



GCE A LEVEL

A520U20-1



S19-A520U20-1



ECONOMICS – A level component 2 Exploring Economic Behaviour

THURSDAY, 23 MAY 2019 – MORNING

2 hours 30 minutes

A520U20-1
01

ADDITIONAL MATERIALS

A calculator.
A WJEC pink 16-page answer booklet.

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen.
Answer **all** questions.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets at the end of each question or part-question.
You are reminded of the necessity for good English and orderly presentation in your answers.

Answer all the questions.

1. Water Gets Competitive

The restructuring of the government-owned water industry in England and Wales in preparation for its privatisation in 1989 was unique. It took the form of the establishment of ten large, vertically-integrated regional companies each with monopoly power in the supply and treatment of fresh and waste water in geographical regions based on water catchment areas. These ten companies operated alongside several, smaller pre-existing water suppliers. Companies such as Thames Water, United Utilities and Welsh Water collect water, process it and then pipe it to homes and businesses. Water privatisation was controversial among certain members of the public. There were loud objections to the idea of the private sector taking over water supply and making profits from it. Some people's fears expressed at the time of privatisation have been well founded with water and sewerage bills in England and Wales rising by 40 per cent in real terms since 1990. Water poverty, which is said to exist when a household spends more than 3% of its income on water and sewerage charges, has increased in the last 30 years. Many households in water poverty are on benefits which only rise in line with inflation as measured by the Consumer Price Index (CPI).

Since privatisation there have been a number of mergers between water companies often involving small water suppliers being taken over by one of the big ten. The Competition and Markets Authority (CMA) and previous competition authorities have examined ten such mergers between water companies since 1990. In 2015 the CMA cleared the merger between South West Water and the much smaller Bournemouth Water further increasing the level of concentration in the water supply industry. Many of the big water companies are now totally or partially foreign owned.

Household customers pay for their water in one of two different ways. Either they have a water meter (similar to those they have for gas and electricity) or they pay a fixed charge for their water based upon the size of their home which means that their water bill is unrelated to their water consumption. Many analysts believe that all homes should have a water meter as it would prevent wasteful consumption of water. Charging for water by the use of a water meter would make it possible for each litre of water consumed to be priced equal to marginal cost although this would probably cause the water companies to make huge losses.

As water is supplied to households by regional monopolies, water prices are regulated by Ofwat. For the five-year period 2015 – 2020 Ofwat has said that the average water and sewerage bill, which in England and Wales was £396 in 2015, will be 5% lower by 2020. However, the water companies are then allowed each year to add inflation to household bills so water charges will still almost certainly rise. Price controls have been widely used by UK regulators in the energy and telecommunications sectors in the past and were even given support by Prime Minister Theresa May in the 2017 General Election campaign.

Average water prices in England and Wales by region

	2015	2020	Five Year Change
National average bill	£396		-5%
Anglian	£431	£390	
Dŵr Cymru (Welsh Water)	£440	£416	-5%
Northumbrian	£388	£382	-1.5%
Severn Trent	£333	£316	-5%
Southern	£437	£403	-8%
South West	£545	£506	-7%
Thames	£370	£353	-5%
United Utilities	£410	£398	-3%
Wessex	£485	£442	-9%
Yorkshire	£373	£361	-3%

In April 2017 the water supply industry in England was opened up to competition for businesses but not for households. This meant that 1.2 million businesses, charities and public sector organisations in England were no longer restricted to buying water services from their regional monopoly. Instead, they could now shop around, renegotiate and find the right deal for them. The retail part of selling water i.e. billing, payments handling, meter reading and contract management will be competitive with business customers being able to choose from a number of different companies. These 'retail' companies will buy the water from the regional monopoly to sell on to their business customers. In effect this means that regional water companies will now be less vertically integrated; at least when dealing with their business customers.

However, it is quite possible that a future Labour Government may consider re-nationalising the water companies even though they have made some capital investment which has benefits beyond the water industry. In their 2017 General Election manifesto the Labour Party pledged to re-nationalise the railways and the Royal Mail and to partly re-nationalise Britain's energy industry. Most customers, households and businesses alike, just want a fair price and improved service from their supplier whoever it is.

- (a) Using the data, describe how an increase in the percentage of households in water poverty has occurred. [2]
- (b) Evaluate the effects of vertical and horizontal integration for a firm. [8]
- (c) Using the concept of marginal utility, discuss the extent to which replacing a fixed charge for water with water meters in a home will reduce water consumption. [8]
- (d) (i) Calculate the national average water bill in 2020. [1]
(ii) Calculate the percentage change in the average Anglian water bill between 2015 and 2020. [1]
(iii) In what circumstances will the average water bill fall in real terms between 2015 and 2020? [2]
- (e) Using a diagram, consider the extent to which a rise in variable costs for the water companies would affect price, output and profits. [8]
- (f) With reference to the water supply sector, evaluate the effects of privatisation on competition and efficiency. [10]

2. From dictatorship to the EU. The curious case of Albania

Albania was for many years one of the world's most mysterious countries located only a few miles from Italy, but similar in some ways to modern North Korea for its distrust of the outside world and strict communist principles. Occupied by both Italy and then Germany during the Second World War, Albania underwent a communist revolution in 1944 led by the eventual dictator Enver Hoxha. Over the next 40 years Albania was dominated by a state-run focus on heavy industry and a fear of foreign invasion which led to the construction of (according to some estimates) 750 000 defensive military bunkers (bomb-proof shelters) which are still dotted all over Albania.

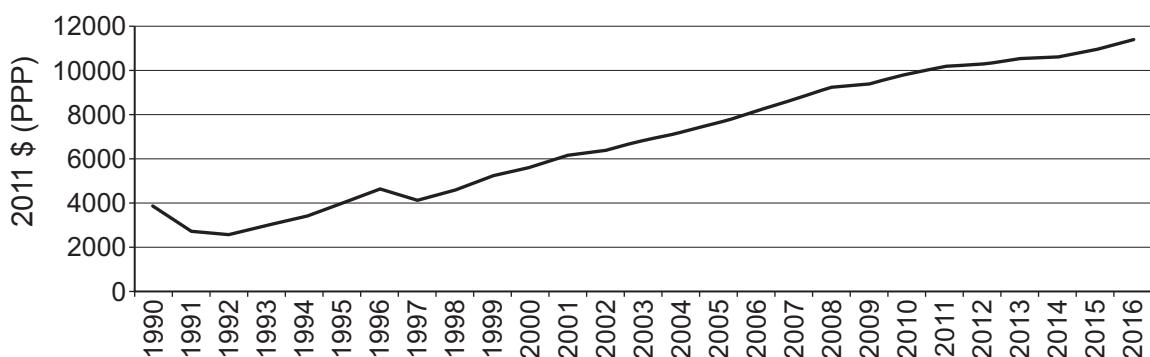


This defence programme was a massive drain on Albania's economy, with the programme diverting resources away from road construction and power projects that might have been better at supporting Albania's long run growth. The average bunker was said to cost as much as a two-room apartment or 20 bunkers cost as much as constructing a kilometre of road. The bunkers also occupied a lot of fertile agricultural land and around 100 people a year died building them.

Following the collapse of communism in the early 1990s, Albania adopted democracy in 1992 and began an ambitious programme of liberalisation. However, Albania had to build from a base in which 50% of the workforce were in state-controlled agriculture and another 25% in inefficient state-controlled heavy industry (such as mining and engineering) that had never had to compete either domestically or on world markets. Many of these state enterprises had ceased production in the early 1990s when communism collapsed. Albania also had to contend with a mass emigration of skilled workers in 1990 to Greece and Italy. The liberalisation programme involved exchange rate liberalisation, a commitment to avoiding budget deficits, controls on the money supply and a large-scale privatisation programme in housing, agriculture, transport and industry. After initial setbacks, Albania grew from the poorest country in Europe in the early 1990s to middle-income status today (**Source 1**).

Source 1

Albanian GNI per capita, Purchasing power parity (PPP), constant 2011 \$



Such has been Albania's progress, that in June 2014 Albania was accepted as an official candidate country for EU membership. Albania has been gradually becoming more economically integrated with the EU since 1992, with tariff-free access for Albanian goods granted in 2006, for example.

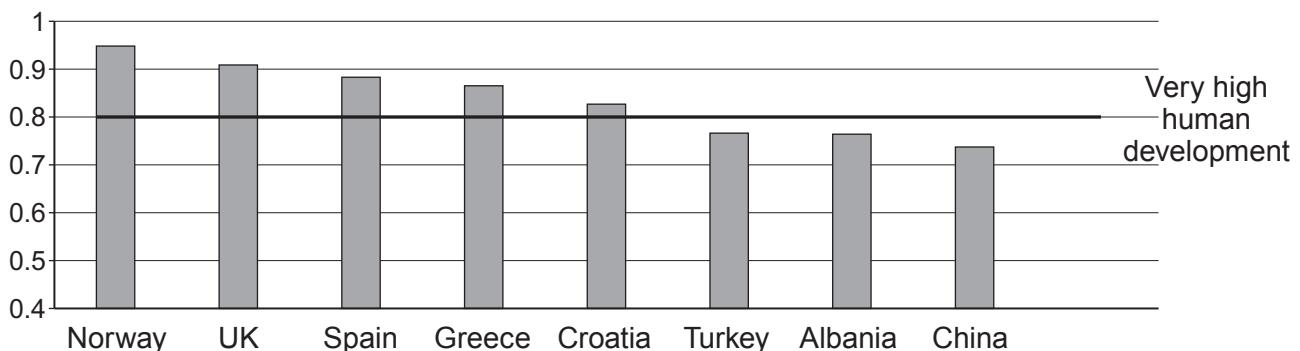
Formal talks on actual membership are likely to begin very soon and the prospect of these talks has sparked criticism in British newspapers, which have pointed to widespread corruption (Albania is 83rd/188 countries in the Transparency International Corruption Perceptions Survey, around the same level as Brazil and China), a large organised crime sector and the need for reform of the court system.

Supporters of future Albanian EU membership have argued that there have been significant improvements in all of these areas (with Albania's corruption perceptions rank having risen from 113th in 2012) in recent years. It is also argued that Albania's overall level of economic development is very similar to that of Croatia, which joined the EU in 2013, (**Source 2**) and that full EU membership will help Albania to make the jump to 'very high' levels of human development, as measured by the United Nations' Human Development Index (**Source 3**).

Source 2

Albania and Croatia, selected indicators (2016)

Indicator	Albania	Croatia
Life expectancy at birth	78	77.5
GNI/capita (PPP, 2011 \$)	11 379	20 750
Death rate of children under age of 5	1.4%	0.43%
Adult literacy rate	97%	99%
Women in senior management/legislative roles	22.5%	24.8%
Inequality (Gini coefficient, 0=total equality, 100=total inequality)	29	32.5
Internet users (% of population)	63%	70%
Access to clean water	84%	99.6%
Agriculture (%GDP)	23%	4.1%
Agriculture (% workforce)	41.8%	1.9%
Unemployment rate	14.3%	10.8%

Source 3**Human Development Index 2016, selected countries****Source 4****Estimated productivity and wage levels, selected countries**

Country	Productivity index (Germany=100)	Hourly wage costs (euros)
Germany	100	22.4
UK	79	16.5
Bulgaria	65	4.4
Romania	70	5.5
Slovakia	65	10.4
Albania	55	3.5 (estimated)

According to Edi Rama, Albania's Prime Minister since 2013 (posting on Facebook):

50 "Not only does the EU have ideals and values that we aspire to, but the aspiration to join the EU across the region has made the impossible possible. It is because of this aspiration that we have changed our long history of wars and bloody conflicts, and entered a new era of peace and cooperation. At present, we have only limited access to the EU's market in services, and no access for financial services; our banks cannot operate across Europe. We are outside the EU's customs union, meaning that we face costly red tape for exporting businesses. Tariffs apply to some fruit and vegetables. And we do not have access to the EU's external trade deals. So when the EU lands a great trade deal, for example with South Korea, we do not benefit.

60 [EU membership also means that] we will have to adopt EU laws in a range of areas, including competition, intellectual, industrial and commercial property rights, government contracts, standards and certification, financial services, maritime transport, company law, accounting, consumer protection, data protection and health and safety at work. The list goes on. We are willing to accept these conditions because we believe that, in partnership with the EU, we can reform our country and in the process improve conditions for our citizens."

- (a) Using the data and production possibility diagrams in each case, outline the opportunity cost of Albania's military bunker building programme:
- (i) in the short run [4]
 - (ii) in the long run [4]
- (b) (i) Outline the difference between GNI/GNP per capita and GDP per capita. [2]
- (ii) Using the data, explain the likely reasons for the trends in Albania's GNI per capita in **Source 1**:
- (I) Between 1990 and 1992 [4]
 - (II) From 1992 onwards [4]
- (c) With reference to **Sources 2** and **3**, discuss the extent to which it is reasonable to claim that "*Albania's overall level of economic development is very similar to that of Croatia*".
(lines 43-44) [10]
- (d) Using the information in the case study, discuss whether EU membership "*will help Albania to make the jump to 'very high' levels of human development*". (lines 45-46) [12]

END OF PAPER