



ICEG EUROPEAN CENTER

# NEWS OF THE MONTH

on EU-10 and CIS



No.  
39

M a r c h  
2 0 1 1

## NEWS OF THE MONTH, ON EU-10 AND CIS

The ICEG European Center issues its monthly publication, which includes 2-4 brief analyses on macroeconomic and microeconomic issues. The publication focuses on two groups of countries: **Commonwealth of Independent States - CIS** (Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan) and the ten post-soviet New Member States of the European Union – **EU-10** (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia).

### Editor

Olivér Kovács [okovacs@icegec.hu](mailto:okovacs@icegec.hu)

### About us

ICEG European Center is an independent economic research institute based in Budapest, Hungary. The Center was founded by Dr. Pál Gáspár in 2001.

### Contact information

ICEG European Center, 5/B Kiralyhago Street Budapest, 1126 Hungary.  
Phone: (+36) 1 248 1160. Fax: (+36) 1 319 0628 E-mail: [office@icegec.hu](mailto:office@icegec.hu). Webpage: [www.icegec.org](http://www.icegec.org)

### Disclaimer

This document is for informational purposes only. It is not intended as an offer or advice in relation to any investment decision. ICEG European Center and the authors of this document are not responsible or liable for the accuracy, completeness and correctness of the information in this document and cannot be held responsible for any damage resulting from the use of this document. The contents of this document are subject to change without prior notice. The views expressed in this Publication are those of the author(s) and do not necessarily represent those of the ICEG European Center.

ISSN 1789-1515

## CONTENTS

A TIME WHEN POLAND AND GREECE WERE IN TANDEM? .....	4
THE HUNGARY-RELATED FDI MADE BY AUDI.....	7

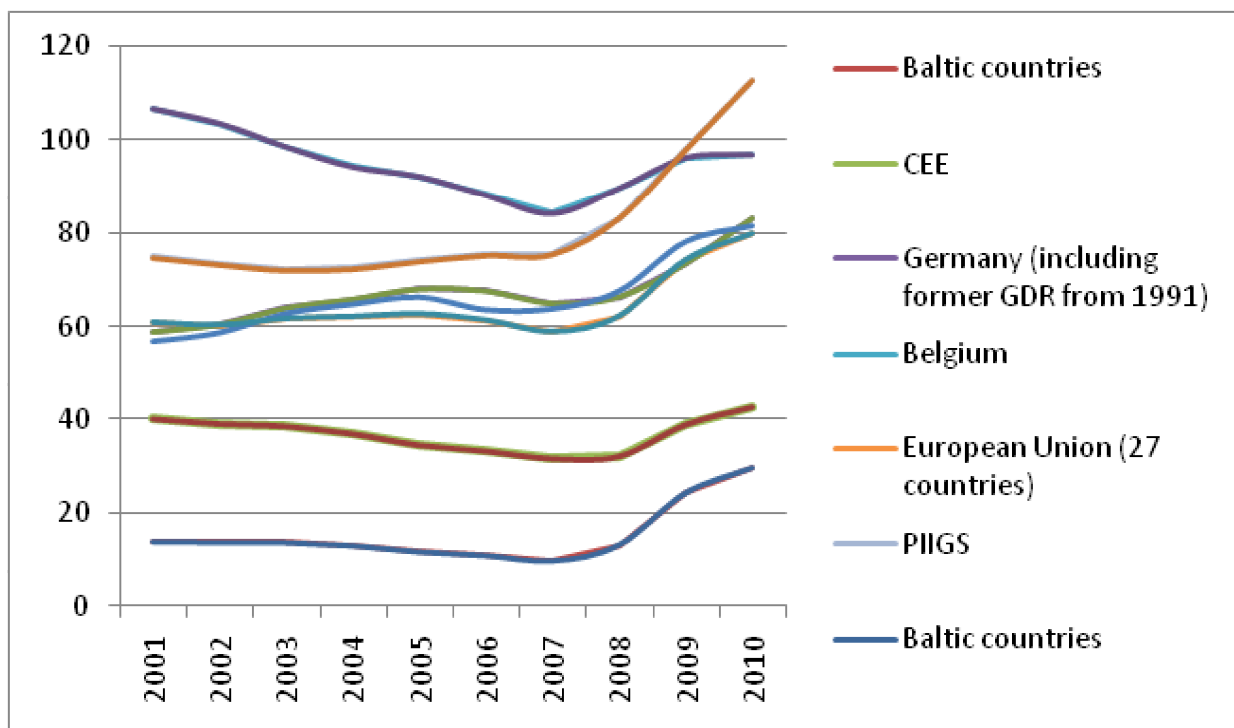
## A TIME WHEN POLAND AND GREECE WERE IN TANDEM?

*Olivér Kovács*

This article addresses the issue whether the CEE countries have left the international markets calm during the global financial meltdown and economic crisis which brought a new question onto the agenda: the European sovereign debt crisis.

The EMU is to feverishly tackle the problem of the peripheral countries like Greece, Portugal, Ireland and Italy, but, in the meantime, one might intuitively expect that the debt crisis is likely to take place not only in that region but also in some CEE countries.

**Chart I. Gross general government debt (% of GDP)**



Source: Eurostat

As *Chart I* illustrates, debt-to-GDP ratios of the CEE countries is far above the EU27 average, however, they were still lower than that of the PIIGS or Baltic countries. The chart also exemplifies that Germany, Belgium and France, known as the biggest creditors in Europe, are also suffering from mushrooming debt levels. As a result of that kind of evolution of public debts in case of creditor countries it is unsurprising that the willingness of investors to finance countries with historical debt rates (e.g. Portugal has never seen such a debt rate for 130 years) to a large extent evaporated due to the increased risk-aversion.

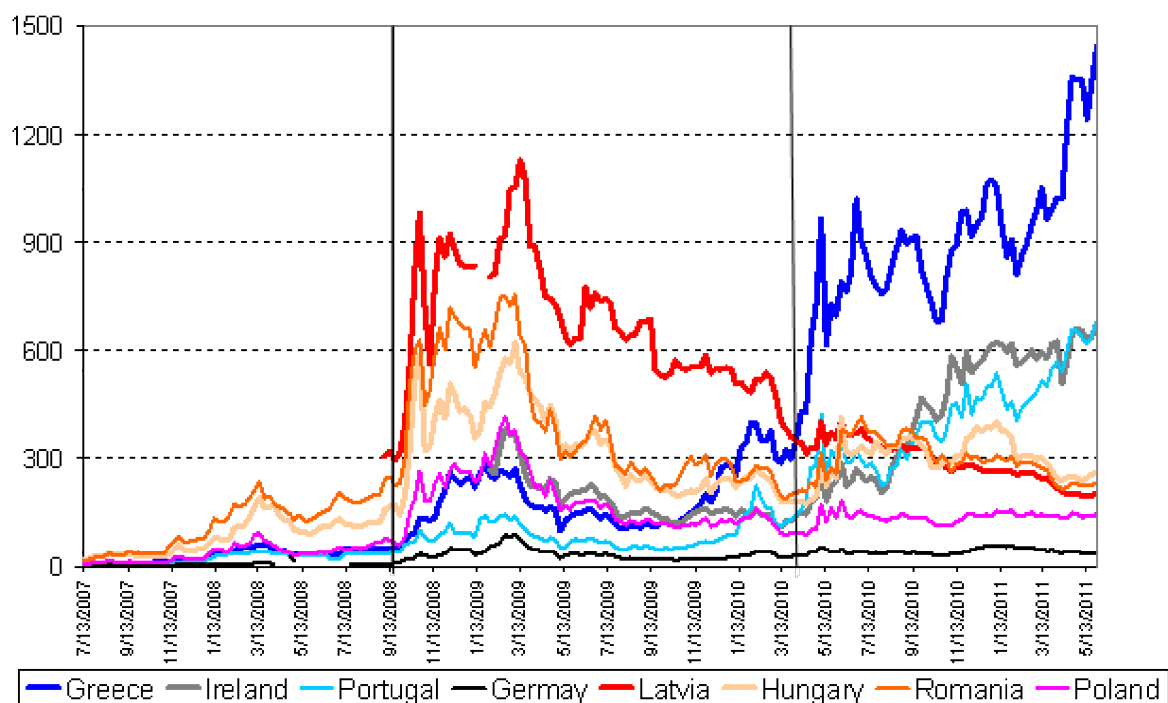
We can elaborate the rationale behind this relatively easily. According to some authoritative estimates, the volume of the liabilities of French and German banks in PIIGS countries amounts to 830 billion euro, it equals to 53 per cent of the total amount of liabilities held by the European banks. As a corollary, investors have become increasingly cautious as things did not come their way.

In CEE countries, the most obvious fiscal anomalies were found in Hungary, Latvia and Romania whose governments had to turn to IMF and EU support that accounted to approximately EUR 48 billion.

Let us add immediately, the debt risk ratings were not fully in conjunction with the previously mentioned facts. Albeit, the attention of the European governance was mainly devoted to the issue of the periphery, an interesting case emerged in the culmination of the recent financial crisis in the first quarter of 2009.

Namely, if we take a mere glimpse into the evolution of the credit default swaps (CDS spreads) between 2007 and 2011, one may conclude that investors regarded Poland as risky as Greece in March 2009. It clearly reflected the above mentioned phenomenon when the creditors tighten their debt tolerance threshold applied to countries receiving their credits.

**Chart 2. The evolution of CDS spreads between 2007-2011**



Source: Bloomberg

Chart 2 points out that the situation of Poland can also be interpreted as a predicament which was mainly given by the paradoxical fact that the Polish economy faced deficits (7,9% of GDP in 2010) and increasing debt levels (55% of GDP in 2010) in time of a relatively good real GDP growth performance. The debt-to-GDP ratio has reached the limen as it soared up to 55% of GDP which is a constitutionally declared threshold what should not be exceeded. This fact influenced the investors' sentiment significantly by causing anxiety over the sustainability of the Polish public finance.

While this prefatory analysis is far from a very comprehensive one, what is more, its role is to pinpoint an interesting fact, we can formulate a conclusion which may contribute to the collage of the crisis-related economic literature.

## Conclusion

One of the most insightful conclusions that can be drawn from the current experiences of Poland is that: one should not concentrate merely on fiscal performance in assessing a country's sovereign debt risk, because, in time of global crisis, even those countries can encounter problems having relatively good fiscal positions in terms of deficit and debt rate. Poland has to foster significant fiscal consolidation in an effort to guarantee stable confidence for its investors. It goes without saying that the consolidation with a rod of iron per se does not provide a sufficient way towards sustainability, therefore resorting to structural reforms can be instructive in this regard in streamlining the sub-systems such as the pension system whose slice from the total expenditures is very substantial(17% of GDP).

## THE HUNGARY-RELATED FDI MADE BY AUDI

*József Gázsó*

### **The concept of Foreign Direct Investment – a race among states**

This article is focusing on the factors that play a role in the decision process of a multinational company when choosing among different investment destinations. States have already realized the importance of foreign direct investment (FDI), such as inflow of capital, job creation, technology and know-how, other intangibles. There are certain determinants that a state cannot change, at least in the short run, for instance location-specific factors. However, a country can decide to establish an appealing FDI policy to attract foreign investors. When designing such an incentive package, it is crucial to lay emphasis on the specific conditions that a multinational company must meet in order to be entitled for the discounts provided by the state. Such a package should aim for a high local embeddedness, that is, high percentage of the suppliers should be local, therefore supporting the local industries and the whole economy.

### **The parent company and its affiliate: Audi AG and Audi Hungária Motor Zrt.**

The legacy of Audi AG provides grounds for success of its Hungarian affiliate, Audi Hungária Motor Ltd. Audi AG was always famous for its racing success, innovative, state-of-the-art technological breakthroughs and the ability to change and adapt to new circumstances. Audi AG is the third biggest car manufacturer by sales according to 2008 figures. This provides financial stability for both Audi AG and Audi Hungária Motor Ltd, since the automobile industry is one of the most capital-intensive industries. By analyzing the figures of Audi AG, it can be stated that the parent company of the Hungarian affiliate is financially stable. From 2009 to 2010 the operational revenue of the company increased by 9,5%. With regard to the sales of Audi AG, worldwide its sales increased by 17,6%, to this rise China contributed to a great extent. China is an increasingly important market for Audi due to its extremely large middle-upper class society (in absolute terms). It represents a great potential in the future, as well. However, Germany, the home market of Audi is the only one market which shows a declining tendency concerning sales with -3,9%. Maybe this is due to the fierce competition of the premium German car manufacturers.

Audi Hungária Ltd was founded in 1993 with an investment of 100 million euros in Győr. Important dates in the history of the company show how local production evolved. In 1998 the assembly of TT Coupé was started in Győr. The assembly of the sports car needed accurate handwork to achieve perfect quality. In 2000 the manufacturing hall for the four-cylinder diesel engines was opened. In 2001 the Engine Development Centre of Audi Hungária Ltd. was set up. The engineers carry out development work not only for Audi Hungária, but also for the mother company Audi AG. That year the production of Audi A3 and S3 was started in Győr, as well. In 2002 the eight-cylinder engine factory was established. In 2005 the ten millionth engine was produced by Audi Hungária and a tool factory was also set up that year. In 2010 it has been announced that the management of Audi AG intends to invest around 900 million euro by 2013 in automotive production in Győr. The area of the Győr production plant is 1,740,328 square metres. The production plant of Győr is enjoying a favourable location, since it is close to the point where Hungarian, Slovakian and Austrian borders all meet. Another big advantage of the Győr production plant is the presence of local industries, such as mechanical engineering, plastics processing and construction.

At present, the Győr production plant is actually dealing with 4 processes: engine production, vehicle assembly, Research and Development unit and tool-making. The engine production started in 1994, and now Győr is producing the entire range of Audi engines. The vehicle assembly in Győr started in 1998 with Audi TT models. The painted bodyshells are brought by train from Ingolstadt to Győr, where they are delivered to the assembly hall. A new, process-oriented production concept is implemented in Győr resulting in fast, efficient, cost-saving and innovative car assembly. Since 2005 the Győr production plant is also manufacturing tools for the press shop and body shop.

As for the latest financial figures of the company, from 2008 to 2009 the revenue decreased by 31% and the production of motor vehicles fell from 1 900 333 to 1 383 909 pieces due to the economic downturn caused by the financial crisis. This result can be explained by the sheer fact that Audi is producing premium vehicles, which are not the most efficient and environmentally friendly. Therefore, this segment of car manufacturing is more sensitive than the low-end category with cheaper, fuel-efficient vehicles. To adapt to changes, Audi Hungária decreased the number of employees from 5 879 to 5624 in 2009 and also its R&D spending was cut down by 16%. However, it is forecasted that the figures will boom as purchasing power of customers improve and the economic downturn is over. In contrast with these figures, Audi Hungária is financially strong due to its mother companies (Audi AG and VW Group). This healthy state is also shown by the large investment announced by the parent company by 2013.

### **The production pattern of Audi AG**

Audi AG is applying transnational vertical integration pattern concerning its geography of production. This pattern means that each production unit performs a separate part of the production process, for example the Hungarian affiliate is mainly responsible for the assembly of cars and for engine production. Therefore there is a distribution of labour between the affiliates (and the parent company). Afterwards, the output is transported to a final assembly plant, in case of Audi TT this is the Hungarian production plant in Győr. The main advantage of this pattern is that the company can benefit from the geographical variations in labour prices, technological level and market demand/size.

As certain type of R&D requires proximity to the production process, the Hungarian Audi production plant “attracted” some of these activities. There is a research and development center dealing with engine development, IT, production processes and test rig technology. It works in cooperation with the local university and employs a relatively large number of engineers, which is without doubt beneficial for the local economy.

### **The significance and current market position of Audi Hungária**

Audi Hungária plays an important role in the Hungarian economy, since it is one of the companies with the highest sales revenues, one of the biggest employers with 5624 employees and the second biggest exporter of the country with 11, 77% share in total Hungarian exports.

Currently there are four car manufacturers present in Hungary: Opel, Suzuki, Mercedes and Audi. Table 1 above shows the relevant position of each car manufacturer according to four parameters: amount of investment, year of foundation, number of employees and yearly production capacity. It can be stated that Audi Hungária represents the biggest investment with 3 890 million plus 900 million euros planned. Furthermore, it is also Audi Hungária who employs the biggest number of employees with 5624 and an additional planned number of 1800. However, as far as capacity is concerned, Opel is the leading firm, though this is understandable since Audi is a premium car maker.



TABLE 1. SELECTED DATA OF THE FOUR CAR MANUFACTURER AFFILIATES IN HUNGARY

	Opel	Suzuki	Mercedes	Audi
Investment	700+500 M EUR*	150 M EUR	800 M EUR	3 890 M + 900 M EUR*
Yr of foundation	1990	1991	2008	1993
# of employees	1500*	4200	2500*	5624 + 1800*
Capacity (cars/yr)	500 000*	180 166 (300 000*)	100 000*	32 063 + 125 000*

Source:Source: Világgazdaság Online, \*: planned data in the future

### FDI types – horizontal versus vertical investment

It is very important to make a distinction between horizontal FDI and vertical FDI. Horizontal FDI is market-seeking FDI, while vertical FDI is considered to be efficiency-seeking. The act of investing in a country in order to be able to sell the given product or service to the locals is regarded as market-seeking FDI (e.g. pharmaceuticals or in certain cases motor vehicles). In contrast, efficiency-seeking direct investment is actually supply-driven. In this scenario the firm intends to take benefit of the favourable specialties of the country, such as low labour costs. Concerning the investment of Audi AG, it was supply-driven or efficiency-seeking in the first place. However, as the Hungarian purchasing power, market is evolving with time; Audi expects that it will be able to sell its vehicles in greater numbers locally. In that case the foreign direct investment of Audi AG will be considered partly market-seeking.

### The OLI framework – the reasons why Audi AG has invested in Hungary

The OLI-framework of Dunning tries to capture those reasons why a firm invests and is able to invest abroad. O stands for ownership-specific advantages which are stemming from the fact that the company owns specific assets and is able to generate profits from them. By owning these specific assets the corporation is able to cut down on production costs or raise the price of its products or services, which its competitors might not do due to the lack of these specific assets. An interesting example might be the intangible assets of a company. For example, the brand name of Audi is very valuable. Furthermore, the production processes, R&D results and know-how of the company are also contributing to the success of the company. Thanks to these intangible assets, Audi is able to lower its production costs and charge a higher price for its premium motor vehicles.

The second element of the OLI framework is the location-specific advantage. This part of the OLI framework played a major role in the decision of Audi AG. Location-specific advantage is the benefit or extra profit that the company is gaining by producing in a given country where the production costs and other cost-related factors are lower compared to others. Now I would like to mention those specific location-related advantages that contributed to the fact that Hungary won in the race for the Audi investment. The most important factor is the highly skilled but cheap labour force. Audi was able to find relevantly skilled labour force due to the legacy of Hungarian companies, such as Ikarus or Rába. Furthermore, the cost of a Hungarian worker is one-third of that of a German worker. Moreover, Győr is enjoying a very favourable geographical location due to good international transport and infrastructure opportunities, such as railways or motorways<sup>2</sup>.

<sup>2</sup> Vera Scepanovic (2008): Reconfiguration of automobile production chains in Europe and consequences for developmental effects of automotive FDI in Central and Eastern Europe, Annual Doctoral Conference

The third element of the OLI framework is the internalization advantage. This advantage is caused by the fact that certain production processes are kept inside. Thus the company can make profits from internalization due to economies of scale, security of know-how and management techniques. Taking into account the above-mentioned advantages of the Hungarian production plant, Audi AG decided to set up the production plant in Győr, which is meant to be a strategic base and the centre of Audi's European engine production and will be contributing to the competitiveness of Audi due to decreased costs and retained quality.

### **FDI incentive policy**

Immediately after the regime change, investments in Hungary were still regarded as riskier compared to Western countries, for example. Therefore the FDI incentive policy of the Hungarian government played a major role in the decision of Audi, especially taking the fact into consideration that Audi in the first place wanted to invest because of reducing production/business costs. Vertical or efficiency-seeking FDI is much more sensitive to FDI incentive policy than the market-seeking investment.

The Hungarian government following the regime change decided to set up the so called Industrial Free Trade Zones (IFTZs). These zones were dedicated to attract foreign investors to Hungary and offset the relative risks of the Hungarian economy and politics. Some examples for multinational companies who installed their production in such zones are Suzuki, Philips or Audi. IFTZs were designed primarily for greenfield investments. Audi in 1993 set up the Győr production plant in an IFTZ and therefore the company was entitled to avoid the payment of certain taxes and duties. In an IFTZ there was neither value-added tax nor import duties, it was a customs free zone. Audi was also enjoying certain tax holidays for both profit and local taxes. Industrial Free Trade Zones existed until the Hungarian EU-accession of 2004.

It is important to note that there are two “Lex-Audis” in Hungary, which show the importance of the Audi affiliate for the Hungarian government. For instance, the amount spent on research and development is deductible from the tax base for the so called solidarity tax by law. In the case of Audi, it is quite favourable, since Audi is spending significant amounts on research and development activities done by the Hungarian Research Centre.

### **Extension of the Győr production plant**

The development of a country's automobile industry has four stages. In the first stage, the country only imports complete vehicles; however, the importation is often limited by high transportation costs or governmental restrictions. In the second stage, the country is assembling vehicles itself from a full kit of component parts with no or minor modifications. In the third stage, the local assembly is involving a mix of imported and locally sourced components. The most important thing is that this stage is contributing to the development of local components industry. Finally, the fourth stage is about the full-scale manufacture of automobiles .

Until now Hungary was in the third stage, since the Győr production plant was only assembling the painted bodysHELLS coming from Ingolstadt on railway using a mix of imported and locally sourced components. However, Audi has decided to invest 900 million euros in the Hungarian plant by 2013 . As a consequence, the Hungarian production plant is becoming a full-scale manufacturing facility and also the local content is planned to be raised compared to the imported content. They will contribute to the improvement of the Hungarian Balance of Payment (BoP) and the investment may have a significant impact on the Hungarian economy.

The investment in Hungary forms an essential part of the company's strategy. The aim of Audi is to become the No. 1 in the premium car segment by overtaking BMW and Mercedes. The company intends to increase its sales by 50% by 2015 and to produce 1,5 million cars per year. It implies that the extended Győr production plant will manufacture 125 000 cars (models A3 and TT) per year and the additional investment will create another 1800 new jobs in addition to the existing 5624. That means that the Győr production plant of Audi would employ directly and indirectly 15 000 people by 2015.

The question arises again: why Hungary won again? The existing profitable and properly working strategic center of Audi in Győr is providing grounds for the extension itself. However, there were some additional factors that played major roles in the decision: cheap and qualified workforce, high qualified university graduates, flexible work schedules and opportunities provided by the future Hungarian market as Audi plans to increase its sales in the host country, Hungary, as well. The new FDI policy of the Hungarian government had also its part in the decision. Significant corporate tax allowances and the maximum subsidy of vocational training (2 million euros – the maximum possible by EU-rules) were granted to Audi. Now the Hungarian government realized the importance of the local content requirement, so it is intending to determine it by setting a ration of domestic suppliers to foreign ones. In the past the emphasis was laid only on the number of created workplaces, but the local content requirement is equally important from the aspect of the whole domestic supplier industry.

Finally, it is worth examining the benefits that the new investment in Győr will give for the economy. It will create new jobs, which is crucial in such a country where the unemployment rate is so high. It will improve the Balance of Payment of Hungary by more domestic suppliers and less import. Furthermore, the research and development center will also be improved and extended. There will be a new electronic test laboratory (94 million HUF), which will focus on engine parts and there will be a new experimental motor manufacturing center installed (55 million HUF), as well. There will be also positive effects with regard to the local infrastructure and construction companies. The expected spill-over effect of full-scale production on domestic SMEs would also contribute to the economic growth of the country due to the network effect.

## Conclusion

A cost-benefit approach could be applied to evaluate the foreign direct investment of Audi AG. On the cost side, the Hungarian government is spending a huge amount in the forms of vocational training assistance, tax relief and other incentives. Furthermore, it is important to note that Audi had no local suppliers till 2000, which is adverse from the aspect of local industries. Currently the local content of Audi is 10%, which is still considered to be low, but admittedly it has risen from zero. During the negotiation of the new investment of Audi by 2013 the Hungarian government therefore had the aim of concluding an agreement that Audi will raise its local content. On the benefit side, the investment has created 5624 jobs up to date and Audi plans to give work to another 1800 people by 2013 making Audi Hungária the largest employer regionally. It is important to note that the automotive industry is a network industry meaning that for 1 worker in an automotive factory there are 9 other employees working in other fields of production, such as suppliers. Therefore, the actual number of people involved in Audi production can be calculated by multiplying the current number of workers of Audi by 10. The new technologies, know-how and management techniques through the development of local suppliers have modernized the Hungarian economy. By 2015 the company will be boosting the Hungarian GDP by 2%, which is enormous. As a conclusion, the benefits of the investment undoubtedly offset the costs of that, particularly on the long term.