

**ADVANCED GCE  
ECONOMICS**

Economics in a European Context

**FRIDAY 13 JUNE 2008**

**2888**

Morning  
Time: 1 hour 45 minutes

**Additional materials (enclosed):** Answer Booklet (16 page)

**Additional materials (required):**  
None



**INSTRUCTIONS TO CANDIDATES**

- Write your name in capital letters, your Centre Number and Candidate Number in the spaces provided on the Answer Booklet.
- Read each question carefully and make sure you know what you have to do before starting your answer.
- Answer **all** the questions.
- Write all your answers on the separate Answer Booklet/paper provided.
- If you need to use additional answer sheets, fasten these sheets securely to the Answer Booklet.

**INFORMATION FOR CANDIDATES**

- The number of marks for each question is given in brackets [ ] at the end of each question or part question.
- You will be assessed on the quality of your written communication. All answers should be in continuous prose.
- A copy of the pre-issued stimulus materials is included in the question paper. You must **not** bring your original copy into the examination.
- This is the synoptic paper. You will, therefore, gain credit for demonstrating in your answers how individual aspects of the subject can be used to explain and evaluate economic issues and problems raised by the stimulus material.
- The total number of marks for this paper is **60**.

This document consists of **11** printed pages and **1** blank page.



Answer **all** questions

- 1 (a) Using Extract 1, compare:
- the trend in light vehicle production in Western Europe with that in Central and Eastern Europe between 2001 and 2011 (projected);
  - the market share of new car sales in Romania with that in Bulgaria in 2005. [6]
- (b) Analyse the possible reasons why there are high levels of market concentration in the European automotive industry. [9]
- 2 Comment on the extent to which economic integration tends to lead to the convergence of the prices of consumer goods such as cars. [10]
- 3 The EU wants car manufacturers to produce cars which are more energy efficient. Comment on the case for tougher pollution standards rather than taxation as a means of achieving this objective. [15]
- 4 Discuss the extent to which rising foreign direct investment (FDI), such as that experienced by the Czech automotive industry, is of benefit to the recipient economies of Central and Eastern Europe. [20]

# The European automotive industry

## Introduction

The European automotive market is the second largest in the world, in terms of production, and largest in terms of sales. Around 30% of world production takes place in the European Union (EU) where the industry makes up 7.5% of the EU's manufacturing sector. The industry directly employs two million people in the EU. It is estimated that up to a further eight million jobs could be indirectly related to the industry.

In the first decade of the 21st century, this key industry in the Western European economy has been suffering declining sales and production. Declining demand, and consequently production, has brought into sharp focus the over-capacity of the industry and accelerated the trend towards mergers and acquisitions. The market is concentrated in the hands of a few major groups of companies responsible for the production of a range of brands of cars. These groups currently include: DaimlerChrysler (Mercedes Benz, Chrysler, Jeep, Smart), Volkswagen (VW, Audi, Skoda, SEAT, Bentley), BMW (BMW, Mini, Rolls Royce), Ford Europe (Ford, Jaguar, Volvo, Land Rover), General Motors (Vauxhall, Saab, Chevrolet), Renault (including 44% ownership of Nissan), PSA (Peugeot, Citroen) and Fiat (Fiat, Alfa Romeo, Ferrari). This concentrated ownership of production is further complicated by a series of 'alliances' between major manufacturers.

A major trend in recent years has been the decisions of these main manufacturers to invest in production capacity in Central and Eastern Europe (CEE). In part, this has been in anticipation of the enlargement of the EU, the growth of sales in this region and to take advantage of lower production costs. Such foreign direct investment (FDI) is said to benefit the economies of Central and Eastern Europe; however, the extent of this benefit has been questioned by economists. It is also not clear whether the benefits of low production costs in CEE economies have been passed through to consumers in the EU15.

Car price differentials are regularly monitored by the European Commission (EC). They have also been the focus of investigation by competition authorities in some of the member states of the EU, most notably the UK. The reasons for such differences in prices are numerous and not always indicative of the market power of manufacturers. European economic integration has reduced these differentials over the last 25 years, although the rate at which prices have converged has slowed down. It is unclear whether further economic integration in the EU will cause prices to converge further.

In 2006/07, the European Commission seemed to be on a collision course with the EU's car manufacturers as it once again flexed its regulatory muscles in aid of the environment. Back in 2000, concerned with the nine million cars discarded each year in the EU, the EC required car manufacturers take back their old vehicles and pay to have them disposed of in an environmentally friendly way. The latest proposal from the EC, frustrated by the industry's slow progress in reducing the CO<sub>2</sub> emissions of new vehicles, is to impose tougher pollution standards on the industry. Manufacturers' associations have strongly resisted the proposals, citing the loss of jobs and adverse macroeconomic consequences of regulating one of the EU's key industries in these ways.

## Pre-released stimulus material

- Extract 1                    The automotive industry – selected statistics  
The Central and Eastern European Automotive Market: Industry Overview, Ernst and Young, October 2006
- Extract 2                    Polish cars are cheapest in EU  
Polish cars are cheapest in EU, BBC News, 29 July 2004
- Extract 3 (a)                Car-makers and EU head for showdown  
Most car brands ‘failing on CO<sub>2</sub>’, BBC News website 25 October 2006  
Ex-ministers urge action on EU car emissions, Yorkshire Forward, 9 September 2006  
Car industry EU’s top R&D investor, EurActiv.com, 23 October 2006  
Car-makers and EU head for showdown, The Guardian, 30 October 2006
- Extract 3 (b)                Pollution standards give misleading picture  
Most car brands ‘failing on CO<sub>2</sub>’, BBC News, 25 October 2006
- Extract 4                    Car firms attack pollution plans  
Car firms attack pollution plans, BBC News, 7 February 2007
- Extracts 5 (a) and (b)    The Central and Eastern European Automotive Market  
Light vehicle production in selected CEE countries  
The Central and Eastern European Automotive Market: Industry Overview, Ernst and Young, October 2006

## Extract 1

### The automotive industry – selected statistics

Fig. 1.1 Light vehicle production by region ('000s)

	2001	2005	2011*
North America	13,672	14,142	14,399
Asia-Pacific	16,801	23,312	32,346
Western Europe	16,804	16,013	16,357
Central and Eastern Europe	2,875	4,320	6,073
Central and South America	3,847	4,393	5,701
Middle East and Africa	768	1,548	2,046
<b>World total</b>	<b>54,767</b>	<b>63,728</b>	<b>76,922</b>

\* projected

Light vehicles are passenger cars and vans

Source: Global Insight, Ernst & Young

Fig. 1.2 Light vehicle sales by region ('000s)

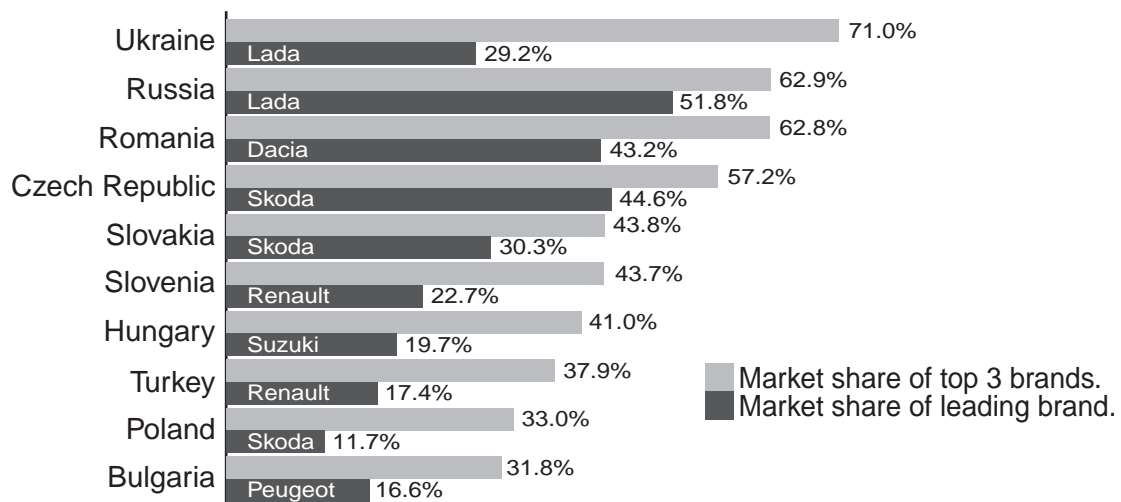
	2001	2005	2011*
North America	18,864	18,549	19,180
Asia-Pacific	12,414	17,238	25,321
Western Europe	16,652	16,487	16,936
Central and Eastern Europe	2,574	3,964	4,860
Central and South America	4,759	5,030	6,195
Middle East and Africa	841	2,643	3,372
<b>World total</b>	<b>56,104</b>	<b>63,911</b>	<b>75,864</b>

\* projected

Light vehicles are passenger cars and vans

Source: Global Insight, Ernst & Young

Fig. 1.3 New car sales in Central and Eastern Europe (2005)



Source: Global Insight, Ernst & Young

## Extract 2

### **Polish cars are cheapest in EU**

**Car prices are converging across the European Union but there are still huge differences between countries, a European Commission report has concluded.** The Commission found price differences of more than 20% were common, particularly for luxury models.

Cars are cheapest in Poland, according to the European Commission, and most expensive in Austria and Germany.

The EU introduced new regulations in 2002 in order to liberalise the market.

#### **Price differences**

In its first survey of car prices since the EU expanded to 25 members in May 2004, the Commission found that the average price difference across the EU had fallen from 4.9% to 4.4% between April 2003 and April 2004.

Prices in Poland were 9% lower than in Finland, which was the least expensive market among the EU15. Finland, itself, boasted prices some 10% lower, on average, than Germany.

The report, which analysed sales of 90 models, concluded that Fiat Pandas sold in Poland were the cheapest cars in the EU. "This finding, with a slight downward trend in car prices in some of the high volume EU15, is a hopeful sign that competition is gaining a foothold in the car sector," EU Competition Commissioner Mario Monti commented.



The Polish Fiat Panda is the cheapest car in the European Union

**Extract 3 (a)****Car-makers and EU head for showdown**

In 1998, the European Automobile Manufacturers Association (ACEA\*) pledged to the European Commission, on behalf of its members, to reduce the average CO<sub>2</sub> emissions for new cars to 140 grams per kilometre by 2008. This represents a reduction of 25% on 1995 levels.

A spokeswoman for ACEA admitted the commitment represented “a very ambitious target”. She added, “The industry invests huge amounts of money in research and development to achieve these goals.”

Motor manufacturers say safety requirements imposed on the industry have offset efforts to cut emissions. Side impact bars and airbags add to a car’s weight, requiring greater engine power to move the vehicle.

In 2005 the extent to which car manufacturers had reduced CO<sub>2</sub> emissions for new cars varied widely (see Extract 3 (b)). Whilst some car manufacturers are set to meet or exceed their target by 2008, others have cut their emissions at less than half the rate needed to meet their commitment.

ACEA said it supported an “integrated approach” to reducing CO<sub>2</sub> emissions, including alternative fuels, new approaches to taxation and driver responsibility.

Exasperated by the industry’s failure so far to hit voluntary targets for cutting CO<sub>2</sub> emissions to 140 grams a kilometre by 2008, Stavros Dimas, Environment Commissioner, will propose new laws to enforce tougher limits in the years ahead. This is likely to involve imposing compulsory pollution standards on EU car manufacturers. A European Commission spokesperson said the Commission would not hesitate “to replace the carrot with the stick”.

EU car manufacturers oppose compulsory pollution standards. “A car manufacturer can reduce CO<sub>2</sub> emissions only if customers are ready to buy more CO<sub>2</sub>-efficient cars rather than gas guzzlers. Currently the industry’s efforts on the supply side are hampered by the reluctance of consumers to switch to CO<sub>2</sub>-efficient cars and new safety regulations,” the Environmental Regulations Manager at Renault, argues. “Today’s business environment does not reward manufacturers for developing and selling CO<sub>2</sub>-efficient cars. Future EU policies should create this reward and continuously encourage a switch in demand to CO<sub>2</sub>-efficient cars through co-ordinated fiscal measures.”

\* Association des Constructeurs Européens d’Automobiles



### Extract 3 (b)

#### Pollution standards give misleading picture

Pollution standards for the automotive industry are expressed as the average CO<sub>2</sub> emissions, across the range of cars sold by each manufacturer. Some cars produced by a manufacturer may have high CO<sub>2</sub> emissions, whilst others have low emissions.

Some manufacturers claim that, in any one year, the average CO<sub>2</sub> emissions over the whole range of their cars is affected by the demand for different types of vehicles and does not necessarily reflect their efforts in producing new, more CO<sub>2</sub>-efficient cars.

Nissan said its poor performance in reducing CO<sub>2</sub> emissions between 1997 and 2005 (see table below) reflected differences in the mix of vehicles sold by the company in 2005 compared with 1997. "Our range of 4x4s and crossover vehicles has broadened and sales have consequently increased. We have also introduced a high performance sports car," a spokesperson told BBC News. "Together these vehicles made up nearly 30% of our sales in 2005 versus less than 5% in 1997. The CO<sub>2</sub> figures of these cars are naturally higher than the smaller cars we sold more of in 1997 and so will raise our average."

**Fig. 3.1 Emissions by car brand**

Brand	1997 average CO <sub>2</sub> emissions g/km	2005 average CO <sub>2</sub> emissions g/km
Fiat	169	139
Citroen	172	144
Renault	173	149
Seat	158	150
Ford	180	151
Peugeot	177	151
Skoda	165	152
Vauxhall	180	156
VW	170	159
Toyota	189	163
Suzuki	169	165
Honda	184	166
Kia	202	170
Hyundai	189	170
Nissan	177	172
Audi	190	177
Mazda	186	177
Mercedes	223	185
BMW	216	192
Volvo	219	195

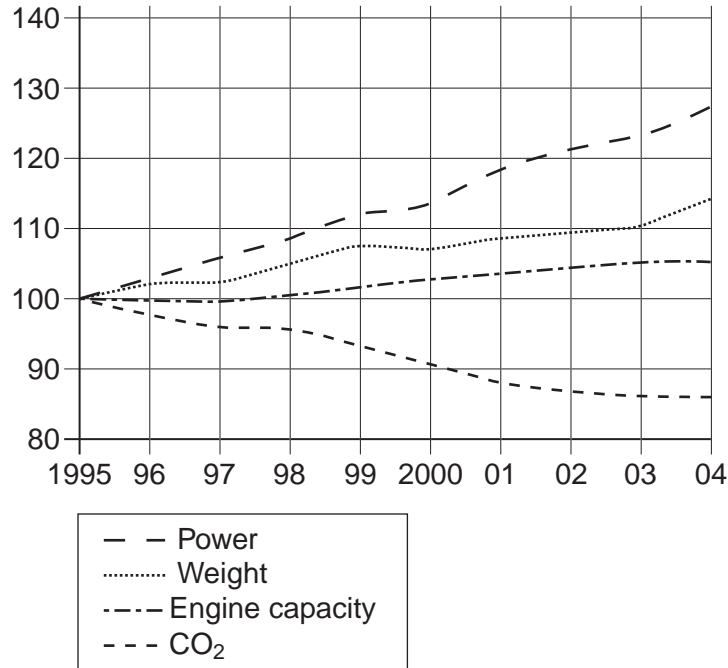
**Adapted from: R.L. Polk Marketing Systems GmbH**

## Extract 4

## Car firms attack pollution plans

**Fig. 4.1 CO<sub>2</sub> emissions from cars**

Average car manufactured in Europe  
Index



source: ACEA (European Automobile Manufacturers' Association)

**European car manufacturers have described plans to force them to cut back on harmful CO<sub>2</sub> emissions as "unbalanced" and "damaging".**

The industry body, the ACEA, said EU targets were arbitrary and would lead to job cuts and relocation of production outside the EU.

The European Commission aims to increase the fuel efficiency of new cars by nearly 20% by 2012. It also wants to ensure new vehicles emit no more than 130g of CO<sub>2</sub> per kilometre.

Environmentalists, however, say the proposal does not go far enough. Jos Dings of the pressure group Transport and Environment said the 130g/km limit was a "disappointing response" to calls last week by a UN panel of experts for serious action on climate change. He called for the EU to fix an 80g/km limit for 2020.

### Economic impact

In a statement, the ACEA said the European Commission's proposals would damage Europe's economy "in terms of wealth, employment and growth potential".

ACEA President, Sergio Marchionne, appealed directly to EU governments and the European Parliament to design a "reasonable and level-headed" strategy, saying other means were available to reduce CO<sub>2</sub> emissions. "If left unchanged, the Commission proposal would erode the economic strength of Europe".

**Extract 5 (a)****The Central and Eastern European Automotive Market**

Over the last ten years, the focus of cross-border investment in the European automotive industry has shifted east. The scale of investment has been huge. Such investment projects typically involve high capital spend and a larger average number of employees than other types of foreign direct investment (FDI). A growing market, existing engineering skills and lower cost production adjacent to the mature market of Western Europe, have together proved attractive propositions for a number of major automotive manufacturers.

In 2005, the clear winners in new automotive investment were Poland and the Czech Republic.

The Czech Republic is almost unique among the Central and Eastern European (CEE) countries in having a longstanding car manufacturer of its own, Skoda. Skoda's position as a local company translates into sales success, with over 40% of the domestic market. More recently, the country has attracted a number of inward investment projects, including the recent Toyota/Peugeot/Citroen plant and the forthcoming Hyundai plant. These help create a projected production capacity of around one million units more than any of the other states that joined the EU in 2004, with export levels running at 80% of production.

The Czech Republic, with a population of 10.2 million, is a mid-sized country among the newer EU member states. Average GDP per capita in 2005, at 32% of EU15 average, ranks the country third among the accession states.

The country has attracted a large number of automotive suppliers in recent years. Large international companies have plants which supply Skoda, as well as delivering to major global vehicle manufacturers abroad.

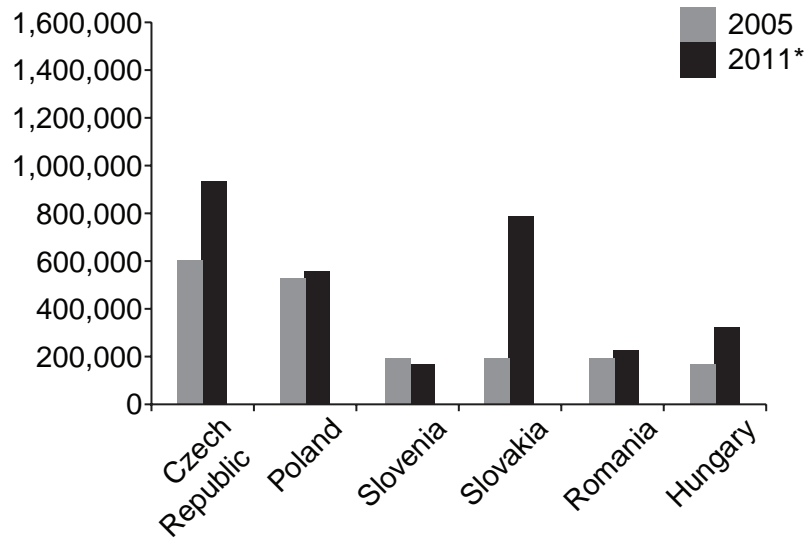
More importantly, a number of mid-sized component suppliers and tool manufacturers now form a well-established network, laying the groundwork for a comprehensive local supply chain for the industry.

While the country's overall unemployment rate stands at around 8%, areas such as Prague and Central Bohemia face a very low rate of 2–4.5%, which poses significant challenges for those looking to hire new staff in these regions. Toyota/Peugeot/Citroen experienced difficulties in staffing its new plant in Kolin. The consortium recruited workers from Poland, Slovakia and Ukraine to fill the gaps. Hyundai decided to locate its new Czech plant in Ostrava, partly to have better access to skilled labour from Poland. The tight labour market for skilled workers and engineers is likely to fuel wage increases in the Czech Republic.

Some Czech politicians have started to question whether the country's dependency on the automotive industry could turn into a risk, with the industry representing 16.3% of GDP and 19.7% of export revenue in 2005. CzechInvest, the country's investment agency, is seeking to attract high value-added services such as research and development (e.g. biotechnology).

## Extract 5 (b)

Fig. 5.1 Light vehicle production in selected CEE countries



\* projected

Light vehicles are passenger cars and vans

Source: Global Insight, Ernst & Young