New York Times, 27 May 2013

Question 2 Extract 6: City A.M, 11 February 2014 Question 2 Extract 7: The Guardian, 1 April 2013

Question 2 Extract 7: CNN Money, 2 May 2013

Question 2 Extract 7: Market Watch, 3 May 2013 Question 2 Figure 2: World Trade Organization

Question 2 Figure 2: The Economist

Question 2 Table 2: Eurostat and The Statistics Portal

Question 2 Table 3: Eurostat and The Statistics Portal

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