

RAFFLES INSTITUTION
2015 YEAR 6 PRELIMINARY EXAMINATIONS

Higher 1



ECONOMICS

8819/01

Paper 1

Sept 2015

3hr

Additional Materials: Answer Paper

READ THESE INSTRUCTIONS FIRST

DO NOT open this booklet until you are told to do so.

Write your name, index number and CT class 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 diagrams, graphs or rough working.

Do not use paper clips, highlighters, glue or correction fluid.

Start each section on a new piece of writing paper

Section A

Answer **BOTH** questions 1 & 2

Section B

Answer **EITHER** question 3 or 4

Fasten Section A together

Fasten Section B separately from Section A answers

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

This document consists of **10** printed pages



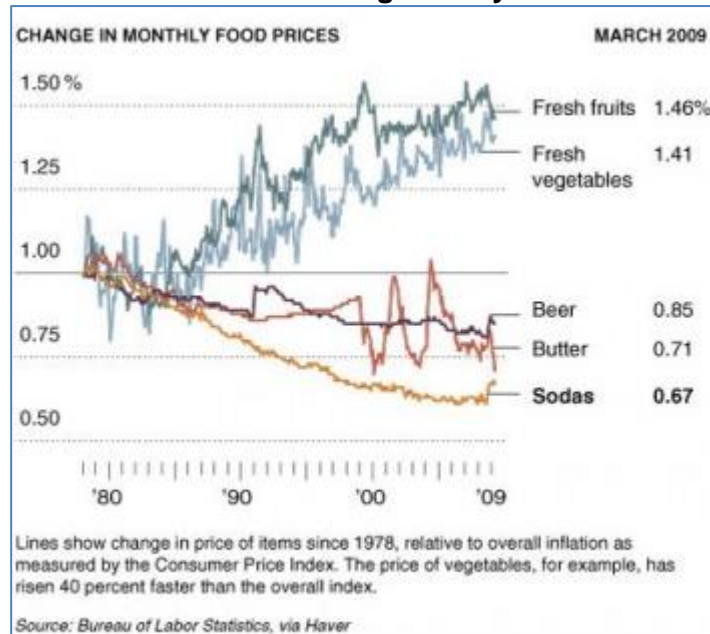
Raffles Institution

Section A

(Answer all questions in this section)

Question 1: Obesity

Table 1: The Cost of Eating Healthy



Extract 1: Cost of healthy Living

Fruit and vegetables have almost doubled in price in parts of the developing world over the past 20 years, calling into question the idea that modern farming methods lower basic food prices for the poor. Paradoxically, the cost of some processed foods has fallen by a fifth over the same time, prompting fears over increasing obesity.

Researchers with the Overseas Development Institute (ODI) looked at relative food prices in Brazil, China, South Korea and Mexico to study the effects in emerging economies. The report found that fruit and vegetables had risen in price by up to 91 per cent in real terms between 1990 and 2012, a bigger increase than for other any other food group. "In high income countries over the last 30 years it seems that the cost of healthy items in the diet has risen more than that of less healthy options, thereby encouraging diets that lead to excess weight," said Steve Wiggins, one of the authors of the report. "It seems the same may apply in emerging economies, where prices of fruit and vegetables have been rising more than most other foods, including energy-dense processed foods."

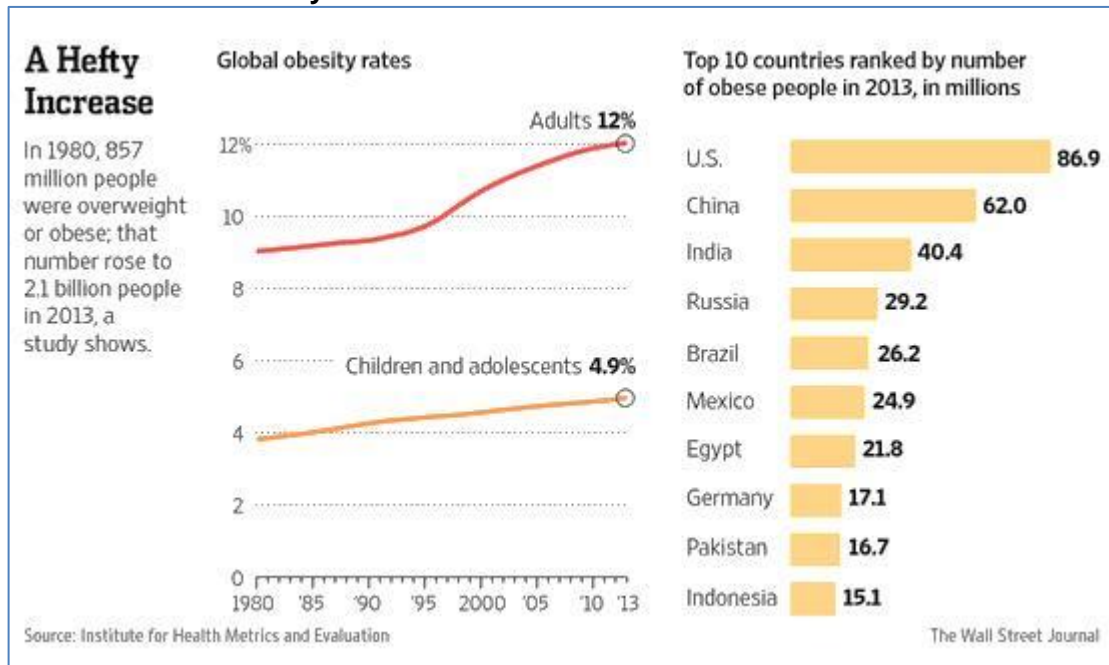
The report does not address the question of why fruit and vegetables have become more expensive, although the authors do offer possible explanations. It may be that the changes in quality explain the increased relative prices. Or, it may not be a matter of cost but of increased demand from those consumers who appreciate the health benefits of fruit and vegetables.

Meanwhile, advances in manufacturing, packaging and flavouring are reducing the prices of processed foods. One possibility is that much processed food does not rely on costly farm ingredients, but rather is manufactured from relatively cheap ingredients, the added

value being largely in factory processes of combining the ingredients and enhancing their flavour.

Source: The Telegraph March 2015

Table 2: Global Obesity Levels



Extract 2: Prevalence of Obesity

The obesity epidemic is global: 2.1 billion people, or about 29% of the world's population, were either overweight or obese in 2013, and nearly two out of three of the obese live in developing countries, according to a study released Thursday. In 1980, 857 million people were overweight or obese. Today, it said, 36.9% of the world's men and 38% of women are overweight or obese.

The study didn't examine reasons for the sharp rise, though it cited a well-known litany of possible factors such as diet and lack of physical activity.

Obesity is generally thought of as a disease of prosperity. Indeed, the US had the heftiest population in 2013, with 13% of the world's obese, according to a study. But while North America and Europe stood out as the world's heavyweights in 1980, increases in the prevalence of adult obesity there have slowed since 2006, and now "you see the share in the rest of the world going up very dramatically," Dr. Murray said.

More than 50% of the world's 671 million obese people live in 10 countries, the study said, ranking them in order: the U.S., China, India, Russia, Brazil, Mexico, Egypt, Germany, Pakistan and Indonesia.

Source: Wall Street Journal 29th May 2014

Extract 3: Spiraling Cost and Rising Waistline

The National Obesity Forum has warned that the spiraling cost of treating obesity could 'break the National Health Service (UK)'. To millions of Britons, being dangerously overweight is now simply normal. With obesity costing the UK almost £45billion a year, it has now reached a 'critical point'. The obesity problem is compounded by many people being *blind to their weight problem*. A poll found that only 6 per cent of Britons consider themselves to be obese – despite the true figure being around 25 per cent.

Source: The Daily Mail, January 2015

Extract 4: Food price and obesity

The government's intervention in the food and beverage markets could be motivated by the public health crisis of obesity combined with market failures that have contributed to the health crisis. Evidence of the extent to which food consumption is in fact price sensitive motivates the possibility for using pricing policies, since in order for the pricing policies to affect weight outcomes successfully, food consumption must respond to prices. A number of studies have provided evidence for the extent to which we can expect changes in food prices to affect food consumption or purchases.

Controlled experiments manipulating the prices of healthy, low energy–dense foods compared with unhealthy, energy-dense foods found that significantly lower prices would result in substantial increases in the consumption of healthful food. For example, a 50 percent reduction in high school cafeteria prices of fruit and salad led to a quadrupling of fruit sales and a doubling of carrot sales. A similar 50 percent price reduction in a university office building cafeteria led to a threefold increase in fruit and salad sales. In vending machines, a 50 percent reduction in low-fat snack vending prices was found to increase the sales of low-fat snacks by 127 percent. While price changes in controlled environments may produce relatively large consumption changes, their external validity is low.

Source: The Milbank Quarterly, March 2009

Extract 5: Tackle Obesity with Tax

Taxes on unhealthy foods and sugary drinks such as colas and lemonades have been introduced by a few other countries in Europe and Scandinavia, but often subtly. Mexico has confronted the food and drink industry head on, resisting tough lobbying and warnings that raising prices would do nothing to help the country's economy.

But the government has taken the long view – that the potential economic harm from reduced junk food and soft drink sales now is insignificant compared with the damage in 10 years time if obesity continues at the current rate. The healthcare burden of diabetes and heart disease in Mexico is already huge and increasing. Some 9.2% of children in Mexico now have diabetes.

The taxes will increase the price of junk foods – those high in saturated fat, sugar and salt – by 8%. It will also put one peso (about 4p) on a litre of sugary drinks such as Coca Cola, which Mexicans consume in vast quantities at a rate of 43 gallons per person per year – the highest in the world. The money raised is intended to go towards health programmes and increased access to drinking water in schools. Among other measures, the

government will introduce a nutritional stamp of approval for healthier foods on sale in supermarkets.

Most of these taxes have not been high profile, however, avoiding a fight with industry. Hungary has the most extensive anti-obesity tax, which applies to foods high in sugar, fat and salt as well as to sugary drinks, but it is at a low level and has also been politically difficult.

The food industry claims such taxes are a burden on the poor and do not work. They cite the Danish example. In 2011, the Danish government imposed a tax on all foods containing more than 2.3% saturated fat, which hit such popular staples as butter and bacon. Newspapers ran stories about Danes stockpiling and crossing the border to buy cheaper butter. Eventually the government fell, and the tax was withdrawn after six months.

Source: Guardian Nov 2013

Questions:

- a (i) Using Table 1, describe what has happened to prices of healthy food (e.g. fruits, vegetables) as compared to unhealthy food (e.g. soda, butter) from 1980 to 2009. [2]
- (ii) From the data, explain what may have caused this difference. [4]
- b With reference to the data where appropriate, to what extent is 'obesity a disease of prosperity'? [6]
- c Explain why 'people being blind to their weight problem' compounds the need for government to combat the rising tide of obesity. [6]
- d Define price elasticity of demand (PED) and explain whether the data suggest if PED of healthy food is elastic or inelastic. [4]
- e Assess if tax on unhealthy food is an effective way to tackle the rise in obesity. [8]

Total: 30 marks

Question 2:

Extract 6: Is Germany's miracle about to fade?

Germany, Europe's model austerian, is saving itself to death.

Only months ago, the German economy was widely championed for its dynamism and resilience; its industry had weathered the Eurozone crisis surprisingly well. But in October 2014 it is the pessimists who are setting the tone: the German economy is looking rusty.

Plans for the next budget see Germany taking on no new sovereign debt, an important demonstration of fiscal discipline to the rest of the Eurozone. Some say the obsession with a balanced budget is starving Germany of much-needed investment. Missed investment in infrastructure, education, research and industry might only be felt once it is too late.

Though Germany has fed its manufacturing machine with a steady supply of technicians, engineers and skilled workers through vocational training and technical apprenticeships, there are concerns that German firms are falling behind the digital curve. 'Today people across the world may be buying BMWs and Mercedes cars because of quality engineering, but tomorrow, we may be choosing one car over the other because it has superior software.' The government needs to spend more on teaching IT skills at schools and to do more to support startup companies.

Small and medium enterprises (SMEs) have long formed the backbone of the German economy. Together with industrial giants such as BMW, Siemens and Bosch, they have helped maintain her manufacturing and export prowess. Germany should continue to enjoy export-led growth, based on traditional sectors, as industrialization in emerging economies keeps up demand for machine tools and if German firms innovate fast enough to maintain their dominance in premium niche markets. Nonetheless, continually intensifying international competition will pose a major challenge to German exporters.

Source: *The Guardian*, 19 Oct 2014

Extract 7: Spain economy propped up

As Spain timidly emerges from a blistering double-dip recession that has ripped 7% out of GDP over five years, job-seekers remain desperate. Unemployment is stuck at 26%.

Projected growth of 0.7% next year falls short of the government's own estimates for job creation. And with a planned deficit of 5.8% of GDP adding to an already worrying debt pile, stimulus spending is impossible.

Civil-service pay is being frozen for a fourth year in a row and pensions will not keep up with inflation, yet the public debt will still reach almost 100% of GDP. Spanish companies and households are busy trying to pay off their own debts. After taking a €41 billion bail-out last year, Spain's banks find it safer to lend to the government than to business.

Even so, Spain's story is now one of hope. Deep in the real economy, exciting things are happening. Car plants are humming, taking work from less competitive factories in Europe. Retail sales figures have also crept up in recent months. Recession inflicted a brutal cull on businesses, but those still standing are more efficient and productive than ever. Exports, spurred by Spain's new competitiveness, should grow more than 5% both this year and next, doubling their pre-recession weight in the economy. With exports booming, the

current account has swung into surplus. Recovery in the European Union, Spain's main export market, will help further. Almost two-thirds of Spain's exports are with the euro zone. Even so, two big problems could undo this limited progress. One is the credit crunch. Bank credit for SMEs, which make up more than 99% of Spain's businesses, remains scarce as compared to that in Germany and other Northern European countries.

The second problem is reform fatigue. Spaniards have already accepted a slew of changes, including wage cuts to boost competitiveness. Labour market reforms have helped boost productivity, allowing employers and unions to opt for wage moderation rather than sackings. The government has adopted new rules to limit the power of unions to negotiate collective bargaining agreement across entire industries and also to make it cheaper for companies to dismiss workers. But more reforms are needed: Lowering or scrapping the minimum wage, reducing overly generous unemployment benefits, encouraging mini-jobs and part-time work and reducing the burden of pensions. Taxes could also be cut, but only if public spending is cut.

The OECD also urged Spain to improve vocational training and to encourage greater scale and specialization of universities and research organizations to strengthen innovation and competitiveness.

Source: *The Economist*, October 12, 2013

Extract 8: Talks on Trans-Atlantic Trade and Investment Partnership

In July 2013, the European Union and the United States started negotiations on a trans-Atlantic free trade agreement, Trans-Atlantic Trade and Investment Partnership (TTIP). The aim of the agreement is to create growth and jobs on both sides of the Atlantic.

On top of cutting tariffs, the TTIP aims to reduce or eliminate barriers based on complex regulations, which currently represent the greatest obstacle to business. Removal of bureaucratic barriers can impact small businesses more than large companies that already have the scale and resources in place to manage them. Improved market access would benefit European companies and consumers alike.

A deal is expected to have huge benefits for both the US and the EU.

Source: *www.euraactiv.com*, October 3, 2014

Table 3: GDP growth (annual, %) and Unemployment rate (%)

		2010	2011	2012	2013
Germany	GDP growth (annual)	4.1	3.6	0.4	0.1
	Unemployment Rate	7.1	5.9	5.4	5.3
Spain	GDP growth (annual)	0	-0.6	-2.1	-1.2
	Unemployment Rate	20.2	21.7	25.2	26.6

Source: The World Bank

Table 4: Expenditure of GDP (%), for Spain and Germany, 2013

	Spain	Germany
Household final consumption expenditure	58.2	55.9
Gross fixed capital formation	19	20
Government final consumption expenditure	19.5	19.3
Exports of goods and services	31.6	45.6
Imports of goods and services	28.1	39.8

Source: The World Bank

Table 5: Composition of major exports and imports between Spain and Germany, 2013

Spain's main exports to Germany	Spain's main imports from Germany
<ul style="list-style-type: none"> • Road vehicles (including cars, vehicle parts, trucks, vans) (US\$8.88b) • Fruits and vegetables (US\$2.88b) • Electrical machinery and appliances (US\$2.13b) • Pharmaceutical products (US\$1.14b) • General Industry Machinery, equipment, parts (US\$954m) • Power generating equipment (US\$839m) • Wine (US\$540m) 	<ul style="list-style-type: none"> • Road vehicles (including cars, vehicle parts, trucks, vans) (US\$8.27b) • Electrical machinery and appliances (US\$2.03b) • General Industry Machinery, equipment, parts (US\$2.21b) • Pharmaceutical products (US\$1.86b) • Power generating equipment (US\$1.52b) • Organic Chemicals (US\$1.27b) • Machinery specialized for certain industries (US\$887m)

Source: The Atlas of Economic Complexity

Table 6: Top US world exports, 2013

<ul style="list-style-type: none"> • Road vehicles (including cars, vehicle parts, trucks, vans) • Electrical machinery and appliances • General industry machinery equipment, parts • Power generating machinery • Pharmaceutical products • Machinery specialized for certain industries
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Source: The Atlas of Economic Complexity

Table 6: Relative Unit Labour costs- Overall economy, Indices (2010=100)

	2010	2011	2012	2013
Germany	100	98.6	96.6	100
Spain	100	97.6	89.7	89

Source: OECD Statistics

Questions

- (a) Describe the changes in GDP for Spain and Germany between 2010 and 2013. [2]
- (b) With reference to Table 4, define the multiplier and explain how you might expect the size of the multiplier to differ between Germany and Spain. [4]
- (c) To what extent can the theory of comparative advantage account for the composition of the main items of trade shown in Table 5. [4]
- (d) Explain why the Spanish government should be concerned about high unemployment. [4]
- (e) Discuss whether the unemployment situation in Spain is more likely to be improved by adopting supply-side or demand-side measures. [8]
- (f) Discuss the different extent to which Germany and Spain would gain from the Trans-Atlantic Trade and Investment Partnership with US? [8]

[30 Marks]

Turn Over

Section B

Answer either question 3 or 4

- 3** The government provides many economic functions that affect the way in which exchange is carried out. It decides on which goods should be taxed, which to be subsidised and which ones it should produce.
- a) Explain how the understanding of the concept of price elasticity of demand may be useful to the government when it imposes indirect taxes on different goods and services. [10]
- b) Price mechanism will allocate scarce resources in the most efficient manner for all goods and services in a market economy and there is no need for government intervention. Discuss. [15]
- 4** Singapore's inflation is to stay low for now. Consumer price index (CPI) inflation for August is expected to remain benign at 1.1% on-year.

DBS Group Research / September 23, 2014

- a) Explain the benefits of a low inflation rate in the Singapore economy. [10]
- b) Discuss whether the Singapore government currently adopts the most appropriate economic policies to maintain a low rate of inflation. [15]

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Extract 6	© The Atlantic, Business Section, 'President Obama wants America to be like Germany- what does that really mean?', written by Steven Hill, 21 February 2013
Extract 6	© The Economist, 'Germany: Dissecting the Miracle', 15 June 2013
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