Development of the Economic Theory in the Context of Economic Integration and Globalization – Presentation of Research Results[1]

Jiří Kraft, Jiří Fárek, Pavla Bednářová, Iva Nedomlelová, Marek Skála

The authors of the submitted article are members of the research team, working under financial support of the Grant Agency of the Czech Republic on solving the project titled "Development of the Economic Theory in the Context of Economic Integration and Globalization" (registration number 402/09/0592) for the years 2009 – 2011. The authors are associated professors and research assistants of the Department of Economics, Faculty of Economics, Technical University of Liberec in the Czech Republic.

The tasks of the research are:

- To map and compare the new directions of development of economic theories from the mid-20th century up to the present, especially those reflecting the influence of globalization and integration processes.
- To qualify and define interactions and relations among the phenomena of globalization, internationalization, transnationalization, and interdependence.
- To analyze the implications of the conclusions for solving problems of external and internal balance of an economy on both theoretical and application levels.

The analysis has been focused on the comparison of economic areas of the European Union and Japan, or of an economic area developed as a result of economic integration and an area dependent solely on the phenomenon of globalization.

This contribution aims to present the results of this research project.

1 Global Economic Imbalance and Transformational Entrepreneurial Challenges – Outline of Selected Theoretical Aspects

In the world economy, the clasp of commercial, capital, and financial aspects of globalization is growing stronger along with cross-border investment acceleration building global production and supply chains. Tense competition in financial sector together with innovated transactions and overall relaxed atmosphere in bank lending promoted deepening of the international payment imbalance. Export effective economies – with support of exchange rate policies – accumulated massive disproportional monetary (dollar) reserves. Worldwide market interconnectedness on one side and relatively low level of global supervisory coordination and communication on the other side represented a strong potential for disorders or shocks in the world economy, but also for transfers of savings from

---

[1] The article was published under financial support of project GA ČR 402/09/0592.

developing to the developed countries. Existing international monetary arrangement (system) contains bottlenecks in the form of monetary manipulations in favor of achieving foreign-trade advantages and linked to redistribution of production and income in the world economy.

There is an obvious absence of balancing mechanism that would encourage remedial corrections in countries with excessive increments of payment surpluses or deficits and that would face the pressure of continuous deepening of global economic imbalance. Now, the world is standing in front of the problem of redirecting the growth sources from consumption in the deficit countries to consumption or demand in the surplus countries. In other words, a revision of the model is in need, where the poorer, though relatively fast growing countries finance or provide bulk and cheap loans for common consumption in the developing economies in exchange for a promise or future demand for their production. In the present post-crisis development of the world economy, the solution can hardly be found in a mere ordinary revitalization of the growth dynamics with return to the previous trends or growth models. Signs of new challenges and trends with implications for theoretical and economic policy sphere are getting to the forth.

On the macroeconomic level, there is an apparent significant shift of the economic power and status of some, in particular Asian developing countries in the world economy. Especially the large countries (China, India, Brazil, and others) are moving from their former status of imitators and copiers of developing tracks of advanced economies to the position of innovators with their own original research and development, applying progressive business models, and employing new technologies in manufacturing and services. It isn’t only a shift from the position of debtor to the position of creditor or from the lot of importer or receiver of foreign capital. It is a crucial transformation to the role of internationally active corporation owners and sovereign investment funds. The structural aspects of ownership are consequently in a tight relationship with this new component of the global entrepreneurial environment. Beside the state owned companies, there are also new progressively structured family businesses coming to the forth in the dynamic environment of Asian economies. They offer very specific versions of motivation, employee relations, approaches to the growth opportunities, as well as time horizons of investment plans and returns on capital.

The level of differentiation of the business entities from the large Third World economies and in this context also the legitimacy of eventual abstractions in theoretical constructions of profit bound behavior of firm remain the question for microeconomic theories of firm. A good example of this case can be represented by Chinese and recently also Indian companies joining in such activities as purchasing agricultural soil units in Africa, financing railway projects and port facilities in other continents, as well as supporting investment activities of local governments. From the solely profit point of view, the reasons are questionable, nevertheless, they make perfect sense if generating future values or creating social benefits (e.g. ensuring food supplies, energy sources, and commodities) are taken into account. When the new transnational corporations from large developing countries – with their acquisition activity and fierce competition for natural resources – entered the world scene, they brought a number of new features into the risk and uncertainty management of contemporary global business environment. Additional factors advance this process, among others geopolitical turmoil, natural disasters, fiscal crises in the Euro zone, inflation pressures in the key developing countries, deepening debt problems in the USA, etc. Nowadays, business activities and with them associated risks have an obvious transnational character or dimension.

After decades of globalization trends, that were relatively easy to anticipate, conceptions and models of economic growth, that were consensually accepted, and dominant political realities, that were widely respected, the present development is heading to distinctively multipolar world. This world is characterized by its ideological diversity, by differences in government supportive and regulatory framework, and – last but not least – also by more demanding requirements for adaptation strategies of business subjects. It is not only about building diversified conglomerates, that would use globalization for broader application of new technologies, cost reduction, and increasing labor productivity, but also about strengthening the local importance (adaptability), while respecting the specific local bodies or authorities. The strategies of the corporations must take into account not only local or regional factors, but also the international challenges and dimensions. But at the same time, they must look for and distinguish the relevant procedures in such fields, which have not yet been clearly defined by the government intentions, or in such aspects of global economic phenomena, which have not yet been completely theoretically elaborated.

The model approaches to economic growth in the context of sector structures became a subject of reactivated interest of macroeconomic oriented theories. With a certain extent of simplification, it is possible to say, that the less developed countries generally favored such priorities (education and external openness) that facilitated both 1) receiving knowledge and experience from the more developed countries and 2) foreign-demand-driven specialization of product from local manufacturers. Many of the countries set off for a relatively successful journey of continuous structural adaptation from labor-demanding production to technologically more progressive manufacturing or even to services.

The application of above mentioned model approaches has been rather significantly hampered by global economic imbalance manifested in the form of enormous budget and balance of payments deficits of some countries and in the form of foreign trade surpluses of a number of others, be it petrol exporting countries or successful Asian economies. The separation of exchange rates of national currencies from their internal economic values together with an artificial modification of theses rates by doubtful impacts, especially when it came to preservation of economic structures, have constituted another derivative problem. Its concomitant effect has manifested itself in some countries in the form of increasing monetary reserves. The question of really meaningful volume of these reserves arises in the relationship with the demand for these reserves. It would be difficult to identify a general theoretical concept, nevertheless, besides the financial globalization – the previous experience with runaway outflows of money after outbreak of financial crises plays an important role. Reserve accumulation is often perceived as a kind of safety fuse and also it is not quite possible to exclude the rivalry for more trustworthy reserves, stimulated by the effort for maintaining low exchange rates of national currencies and competitive advantages of the economy in the international trade.

The dark side of the fact is the difficulty of progressive adaptation in the direction of the worldwide economic trends, then. In this context, it is meaningful to note, the economic theory has so far focused primarily on the links between the globalization and manufacturing, especially on feasibility of individual countries to specialize not only in production of the final products, but also in all sorts of intermediate stages of production, respectively in certain partial phases of production process. It is possible to consider the analysis of the sector of services, especially the modern and sophisticated ones, as a new challenge for research. There is a wide scope with a number of not-yet-opened questions available for research. They should address especially the issue of assessing the efficiency of a certain combination of economic activities and related government support; the specific advantages of services in the context of global demand development and of their tradability; the potential to create job opportunities; the level of qualification intensity and others. There cannot be any doubt these are highly interesting issues concerning both the developed economies and also the developing countries. Especially India stands out to the forefront. They succeeded in building up an impressive network of research and service centers for transnational corporations and thus turning the export of services adherent to the information technologies into a lucrative source of profits. The findings of this research have been detailed in the following publications (Fárek, 2009a), (Fárek, 2009b), (Fárek, Foltýn, 2009).

2 Reflection of Globalization in Contemporary Economic Theory

From the contents of the world textbooks on macroeconomics, monographs, and analytical papers published since the half of the nineties, it is possible to observe the changes as a reaction to the phenomenon of globalization. An integrative approach to the analysis and explanation of problems, that earlier constituted partial fields of macroeconomics, open economy macroeconomics, international macroeconomics, international finance, and others became an integral part of these texts, the extent of these intersections in extension and intension has been constantly increasing, which is undoubtedly a reflection of the globalization of the economic life in today's world.

In the accelerating process of globalization, the impacts of thinking in the dimension of the globe and mutual relationships acquire substantial importance for finding all the macroeconomic parameters of the national economies fading in the international economic environment with far-reaching economic consequences on the change of the very basic paradigm of the contemporary macroeconomics.

2.1 Impact of the Globalization Processes on the Theory of Firm

The main-stream microeconomic theory represents stable and consistent complex. The consistency is shaped by a solid elaboration of the basic topics of the microeconomic analysis such as behavior of consumer, theory of firm, analysis of production factor markets, and the general equilibrium issue, including the market failure. The analysis solves all the real microeconomic problems. However, the future danger is epitomized by a contradiction between the reality and the textbook theory. The mathematical method is exact, but the reality described with it has begun to differ. Fundamentally, the theory of firm might be endangered in the first place, as there arises a poignant question, whether the business environment altered in the processes of globalization of economic life – mainly due to the existence of transnational companies – does not turn the assumptions of the modern microeconomic inadequate.

The treatise (Skála, 2010a) aims to find the answers to the following issues:

- What is the environment of the contemporary firm in the comparison with the “textbook firm”?
- Is the discrepancy significant and could it lead to incorrect conclusions?
- Does the modern microeconomic analysis suffer from an absence of any of the phenomena of altered business environment?
- Do the alternative theories offer more realistic answers for the theory of firm and are they able to replace the neoclassical theory?

The monograph verified the hypothesis the neoclassical theory of firm as it was interpreted in the modern textbooks of the microeconomics gave correct answers concerning the behavior of firm despite the dramatic change of the business environment. It is so due to the following reasons:

- The differences between business environment and the assumptions formulated for the neoclassical theory of firm are not able – except for the problems of uncertainty in the life of the modern firms – to challenge the profit maximizing behavior of the firm.
- The alternative theories of firm do not offer a robust solution of the problem of uncertainty for the behavior of firm. They are restricted to a mere description of the problem and they hold the problem of uncertainty for an assumption.
- The alternative theories are not able to replace the neoclassical theory of firm.
- Conversely, the neoclassical microeconomics at least explicitly solves the problem of uncertainty in the life of firm with a method of expected value maximization. It is necessary to note this solution of the problem is substantially inconsistent with the reality, because the risk-neutral owners are assumed, while there is statistically verified majority of risk-averse individuals in the real population.

2.2 Impact of Globalization Processes on Labour Market in the Macroeconomic Theory

The behavior and correlation of macroeconomic variables during the business cycle in the reality seems to be at odds with the traditional AD-AS model and DAD-AS model. New Keynesian macroeconomics through the incorporation of rigid prices into the AD-AS model and DAD-AS model aims to get over this shortcoming. At the same time, it attempts for microeconomic foundation of rigid wages and prices in today's economy. Their theory of effective wages is able to explain many phenomena in the labor market, which the traditional macroeconomic theory was not able to handle.

It is possible to sum up the macroeconomic consequences of the fixed prices published in the article (Skála, 2010b) in the framework of the project as follows:

- The economy is during negative demand shock further below its potential. Firms are reluctant to reduce prices and therefore will not get a part of their demand back.
- The labor market has found its new equilibrium where firms employ only an effective amount of workforce required for producing the lower output. In recession, firms reduce the flexible nominal wages and the real wage (procyclically) decreases. In the labor market, a new unfavorable equilibrium is established with far lower employment. This balance will not change until the prices are released.
- In the real economy, rigid prices and wages will coexist. Their share is determined by market structures (the impact on the variability in prices) and by the institutional concept of the economy (the impact on the wage flexibility).
- The objective of economic policies should focus on the creation of a competitive environment, characterized by flexible price formation (the firms are the price-takers and they must respond flexibly to the market situation, if they want to survive) and by elimination of wage rigidities in the labor market.

The theory of effective wages is able to offer an explanation of a number of phenomena in the labor market (Skála, 2010b), which the neoclassical labor market is not able to handle, e.g.:

- Less productive individuals are more unemployed than their more productive counterparts.

  The theory of effective wages will lead the firm to such behavior the company will prefer more capable, better educated workers, for which can be expected a high elasticity between real wages and their efficiency (productivity). Economic policies can contribute to high quality and affordable education of individuals.

- The company does not reduce the wages associated with a particular job, even if there are more candidates for this job.

  Reduction of the real wage would expose the firm to the risk of losing skilled workers or to a drastic decrease in efficiency (productivity) of their employees. As a result, there can persist high and in terms of economic policies not very solvable involuntary unemployment.

- With the drop of demand, the working hours are not reduced proportionally to all employees instead the redundant (less-efficient) individuals are laid off.

Reducing working hours would mean an adequate reduction in real wages. By shortening the working hours, the company runs the risk of decrease of efficiency (productivity) of their employees therefore it will prefer to lay off redundant staff. Probably more layoffs will hit low-skilled individuals.

3 Impact of Globalization Processes on Economic Cycle and Economic Growth in the Macroeconomic Theory

The contribution of model of *the theory of real business cycle* is the connection between microeconomics and macroeconomics. The model explores the optimization behavior of individuals with regard to investment, jobs, present and future consumption, with implications for the dynamics in the economy. Supply shocks (technological change) or preferences cause inertial (running for a number of periods) movements in the economy. Underlying this dynamics, there is the intertemporal substitution of labor and consumption.

The article (Nedomlelová, Skála, 2009) sums up the macroeconomic effects in the very immediate period after the shock in the real business cycle theory:

- The interest rate drops because the discrepancy between aggregate expenditures and aggregate supply is getting smaller. There is no need for the interest rate to be as high as during the shock, but it is still not at its equilibrium level.
- In the period immediately after the shock, the product is growing inertially because of expanding investment from the period of shock.
- Increasing output stimulates consumption. On the other hand, investment demand is decreasing because the higher capital base reduced the productivity of capital.
- Ambiguous is the impact on employment and price level (just like during the shock).

Macroeconomic reality in the real business cycle theory in the new long-term equilibrium shows following characteristics (Nedomlelová, Skála, 2009):

- The new long-term equilibrium is – in comparison with the former long-term equilibrium – established at higher levels of product. Also the capital-labor ratio is higher in the economy.
- The price level is likely to increase compared to the base period. Higher product increased the transaction demand for cash, while the interest rate returned to its initial long-term level. There are not considered any changes in the transaction costs. The price level in the model must clear all the excess of the demand for money.
- Employment is likely to return to its initial level, as the effect of intertemporal substitution of labor stops actuating (interest rate returned to its long-term equilibrium level).

3.1 Education and Economic Growth

A number of contemporary models of economic growth are based on the implementation of knowledge, skills, investment in education, science and research. In this context, two main hypotheses were tested (Nedomlelová, Kocourek, 2009a), (Nedomlelová, Kocourek, 2009b):

- The higher the level of education and qualification, along with the development of science and research, the higher the economic growth; and at the same time:
- The higher level of education and science and research is a subject to economic growth.

The primary aim of the research was to find a cross-sectional correlation between the growth rate of real gross domestic product (GDP) and the share of expenditure on tertiary education in GDP using elementary statistical analysis. This analysis showed countries with rates of economic growth lower than approximately 4.6% generally have a positive relationship between the share of expenditure on tertiary education and the rates of economic growth, while in faster-growing economies (with growth rates exceeding 4.586%), this tendency proved to be negative.

In order to verify the hypotheses formulated at the beginning of the chapter, the identification of similar relationships within the four selected economies (CZE, DEU, JPN, USA) was carried out.

- At the five percent level of significance, a positive relationship between economic performance and spending on tertiary education in the following years was shown in the United States, while for example in the Czech Republic, there was identified negative correlation between spending on tertiary education and the level of GDP in following years. The higher the Czech GDP grows, the less attractive the Czech Republic seems to be for the Czech university students. In the U.S. or Japan the situation was just the other way round.
- The Czech Republic also has a statistically significant positive correlation between the size of the GDP per capita and the level of expenditures per tertiary student in previous years. So if the Czech government were longing to support the long-term growth of GDP per capita in the Czech Republic, the volume for their expenses for one undergraduate student could serve them as one of the potential and proven effective tools.

3.2 Neoclassical Production Function and the Theory of Distribution

The neoclassical production function stands for a corner-stone of majority of neoclassical schools of macroeconomics. Its history has been bound with such well-known names as A. Marshall, K. Wicksell, C. Cobb, P. Douglas, P. Samuelson, R. Solow, etc. On the other hand, the neoclassical concept of production function has also faced some criticism during second half of the 20th century coming especially from Europe (J. Robinson, P. Sraffa, L. Pasinetti, P. Sylos Labini, etc.). No matter how rigorous and robust their reproaches were, their critical opinions have never really been reflected in the mainstream economics.

The article (Nedomlelová, Kocourek, 2010) reopens the debate on validity of assumptions of the neoclassical concept of production function and theory of distribution. Its authors bring objective and unbiased view of the centennial history of various production functions, they show their relations to theories of distribution, and by doing so they hope to attract attention of contemporary economists to the old and yet unsettled issues:

- The neoclassical economic theory and in particular the concept of aggregate production functions are both criticized for a lack of reality and partly also for the logical indefensibility of the assumptions which they are based on. It is precisely because of favoring the optimal resource allocation scheme in the Arrow-Debreu version and also due to neglect of the logical inconsistencies of some of the analytical tools used for its verification, why the theory of income distribution was somewhat pushed into the background. This stereotype of thought tends to persist even in the framework of innovative approaches, such as examining endogenously motivated technological progress and others.
- Under these conditions, it is the real and concrete evidence on the empirical significance of the problems associated with the distribution of income, which – to some extent – revived the topic of income distribution. Yet, it is necessary to ask whether looking at the problems of income distribution in this way has actually any benefits, or whether it is not more an obstacle to finding a decent clue for understanding the reality of the contemporary world.
- During the last few decades, there has been marginalized the entire alternative stream of research that is based on the classical theory in its modern versions, as it is perceived e.g. by M. Kalecki, N. Kaldor, J. M. Keynes, P. Sraffa, P. Sylos Labini, and others. Classical-Keynesian school of thought seems – for its ability to absorb the changes brought in by structural dynamics based on the new technologies – to be much more acceptable for the development of research of institutional organization of economic systems than the neoclassical one.

3.3 New Stylized Facts on Economic Growth

There were presented new theoretical findings in the field of economic growth (Kocourek, Nedomlelová, 2010). In response to the new stylized facts on growth formulated by American economists Charles I. Jones and Paul M. Romer,[2] an analytical study was published (Nedomlelová, Kocourek, 2011), in which the authors tried to verify the validity of the two selected Jones-Romer facts at the sub-global levels.

- The authors demonstrated the general validity of the fact dealing with accelerating rates of population growth and GDP per capita in the Eastern Europe and in the Czech and

[2] JONES, CH. I., ROMER, P. M. The New Kaldor Facts: Ideas, Institutions, Population, and Human Capital. *Working Paper No. 15094*. National Bureau of Economic Research. Cambridge, June 2009.

Slovak Republics, however, pointed to the fact that significant historical events can temporarily reverse the identified general global trends.

- With increasing distance from the technological frontier, the variance in real growth rates rises, while the key determinant of successful catching up with the developed economies is the institutional level and through it the ability of developing economies to absorb new ideas.

3.4 Comparison of Macroeconomic Development of the EU and Japan in the Last Two Decades

The article (Nedomlelová, 2010) deals with comparison of macroeconomic development of the two important economic centers between 1990 and 2009: the European Union, an economic player originating from the economic integration, and Japan, which appears to be out of the phenomenon of economic integration. Macroeconomic comparison and monitoring the business cycle synchronicity has been carried out on the basis of analysis of the development of growth rates of the GDP. Rates of unemployment and of inflation were another two monitored macroeconomic indicators.

- Relatively favorable development in the EU during the reference period can be attributed to the preparations of the member states to comply with the convergence criteria and to the ECB's efforts to meet the objective of a stable price level.
- The EU pitfall is the high rate of unemployment and lower GDP growth rate, both caused among others also by high levels of taxation in the member states.
- The Japanese economy went through tough recession in the period 1990 – 2009, much worse than in the EU. They squared up with the asset market "bubble-burst", with the financial system crisis, with liquidity trap and deflationary spiral, and even with the rise of unemployment recorded in the labor market.

4 New Roles of Currencies in the Process of World Economy Globalization

For centuries, currencies have been seen – beyond their economic functions – as symbols of sovereignty. Today, in the environment of globalization, they are often seen as symbols of economic and financial strength of economic areas in an international context. Economic integration is the process through which nations lessen the economic significance of their borders. It can take the form of pacts that reduce tariffs and other barriers, letting goods and services move more freely. It can take the form of investor protections that foster capital mobility or visa programs that help firms find willing workers. When goods, services, capital, and labor can move to where they are most efficiently employed, economies can grow at faster rates than they otherwise would. But increasing mobility of goods, labor, and capital entails greater exposure to global economic pressure. Globalization and integration (which influence each other) substantially change economic relations: They increase trade and factor mobility between regions and thus foster interregional competition and affect the interregional division of labor.

4.1 Financial Globalization, International and Global Roles of Currencies

Financial globalization and financial stability is just one aspect of the entire process of globalization. The process of financial globalization has brought a massive change in the economic landscape of all the countries across the globe (Bednářová, 2009a).

Financial globalization has brought a remarkable change in intensive cross-border financial and cost flows, in international risk-sharing management with the help of an extensive range of financial equipment, in the rising stakes of cross-border properties, in the flaring international profile in the financial stability of economic markets, and lastly in market operators and institutions. It is a process by means of which financial markets of many countries are being integrated globally.

Financial liberalization is not a sufficient condition for financial globalization. It is an aggregate concept that refers to a rising global linkage through cross-border capital flows. There are different forces such as governments, borrowers, investors, and financial institutions that facilitate financial globalization.

The international roles of currencies are measured by the share in global markets, in particular, in debt securities markets, international loan and deposit markets, foreign exchange markets, and international trade.

The concept of the global roles of currencies combines the domestic and international (cross-border) use of currencies and therefore captures the overall importance of different currencies in a globalized economy. The measure of a currency's global role is based on the size and stage of development of the underlying economy, as well as on the size and stage of development of its financial markets and the scope of financial instruments available in this particular currency. The measure is based on size indicators and structural indicators relating to the currency's financial markets and the underlying economy.

The US dollar is still the leading global currency, resulting from the economic strength and governance framework of the underlying economy and the size and stage of development of its financial markets. The role of the Euro will continue to rise as a result of the enlargement of the EU – which will gradually add to the global economic weight of the Euro area – and, more importantly, of financial development and integration within Europe. The Japanese yen's global concept plays more important role than the international concept due to the large domestic financial market in Japan.

4.2 Globalization and Public Finances

Today's record public debt levels in most advanced economies are not only a direct consequence of the global crisis. Public debts had grown over many decades before, because they had been used as the ultimate shock absorber. They rose in bad times but did not decline much in good times. Government debts rose considerably over the past decades and this trend was generally accompanied by an expansion in the size of governments. For many industrial countries, the growth of general government expenditure was enormous in the 20th century. The financial crisis that has been influencing the global economy since the summer of 2007 has no precedent in post-war economic history. Although its size and extent are exceptional, the crisis has many features in common with similar financial-stress driven recession episodes in the past. The crisis was preceded by a long period of rapid credit growth, low risk premiums, abundant availability of liquidity, strong leveraging, soaring asset prices, and the development of "bubbles" in the real estate sector.

Globalization exerts an influence on government spending: with growing globalization, public expenditure increases (Bednářová, 2010a), (Bednářová, 2010b):

- The transmission of financial distress to the real economy evolved at record-breaking speed, with credit restraint and sagging confidence hitting business investment and household demand, notably for consumer durables and housing. The cross-border transmission was also extremely rapid, due to the tight connections within the financial system itself and also the strongly integrated supply chains in global product markets.
- The European fiscal criteria, regardless of all the reservations to their particular form and enforcement of their performance, helped to prevent public finances of the EU countries from getting to such a critical condition as they are in the case of Japan's economy.
- The average budget deficit in the EMU in 2009 was 6.2% of GDP and the average size of the gross debt reached 78.8% of GDP. The average values, however, conceal significant differences between individual countries. In 2009 only two member countries of EMU met the referential values for sustainable public finances.
- Japan's public debt in 2009 reached enormous 217.7% of GDP and was almost two times higher than the highest value in the Euro zone. In 2009 only two Euro zone countries had their budget deficit higher than Japan's deficit, which was 11.4% of GDP. Based on the comparison, it is possible to conclude that the state of Japan's public finances is the worst when compared with all the countries of the Euro zone.
- Under the current and future pressures on Japan's public finances, such as large primary gaps and rising health care and pension spending, the public finances would spiral out of control unless any fiscal adjustment is carried out.

4.3 Hypothesis of Integration Process Endogeneity

The hypothesis of the integration process endogeneity assumes that the countries which participate in economic integration for a longer period of time should reach a higher level of the synchronization of the economic cycles. The main theoretical basis for the analyses of cyclical and structural synchronization is the Theory of Optimum Currency Areas (OCA). On the basis of the theoretical principles, the costs and benefits connected with the entry to a monetary union are compared. Monetary integration represents, amongst others, the removal of “borders” for national currencies. This contributes to the shortening of distances and changes in the structure of agents. Monetary integration also signals the willingness to participate in even broader economic integration, which includes, amongst others, issues of property rights, non-tariff trade barriers, labor policy, regulations, and social policies. A currency union strengthens the effects of the free market by being irrevocable.

The synchronization of global economic shocks increases with the increased economic integration and globalization (Bednářová, 2009b), (Bednářová, 2010c):

- The hypothesis of the integration process endogeneity assumes that in the case of a quantitative or qualitative change in economic integration the expected benefits will be visible in a certain time after the change occurred. If the quantitative barriers, free movement of production factors, and national currencies are removed, it should result in higher synchronization of business cycles.

- The optimistic hypothesis of the integration process endogeneity assumes that the process of integration is connected with the growth of international trade and with the gradual higher synchronization of business cycles.

- The Krugman’s hypothesis represents an opposite opinion of the American monetary economist, P. Krugman: If in the framework of the developing integration process all the barriers of mutual international trade are gradually removed, it can lead to the regional concentration of production connected with lower costs. Trade integration leads to higher specialization of countries and consequently also to the increase of the possibility of asymmetric shocks occurrence (agglomeration effect).

- On the basis of the empirical measurements of the development of economic and monetary integration in Europe, the hypothesis can rather be supported in the pre-crisis period. In the period of the crisis, the positive impacts of the process of economic and monetary integration are suppressed.

- The current economic crisis has clearly a negative impact on the process of the European economic and monetary integration; the benefits are decreasing and the costs are soaring. This negative development, however, can be limited in time.

5 Impacts of Globalization on Economic Cycle

5.1 Asynchrony of the Economy Cycle

Macroeconomic reality shows, as confirmed by the world economic development, a major conditionality to the microeconomic reality. The basis of the carried-out research was the comparison of five super-regions (Kraft, Kraftová, 2010):

- It was confirmed the asynchronicity of the business cycle, which is nowadays a fact only partially, but exists in the connection between the EU and Japan, may be at least to some extent used for mitigation of impacts on – at the moment – hardest-hit economic subjects.
- Contrary, in Europe (in the EU respectively), the synchronicity of economic cycle reached a rather high level, thus largely reducing the manipulation space for soothing the recessionary impacts in the EU. Related to this fact, the authors investigated a varying efficiency of investments in several economies and sectors, reflecting trends in the development of human well-being.
- When comparing Europe and Japan, it has been shown that increased cooperation, even of such hardly comparable entities as Japan and the Czech Republic, can bring significant positive effects for both participants mainly due to different levels of sector investment efficiency.

5.2 Development of the Market Structures

In addition, intensifying trends towards globalization of the world economy can be now proved in the reality of the international territory, affecting its development essentially (Kraft, Kraftová, 2009a). Right in this context, the macroeconomic reality is influenced by microeconomic development most efficiently. Therefore, the further investigation developed in this direction and confirmed the market structures are changing particularly in the developed market economies – and demonstrably also in the Czech economy (Kraft, 2010), (Kraft, Kraftová, 2011), (Kraft, Zaytsev, Baranov, 2009). In the principle, two trends are reflected in the identified market structures:

- The technical and technological economic progress requires large-scaling of the production in relation to the need to make use of the increasing returns to the variable input and consequently increasing returns to scale.
- The operational and ambitious small and medium-sized enterprises do not "pulverize" the monopolization trends and create space for activities of a competitive fringe typical for oligopoly with a dominant firm.

But on the top of it, the economic reality generates a new market structure that has not yet been the subject of theoretical analyses. It is – to say – neither a monopoly, nor a typical oligopoly, be it cartel or the dominant firm oligopoly (oligopoly with the price leader), and certainly not a monopolistic competition.

This market structure arises where a few dominant firms (usually in the economies of the size of the Czech economy, there operate two or three) coexist side by side treating against each other as cartel firms, and aside them, there is an analogy of a competitive fringe. Nevertheless, unlike the traditional competitive fringe, this one does not consist of strictly technically and technologically economically backward companies, but rather of subjects less significant in terms of size and scale of production.

And right in this context, it appears to be essential that the different market structures bring with them different effects on the macroeconomic reality. The theoretical analysis has proved that:

- For the macroeconomic reality, it is desirable to replace a monopoly at least with a dominant firm oligopoly, and it is exactly this direction in which the phenomenon of globalization acts (Kraft, 2009).
- The positive effects of substituting the monopoly for an oligopoly emerged not only in relation to the phenomenon of inflation, but mainly to the creation of wealth.
- The reality of deadweight loss has been affected and the demonopolisation attenuated its scope.

This shows that one of the key moments of the EU economic policies, implemented in the form of support for small and medium-sized enterprises is based on a correct theoretical basis (Kraft, Kraftová, 2009b), (Nikolaev, Zaytsev, Baranov, Kraft, 2010). And precisely because of the above adopted conclusion about the effect of targeted regulation in a market economy it was necessary to put this regulation in contrast to the phenomenon of autoregulation in relation to the appropriate, so-called encouraging growth (Kraft, Kraftová, 2009c).

6 Conclusion

In the late nineties and at the beginning of this century, the economic theory began to deal with practically and theoretically important issues seeking for a confrontation of the contemporary theoretical knowledge with the changes that occurred in the economic environment which strongly accentuates and accelerates the process of globalization of economic life as well as of other activities held by the human in the dimension of the planet. Globalization, which minimizes the national economic sovereignty and thus transforms the national economic environment into an international economic environment, puts the economic actors – households (individuals) financial and non-financial corporations, governments and their national economies – in a fundamentally different environment with far-reaching economic, social, and political implications.

Bibliography

BEDNÁŘOVÁ, P. (2009a) The Roles of Currencies in the Process of World Economy Globalization. In Proceedings of the 9th International Conference Liberec Economic Forum 2009. 1. vyd. Liberec: TU v Liberci, 2009. S. 42 – 51. ISBN 9788073725235.

BEDNÁŘOVÁ, P. (2009b) Vznik, identifikace a dopady poptávkových a nabídkových šoků do reálné ekonomiky v kontextu probíhajících integračních a globalizačních procesů. In Velká deprese a její odraz v ekonomické teorii a praxi. 1. vyd. Ostrava: VŠB-TU Ostrava, 2009. S. neuvedeny (9 stran). ISBN 9788024821504.

BEDNÁŘOVÁ, P. (2009c) Effects of the Endogeneity in the European Monetary Integration Process. In Hospodářská politika v zemích EU: Ekonomická krize - výzvy budoucnosti. 1. vyd. Ostrava: VŠB-TU Ostrava, 2009. 11 s. ISBN 9788024820224.

BEDNÁŘOVÁ, P. (2010a) Fiskální pravidla v Evropské měnové unii z pohledu současného vývoje Eurozóny. In sborník příspěvků VIII. mezinárodní vědecké konference Hospodářská politika v členských zemích Evropské unie. 1. vyd. Frýdek-Místek: Slezská univerzita v Opavě, 2010. S. 21 – 29. ISBN 9788072486014.

BEDNÁŘOVÁ, P. (2010b) Japan's Public Finances from the Viewpoint of European Fiscal Rules. ACC Journal. 1. vyd. Liberec: Technická univerzita v Liberci, 2010, roč. 16, č. 2, s. neuvedeny (11 stran). ISSN 18039782.

FÁREK, J. (2009a) Globalizace a deglobalizace světového hospodářství. Mezinárodní politika. 1. vyd. Praha: Ústav mezinárodních vztahů, 2009, roč. 2009, č. 9, s. 4 – 7. ISSN 05437962.

FÁREK, J. (2009b) Transformace finanční krize v globální hospodářský útlum. Mezinárodní politika. 1. vyd. Praha: Ústav mezinárodních vztahů, 2009, roč. 2009, č. 2, s. 4 – 7. ISSN 05437962.

FÁREK, J., FOLTÝN, J. (2009) Ceny ropy: tendence, problémy, perspektivy. E+M Ekonomie a Management. 4. vyd. Liberec: Technická univerzita v Liberci, 2009, roč. 2009, č. 4, s. 5 – 16. ISSN 12123609.

KOCOUREK, A., NEDOMLELOVÁ, I. (2010) Původní a nová stylizovaná fakta o růstu. Znalostná ekonomika a jej odraz v ekonomickej teórii a hospodárskej praxi. Bratislava: Ekonomická univerzita v Bratislave. Národohospodárska fakulta. Elektronický zborník príspevkov z medzinárodnej vedeckej konferencie. 5. november 2010, s. 223-234. ISBN 978-80-225-3076-7.

KRAFT, J. (2009) Theoretical Principles of the Expected Deadweight Loss Change in a Globalizing World Economy. Proceedings of the 9th International Conference Liberec Economic Forum 2009. p. 187-192. Liberec: TUL, 2009. (15.-16.9.2009). ISBN 978-80-7372-523-5.

KRAFT, J. (2010) Možnosti využití odlišností ve vývoji ekonomicky integrovaného Československa, resp. jeho nástupnických zemí, a neintegrovaného Japonska cestou vzájemné spolupráce. International Conference Proceedings: National and Regional Economics VIII. 13th-15th October 2010. Herlany – Slovensko, str. 506-517. ISBN 978-80-553-0517-2.

KRAFT, J., KRAFTOVÁ, I. (2009a) The influence of globalization on market structure and competitive advantage of selected economies. Conference Proceedings of the 3th Central European Conference in Regional Science 2009, 3. ročník, str. 531-546, Košice, TU – EF, 2009, ISBN 978-80-553-0329-1.

KRAFT, J., KRAFTOVÁ, I. (2009b) The Support of Technology Development in Imperefect Competition. (Selected Aspects Focused on SMEs in the Czech Republic.) Studia Universitatis Babes Bolyai. Negotia Vol. 54 (2009) No. 4, p. 53-70. ISSN 1224-8738.

KRAFT, J., KRAFTOVÁ, I. (2009c) Povzbudivý růst ekonomiky regionů: cílená regulace versus tržní autoregulaace? Politická ekonomie 6/2009. str. 15-22. ISSN 0032-3233.

KRAFT, J., KRAFTOVÁ, I. (2010) Dynamic Equilibrium of the Global Economy – Effects of Cyclic Develpoment. Economics and Management: 15 (2010), p. 123-129. ISSN 1822-6515.

KRAFT, J., KRAFTOVÁ, I. (2011) Innovation - Globalization – Growth. ICEM 2011. [ready for publishing]

KRAFT, J., ZAYTSEV, A., BARANOV, V. (2009) Globalization and Innovative Factors of the Enterprises Development. Proceedings of the 9th International Conference Liberec Economic Forum 2009. p. 193-200. Liberec: TUL, 2009. (15.-16.9.2009). ISBN 978-80-7372-523-5.

NEDOMLELOVÁ, I. (2010) Comparison of Macroeconomic Development of the EU and Japan in Last Two Decades. Moskva 2010. [ready for publishing]

NEDOMLELOVÁ, I. SKÁLA, M. (2009) Teorie reálného ekonomického cyklu na pozadí metodologických východisek teorií optimálního růstu. Nová ekonomika. 2009, roč. 2, č. 3, s. 32-43. ISSN 1336-1732.

NEDOMLELOVÁ, I., KOCOUREK, A. (2009a) Education as Crucial Factor of Economic Growth in the Process of Globalization. In Scientific Papers University of Pardubice, Series D, Faculty of Economics and Administration, Special Edition. Pardubice 2009, s. 87 – 99. ISSN 978-80-7395-209-9.

NEDOMLELOVÁ, I., KOCOUREK, A. (2009b) Vzdělávání a ekonomický růst – prezentace výsledků výzkumu. In Makroekonomické súvislosti konvergencie ekonomiky Slovenskej republiky ku Eurozóne. Elektronický zborník príspevkov z medzinárodnej vedeckej konferencie. Bratislava 5. – 6. november 2009. Počet stran 10. ISBN 978-80-225-2822-1.

NEDOMLELOVÁ, I., KOCOUREK, A. (2010) Polemika o vztahu neoklasické produkční funkce a teorie rozdělování. In Ekonomický časopis. (Journal of Economics). Bratislava 2010, roč. 58, č. 5, s. 492-511. ISSN 0013-3035.

NEDOMLELOVÁ, I., KOCOUREK, A. (2011) Comparative Analytic Study on Applicability of Jones-Romer New Stylized Facts on Growth. In Proceedings of the 10th International Conference Liberec Economic Forum 2011. 1. vyd. Liberec: TU v Liberci, 2011. [ready for publishing]

NIKOLAJEV, S. D., ZAJCEV, A. V., BARANOV, V. V., KRAFT, J. (2010) Intellekt sovremennogo predprijatija. Izdatelskij dom Komsomolskaja Pravda, Moskva, 2010, 252 s. ISBN 978-5-93434-120-7.

SKÁLA, M. (2010a) Problémy současné teorie firmy. 1. vydání. Liberec: Technická univerzita v Liberci, 2010. 129 s. ISBN 978-80-7372-643-0.

SKÁLA, M. (2010b) Nová keynesiánská makroekonomie. Nový pohled na trh práce a makroekonomickou stabilitu. E+M Ekonomie a Management. 2010, roč. 13, č. 4, s. 6-15. ISSN 1212-3609.

prof. Ing. Jiří Kraft, CSc.
jiri.kraft@tul.cz
Technical University of Liberec
Faculty of Economics
Department of Economics

prof. Ing. Jiří Fárek, CSc.
vera.vesela1@tul.cz
Technical University of Liberec
Faculty of Economics
Department of Economics

PhDr. Ing. Pavla Bednářová, Ph.D.
pavla.bednarova@tul.cz
Technical University of Liberec
Faculty of Economics
Department of Economics

Ing. Iva Nedomlelová, Ph.D.
iva.nedomlelova@tul.cz
Technical University of Liberec
Faculty of Economics
Department of Economics

Ing. Mgr. Marek Skála, Ph.D.
marek.skala@tul.cz
Technical University of Liberec
Faculty of Economics
Department of Economics