

THE WORLD ECONOMY IN THE TIMES OF FINANCIAL CRISIS AND ITS IMPACT ON EUROPEAN ENERGY POLICY

Baláž, P., Bayer, J.

Abstract

Since 2007, globalization of the world economy has led to the expansion of the financial crisis. It affects the long-term international negative positions of EU members. They reacted to the new situation by carrying out structural reforms and by support of new adaptation programs. An important element of this process was the preparing of the convergence of the national energy policies in the framework of the Europe 20-20-20 program, which should remain one of the determining elements of their success in support of the international competitiveness of the EU.

Keywords: comparative advantage, competitiveness, economic policy, energy security of EU, European Commission, globalization of the world economy

JEL Classification: B30, E620, E640.

1. Introduction

The outbreak of the financial crisis in 2007 and its global consequences confirmed that globalization does not bring only positive but also negative effects which, irrespective of national borders or production sectors, may affect all parts of the world economy. Since 2009 this development has been influenced by efforts for the implementation of crucial changes aimed at the successful adaptation to the new situation. However, galloping globalization has passed consequences of macroeconomic decisions without any internal coordination very quickly from one part of the world to another, and therefore it has been difficult to continuously objectively evaluate success of such system shifts and was even more complicated to harmonize them so that they bring the expected economic effect. This was also caused by the fact that national governments or generally accepted opinion-leading experts or prestigious think-tanks (GoldmanSachs) stubbornly pushed forward their opinions that a crunch crisis is exploding in the US and that its solution is only a partial issue of its national government. The subsequent culminating infection affecting the whole American banking business, crowned by bankruptcies of large financial houses, was not only the limited issue of US financial markets. The following year showed that input of its consequences was not only deeper but greatly affected all financial sectors and most of the production territories of the world economy. After 2010, when the economy was expected to resume its balance again, macroeconomic perception of the crisis proved to be incorrect and the level of sufficiency of adapted programs could be identified. Also this development and resulting economic consequences confirmed the high dependence of the world centers on the American economy.

Still at the end 2008, leaders of the European integration community, either the European Central Bank or political representatives of Germany and France, spoke about the crisis as a process which was only marginally related to its economic interests and had minimum effect on its economic impact. Expanding indebtedness and growing frequency

of public fund deficits of PIIGS countries (Portugal, Italy, Greece Spain, Ireland) or Cyprus disproved the legitimacy of such statements already at the end of 2009 and found it unprepared for the escalating crisis. Following huge financial injections to save the PIIGS countries which were originally designed for technology investments across the whole EU and therefore naturally limited the financing of new projects whose implementation was to support international competitiveness of the whole continent.

2. Identification of the Research Problem: A Theoretical View

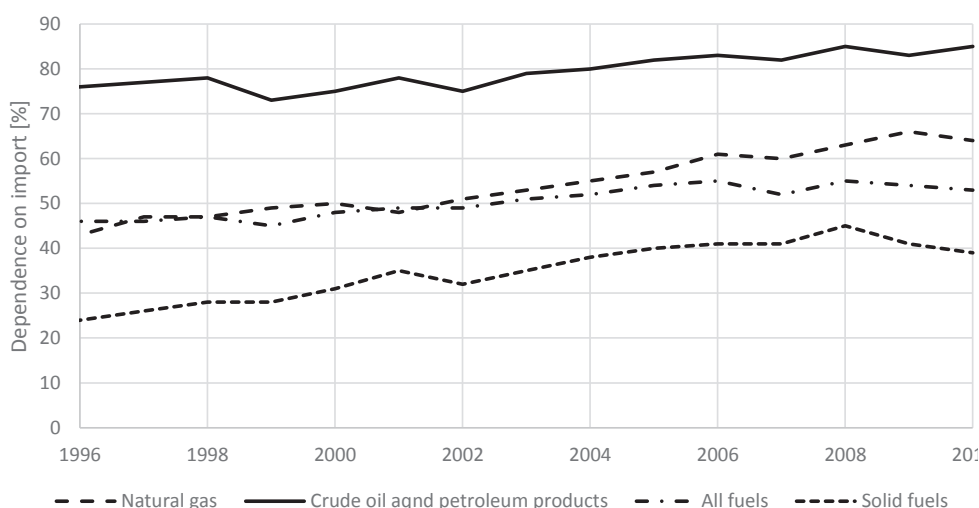
For decades the European integration community and its economic development have been depending on efficient use of its own comparative advantages and the markets' expansion, which bring additional effects resulting from the theory of scale (economies of scale). Its strategic scenario was based mainly on an international competitiveness boost. Therefore, special attention was paid to its impact. Theoretician such as W. Porter (1990), P. Krugman (1994), S. Garelli (1998), M. Šikula (1999), N. Roubini (2012), E. Klváčová (2008) or Z. Kittová (2014) and the results of long-term research from various prestigious research institutions confirmed that international competitiveness will remain a key element of prosperity of every business entity active in the world market even in the 21st century. Although the presented theoretical statements varied in their arguments, there was an essential agreement over the fact that competitiveness, either on the macro- or micro-level, means that a business entity is able to be successful and, if possible, in the long-term, active in the international business environment and fulfil the meaning of its economic existence. The following can be considered as non-negligible: secondary effects such as higher employment and related growing consumption, balance in national finances, positive development of current account or political stability in the countries which are more competitive. Therefore, its falling level was identified as the main reason behind the deteriorating international position of the EU towards its Transatlantic and Asian competitors by J. Delors (1994) and later J. M. Barroso (2009) or others.

The strategy project which was to prepare the EU for this new situation was the so-called Lisboa Agenda. It set for its objective that the Union should become the most competitive region of the world. Although already in 2005 it was factually reviewed and subsequently its content and time horizon was significantly changed – extended until 2020, it confirmed that the EU understands its international importance and that the issue of competitiveness must be solved and supported on the macro-level. The scheme was gradually divided in individual national programs and became an evaluated part of the whole community agenda. Although its “time horizon” was shifted and the EU should become one of the most competitive parts of the world economy after 2020, accepting this “doctrine” as decisive for strengthening international positions of the Union confirms that its importance and meaning were fully understood.

At the beginning of the millennium, the Union defined the energy sector as a one of its main comparative advantages. Yet before the crisis it adopted a strategy agenda – the so-called Europe 20-20-20 – which is to ensure a high level of energy security and was to serve as a basis for essential comparative advantage of domestic producers against US or Asia competition. Finally, the agenda envisages that by 2020 energy consumption and emissions will be reduced by one fifth and the share of renewables on the total production will increase by one fifth. It is expected that a substantial parts of these targets will be met

already in 2015. Although the project's implementation expects high expenses, the EU envisages that by 2020 both Asian countries and the US will also get to the development algorithm and that a gradual but timely project implementation will help EU 2020 to get a head start which will be crucial for future competitiveness of the whole EU. A secure and reliable energy supply for acceptable prices was to, despite the financial crisis, remain one of the main strategic intentions after 2010. In fact, the Union controls only a portion of the world's reserves of oil, gas and coal and dependency on the import of primary energy materials has been still growing. In 2014 their import represented approximately 50% of consumption. Not even the growing share of alternative energy sources in the European average was able to change this trend. According to the priorities set in the Green Book "Towards a European Strategy for the Security of Energy Supply", in 2030 EU dependence on oil import will be 90% and on gas 80%. The original assumption of the long-term fast growth of Asian consumption was to increase their prices to the extent that the ability to reduce its energy dependency through the Project 20-20-20 was to be a key in supporting of EU overall competitiveness.

Chart 1 | EU Import Dependency (1995-2010)



Source: Adapted from European Commission. 2012. Available online: http://ec.europa.eu/energy/gas_electricity/doc/20121217_energy_market_2011_lr_en.pdf s. 18

As defined by the Lisboa Agenda, common energy policy should be the strategy supporting pillar of an EU competitiveness boost. Therefore, it belongs to the system of priorities set in the Green Book and should substantially contribute to the development of a coherent and well-balanced EU economic policy directed at a secure and reliable energy supply for the whole European community. The energy issue itself became a key European policy only after the major enlargement of the EU in 2004. The reason was simple: new member states inherited also almost full dependency on energy import – from the Russian Federation. Since the time of its largest enlargement, the Union has therefore been facing several crises, i.e. gas crisis in 2006, 2009 or at the end of 2014 and the dependency on Russia has become great. Strategy issues such as reliable supplies and

energy prices and their impact on EU competitiveness or projects aimed at reduction of dependency on one supplier came to the forefront of attention.

J. Buzek, the former Polish prime minister and president of the European Parliament (2009-2012), as one of the first European representatives, proposed the solution for common energy policy at the European level. In 2009 he proposed to implement the project of the European Energy Community (EEC), which was to bring about common energy market, through free trade and capacity-sufficient electricity and gas cross-border transmission infrastructure. Attention was to be paid also to better energy efficiency and renewable sources which were to become a basis for EU energy mix optimization. An important element was common purchase of gas or electricity from countries outside the EU. The similar opinion was shared by the former president of the European Commission J. Delors (1985-1994), who is considered one of the “founding fathers” of the European Union. On 5 May 2010, they presented, before the European Parliament as a part of the 60th anniversary of the Schumann Declaration, key components of such a European energy community.

One of the main activities of the European Commission (EC), which is responsible for economic development of the Union in the long-term, is the convergence of European energy security. The International Energy Agency (IEA) participates too. Its background and following international competitiveness is also addressed by M. E. Porter, J. Stiglitz, S. Garelli, etc. There are also other respected younger theoreticians such as O. Machek, O. Hnilica, M. Vošta, S. M. Obadi or S. Zabožnik, especially in the context of the preparedness for accession to the EU and with the preparation of the project of a common energy policy and support of competitiveness of the Union. Still in 2014 and at the beginning of 2015, the Commission declared that there will be a new energy strategy for the EU which will unify the whole internal energy market and reform the way how energy in the EU will be produced, transported and consumed.

The idea of a European energy community was also supported by the president of the European Commission J. M. Barroso, who merged the issue of energy security improvement with gradual integration. The European Commission adopted already in 2010 several measures, contributing to the common energy policy. One of them was the decision of the member states to strengthen the EU's position and coordinate energy policy with neighbor countries or implement preventive measures and emergency plans to improve a secure energy supply. The most important was the decision of the European Council to complete the internal energy market and remove the so-called energy islands (member states whose infrastructure connection with other countries is poor) in 2014. However, political will to promote the integration in energy business was not sufficient and the common energy market did not become a reality. At the session of the European Council in 2014, the then Polish prime minister and its current president – D. Tusk – presented the idea of an Energy Union, based on solidarity between the member states and their neighbors, energy infrastructure integration and the use of its own sources such as coal or shale gas. Contrary to the proposal of J. Buzek, it should be less focused on renewables sources, but e.g. common purchase of natural gas could be an essential part. Member states should delegate competences onto a common European body which would negotiate on their behalf with third party countries.

On 7 February 2015 Marek Šefčovič, vice president of the European Commission in charge of the Energy Union, presented the final picture of the Energy Union which

should concern other policies, except for energy and transport, such as research and innovation, regional and neighborhood policy, trade or agriculture. The Energy Union is, together with climate change policy, included among the priorities of J. C. Juncker. The framework strategy of the Energy Union is expected to be adopted by the Commission on 25 February 2015. Also, the Commission intends to announce the EU's negotiating position for the Climate Summit in December. Other experts expect that there will single supervision implemented in the energy area. Jean-Arnold Vinois, a former advisor to former commissioner for energy, said: "One day there will be an EU regulator for energy. We've seen it with Banking Union – no one would have thought that was possible five years ago," he said.

3. Discussion about Development of a European Energy Market and Results

In 2011, within the annual outlook IEA presented three possible alternatives of the long-term development of global energy markets: based on forecast (1), based on a new energy implementation scenario (2) and based on the so-called 450 scenario (3). The outlook assumes that the overall demand for energy in the global economy will increase with the implementation of the new energy policy, cumulating from 12.150 billion tons of oil equivalent (toe) in 2009 to 16,950 millions of tonnes of oil equivalent (Mtoe) in 2035. It will therefore increase by approximately 2/5, which is approximately 1.3% per year. To compare, in the "classic" scenario the increase during the same period should be 18,300 Mtoe, meaning 51% (1.7% per year) (IEA, 2011). The third scenario anticipates the increase in consumption amounting to only 14,850 Mtoe - only about 23% (0.8% per year). In such a case, the cumulated demand would be lower than the classic scenario by approximately 19%, and lower than the new scenario by approximately 12% (IEA, 2011).

All three scenarios take into account the undeniable premise that energy consumption will continue to increase and that fossil fuels will stay the dominant energy source but their energy mix will change. In the first scenario, their share is 81%, in the second 75% and the third only 62%. The prognosis expects that there will be enough raw materials and they will cover the international demand; the question is the territorial dislocation of their production and consumption sites, as well as their prices. As a matter of fact, prices will definitely also decide the overall competitiveness of European producers and their perspective on the international market.

Table 1 | Structure of fuel consumption per energy carrier type (millions of tonnes of oil equivalent, 1980-2035)

| | | | New IEA methodology scenario | | Current IEA methodology scenario | | 450 scenario | |
|--------------------------|--------------|---------------|------------------------------|---------------|----------------------------------|---------------|---------------|---------------|
| | 1980 | 2009 | 2020 | 2035 | 2020 | 2035 | 2020 | 2035 |
| Coal | 1,792 | 3,294 | 4,083 | 4,101 | 4,416 | 5,419 | 3,716 | 2,316 |
| Oil | 3,097 | 3,987 | 4,384 | 4,645 | 4,482 | 4,992 | 4,182 | 3,671 |
| Natural gas | 1,234 | 2,539 | 3,214 | 3,928 | 3,247 | 4,206 | 3,030 | 3,208 |
| Nuclear energy | 186 | 703 | 929 | 1,212 | 908 | 1,054 | 973 | 1,664 |
| Hydro energy | 148 | 280 | 377 | 475 | 366 | 442 | 391 | 520 |
| Biomass and waste | 749 | 1,230 | 1,495 | 1,911 | 1,449 | 1,707 | 1,554 | 2,329 |
| Other renewables | 12 | 99 | 287 | 690 | 256 | 481 | 339 | 1,161 |
| TOTAL | 7,219 | 12,132 | 14,769 | 16,961 | 15,124 | 18,302 | 14,185 | 14,870 |

Source: Processed according to data in World Economic Outlook, IEA Paris 2011, p. 70.

Even after 2010, a secure and fluent energy supply for acceptable prices will remain one of the main strategic goals of the EU. It controls only a fraction of the world's oil, natural gas, and coal reserves, and its dependence on the import of primary energy carriers keeps increasing. Not even the growing portion of alternative sources across Europe has been able to reserve the trend. In 2014, the import was comprised about a half of consumed raw materials, and by 2030 it will have risen further. We can consider various directions in connection with the supply security; for example the EU could save up to 1/5 on import through a radical decrease of consumption, extensive diversification of supply, increase of domestic generation from renewable sources, more intensive promotion of renewables, or by solving the storability of electric energy – but all alternatives are, in the long run, more expensive than the existing ones. Moreover, the consumption will grow in parallel with the expected growth of GDP, thus eliminating prospective savings. At the end of the day, energy prices created by market situation will always put pressure on prices of the final production and, in case of slow response to their development and position in the production price calculation chain, lead to further decreasing of competitiveness. The solution lies only in significant changes in consumption of all types of energy, as a sign of a successful transformation and adaptation process of economy, which will lead it to the development path of high technology and services production. In this market segment, energy prices are usually of secondary importance.

5. Conclusion

Access to the energy sector and especially energy security in the era of international financial crisis could have a key position in this long-term process. The overall strategic position and perspectives of the European economy as a whole is absolutely dependent of fuel/energy imports. Therefore, it needs to incorporate space for maneuvering so as to acquire them into its strategic plans on one hand; on the other hand, it has to make use of every opportunity to ensure energy saving and minimization of excessive consumption effects. The EU has great expectations from the implementation of the “Europe 20-20-20” strategy program and realizes that its results will directly impact the decrease of international competitiveness (Baláž, 2011).

The analysis confirms that energy will stay literally in a geostrategic condition by which a successful management decides on the future position of all countries and all economic blocks, including EU, too. Apparently this process will play only a minor role in building the national economies of the EU and their industrial traditions. The ability to set developing criteria that will guarantee the construction of complex production systems that should ensure optimization of all forms of tangible and intangible outcomes while minimizing energy consumption will be crucial. The production mix, in addition to factor efficiency and stability of its supply, has to not only reduce import dependence, but also continuously decrease the consumption of energy carries. Such a development trend could significantly increase the EU’s capacity to adapt strategic plans of other territorial enclaves in the world economy, which under the pressure of globalization with the same economic reasons, will implement their own structural maneuvers in support of their position in world markets.

Successful long-term application of comparative advantages in pursuing its own economic interests in the international markets is a crucial attribute of the EU’s success. The strength of existing relationships and dependencies in this area confirms the view that only by asserting the doctrine of an EU common energy policy and cumulative effect can sufficient competitiveness of the whole block be maintained or increased. The current development confirms that energy will be literally geostrategic condition-sine-non-qua, by which successful management decides on the future position of all countries and all economic or political blocks. This process will play only a minor role in building national economies and their industrial traditions. The ability to set developing criteria that will guarantee the construction of complex production systems that ensure optimization of all forms of tangible and intangible outcomes while minimizing energy consumption will be crucial. While the production mix, in addition to factor efficiency and stability of its supply have not only to reduce import dependence, but also continuously decrease the consumption of energy carries. Such a development trend could significantly increase the EU’s capacity to adapt strategic plans of other territorial enclaves in the world economy, which under the pressure of globalization with the same economic reasons, implemented and will implement their own structural maneuvers in support of their position in world markets.

European countries and especially the members of the euro zone will do to realize the restructuring processes which should help them to achieve former economic positions in the world economy and particularly international business environment. Seemingly, they have to consider the real conditions determining the future economic prosperity

and to identify which comparative advantage is key to achieve these positions on the international markets. Access to the energy sector and especially energy security could have a key position. Without a doubt, the overall strategic position and perspectives of the European as well as the Slovak economy are absolutely dependent on fuel/energy imports. Therefore, it needs to incorporate room for maneuvering so as to acquire them into its strategic plans on one hand; on the other hand, it has to make use of every opportunity to ensure energy saving and minimization of excessive consumption effects. Implementation of comparative advantages of the EU remains an important imperative for the future (Baláž and Zábojník, 2013).

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Authors

Prof. Ing. Peter Baláž, PhD.

Department for International Business, Faculty of Commerce, University of Economics
Bratislava, Slovakia
balaz@euba.sk

Ing. Juraj Bayer

Department for International Business, Faculty of Commerce, University of Economics
Bratislava, Slovakia
bayer.juraj@gmail.com