Economics

Try to spend as much time on your last point as the first one as marks allocated are usually the same, writes Institute of Education Economics teacher **Ray O'Loughlin**

THE NUMBERS THAT MATTER

Topic	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002
MICRO											
Demand, Supply Equilibrium	25	75	45	30	60	75	15	75		75	
Elasticity	50		30	45	15		60		75	75	75
Markets – Perfect Competition	65		30			75					75
– Monopoly/Price Discrimination	10		45		75				75		
– Imperfect Competition				75				75			
– Oligopoly		75					75			75	
Costs of Production	75	75		75					75		75
Factors – Land/MRP								75			
– Labour	25		75	20	30	75				75	
– Capital		75					75		30		75
– Enterprise	50				45				45		
Economists			20	15		20				20	
MACRO											
National Income/Multiplier		75	75	75	75	50	75	75	75	75	
Inflation/Banking		75	30	75	75		75	75		75	75
Trade/Balance of Payments/Exchange Rates	75		75	60	75	75	75	75	75	55	75
Government – Fiscal Policy/Taxation	75		75	75	75	75	75	75			25
– Aims and conflicts	55	60	25		25	75	75	30	55		30
– Economic Performance		15	75			55			20		20
– Unemployment	20			55							75
Growth, Dev, Population, Migration	75	75			50	25		45	75	75	

■ **Frequency of questions.**

THE PAPER

400 marks – 2 hours 30 minutes

SECTION A – 100 MARKS

■Students must answer six out of nine short questions, although all nine questions should be attempted with your best six taken. Questions 1 to 5 carry 16 marks. The last four questions carry 17 marks.

■Section A questions are varied with very little pattern other than there is usually a question on market structures, another on one of the laws. The final question on a topical issue such as water charges, the bank bailout or the imminent collapse of the euro. They do however tend to repeat themselves over the years so practice on past papers is essential.

■ Text book definitions are expected so be very accurate when asked to "define".

■ An example should also be given with the definition even if not asked .

■ 25 to 30 minutes should be allocated for Section A.

SECTION B – 300 MARKS

■In this section students must answer four questions out of eight with all questions carrying 75 marks each.

■Traditionally there have been three to four micro questions and four to five macro questions but in recent times there has been a combination of micro and macro questions included together so students should be prepared for such eventualities.

There are eight main examination question areas :

1. **Demand, Supply, Equilibrium and Utility**
2. **Costs and Market Structures**
3. **Factors of Production**
4. **National Income and the Multiplier**
5. **Inflation Money, Banking and Monetary Policy**
6. **International Trade, Balance of Payments and the euro**
7. **Fiscal Policy and Taxation**
8. **The Government in the Economy (incl Economic Development and Growth, Population, Emigration)**

ECONOMICS 2013

■Allocate 25 to 30 minutes for each Section B question which should allow sufficient time for reading over the paper at the beginning of the exam and re-reading your answers at the end. Remember to record your examination number on Section A as well as your answer book.

■Marks allocated for each part which should give you an indication of the number of points required:

15 marks – two/three points,
20 marks – four points,
25 marks – five points.

Each point generally earns two marks for identification of that point with extra three marks for development/explanation of the point which has to include some new information and/or detail.

■Generally three sentences per point:

– Two marks for identification,
– Two marks for explanation,
– One mark for extra information such as a figure or an example.

WORD REQUIREMENT FOR EACH QUESTION

Define Show text precise meaning.
Outline Describe the key points, no explanation needed.
Explain Give detail, show in a clear manner.
Discuss Examine in detail showing arguments for and against.
Derive Work out from basic principles.
Calculate Find out using formula and numerical data.
Show Use diagram or example to assist answer.

Identify the key outcome verb for each question and part question, eg state and explain.

DIAGRAMS

Always use relevant diagrams to assist explanations in micro taking care that all elements of diagram must be clear, large, labelled with diagram properly titled, eg price (P), quantity (Q), MC, MR, equilibrium etc.

Diagrams need to be accompanied with a written explanation.

CURRENT FACTS, FIGURES AND RELEVANT EXAMPLES

These should be supplied even if not required as it will strengthen your answer and enable you to earn higher marks. Also try and link the subject content as far as possible with:

(i) Its application in everyday life.
Example – "Three for the price of two" shows the practical existence of the law of diminishing marginal utility.
(ii) The economist to whom the topic is attributed.
Example – Expansionary fiscal policy as advocated by JM Keynes.
(ii) Using a current example to explain a given concept.
Example – Golf clubs to you and I are a consumer good but to Rory McIlroy they are a capital good as they create income for Rory.

BULLET POINT ANSWERS

■Generally Section B answers should be in point form, noting number of points required depending on marks allocated.

■Bullet point answers are preferred to essay-style answers. This allows your explanation to be focused on one concept and prevents duplication. Try to spend as much time on your last point as the first one as marks allocated are usually the same. Give as much detail as possible especially with macro questions, embellishing your answers with detail on inflation, growth, employment government finances etc.

■Always stick to the question asked and avoid writing irrelevant information which may be correct but not applicable to that question . Also include figures and examples if available. Avoid elaboration on one/two points to the exclusion of others as again the fifth point usually earns the same number of marks as the first.

LINKS

■If figures are given in a question then you are required to use them to explain your answer.
Example – If I spend 60 per cent of my income on product A and only 40 per cent on A when my income is doubled, is A a normal, inferior or Giffen good?

Product A is normal as demand for A increases as my income increases:
60% of 100 (assume income of 100) = 60
40% of 200 (income doubled) = 80

■If you are asked to show the effects on the economy of the possible introduction of a tax on text messages then you are to focus on Ireland and its citizens. Always relate answers to what you are being asked.

■ A commuter sits inside a bus during a 24-hour metro, tram and urban railway transport strike in Athens, September, 2011. PHOTOGRAPH: REUTERS/JOHN KOLESIDIS

BOX CLEVER

■ Statistics show that students may find it harder to accumulate marks in macro questions so be conscious of this in question selection. Micro questions however require precise definitions, understanding and detail and can be harder to answer unless you know the concept or principle well.

■ You will most likely be asked to show the effects on the economy of (the following standard areas are generally the required ones you should use):

1. Growth and the standard of living
2. Employment
3. Prices – inflate or deflate the economy
4. Wages and industrial relations
5. Demand and consumption
6. Credit, saving and investment
7. Government revenue, taxation and the national debt
8. Balance of payments, imports and exports
9. The euro and interest rates

YOUR TARGET MARKS

Section A	75	85	95	100
Question 1	50	60	75	75
Question 2	45	50	65	70
Question 3	40	45	55	60
Question 4	30	40	50	55
	60%	70%	85%	90%
	C2	B3	A2	A1

DETAIL

■ One word answers even phrases without development are not sufficient. Generally the more you write of relevant information the greater the chance of accumulating marks.

■ Consistency is key to getting a good grade in economics. Try not to spend too much time on your first question and end up writing very little on your fourth. Remember they all carry the same marks, ie 75, so allocate 25 to 30 minutes for each.

AND FINALLY . . .

It is very important to note that many of the figures used in this article (taken from government sources) may be out of date by the time you sit your exam in June due to the incredibly volatile nature of the economy at the moment. It is recommended that you update yourself with the most current figures available prior to the exam.

IRELAND'S ECONOMIC CRISIS

IMF BAILOUT

■ The European Union approved an €85 billion rescue package for Ireland by member states of the European Union through the European Financial Stability Fund along with bilateral loans from the UK, Sweden, Denmark and the IMF at an interest rate of 5.83 per cent.

■ A total of €10 billion of this was used immediately to recapitalise the banks, with another €25 billion set aside for a contingency fund if losses spiral even further out of control. Another €50 billion was set aside to meet the budgetary requirements of the State.

■ All this has been based on a guarantee that Ireland will meet its **budgetary deficit target of three per cent of GDP** by the year 2015.

If Ireland is unable to repay the loan plus interest ie, default, this will directly put pressure on the interest rates and also it will run the risk of being unable to borrow in the future, even on the bond markets.

■ Ireland's contribution to this €85 billion package is €17.5 billion which comes from the National Pension Reserve Fund.

■ The Programme for Support has been agreed with the **Troika**, which comprises the EU Commission, the International Monetary Fund and the European Central Bank. This Programme has two parts:
1. Bank restructuring
2. Fiscal and structural reform, commonly referred to as **"austerity measures"**

THE IRISH BANKING CRISIS

■ In September 2008 the Deposit Guarantee Scheme was introduced to prevent a run on the banks during the height of the financial crisis.

■ Individually this means that deposits of less than €100,000 in an Irish bank is guaranteed by the Government. If the bank fails you will still receive your money.

■ The scheme applies to current and deposit accounts in the associated commercial banks together with share and deposit accounts in building societies and credit unions.

■ The banking landscape in Ireland has changed dramatically in the last four years. AIB is government-owned as is Anglo Irish Bank, which now trades as IBRC. The Irish Nationwide Bank has had all its operations transferred to IBRC too. The programme for the recovery of the banking system provides for a fundamental downsizing and reorganisation of the banking sector so it is in proportion to the size of the economy.

It is going back to where they were in the 1960s, focused almost exclusively on the home market and a return to normal market sources of funding.

■ The spiralling cost of Anglo Irish Bank was the biggest shock to the whole banking system, amounting to a mind-boggling 21 per cent of GDP. The Government felt it had to stand by Anglo as the bank's failure could collapse not only the whole banking system but the State itself.

■ In 2010 the Irish government gave a loan of €31 billion to Anglo Irish and Irish Nationwide in the form of a promissory note over a 20-year period. The accumulated interest on this amounts to a further €17 billion.

It also gave €1.1 billion to AIB to top up pension funds. This year €5 billion has to be repaid from this debt, effectively on behalf of two "casinos both under investigation".

NAMA

■ The National Asset Management Agency is the government's solution to the banking crisis, aimed at cleaning up the banking system by taking toxic property loans off its balance sheets.

■ The asset management company has bought more than €80 billion of loans from five banks in a bid to manage the bad debts of Irish banks.

■ Nama paid about €54 billion for the loans using Government bonds. The banks then take these bonds and place them with the European Central Bank which will in turn give them cash. This cash will then be used to recapitalise the banks so that they can start lending to business and consumers again.

■ Nama will be able to hold these assets over long periods, trying to realise their investment when the market improves and property markets recover. It is taking ownership of thousands of loans secured on property in Ireland, the UK, other parts of Europe and the US.

To date Nama has sold 25 per cent of its assets with only another 20 per cent classed as performing.

■ The IBRC (formerly Anglo Irish Bank) and Nama share common objectives in that both have an overlapping objective of working out the development and investment loans extended during the boom. Nama-held assets include only loans in excess of €20 million while IBRC assets cover loans of less than €20 million. Anglo Irish Bank and Irish Nationwide Building Society have sold their larger loans to Nama

Advantages to the economy

1. Increase credit into the Irish economy which will create a healthier loan book for the banks.
2. Prevent total nationalisation of the banks which would be even costlier to the Irish taxpayer.
3. The establishment of Nama has enhanced Ireland's reputation internationally by taking decisive correctional action which should increase the flow of foreign capital back into the State.
4. Future profits should be earned as loans of €80 billion have been bought at a discounted cost of €54 billion.
5. Jobs in the financial services industry are guaranteed into the future.

Disadvantages to the economy

1. Nama is a long-term solution as it may take up to 15 years before the financial turmoil is solved.
2. The size of the national debt has increased dramatically as has the interest that has to be paid each year.
3. Nama will become the biggest property owner in the State which is not in the best interests of the public as wealth will be transferred from the general population to wealthy property owners.

NATIONALISATION OF BANKS

Nationalisation means the process of taking an industry or, in this case, a bank into public ownership of a national government or state as Ireland has done with Anglo Irish Bank, AIB and Irish Nationwide.

Advantages

1. Rationalisation of the banking system which will lead to a streamlining of banking services and practices and help eliminate wasteful and expensive practices.
2. Survival of existing banks. The financial system will be kept afloat and credit will continue to flow .
3. Employment which may have been threatened will now be protected under State ownership.
4. Quality and ethics – and customer care with the provision of better services – will replace greed and profits.

Disadvantages

1. Crowding the market will occur as there is only a certain amount of business out there.
2. Nationalisation removes competition which may lead to inefficiencies resulting from monopolies.
3. Reduction of foreign investment as international lenders dislike growing State involvement in banks.
4. The cost of State money involved which could have been used in education, health and so on.
5. Increased national debt as cash paid to buy these banks needed to be borrowed.

■ **Brendan McDonagh, left, CEO of Nama and Frank Daly, chairman.** PHOTOGRAPH: BRENDA FITZSIMONS

BONDS

Bonds are IOUs that banks, large businesses and governments use to raise money.

An investment company pays an amount of money and is guaranteed to be repaid, together with interest in full, at a certain date.

A bond is like a loan and must be repaid at regular intervals and is part of the "debt" of a company in that the bondholders are creditors. They are given precedence over shareholders in the case of liquidation.

Debt equity swap

This is where the bank changes the bonds into ordinary shares giving the bondholders ownership of the bank but also exposing them to losses which do not have to be paid back.

Senior bonds

These are safe bonds which carry a lower rate of interest as a trade off for this safety feature.

Subordinated bonds

These are riskier bonds that will be repaid last in the event of a bank collapse. They carry a higher rate of interest in exchange for this risk.

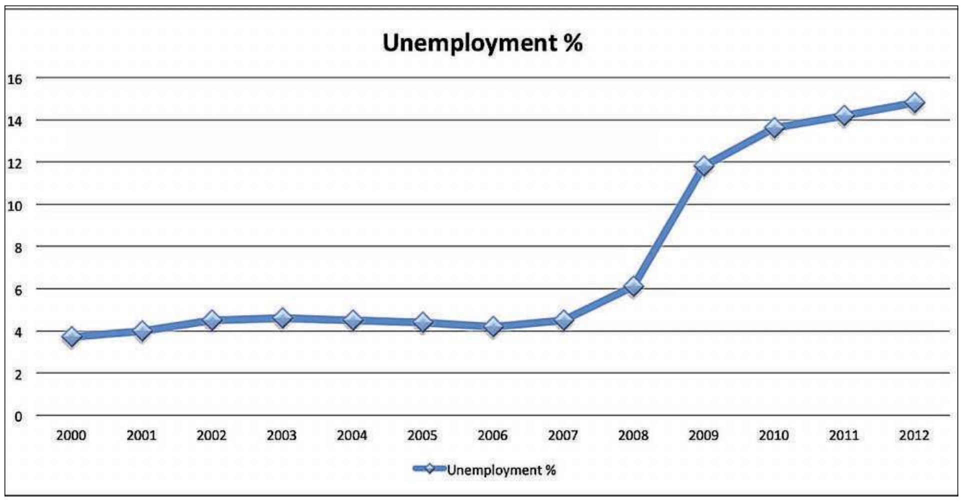
Burning the bondholders

■ If we burn the bondholders ie, fail to honour the debt, economists warn that we won't be able to borrow more money if the government forces pain on those who own senior debt in the former Anglo Irish Bank.

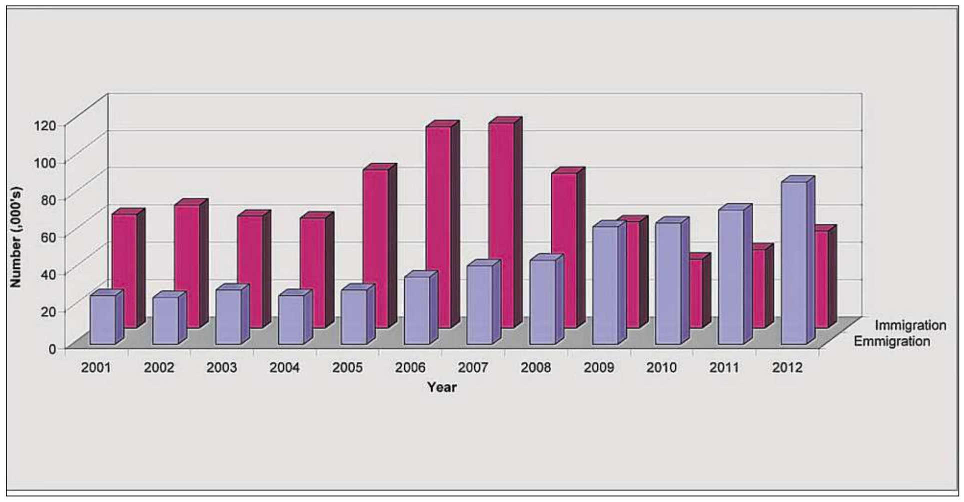
This would trigger a fall in all of the Irish bank bonds since those who owned the bonds could no longer be guaranteed payment.

■ Alternatively these forced losses would protect the State and many believe that bondholders are speculators who trade on the risk of not getting paid anyway. The ECB are saying that under no circumstances can senior bondholders not be repaid in full because they are worried about the impact on banks in Europe.

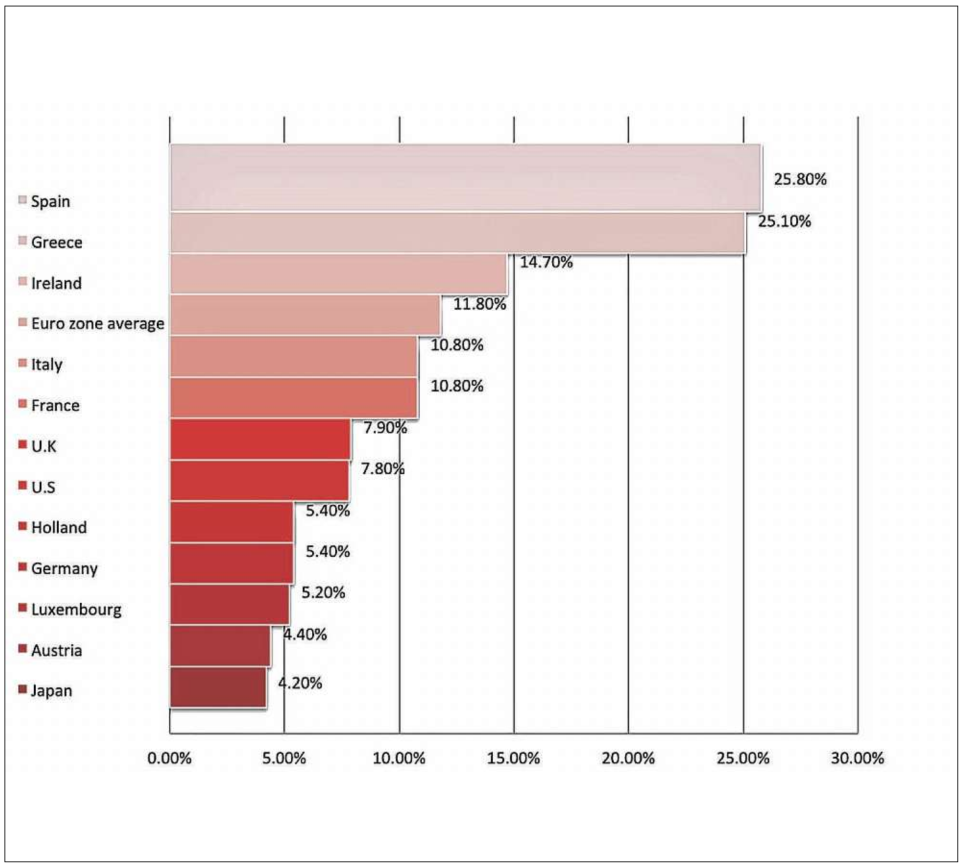
■ Bank debt should be separated from sovereign debt as it has occurred as a result of ill-advised banking practices. Bondholders have invested in banks that are now insolvent and as



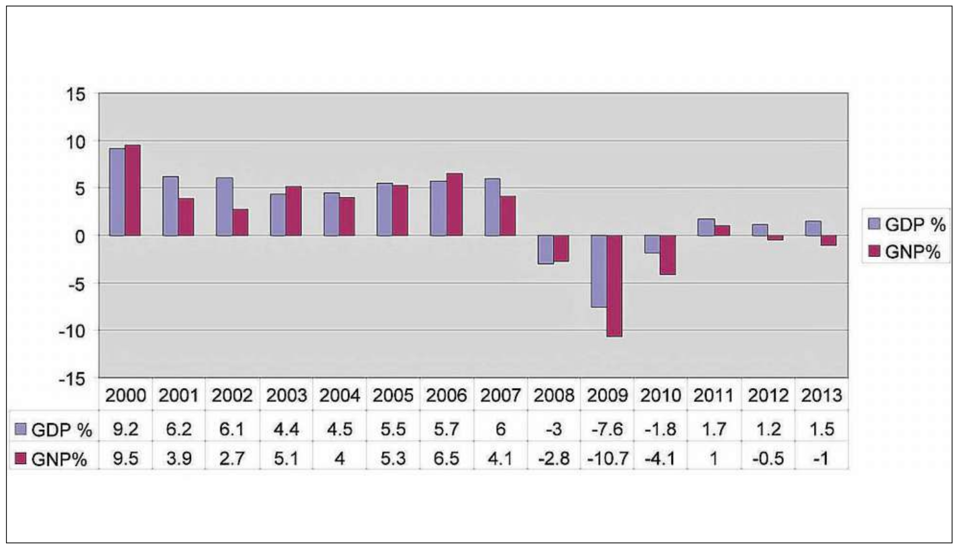
■ Irelands's unemployment rate.



■ Emmigration and immagration figures.



■ Current unemployment rates.



■ GDP/GNP.

our ability to pay our sovereign debt is eroded do we default on it to pay for the "gambling debts" of those who speculated on the word of Anglo Irish Bank?

AUSTERITY MEASURES

Austerity is the policy of deficit cutting via reduction in benefits and public services. It is often coupled with increased taxation to demonstrate fiscal solvency to our creditors who are, in this case, the Troika.

Initially when the bailout was agreed, Ireland prepared the National Recovery Plan which included an adjustment of €10 billion in expenditure savings and an extra €5 billion in taxes.

Specific measures in this programme include

1. Reduction in public service numbers.
2. Reduction of existing public service pensions.
3. Fiscal measures such as:

– Increase in carbon tax.
– Reduction of pension tax relief, and health expense relief.
– Introductionof property tax and household charge.
– Universal social charge of 7 per cent introduced and personal credits were cut.
– Capital gains tax increased to new rate of 30 per cent.

Many are paying 30 per cent more tax now with middle and lower income groups being the worst affected. A damning statistic on austerity is the fact that income tax currently accounts for €15.3 billion whereas it was only €13.5 billion three years ago when 300,000 more people were working.

Ireland has conformed very well to these measures so far and has been identified by creditor countries as a shining example of how to suffer austerity.

Other bailout recipients such as Greece, Portugal, Spain and Cyprus are nowhere near as advanced as Ireland in relation to emerging from the crisis. We have made an appearance back in the bond markets, despite being in a bailout programme. Investors also seem relatively confident that Ireland will not default as exhibited by lower long-term Irish bond yields than other bailout countries.

EMIGRATION

Emigration in the last 12 months was 87,100 (immigration was 52,700).

■ Almost 1,700 people emigrate each week: 56 per cent of them are Irish. This is the highest level since the famine.

■ During the boom there was net immigration of over 50,000 a year. This has now gone into reverse with net emigration figure of 34,400.

■ Traditionally emigration was caused by "pull" factors such as better pay and conditions abroad, and perhaps a desire to see the world, allied to the fact that many friends and family already there make it easier to settle when abroad.

■ It is noteworthy that during the boom years, when Ireland had full employment, not many chose to emigrate. This suggests that rather than "pull" factors being responsible for our current emigration it is "push" factors such as inadequate provision of jobs at home and the increased taxation burden placed on income earners at home. There is little doubt that emigration is caused by deficient demand and flat consumer spending and is cyclical in nature.

Year	Emigration	Immigration
2001	26,000	61,000
2002	25,000	66,000
2003	29,000	60,000
2004	26,000	59,000
2005	29,000	85,000
2006	36,000	108,000
2007	42,000	110,000
2008	45,000	83,000
2009	63,000	57,000
2010	65,000	37,000
2011	72,000	42,000
2012	87,000	52,600

UNEMPLOYMENT

■ Unemployment rose by 605,500 from 1987 to 2001, an increase of over 54 per cent.

■ Multinationals accounted for just 10 per cent of employment in 2000.

■ Unemployment hit an all-time low of 4.2 per cent (full employment) in 2006.

■ The unemployment rate is currently 14.7 per cent. There are 440,000 signing on the live register.

■ The live register is not designed to measure unemployment as it includes part-time workers, seasonal and casual workers and those wishing to claim benefits in order to support their income and or be eligible for public service housing, FAS courses and Jobseekers' benefit.

Ireland's unemployment

Year	per cent
2000	3.7%
2001	4%
2002	4.5%
2003	4.6%
2004	4.5%
2005	4.4%
2006	4.2%
2007	4.5%
2008	6.1%
2009	11.8%
2010	13.6%
2011	14.2%
2012	14.7%

Unemployment elsewhere

Japan	4.20%
Austria	4.40%
Luxembourg	5.20%
Germany	5.40%
Holland	5.40%
US	7.80%
UK	7.90%
France	10.80%
Italy	10.80%
Ireland	14.70%
Greece	25.10%
Spain	25.80%
Eurozone average	11.80%

■ Unemployment is measured by the Quarterly National Household Survey which is seasonally adjusted. It shows 304,000 people unemployed.

■ The labour force in Ireland is the total number of the population of working age available for work: 2.1 million.

■ The "workforce" is the total amount at work ie, labour force less unemployed: 1.8 million.

GDP/GNP

■ GDP is the total market value of goods and services produced by workers and capital within Ireland's borders.

■ GNP is the total value of all goods and services produced in an economy which accrues to the permanent residents of a country.

■ The difference is made up of Net Factor Income which includes repatriation of multinational profits and interest on the foreign component of national debt.

In Ireland's case GDP is considerably greater than GNP because of the large US foreign direct investment (FDI) here.

■ "Economic growth" and "standard of living" are terms used to assess the performance of the economy.

These are measured through comparisons of GNP and GDP over the years.

Year	GDP	GNP
2000	9.2%	9.5%
2001	6.2%	3.9%
2002	6.1%	2.7%
2003	4.4%	5.1%
2004	4.5%	4.0%
2005	5.5%	5.3%
2006	5.7%	6.5%
2007	6.0%	4.1%
2008	-3.0%	-2.8%
2009	-7.6%	-10.7%
2010	-1.8%	-4.1%
2011	1.7%	1.0%
2012	1.2%	-0.5%
2013	1.5%	-1.0%

EXPORTS AND IMPORTS

■ Exports are the only jewel in the economic crown, growing at 7 per cent, reaching €161 billion last year for all goods and services with a projected figure of €172 billion for 2013.

■ The pharmaceutical and chemical sectors now account for half of all the Irish goods (merchandise trade) exported.

■ Food exports have recovered to reach their highest level since the financial crisis began.

■ The machinery and transport goods industry unfortunately exports only about 25 per cent of what it did a decade ago. Much of this is computer manufacturing that has moved production to other economies with lower wages.

■ Imports are on the rise but at a slower rate. Much of the increase is as a result of raw materials, with consumer goods and capital imports contributing little to the overall increase.

■ The Irish economy is a small and very open economy. The value of internationally-traded goods and services last year was €159 billion.

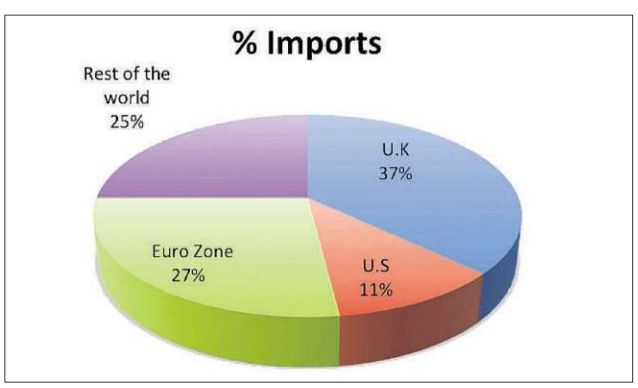
■ Exporters are doing well but over 85 per cent of Ireland's manufactured exports and 94 per cent of international service exports are from branch plants of multinationals operating in the State. Export-led growth does not always convert into jobs as our SMEs and indigenous industries are still struggling to survive. We are in danger of becoming a "twin-track" economy with the FDIs (Foreign Direct Investment) being the main beneficiaries.

Main trading partners

	Exports	Imports
UK	16%	37%
US	24%	11%
Euro zone	43%	27%
Rest of world	17%	25%

Breakdown of exports

Pharmaceutical goods	54%
Manufactured goods	32%
Food and Drink	10%
Others	4%



■ Terms of trade
1990 = 100
2012=79
This shows that the value/price of exports in terms of imports has decreased considerably over the last 20-plus years. Our exports earn less or we can buy less imports for the same quantity of exports. This is primarily due to the increased price of oil.

■ Balance of merchandise trade (visible exports €85 billion and visible imports €49 billion) = €36 billion

Balance of invisible trade (services) = €35.8 billion

Balance on current account = €0.127 billion

GOVERNMENT FINANCES

BUDGET	2013	2012
	€ bn	€ bn
Current budget	2013	2012
Tax revenue	37.9	36.2
Non-tax revenue	2.4	2.7
Total receipts	40.3	38.9
CURRENT EXPENDITURE		
Supply services	40.2	41.6
Central fund charges	9.7	8.1
Total expenditure	49.9	49.8
CURRENT BUDGET DEFICIT		
	-9.6	-10.9
CAPITAL BUDGET		
Capital receipts	2.0	2.0
Capital expenditure	7.8	6.7
Capital deficit	-5.8	-4.7
Exchequer balance	-15.4	
General govt balance	-12.6	

GGB as % of GDP	118% of GDP
GDP	€162 bn

National debt: This is money borrowed by the government, ie, sovereign debt is currently €138 billion.

Interest on the national debt in 2007 was €1.6 billion and constituted 3.4 per cent of all taxation collected.

This figure for 2013 is expected to rise to €8.1 billion which is a staggering 21 per cent of all tax collected for the year

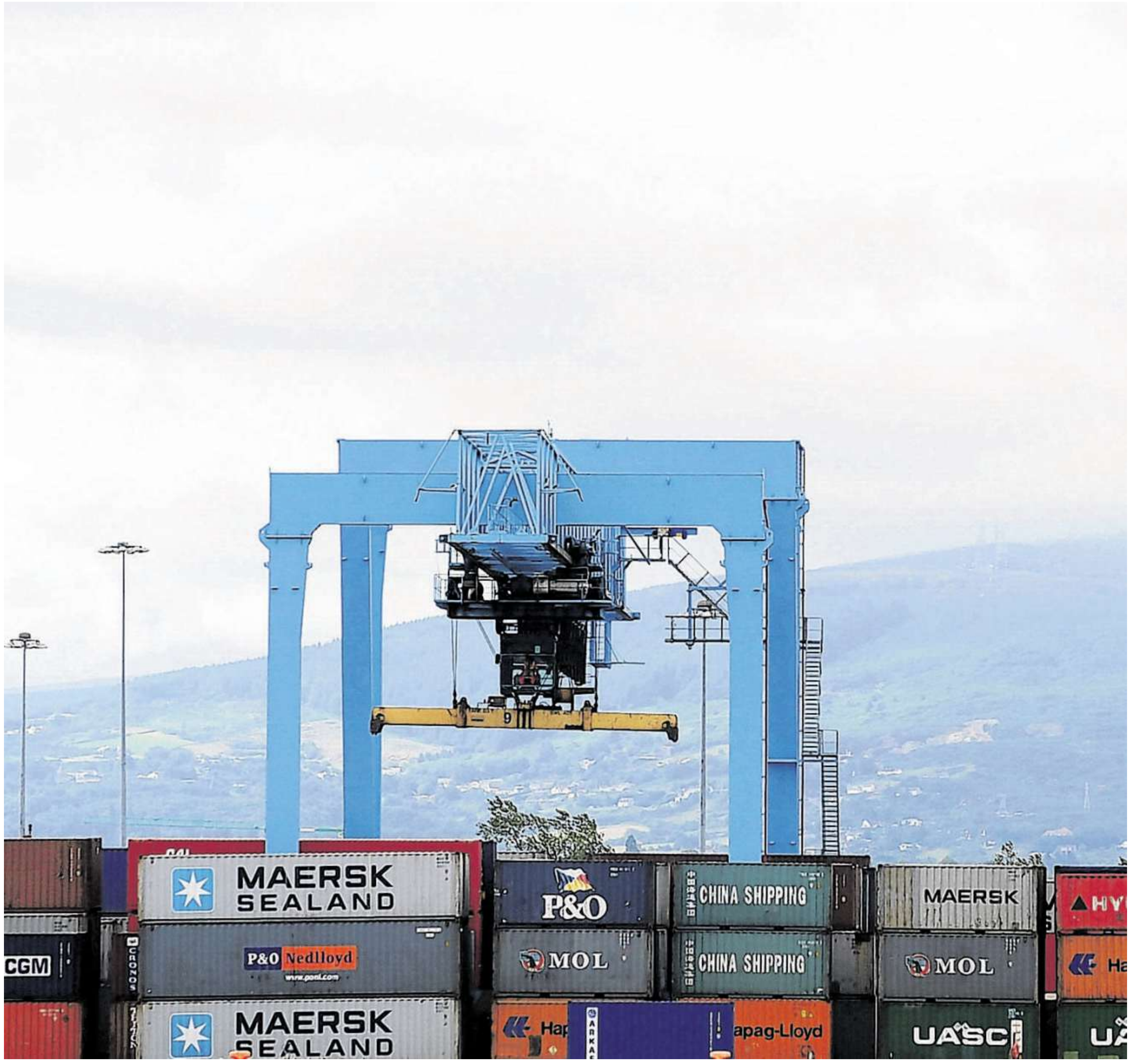
Bank debt: This is the final cost of rescuing Anglo and Irish Nationwide and is another €51 billion. The very recent promissory note deal between the Irish Central Bank and bond holders will significantly reduce this €3.1bn annual payback to less than €1.6bn per annum as the payback period has been extended and the interest rate lowered. This however, has necessitated turning this bank debt into Sovereign Debt.

General government debt: This is €192 billion, which is 118 per cent of GDP.

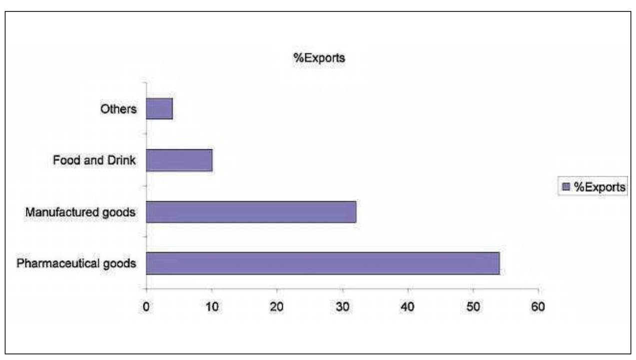
General government debt consists of the national debt as well as promissory notes and includes local authorities, non-commercial State-sponsored bodies, the National Pensions Reserve Fund and the Social Insurance Fund

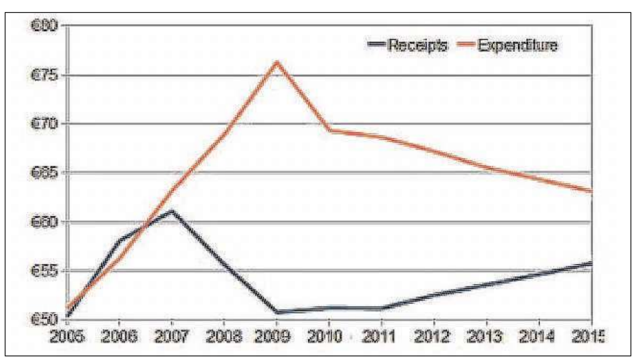
Exchequer surplus/deficit figures

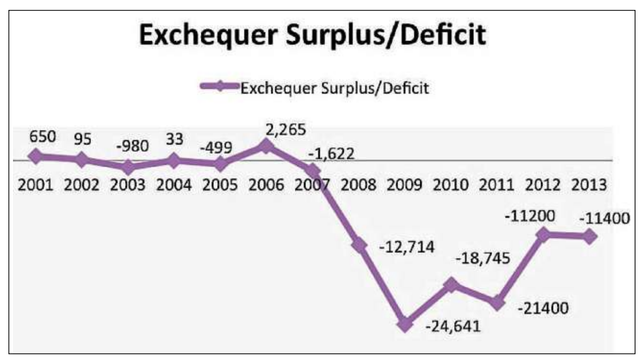
2001	650
2002	95
2003	-980
2004	33
2005	-499
2006	2,265
2007	-1,622
2008	-12,714
2009	-24,641
2010	-18,745
2011	-21,400
2012	-11,200
2013	-11,400

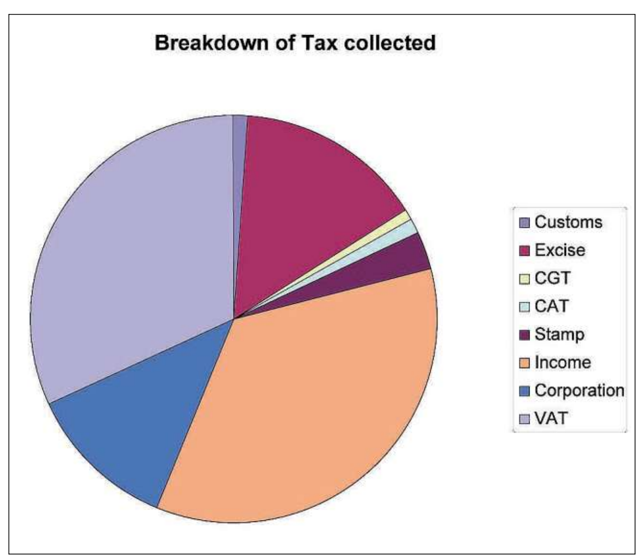


■ Above: shipping containers are stacked at Dublin port. PHOTOGRAPH: AIDAN CRAWLEY/ BLOOMBERG VIA GETTY IMAGES









CRITICAL FACTORS

THE IMPORTANCE OF THE US TO IRELAND

■ In 2011 American FDI in Ireland hit an all-time high of almost €150 billion which is 54 per cent of our total exports and one third of our GDP.

■ This is €30 billion more than the previous year and is equivalent to a full year's GDP, ie the value of everything produced in the economy annually.
Ireland is the premier location worldwide for US investment in the IT sector and fourth worldwide for chemicals.

■ Of the planet's seven billion inhabitants only one in 1,600 live in Ireland yet five per cent of US investment worldwide is channelled into the Irish economy.

■ The stock of US FDI here in Ireland is a multiples times that of all the Mediterranean countries combined including Spain and Italy, much larger economies.

■ Even though Ireland became the second eurozone country to be bailed out in 2010, corporate America still continues to have confidence in the Irish economy. This is recently evidenced through a €1 billion American consortium investment in Bank of Ireland last summer. This is surely a huge leap of faith as Bank of Ireland would not be seen as a very viable investment opportunity in light of the recent banking troubles.

■ Not alone do these FDIs employ over 100,000 Irish workers directly but they contribute billions in corporations tax and employers PRSI. A further €15 billion is spent on payroll, goods and services used and employed in Ireland.

■ Much of the US investment is attracted through the fact that we are the only English speaking member of the eurozone. We also have a low corporation tax rate and our geographic location is a perfect fit for a link between the US and the EU.

THE PHARMACEUTICAL INDUSTRY IN IRELAND

■ Ireland is one of the leading locations for the pharmaceutical industry in Europe and punches far above its weight in relation to the fact that we have only a population of 4.5 million.

■ There are approximately 120 overseas companies with plants here including nine of the top 10 in the world and 15 of the top 25 medical technology companies.

■ The main ones in Ireland include Pfizer, Johnson & Johnson, Novartis and Genzyme, with Cork being acknowledged as the "pharma" capital of Ireland.

■ This industry has had a presence here since the 1960s producing active ingredients for export. Subsequently, plants were set up to produce finished product and more recently research centres have become involved with Irish universities.

■ The pharmaceutical industry currently employs over 24,000 people directly with an equivalent number providing services to it. It pays tax to the Irish government of over €3 billion per annum.

■ Ireland is now the largest net exporter of pharmaceuticals in the world. Exports were €55 billion in 2011 accounting for 54 per cent of all exports from the country.

■ The total investment by the sector in the economy exceeds €40 billion of which €7 billion has been invested in the last 10 years.

■ Compliance to standards is a major problem for this industry as up to 1,000 proposed products may be researched to secure one for distribution. Recently Elan/Biogen have spent approx €1billion on an Alzheimer's disease drug for it to fail at the penultimate test in clinical trials.

■ With many of the products coming out of patent protection, the pharmaceutical industry in Ireland may face more difficult times ahead. Companies can face possible losses of 90 per cent of sales once a patented drug goes head to head with a generic version as consumers switch to the cheaper alternative.

IRELAND'S DEBT PROBLEM

■ **Ireland gross debt is €192 billion** and it is expected to rise to €200 billion in 3 years.

■ **This represents 118 per cent of GDP** and only four years ago it was 44 per cent (Greece is heading towards 200 per cent). It is generally accepted that a debt to GDP of greater than 90 per cent pulls down the prospect of growth. This debt problem is not helped by the fact that growth both here and in the eurozone as a whole is essentially zero.

■ It costs €6.8 billion per annum to service our national debt.

■ The excessive bank rescue costs account for 30 per cent of this debt and excluding this support, the ratio would indeed be the be 90 per cent limit viewed as the cut-off point for economic growth.

■ Ireland's budget deficit which adds to our national debt annually peaked at 13.5 per cent of GDP in 2009. It is now 8.5 per cent which seems a small reduction for the enormous fiscal effort of recent years. It was heading for 20 per cent of GDP however if no action had been taken.

ARE THERE ANY CHINKS OF ECONOMIC LIGHT FOR 2013?

The following may represent some of the most optimistic ones:

1. Exports are rising as a result of deflation at home, a weaker euro and increased demand globally. The proverbial jewel in the crown.

2. Rise in FDI (foreign direct investment) in 2012 mainly in the pharmaceutical, chemical and computer industries. Ireland is still ranked in the top three in the world in attracting FDIs.

3. Bond markets. Ireland has begun to re-enter the bond market as the rate for 10 year bonds has fallen from 7.5 per cent earlier this year to an affordable 4.7 per cent.
Examples include; Franklin Templeton, the US investment giant is buying up Irish debt and currently holds 10 per cent of all Irish debt. Bank of Ireland, Bord Gáis, ESB and NAMA have all borrowed showing confidence in Ireland Inc.

4. Industrial output is growing faster in Ireland than other European countries. Growth in Europe is predicted to be zero next year which shows our positive GDP predicted growth in a better light.

5. The weak euro makes Irish products cheaper in Britain and the US. These are particularly important markets for Irish goods and services with tourists being attracted back once more.

6. Economic stability is being restored with unemployment figures stabilizing and tax returns showing a positive turnaround. Our budgetary deficit should come in at 8.5 per cent down from over 13 per cent four years ago and hopefully will reach our target of three per cent by 2015.

7. Reduced production costs are helping to bridge our gap in competiveness as Ireland has fallen from being one of the most expensive locations for rental property, reduced labour costs, electricity and other utility costs also being reduced.

8. International reputation: the word from investors is "if its Irish, buy it" as even though demand is on the floor and our economy is still depressed, overseas investors see a higher return from Ireland than the pittance to be earned in core markets. There is a significant shift in perception of this country internationally certainly helped by our willingness to accept austerity packages imposed on us . There are many at home who however think that "stimulus rather than austerity" not only works better but is certainly easier to take,

QUESTION ON SUPPLY AND DEMAND IS A GIFFEN

SECTION B

Sample Questions and Solutions

QUESTION 1. DEMAND AND ELASTICITY

(A)

(i) Distinguish between normal, Giffen and inferior goods.
(ii) Explain with a separate diagram in each case the effects of: – Successful advertising campaign.
– Increase in the cost of production on market equilibrium.

SOLUTION

(i)

Normal Goods

– Obey the law of demand in that as price rises demand falls, demand rises when price falls.
– Normal goods have a positive substitution and income effect.
– Examples include books, holidays.

Giffen Goods

– Do not obey the law of demand and are abnormal in their response to price changes.
– A large percentage of the income of low income families is spent on Giffen goods.
– They are generally goods of low quality such as rice or bread that as their price rises families are forced to buy more of as they cannot afford other goods as their real income is less.

Inferior Goods

– Are abnormal in their response to income changes, ie people buy less of these as they have more income such as blank CDs.
– A small percentage of income is spent on inferior goods.
– They obey the law of demand.

(ii)

Successful Advertising

– See diagram 1.
– Increase the demand curve as consumers buy more due to knowledge and being informed.
– Equilibrium changes as both Price and Quantity rise to P1 and Q2.

Increased Cost of Production

– See diagram 2.
– Supply will shift to left (decrease) as less will be supplied at different prices, alternatively a number of suppliers will choose to leave the industry.
– Equilibrium changes as price rises to P2 and quantity falls to Q2.

(B) DEFINE:

(i) Price elasticity of demand.
(ii) Cross elasticity of demand.
(iii) Identify three factors that determine price elasticity of supply.
(iv) Assume income elasticity of demand for good A is + 2.5 and total sales in 2012 were 5,600 units. Calculate the expected total sales for the year if consumers incomes are expected to fall by five per cent in 2013.

(i) Price Elasticity of Demand

– Measures the responsiveness of a change in demand to a change in price.
– It tells you how big or small the change in quantity demanded will be in advance of any proposed change in price.
– $\%\triangle Qx / \%\triangle Px$

(ii) Cross Elasticity of Demand

– Measures the percentage change in quantity demanded of one product as a result of a percentage change in the price of another good.
– Substitute goods will have a positive value answer while complementary goods will have a negative answer.

(iii) Factors that affect PES

1. Is the firms capacity level reached or can more be produced?
2. Is the nature of the product suitable for an increase in production?
3. How mobile are the factors of production if supply is to be increased?
4. Can production costs be reduced or at least be kept at the same per unit value if production is to be increased?

(iv)

$$\begin{aligned} \%\triangle Q &= \%\triangle Y \times YED \\ &= -5\% \times 2.5 \\ &= -12.5\% \\ &= -700 \\ Q.2 &= 4{,}900 \end{aligned}$$

(C)

Explain how a knowledge of PED is vital for the government before it decides the type of product upon which a tax is going to be levied.

The Government and Elasticity:
PED Less Than One /Inelastic.

– The government can increase indirect taxation on these type of products as any increase in price is not reflected by a corresponding increase in quantity demanded.
$\%\triangle Q$ less than $\%\triangle P$
– Very few non-essential products fall into this category and such is the reason than products such as cigarettes, cars and petrol are so heavily taxed.
– See diagram 3.

PED Greater Than One/Elastic

– The government will only place a tax on these products in order to reduce their consumption as any price increase will lead to an even greater quantity decrease.
$\%\triangle Q$ greater than $\%\triangle P$
– Recent stealth taxes applied such as plastic bag tax increased to 22 cent, bin collection charges, etc are introduced to discourage consumption.
– See diagram 4.

QUESTION 2. MARKET STRUCTURES

(A)

(i) State and explain the assumptions of imperfect competition.
(ii) Why is imperfect competition considered to be wasteful.

SOLUTION

(i)

1. There are many buyers and sellers in the industry.
– An individual seller can influence the quantity sold by the price it charges for the goods.
– This is why the demand curve is elastic and downward sloping.
2. Product differentiation exists.
– Goods are not homogeneous but are close substitutes.
– Firms use branding to distinguish their products from one another.
3. There is reasonable knowledge of profits made by all firms in the industry.
– As profits are known firms may be attracted into the industry as no barriers exist within the industry.
4. Firms are in equilibrium making maximum profits.
– They produce where MC = MR, M,C cuts MR from below and is rising.

(ii) Imperfect Competition is Wasteful

1. Production is not where AC is minimum therefore excess capacity exists and resources are considered to be wasteful. Economies of scale are not being fully utilised.
2. Competitive advertising is a very large part of imperfect competition and this leads to higher prices because of higher costs passed on to the consumer.

(B)

Show with the aid of suitable diagrams:
(i) The short run equilibrium position of a firm in imperfect competition.
(ii) Explain the long run equilibrium position of this firm.

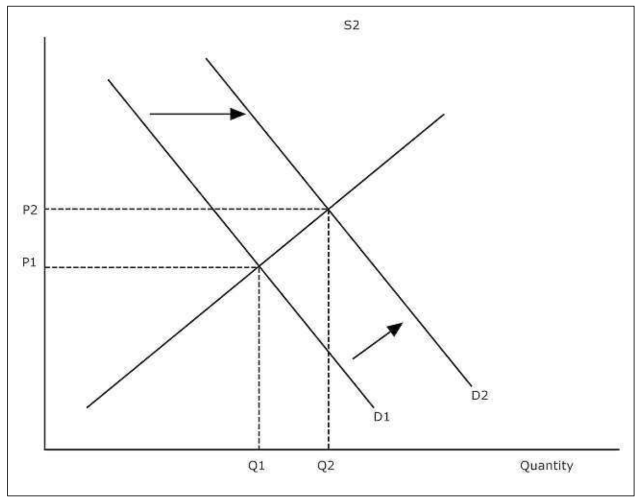
SOLUTION

Short Run Equilibrium

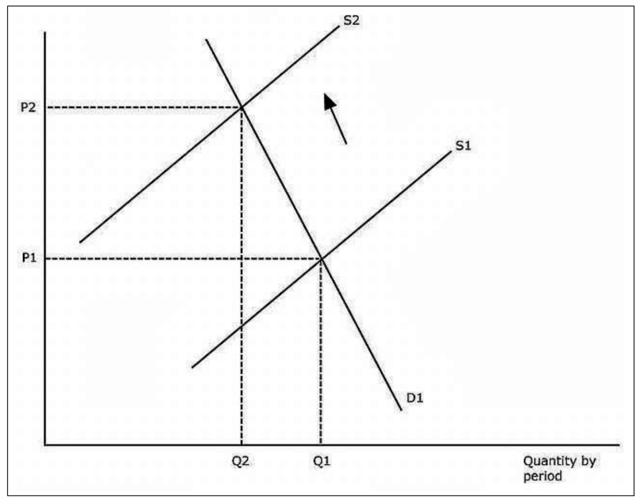
– See diagram 5.
– The firm faces a downward sloping elastic demand curve. More can be sold as price is reduced.
– Equilibrium/profit maximisation occurs at X where MC = MR, cuts from below and is rising. Output at this point is Q1 selling at P1.
– Super normal profits exist at this point as AR is greater than AC.
– Firm is not producing at minimum point on the AC curve so it is not efficient.

Long Run Equilibrium

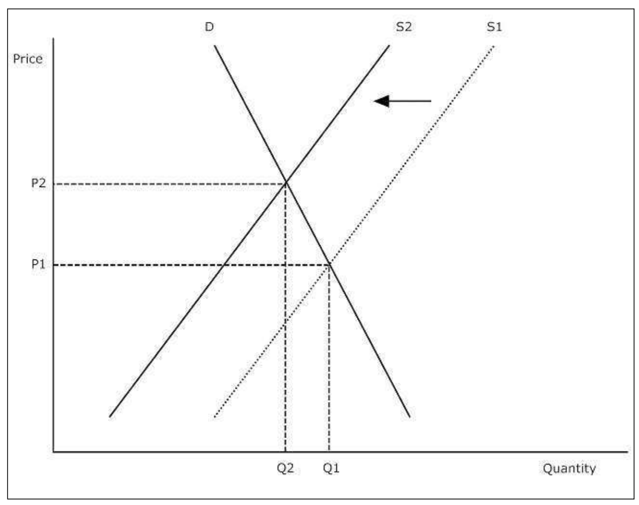
– See diagram 6.



■ **Increased Cost of Production.**



■ **Equilibrium changes as Price rises to P2 and Quantity falls to Q2.**



■ **PED less than 1 / Inelastic.**

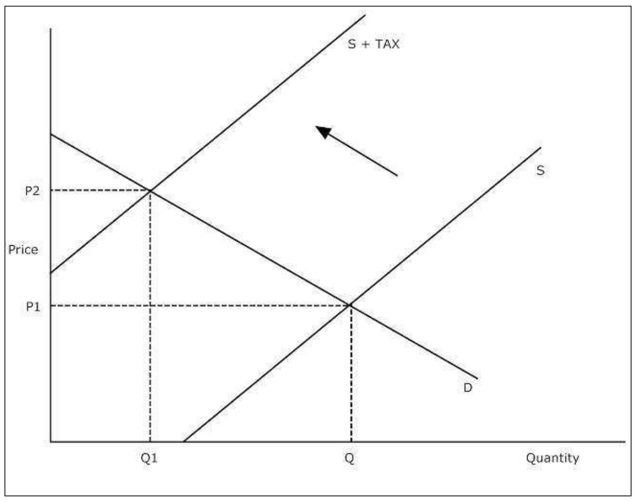
– Equilibrium/profit maximisation occurs at point X where MC = MR, cuts from below and is rising. Output at this point is Q2 selling at P2.
– The firm is earning normal profits as AR = AC (no barriers exist).
– The firm is not producing at the lowest point on the AC curve. This indicates that it is wasting resources.

(C)

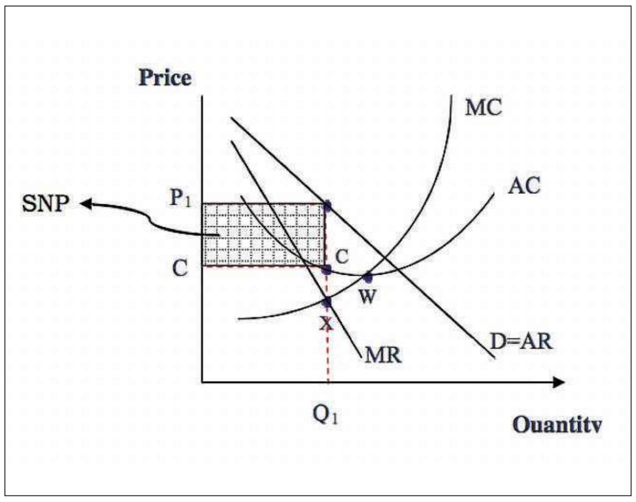
(i) Consider the retail market for bottled water. Do you think that this market operates under conditions of imperfect competition?
(ii) Identify two features of a firm in imperfect competition which would be different to that of a firm in perfect competition.

SOLUTION

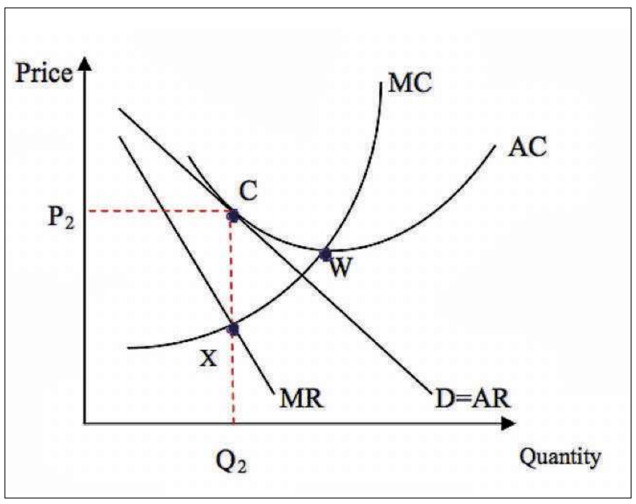
(i) Is bottled water industry a firm in imperfect competition? Yes because:
1. There are many sellers of bottled water in the industry such as Ballygowan, River Rock.



■ PED greater than 1 / Elastic.



■ Short Run Equilibrium.



■ Long Run Equilibrium.

2. The products they produce are very close substitutes, mainly homogeneous but packaged and promoted to look different from each other through brand names and competitive advertising.
3. Each seller can influence the demand for their product by altering their price. They all face an elastic downward sloping demand curve.

(ii) Different features to perfect competition.
1. They produce where MC = MR and AC = AR but at different points.
2. The firm is not efficient as they do not produce where AC is at its lowest point.
3. Firms engage in intense competitive advertising .

QUESTION 3. NATIONAL INCOME

(A)
(i) Explain what is meant by national income.
(ii) GDP is declining at a slower rate than GNP in Ireland at the moment, but which is a better indicator of the standard of living and why.

SOLUTION
(i) National Income
– This is the total income accruing to the permanent residents of a country as a result of engaging in economic activity.
– It is the total amount of money in circulation in a country at any one time.
– It is often referred to as gross national product.
– National income is the total wealth gained as a result of supplying the factors of production.

(ii)
GNP is less than GDP at the moment, because net factor income from the rest of the world is negative.
This is due to:
– The repatriation of profits by companies resident in Ireland such as American multinationals.
– The repayments on the foreign element of our national debt. Interest on the national debt.
– The remittances of immigrants in Ireland sent abroad.

(B)
Explain the difference between following terms:
(i) Benefit-in-kind and transfer payments.
(ii) GDP at factor cost and GNP at market prices.
(iii) Inflationary and deflationary gap.

SOLUTION
(i) Benefit-in-Kind/Incomes-in-Kind:
– Income received in a non-monetary form.
– Payment made in the form of goods or services, eg company car, expense account, free pension etc.

Transfer Payments:
– Payments received for which no factor of production has been supplied.
– Income which people receive for which they did not supply goods/services, eg welfare payments which are given as a result of personal circumstances and not as payments for factors supplied.

(ii) Gross Domestic Product at Factor Cost:
This is the total value of input/expenditure within the country as a result of engaging in current economic activity in one year, valued at payments to factors of production.

Gross National Product at Market Prices:
This is the value of total output/expenditure valued at today's market prices, produced by Irish-owned factors of production, before any adjustments are made for taxation, subsidies or depreciation

(iii) Inflationary Gap:
This occurs where equilibrium national income is a level higher than is necessary to pull all the economy's resources to work, ie to bring about full employment as happened during the boom years of the Celtic Tiger.
Deflationary Gap:
This is occurring at the moment during the downturn in the economy. National income is less than what is necessary to bring about full employment hence we have had deflation in the economy.

(C)
GNP in Ireland for 2013 is expect to fall by less than one per cent. Discuss the effects of this decrease in national income on the economy.

SOLUTION
Reduced employment in the State.
– A fall in GNP will lead to reduced demand for goods and services which will mean less labour being demanded for the production of these goods and services.
– This will add to the 14 .7 per cent of workforce currently unemployed.
Decreased government finances.
– As spending decreases so does indirect taxes such as VAT, fewer people are at work and are paying less income tax, less property being bought therefore decreased stamp duty collected.
– The government is not only collecting less taxation revenue but now also has to pay out more in welfare to sustain the growing unemployed.
Fall in standard of living.
– Lower GNP will result in reduced wealth in the economy allowing fewer consumers to buy goods and services.
– Reduced demand in the economy follows which will have an adverse effect on consumers standard of living.
Foreign direct investment may suffer.
– As Ireland struggles to come to terms with debt repayments existing FDI s may be tempted to relocate elsewhere .
– It will become very difficult to attract new investment also as investors if they not see a return to growth immediately.
Reduced inflation in the economy.
– As this is an advantage with prices increasing at a lower rate or in some circumstances such as food and housing decreasing in price.
– This deflationary effect can have a positive effect on the economy as it increases consumers real income and reduce the price of exports.

QUESTION 4. FISCAL POLICY

(A)
(i) One of Ireland's main aims is to control our massive national debt. Discuss four other economic aims of the government and use relevant information to justify your choice.
(ii) Outline two economic measures the Irish government could take to discourage this activity.

SOLUTION
(i)
1. Achieve economic growth.
– Growth rates/standard of living are at a low 0.5 per cent for last year with a similar figure predicted for 2013.
– The government's job is to seek to improve economic growth so that jobs are created investment takes place and the states financial position improves.
2. Reduce unemployment.
– Pursue policies which will improve our competitiveness, boost exports and create jobs.
– Unemployment currently stands at 14.7 per cent with a further 1,700 emigrating every week.
3. Improve infrastructure.
– By investing in school buildings, hospitals, public transport etc, the Government hopes it will not only create jobs but encourage long term investment and improve the economy.
4. Broaden the tax base.
– The Government has introduced the household charge, septic tank inspection charge and is planning to introduce a water metering tax. This will provide stability and increase certainty for government revenue.

(B)
(i) Explain using examples the difference between direct and indirect taxation.
(ii) Discuss the advantages and disadvantages for the government of increasing VAT rates instead of income tax rates in order to earn extra revenue.
(iii) Outline how imposing a tax on "fatty foods" could benefit the economy.

SOLUTION
(i)
Direct Tax is a tax on income, wealth and profits. Examples include PAYE, DIRT, CPT.
Indirect tax is a tax on goods and services, ie spending. Examples include VAT, excise, carbon.

(ii) Advantages of indirect instead of direct taxation:
1. Impossible to evade indirect taxation as the tax is built into the selling price.
2. Convenient to collect as they are collected when the product is sold.
3. The cost of collection is borne by the retailers. Very economical for the government.

Disadvantages:
1. They are inflationary as they increase the price of the product.
2. They are regressive. They do not take into account the ability of the person to pay so the burden falls more heavily on lower income groups.
3. They act as a disincentive to spend and drive consumers into the black economy products with a consequent loss of revenue for the government.

(iii) Benefits of tax on fatty foods.
1. Much needed revenue for the government.
2. Reduce consumption of these foods as the price is now higher.
3. Obesity, heart problems can be tackled with increased revenue generated to help fund these health initiatives. Reduced illnesses in the future will help to reduce current health costs.

(C)
Ireland's black economy activity results in losses of over €8 billion to the exchequer annually.
(i) State and explain three economic effects of this activity.
(ii) Outline two economic measures the Irish government could take to discourage this activity.

(i)
1. Loss of tax revenue for the government.
– Tax revenue is essential for the provision of State services and capital investment in the future. This will suffer as revenue collected declines.
2. Pressure on existing finances and services.
– With the loss of revenue the government may have to cut spending, find additional tax revenue or borrow to finance the deficit which will be very difficult in light of current fiscal pressures.
3. Decline in legitimate business activity.
– Jobs will be lost as these businesses suffer a decline in sales and economic activity as consumers choose the cheaper option which is may be unsafe because of lack of regulation.

(ii)
1. Reduce direct taxation.
– Irish citizens may be more inclined to be more tax compliant as their real income is higher. Reduce indirect tax will mean prices will fall so black market products may not be as attractive.
2. Better enforcement by Revenue.
More deterrents such as heavier fines and longer court sentences may deter black-market activities coupled with a more comprehensive tax system which makes evasion more difficult.

INFORMATION INFLATION

ORDINARY LEVEL

The structure layout and timing of the Ordinary Level economics paper is the same as the Higher Level paper: two hours and 30 minutes for an exam with two sections.

Section	Contents	Marks	Times
A	Nine short questions Attempt six	25% of paper	35 minutes
B	Eight long questions Attempt four	75% of paper 75 marks each	25 minutes per question

SECTION A

– Attempt the short questions first in the exam as they tend to be the best answered part of the whole exam.
– Also do the whole nine questions if you know the answers as your best six will be taken for marks.
– Try to give as much information on each that you can fit in the space allocated including an example if appropriate.

Examples:

1. Define economics.
Economics is a social science which studies how scarce resources are best distributed to satisfy wants and needs.

2. State three economic problems which less-developed economies are experiencing.
– Rapid population growth.
– Famine.
– Uneven distribution of wealth.

3. Define the term marginal propensity to save.
The fraction/proportion/percentage of extra income that is spent on savings.

4. Adam Smith developed four canons of taxation. Equity was one of these. Explain Equity and state two others.
Equity describes the ability of each person to pay tax must be taken into account.

Other canons: economy, certainty, convenience.

5. An economic good is described as being transferable. Explain.State two examples of goods that are non-transferable.
It must be possible to pass the good from one person to another.

Examples of non-transferable goods: beauty, intelligence.

6. What is meant by the long run in economics?
A period of time during which all factors of production can change.

SECTION B

1. State the four factors of production.
Land , labour, capital and enterprise.

2. In each of the following, state which factor of production it represents.

Factory buildings –	Capital
Rivers –	Land
Carpenters –	Labour
Shareholders –	Enterprise
Transport vans –	Capital

3. State and explain two reasons why entrepreneurs are important for the Irish economy.
They organise production – they are managers who borrow the capital, hire the staff, purchase the raw materials and generally make sure the finished good is manufactured and sold to market.

They provide employment – as a result of entrepreneurs jobs are created to manufacture product for the market.

4. Suggest two ways in which the Irish Government could encourage more individuals to become entrepreneurs.
More generous taxation incentives – encourage risk-taking by tempting prospective business people with tax breaks grants and subsidies.

The existence of a sound economy – if investors know that the government is controlling inflation, wages and there is economic growth in the country.

5. Explain what is meant by the term "price inflation" and name the main index used to measure inflation in Ireland.
A sustained increase in the general level of prices.
Consumer price index.

6. Outline four consequences of a fall in the rate of inflation.
– Higher standard of living: because of the lower cost of living there is increased purchasing power which will result in increased standard of living.
– Increased competitiveness: as inflation is lower in Ireland than our trading partners our competitiveness will increase increasing exports.
– Increase in unemployment: as prices lower firms may be forced to reduce their labour force to keep costs low.
– Tax revenues decrease: with lower prices the government will collect less tax revenue on VAT plus less will be collected in corporations tax due to falling profits.

7. Explain the following terms which are commonly used in estimating national income:
– Net factor income,
– Transfer payments,
– Incomes in kind.

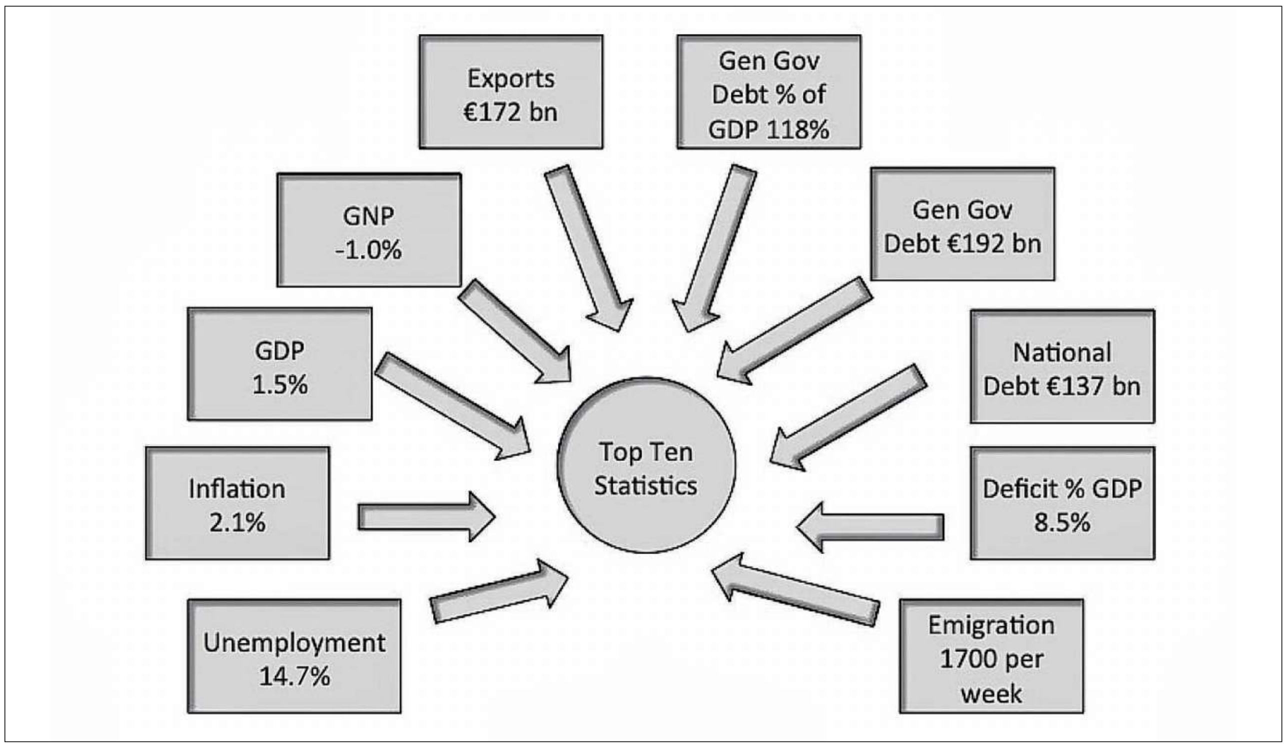
– Net factor income is the difference between incomes earned by foreign factors of production in Ireland and sent abroad and income earned by Irish factors of production abroad and returned to Ireland.
– Transfer payments are payments received for which no factor of production has been supplied.
– Income in kind is any payment received in non-monetary form.

8. Explain the term "the multiplier" and explain the variable elements in the formula.
The multiplier shows the precise relationship between an initial injection into the circular flow of income and the eventual increase in national income from that injection.

MPC/Marginal Propensity to Consume
– The proportion of extra income that is spent.

MPI/Marginal Propensity to Import
– The proportion of extra income that is spent on imports.

MPT/Marginal Propensity to Tax
– The proportion of additional income that is subject to tax.



Top ten statistics.

IT'S THE TERMINOLOGY, STUPID

CURRENT ECONOMIC TERMS

Austerity Measures
Policy of cutting government spending and increasing taxation in an effort to reduce the size of the budget deficit.

Black Economy
Unregistered economic activity, earnings made upon which tax is not paid and not included in national income figures.

Bondholders
Institutions who have loaned out money to banks and the Irish Government. Burning the bondholders really means not honouring the repayment schedule.

Consumer Sentiment
A table/ index that shows the level of demand in the economy.

Debt Equity Swaps
Converting loans into share ownership shareholding in a business.

Debt to GDP
The national debt expressed as a percentage of the total value of production in Ireland for the year.

Debt Relief
The re-negotiation of the terms of our loan agreement such as lower interest rate.

FDI
Foreign direct investment, ie multinational businesses that have set up in Ireland such as Google and Dell.

GDP
Gross domestic product which is the total output produced/income earned by all factors of production in the Irish economy foreign or domestic.

GNP
Gross national product which is the final income earned by Irish factors of production only.

General Government Balance
The net borrowing of the government, ie national debt plus promissory notes including local government borrowing.

Growth Rate
The percentage increase in the value of GNP from one year to another. It illustrates changes in the average standard of living.

Live Register
This shows a monthly account of all persons under 65 years of age who are claiming Jobseekers' benefit or allowance. It also includes people who sign on for supplementary benefits.

National Debt
The total accumulated borrowing of the government over the years, also called sovereign debt as it was negotiated by the State.

Promissory Notes
These are IOUs the Irish government has agreed to pay annually as the cost of interest on bank borrowings from the bondholders. €3.1 billion per annum.

Quantitative Easing
The term associated with the increased issue of currency.

Quango
A quasi non-governmental organisation financed by government yet acts independantly.

Troika
The IMF, European Central Bank and the European Commission from whom we have received out bailout package.

How to get your A1 Economics

Name: Jonathan Frazer
From: Kingscourt, Co. Cavan
Schools: The Institute of Education and The King's Hospital
Course & College: Mathematics & Economics, Trinity College Dublin

Economic Pressure

Economics is one of the most student-friendly papers on the Leaving Cert. The exam at two and a half hours is one of the shortest you will sit in June; however this doesn't mean you will be under pressure for time. The paper also offers lots of choice in both Section A and Section B.

Short Questions

In Section A you must answer six out of nine short questions. I advise you to answer all nine, particularly the last four as they each carry an extra mark. This section shouldn't take longer than 25 minutes. If you want to achieve a high grade in economics you must get as close to full marks in the short questions as possible. In order to do this I advise you to do all the short questions in the past papers. You should look at the marking schemes to see exactly what information is necessary to gain marks and then expand on it. As you do the short questions you will begin to see what comes up frequently – some of these frequent questions are: the law of equimarginal principle; elasticity calculations; questions on the black economy; and the multiplier. My teacher gave us a short questions test at the end of every week on what we had covered that week. This was very helpful for both technique and pinpointing exactly what information is required.

Practice Under Exam Conditions

In Section B you must answer four out of eight long questions. I advise you to spend about 27 minutes on each of the four questions you choose, this gives you time to look over your paper at the end and allow some leeway in case you do go over time on one. Before choosing a long question make sure you can answer all parts. There is no point picking a question because you like the Part A and B if there is a 30 mark Part C that you can't answer. Practising the long questions under exam conditions and getting your teacher to grade them is the best way to study. After your teacher has corrected them, ask where you have gone wrong and how to pick up extra marks. From my experience the best way to answer these questions is in bullet point form. This makes it easy for the examiner to see your points and stops you waffling. In the macro questions you should give facts and figures with most of your answers. For the micro questions you should be able to draw a graph to help explain most of your answers.

Don't Stress

The economics syllabus is one of the shortest in the Leaving Cert and because of this I advise you to cover it in its entirety. The major topics should be covered in great detail. These are: demand, supply and elasticity; factors of production; market structures; international trade; and national income. You should never leave the exam early as you either haven't put enough information down or haven't looked back over your work and tried to improve it. My final piece of advice is to relax and not get stressed. If you don't understand something take a break and come back to it or ask your teacher to explain it again the next day.