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NEUTRAL INFLATION AND THE COSTS OF JOINING AND STAYING IN THE EUROZONE

1. Introduction

Joining the Eurozone is a challenge for the countries which are less developed in comparison to the economic leaders of our continent. The challenge is, on the one hand, connected with the necessity to meet the rigorous Maastricht criteria (narrowing down possibilities of using the economic policy instruments in order to maintain the economic boom) and, on the other, with a highly uncertain effect of introducing the euro on the long-term economic growth. Poland is particularly interested in the removal of all barriers and limitations to economic growth (also those related to adopting the euro) due to a large gap that separates it from the most developed EU countries. Examples of other less developed member countries, such as Greece, Spain or Portugal show how difficult it is to bridge the gap. Greece, for example, joined the Union in 1981 but in 2008 (that is 27 years later) the difference in GDP per capita between this country and the average for the Eurozone member countries (calculated according to the purchasing power parity) was still at -13.3%; in Portugal (1986)– the difference stood at -30.2 % and in Spain (1986) at -4.5%. The values of these differences become significantly higher when the per capita income is expressed in euro without taking domestic price differences into account. Then the values in question amount to -24.5%, -44.3% and -15.2%, respectively. For the sake of comparison, GDP per capita in Poland in 2008 was lower than the Union average by 42.6% when calculated according to the purchasing power parity and by 62.2% when this parity was not taken into account¹.

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¹ Author's own calculations on the basis of ECB. Statistics Pocket Book. www.ecb.int. 18.08.2010.

Before the labour exodus of about 1–2 million people, the estimates made in the country indicated that to make Poland reach the unemployment rate of 11–12% and the employment rate of ca.60% (i.e. the values still significantly different from the EU average) around 2013, the average economic growth rate would have to exceed 5% per annum. However, in the 1999–2009 decade, the average growth rate stood at ca. 4%. A comparative analysis of the data for the EU member countries showed that one country only, namely Ireland, was able to keep the average real GDP growth rate at a level significantly exceeding 5% for 10 consecutive years. In fact in the years 1996–2000 it stood at 9.7% and between 2001 and 2005 – at 5.2%². Eventually, the Irish economic growth collapsed in 2007 when the respective rates assumed some of the lowest negative values in the Eurozone. Other “old” EU countries did not even approach the values Ireland indicated before the crisis. Ireland, however, must be viewed as a sort of a phenomenon due to its connections with American economy and its small size which caused that the inflow of foreign investments, mainly from the USA, produced striking effects in the field of foreign trade turnover and GDP growth. When the Irish export boom was over in 2002, the real GDP indicators also came back to the levels noted in some other, smaller EU countries (3.6% in 2003, 4.9% in 2004 and 5.2 % in 2005).

Observations of the economic growth rates in the EU countries reveal that the very membership in the European Union does not translate directly into accelerated real GDP growth as, e.g., Spain and Portugal before they joined the Union had indicated the growth rates which were by 1–1.5% higher than those noted in the current Eurozone countries. However, after they had joined the Union, their growth rates – although still higher than those observed in the Eurozone – started to approach them. Also deeper integration with the remaining EU countries, for example by joining the Eurozone, does not have to translate into a faster growth rate³. As it seems, the EU membership, especially in the Eurozone, in the long run, means convergence with the growth model of the main EU countries, i.e. Germany, France, Italy and Great Britain.

The so-called European model of economic growth is characterised by a low growth rate of investment in fixed capital and poor productivity growth rate. In both these comparisons taking into account the many-years’ data, the European economy loses with the recently poor performance of the Japanese economy, whereas American economy, despite its numerous problems, seems

² Ibidem

³ Bednarczyk, J.L., *Polityka finansowa a wzrost gospodarczy. Dylematy polskiej gospodarki w procesie integracji europejskiej* [in]: *Polityka finansowa Polski wobec aktualnych i przyszłych wyzwań* (ed. Kulawik, J., Mazurkiewicz, E.), Warszawa 2005, p. 19–36.

completely out of its reach⁴. As a result of a low growth rate in fixed capital, European economies were unable to ensure sufficient employment to the factors of production, which causes that for years unemployment rates in Europe have been much higher than in the USA⁵. Only the inflation indices are lower than in the USA.

On the other hand, an analysis of the situation in the EU countries remaining outside the Eurozone shows that the rates of investment in fixed capital and labour productivity growth rates are higher there, although also in this respect their values are slowly approaching those noted in the Union. The same process refers also to the Polish economy which has been experiencing a slowdown in recent years.

In view of the above outlined observations and close connections between the Polish economy and the EU ones, it seems justified to be interested in both factors which can determine the prospects of growth in the EU countries (including economic policy) and institutional changes which would allow Poland to adopt the Euro without worsening the prospects of possibly quick bridging the gap which separates it from the better developed EU member countries.

2. Inflation target as a major limitation of active economic policy

The current discussion concerning the economic growth determinants is based on the variability of growth rates of major stakeholders in the world economy⁶. On the one hand, the rapidly developing, even in the situation of the current slowdown, Chinese economy increasingly threatens end the US dominance in the world despite the fact that the United States develops faster than Europe. On the other hand, the European Union countries cannot find an efficient method of coping with the low economic growth rate which threatens Europe with economic peripheralisation – despite the implementation of spectacular pro-growth programmes, such as the Lisbon Strategy, or recently implemented short-term programmes aiding development of different sectors. It seems a paradox of modern economy that the fastest developing countries are the ones characterised by a fairly high degree of state intervention in the economic sphere and relatively weak traditions of free market (China and India).

⁴ Bednarczyk, J.L., The Concept of Neutral Inflation and Its Application to the EU Economic Growth Analyses, Quaderni Del Dipartimento Di Economia, Finanza e Statistica dell'Universita' degli Studi di Perugia (Italy), Ottobre 2006, p. 7–8.

⁵ After the 2007 crisis, the unemployment rate in the USA started to come closer to the European one. However, it is difficult to judge now to what extent this convergence of unemployment rates is a durable phenomenon and to what extent it is transitional.

⁶ Bednarczyk, J.L., The Concept of Neutral Inflation... op.cit., p. 8–9.

From the point of view of neo-classical economics which is the foundation of both the Washington Consensus⁷, and the economic philosophy on which the Maastricht Treaty is based as well as the Pact for Stability and Growth, the above mentioned countries should be far beyond liberal American, Japanese or even some liberal European economies as far as economic growth is concerned. Theoretically, they should also cope with the crisis less efficiently. Some explanation of this paradox can be provided by the theory of convergence which assumes that less developed countries (this classification is determined by the magnitude of their GDP per capita) tend to develop more quickly than richer countries. A question arises, however, why only few poorly developed countries develop faster than a group of better developed countries. The research undertaken by Baumol and later by Jones⁸ revealed that within the world economy poor countries "do not bridge the gap" which exists in the GDP per capita value between them and rich countries. Thus, in the global dimension the theory of convergence does not work.

If we reject the theory of convergence as a universal basis of an analysis of differences in the development rate among different countries in modern world, we come to the conclusion that state intervention in the economic sphere does not have to be an obstacle for the more dynamic economic growth but, on the contrary, it can support this growth. Using the experience of the current crisis again, a question can be posed: how deep the economic depression in industrialised countries would be if the wide-scale state intervention, including the takeover of the controlling interest in key financial institutions and production enterprises, had not been effected. In this respect, the fears voiced in connection with endogenous models as the foundation of the economic growth policy in modern economies may turn out unjustified. The state, while creating conditions for the investment process development, and in particular, for the development of education, scientific research, financial, transportation, power engineering, communication or information infrastructure can contribute to achieving sustainable and not only temporary (level effects) acceleration of growth⁹. Thus, on balance, the state intervention effects on economy, taking into account also potentially unfavourable effects (deterioration of the market mechanism efficiency, lower effectiveness of state expenditure), may turn out favourable. If

⁷ Bednarczyk, J.L. (co-author: Kosztowniak, A.), Globalizacja a międzynarodowy podział pracy [in]: *Ekonomia, Technika, Zarządzanie*. Zeszyt No 30, Politechnika Świętokrzyska, Kielce 2002, pp. 24–33.

⁸ See: Baumol, W.J., *Productivity Growth, Convergence and Welfare: What the Long-Run Data Show*, *American Economic Review*, December 1986 and Jones, Ch. I., *Introduction to Economic Growth*, 2nd edition, ed. Norton W.W.&Company, London 2002.

⁹ Temple J., *The Long-Run Implications of Growth Theories*, [in]: *Surveys in Economic Growth. Theory and Empirics*, ed. George D.A.R., Oxley L., Carlow K.I., Blackwell Publishing Ltd., Oxford 2004.

they do, a question arises how rational and useful limiting the freedom of the state in shaping macro-economic conditions of growth is for improving the dynamics of economic growth.

This question is reasonable in the context of the attempts undertaken within the European Union to limit the freedom of the states in their choice of macro-economic policy tools by simultaneous establishment of a rigid frame for monetary and fiscal policies (Maastricht criteria) on the one hand, and imposing ambitious targets on them in the field of economic growth indicators (raising the EU index of economic growth by a value from 0.5 to 0.7 percentage points in the 2000s), on the other. The key to the answer to this question seems to be, on the one hand, the evolution which took place at the end of the 1980s in the sphere of theoretical premises for the economic policy, and on the other, problems related to the implementation of the unprecedented common currency project by the EU countries.

An effect of the evolution of views on economic policy was achieving consensus consisting in accepting both the views referring to the classical trends in economics (intertemporal optimisation, rationality of expectations, dependence of the real sphere dynamics only and exclusively on the impact of real factors) and the ones close to the Keynesian tradition (monopolistic competition, rigidity of nominal wages, the key role of monetary policy in stabilising economy) as the basis of an analysis of changes occurring in economy¹⁰. A direct implication of the convergence of views on these key issues was accepting price stability as a *sine qua non* (and actually sufficient) prerequisite for keeping the economy on a path to sustainable economic growth and making the central bank the main institution responsible for carrying this out.

A new approach developed theoretically and at the same time implemented into practice¹¹ soon found its way to the newly formulated doctrine of stabilisation policy which with time came to be called the doctrine of direct inflation targeting (DIT). According to this doctrine, price stability is the best way for the monetary policy to contribute to the real sphere stabilisation and, in particular, stabilisation of production and employment. It is so because in the situation of price stability, companies can plan production profitability without problems. They can also respond to changes in production or competition conditions using their own price adjustments which, in a macro-scale, results in maintaining the real production output close to potential levels defined by specific supply-side

¹⁰ Goodfriend, M., How the World Achieved Consensus on Monetary Policy, "Journal of Economic Perspectives", No. 4/2007, p. 59.

¹¹ It is not quite clear what chronological order should be assigned to theory and practice (the practice of central banking) in creating the foundations and then arriving at final postulates of the DIT doctrine. Here the precedence of theory is assumed, in the sense that it was co-formulated by practitioners involved in the activities of central banking.

factors, characteristic of economy which actually departs from the perfect competition model but functions in the situation of price flexibility.

Supporters of direct inflation targeting (DIT) go even further and maintain that convincing economic entities by the central bank that inflation will be kept low in the future may directly contribute to the earlier recovery of economy from the recession phase¹². It is so because in this situation significant cuts in interest rates are possible (deeper than in the situation of poorly anchored inflation-related expectations) sustaining consumer and investment spending in economy. However, to make it possible, the central bank must resign from keeping the principles and tools of monetary policy implementation in secret and make its policy fully transparent and predictable for economic entities. Only then can the latter judge its credibility resulting from its determination in pursuing price stability.

Regardless of the changes which occurred in the field of formulating doctrines, an important premise for a change in the EU economic policy priorities already expressed in the 1980s¹³, is a willingness to implement the common currency project. In order to succeed in this area, the EMU countries were somehow forced to treat price stability as an imperative and their economic policy was subordinated to the implementation of this goal and severe limitations resulting from that. Economic growth receded into the background due to the conviction that market mechanisms (also the synergy effect related to the Union enlargement) will be able to fully satisfy European aspirations in this field. The hopes, although deeply rooted in the neo-classical approach to the processes of growth, turned out to be rather deceptive. In the 1990s the “European growth model” became an economic fact. Actually, it was characterised by fairly strong stability but also a low growth rate, much lower than that noted in competitive centres of the world economy.

3. Costs of disinflation policy and the „low inflation trap”

While analysing the costs of joining the Eurozone, first of all the main costs of disinflation policy in the period preceding the common currency adoption as well as costs of keeping inflation low after its adoption must be taken into account. Considering these costs means rejection of the dominating for at least two decades view that low inflation, i.e. for example inflation of 2% per year, can be in every country and all conditions a sine qua non and sufficient prerequisite for keeping economy on the path of long-term dynamic growth. It refers

¹² Goodfriend, M., *How the World ... op.cit.*, p. 55.

¹³ This willingness was displayed by adopting a number of decisions concerning the EMU during a meeting of the European Council in Madrid, 27–28 June 1989.

even more to the opinion claiming that the optimum conditions for growth can appear at the inflation of 0% as there are no examples of bigger economies which would develop dynamically at zero inflation and reveal a high degree of utilising their production capacity.

The subject of disinflation policy was undertaken by P. Howitt¹⁴ (1990), known as the author of the so-called Howitt's rule, D.L.Thornton¹⁵ and, earlier M.Friedman¹⁶, among others¹⁷. According to Howitt there are many arguments in favour of zero inflation. However, the costs of bringing inflation down to this level must be borne in mind and compared with the benefits which the economy can derive from it. The optimum inflation level is the one at which the current net value of the benefits provided by further reduction of inflation is equal to the current net value of costs related to this reduction (in the form of e.g. unemployment growth rate above the natural level¹⁸. As the inflation rate is approaching zero, the costs of its further reduction can become increasingly higher; therefore it is convenient to finish the disinflation process when it still brings advantages. Thus, optimum inflation should assume positive values, slightly above zero. According to Thornton the answer to the question whether the traditionally understood price stabilisation policy is the best solution is a bit difficult as there is no unambiguous answer to the question how far moderate inflation can affect production levels and the economic growth rate¹⁹

Disinflation policy costs were also dealt with by a major exponent of the monetarist trend, Milton Friedman, who stressed the fact that passing through the so-called transitional period from high and changeable inflation to the one which is stabilised at a low level is usually connected with unemployment higher than the natural level. However, it is the cost which is worth paying for restoring "normal" prices²⁰. In the long-run adjustment processes and structural changes which were to occur in economy – consisting, among others, in: a) reduction of import intensity, energy consumption and far-reaching rationalisation of production leading to general reduction of costs, b) an increase in the rate of savings (under the influence of inflation drop), c) intensified activities of the private sector due to this sector being relieved from some of the

¹⁴ Hewitt, P., Zero Inflation as a Long Term Target for Monetary Policy [in]: Zero Inflation: The Goal of Price Stability, ed. Lipsey, Richard G., Howe Institute, 1990.

¹⁵ Thornton, D., The Cost and Benefits of Price Stability: An Assessment of Howitt's Rule [in]: Federal Reserve of St. Louis Review, March/April 1996, pp. 23–38.

¹⁶ Friedman, M., The Role of Monetary Policy [in]: "The American Economic Review", March 1968, pp. 1–17 and the Nobel Lecture: Inflation and Unemployment, "Journal of Political Economy", No. 3/1976, pp. 451–472.

¹⁷ Why price stability? (ed. Herrero, A.G., Gaspar, V., Hoogduin, L., Morgan, J., Winkler, B.), EBC 2003.

¹⁸ Howitt, P., Zero Inflation.... op.cit. pp. 103–104.

¹⁹ Thornton, D., The Cost and Benefits ... op.cit. pp. 33–34.

²⁰ Friedman, M., Nobel Lecture op. cit. p.468.

financial burden for the state budget and improved conditions of its participation in the credit market, d) improvement in labour discipline (owing to higher unemployment) and restoration of “flexible” wages, etc. –were to fully compensate these costs and economy was to enter the road to stable and inflation free economic growth. Friedman did not say anything about the optimum rate of price rise²¹. A significant part of his scientific work focused on showing how harmful high inflation prone to periodical changes was for economy²²).

Friedman’s stance seems to be right as particular countries are characterised by different responses to the disinflation policy depending on the flexibility of prices and wages noted in these countries, perception of the so-called normal price level and the impact of moderate inflation on decisions of economic entities. Figure 1 distinguishes between two groups of countries: some of them attain the state of transitional equilibrium on the AB line (countries characterised by rigid prices and wages and fairly high tolerance for inflation) and some – on the AB’C’’ line (countries characterised by highly flexible prices and wages, and poor tolerance for inflation).

In economies characterised by highly flexible prices and wages, where inflation processes entail high social and welfare costs as well as costs related to output growth (caused by reduced market mechanism efficiency due to the distortion of the relative price structure)²³, the benefits resulting from its reduction can be even so high that the economy heading from point A to point B, initially not only will not indicate a drop in the output growth rate but can even increase it. However, after the output exceeds the potential value P_p – in the case when authorities strenuously pursue the inflation rate at the level of i_c (i.e. an a priori established central bank’s inflation target) – a move towards point C’ (impact of anchored inflation expectations allowing to keep real interest rates at a low level) is highly probable. However, there is a risk of the equilibrium being shifted to point C²⁴, which will result from exhaustion of benefits that economy can have from lower inflation. Shifting equilibrium to point C is the more probable, the weaker the impact of anchored inflation

expectations is. What is more, with time authorities may become a peculiar hostage of the policy aiming at maintaining the anchored inflation expectations at i_c level which may force them to overreact to fluctuations in expected prices. This can result in maintaining exceedingly high levels of interest rates, which does not favour economic boom.

²¹ In connection with this it would be difficult to interpret his postulate of inflation-free economic growth as a pursuit of zero inflation. What he had in mind it was rather achieving such a state of balanced growth where inflation would not be a factor disturbing this balance in any way.

²² Friedman, M. *The Role...* op.cit., p. 116.

²³ See: Thornton D.E. *The Cost and Benefits ...* op. cit., pp. 25–29 and the following.

²⁴ A Shift towards point C’’ is unlikely, i.e. a situation when exceeding a potential output size is accompanied by an inflation drop.

Making a decision on reducing inflation in point A may entail completely different effects depending on the nature of economy. However, in the two cases presented above, pursuing the ambitiously set inflation target and maintaining the inflation rate at this level poses a risk of maintaining too high interest rates (as a prerequisite for inflation expectations anchored at a low level), which may be harmful for the long-term economic growth. A particularly high price for the luxury of low inflation is paid by the countries in which tolerance for moderate inflation is higher and which could develop faster if they did not have to subordinate their medium-term macro-economic policy to the necessity of satisfying the a priori set ambitious inflation target.

These countries should have more freedom in the area of price forming and especially a possibility of maintaining inflation rates at the level which allows the economy of a given country to achieve the highest economic growth rates in the long run in the situation of maintaining external equilibrium. This level is described by the term of neutral inflation or Non-Decelerating Economic Growth Rate of Inflation (NDEGRI)²⁵. In the case there is such freedom, both the costs of adopting the euro and the costs of maintaining it, at least for some countries, would become much lower. Poland probably belongs to the group of the countries where tolerance for the inflation rate exceeding the ECB inflation target seems to be confirmed by behaviour of the growth indicator.

4. Final remarks

Accepting a proposal for the Eurozone countries to depart from the practice of subordinating their economic policy to accurate implementation of the a priori set ambitious inflation target would mean not only the necessity of revising the Maastricht criteria, but also a far-reaching change in the ECB's principles of formulating the monetary policy and its implementation. The ECB, while defining the inflation target for the Eurozone countries should start to follow the long-term observation of inflation rates in all the Eurozone countries and implement its policy so as to limit to maximum the risk of particular member countries falling into the "low inflation trap". The observation of the Eurozone member countries reaction to the Greek crisis, on the one hand calling for solidarity in solving the financial problems of the weaker members and, on the other hand, German blackmailing by unilateral withdrawal from the euro project in the case of loosening the Maastricht criteria – does not put one in a cheerful mood as far a possibility of the systemic reform in the foreseeable future is

²⁵ See: Bednarczyk, J.L., *Inflacja neutralna a wzrost gospodarczy w krajach Unii Europejskiej* [in]: *Polityka gospodarcza a rozwój kraju* (ed. Płowiec, U.), Polskie Towarzystwo Naukowe, Warszawa, 2009, pp. 99–113.

concerned. This means that the countries able to develop faster in the situation of an inflation rate exceeding the level imposed by the Maastricht criteria will still incur excessively high costs of adopting the common currency and staying in the Eurozone, thus creating in future a risk to the sustainability of the whole group.

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13. *Why price stability?* (Herrero, A.G., Gaspar, V., Hoogduin, L.,Morgan, J.,Winkler, B. ed.), EBC 2003.

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(Summary)

Joining the Eurozone is a challenge for the countries which are less developed in relation to the economic leaders of the continent. On the one hand, this challenge is connected with the necessity to satisfy the rigorous Maastricht criteria (narrowing down the possibilities of using the economic policy tools in

order to maintain an economic boom) on the other hand with a highly uncertain impact of adopting the Euro on the long-term economic growth. The key to participation in the project is keeping the inflation rates at a low level, which the economic policy has been subordinated to, subject to strict restrictions. Economic growth receded to the background in full conviction that market mechanisms will be able to fully satisfy European aspirations in this respect. The hopes, although deeply rooted in the neo-classical approach to the processes of growth, turned out to be rather deceptive. In the 1990s the “European growth model” – actually characterised by a fairly strong stability but a low growth rate, much lower than that noted in competitive centres of the world economy – became the fact.

One of the key elements in increasing the growth dynamics in the Eurozone countries could be limiting the costs of joining and staying in the Eurozone by the countries displaying the ability to develop faster in the situation of inflation exceeding the ECB arbitrarily established inflation target. In such a case the ECB monetary policy should provide individual member countries with more flexibility in the field of price formation and especially a possibility of maintaining inflation rates at the level at which a country’s economy achieves the highest economic growth rates in the long run while maintaining external equilibrium. This level is described by the term of neutral inflation or Non-Decelerating Economic Growth Rate of Inflation (NDEGRI).