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EXCHANGE RATE UNCERTAINTY AND ECONOMIC GROWTH⁴⁷

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Abstract: *The paper reviews the benefits of a single currency union in respect of the elimination of exchange rate uncertainty. It presents the gains from adopting the Euro for the CEE countries. It will be shown that the economic and monetary union will increase the degree of integration of capital, goods and labor markets and an equalization of nominal interest rates on equivalent assets. On one hand the elimination of exchange rate cost leads to an increase of national GDP. On the other hand the lack of exchange rate uncertainty triggers expansion of trade and subsequent gains from this process. It is argued that the single currency is not a sufficient prerequisite for economic growth as for example the contemporary coronavirus crisis poses a serious challenge.*

Keywords: *Exchange rate, Economic growth, EMU, coronavirus crises*

JEL Codes: *F15, F31, F36, F43*

INTRODUCTION

Economic and monetary unions increase the degree of integration of capital, goods and labor markets. Monetary unions imply an equalization of nominal interest rates on equivalent assets. The experience of current EMU members shows that inflation convergence will not be perfect between countries. Moreover, due to the catching up process of CEE countries, they will experience a higher inflation rate, explained by the catch up in the relative price of non-tradables. It is important to note that there is no ready-to-use theory to estimate the benefits and costs of joining EMU and thus eliminate the exchange rate uncertainty. This paper argues that the elimination of exchange rate uncertainty by joining a monetary union contributes to national economic growth. However, the mere lack of exchange rate fluctuations is not a sufficient prerequisite for economic growth. Moreover, the exogenous cause of a GDP drop, like the one provoked by the coronavirus cannot be made up by any form of a lack of exchange rate uncertainty.

EXPOSITION

The "theory of optimal currency areas" (De Grauwe, 1993) and (Kunroo, 2016) bring some insights for the cost-benefit analysis. There are several categories of permanent effects from European Monetary Union (EMU):

1. Microeconomic efficiency gains, which arise from the elimination of exchange rate uncertainty and transaction costs, determining a permanent increase in the output;
2. Macroeconomic stability effects, which arise both from elimination of exchange rates between EMU countries and from policy discipline in the monetary and

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fiscal fields, and impact on the variability of output, prices, and other macro-economic variables.

The two main effects are (1) the elimination of exchange rate related to transactions costs and (2) the suppression of exchange rate uncertainty. This in turn will stimulate trade and capital movements and combined with macroeconomic stability effects will determine a reduction in the risk premium in the CEE countries, further stimulating investment and economic growth. It is important to note that the mechanism by which joining a currency union influences welfare and growth is complex and not precisely understood. Moreover, it is difficult to combine the effects of various channels into a Unitarian methodology.

Eliminating exchange rate transaction costs

The exchange rate related transaction costs can be classified into "financial transaction costs" which households and firms pay to the financial sector, and "in house costs" arising from allocating personnel and equipment to foreign exchange management. This implies that there might also be further indirect gains from eliminating the transaction costs, like reducing the scope for price discrimination. These price differences among countries in EU imply welfare losses that could be reduced under the single currency, as the consumers will be able to compare prices more easily.

The financial transaction costs (conversion costs) supported by households arise when changing currency and are the highest (Fidrmuc, 2001). Moreover, given the relatively high minimum fee, bank transfers tend to be relatively costly international payments between enterprises. At the same time, using the Euro will bring a reduction in the expenses and delays associated with cross border bank payments.

Financial costs related to foreign currency transaction also arise within the firms. These "in house costs" can be divided into two groups (Frankel, 1999). Direct "in house" costs consist of human and capital resources used in the administration of foreign currency transactions and losses due to longer time necessary for executing foreign currency transfers than national currency transfers. In addition, there are also opportunity costs implied by the corporate strategy followed in order to protect against the exchange rate risk. For example, a firm with foreign currency receivables might attempt to switch a part of its costs into foreign currency based costs. In turn, the firm may have to purchase their input at less favorable conditions or to use narrow profit margins, missing in this way certain business opportunities.

Moreover, in case of introducing a common currency, evaluation within a company of its subsidiaries' operating in different countries may become much simpler. Consequently, there will be a gain in efficiency and investment decisions and business strategy will be more solidly based. Accordingly, it seems that the reduction in indirect "in-house" costs will mostly benefit the multinational companies.

It is important to note that the potential savings of adopting the Euro will grow larger: the lesser the use of the national currency as a means of international payment, the more intense the trade with EU countries, the lower the technical and price effectiveness of domestic foreign exchange services and, finally, the greater the variability of the national currency's exchange rate as it necessitates more systematic hedging and causes bankers' margin to widen. The CEE countries use little, if at all, their own currency for international payments, trade significantly with EU, and have unsophisticated financial markets compared to Western Europe. Consequently, the transaction costs savings will be more significant for CEE countries than they were for current EMU members. Moreover, the savings on transaction costs will mean a loss for the banking sector; still, the

redundant resources will be directed to more useful activities such as expanding financial intermediation in Euro-denominated assets.

Eliminating exchange rate uncertainty

The second major efficiency gain given by joining EMU consists of eliminating the exchange rate uncertainty. From a theoretical point of view, only unexpected changes in exchange rates constitute exchange rate uncertainty. Moreover, adopting the Euro in CEE countries will eliminate only the nominal variability, as different prices in different countries will still be possible and even desirable, in case of different economic evolutions. The benefits of a stable exchange rate regime will certainly be higher for those CEE countries that currently exhibit higher exchange rate variability, being less important for the CEE countries with hard pegs. However, the latter countries will benefit substantially from the credibility and financial stability ensured by joining the Eurozone.

Gains from trade expansion

The main theoretical argument as to why exchange rate variability should adversely affect trade is that the risk-averse agents will reduce their trade or investment for export in case the variability of return increases. The most direct channel for nominal exchange rate to affect international trade arises because most international trade contracts involve a time lag between the contract is made and when the exporter obtains his payment. However, variations in exchange rate do not necessarily imply similar variations in relative prices of goods. On the contrary, in some cases appreciation or depreciation may smooth out abrupt changes in the terms of trade. Moreover, nowadays financial markets offer a variety of ways to obtain insurance against exchange rate movements through forward, futures and options market. However, this insurance is not costless. The price of this insurance diminishes and its availability increases with the degree of sophistication of financial markets and the size of the firm. The CEE countries have less developed financial markets compared to current EMU members, so it can be concluded that the firms from accession countries do not benefit to the same extent from sophisticated hedge instruments and thus would benefit more from adoption of the Euro.

The role of economic policy coordination can be pointed out as a "side effect" of a currency union. Accordingly, a coordinated fiscal policy should bring business cycles of currency union members closer to each other. When a country's business cycle is aligned with the cycle of a trading partner, then exports and imports will change at a similar rate, reducing the risk, mentioned in the first chapter, of accumulating unsustainable current account deficit. In this case, imports will be financed mainly by exports, and the financial system will have the role of financing the remaining slight deficit. If, on the contrary, the business cycles are strongly misaligned, the financial system might be unwilling to finance deficits accumulating over long periods, which in turn may slow the growth in foreign trade. Thus, the currency union has different implication from a pegged regime, because the primary source of trade-creation is not the disappearance of exchange rate uncertainty.

Exchange rate uncertainty and economic growth

Although most economists agree that a common market and a common currency bring large benefits, it is difficult to estimate them quantitatively within the usual models of economic growth. Most of the difficulties arise from the fact that standard theories of economic growth that

incorporate constant returns to scale and perfect competition do not leave room for integration to affect growth in the long run.

Using the neoclassical growth model allows us to identify two sources of additional growth due to joining a currency union: one comes from the dynamic effects of static efficiency gains, the other comes from dynamic gains from a reduction in risk. Due to these efficiency gains, the overall level of productivity increases, and the production function will shift upward. The new long run equilibrium will be at a higher capital stock, so that output increases by more than the amount of the gain in productivity. However the potentially most important source of gains from EMU comes from the reduction in overall uncertainty that EMU might provide. This refers to the dynamic gains from a reduction in risk. The overall uncertainty affecting investment can be reduced not only through the elimination of exchange rates movements, but also through a reduction in the uncertainty about monetary policy and possibly a more stable fiscal policy.

New trade theory developed in the 80's and 90's introduced roles for increasing returns to scale, trade in imperfect substitutes and endogenous technology. Moreover, new trade literature suggests that open economies have higher long-run growth rates, rather than just higher income levels, as interaction with foreigners spurs innovation by accelerating the absorption of new ideas. An example of theoretical work which combines endogenous growth with traditional trade theory (focusing on factor endowment) is (Grossman, 1991) and (Guarini, 2019). According to their results, foreign trade expansion influences a small country's growth through two channels. They build a model in which growth is influenced by the allocation of resources between the two sectors of the economy (the consumer goods and the research and development sectors). First, due to expansion of trade, there is more adaptation of knowledge accumulated abroad (technology, know-how, management, organizational skills). Consequently, the productivity of the research and development sector increases, innovation expands and growth rate rises. The second impact of increased international trade on growth is through higher imports of human capital intensive consumer goods which reduce the relative prices of these goods in the domestic market. As a result, part of the labor employed in consumer goods sector flows into research and development, contributing to higher growth.

Is the exchange rate uncertainty a sufficient prerequisite to unsure economic growth?

The exchange rate stability does not always favour economic growth, especially if it is obtained through massive official interventions to support the exchange rate (Ihnatov, 2012). Their research has been employed on 16 Central and Eastern European countries, where the exchange rate arrangement choice is a key point in the years before Euro adoption. The results show superior effect on economic growth of the floating and intermediate regimes comparing to the fixed arrangements. These surprising results do not explain why a major part of the selected countries adopted hard pegs, although the flexible regimes apparently stimulate growth. They suggest that currency boards are not suitable for long periods of time, but just for a quick economic stabilization.

During the first wave of the coronavirus crisis, countries imposed strict lockdowns to reduce Covid-19 infections. This led to the sharpest reduction in GDP in Europe (by almost 15 percent) since the Second World War, but the economy recovered quickly during the summer months. When the second wave hit in autumn, harsh lockdown measures were postponed in order to prevent another sharp downturn in value added (CESifo, 2021). The drop in US was by 10 % and the same time. The EMU did not cope with the sharp falling of the GDP simply because the drop was not

triggered by an economical or financial cause, but by an exogenous factor – the preservation of human lives after the spread of the coronavirus in Europe.

CONCLUSION

The research has found out that the economic growth is consistent with the elimination of exchange rate uncertainty. Moreover, the EMU has achieved permanent micro and macro efficiency and stability effects due to the single currency. The lack of transaction costs of currency exchange and the improved gains of trade contribute to the economic growth. However, the single currency and/or the lack of uncertainty in the exchange rates is not the universal formula towards economic growth. The massive official interventions to support the exchange rate and the presence of exogenous causes of economic instability like the coronavirus show that there is a need of a more versatile fiscal and monetary policy to counteract any adverse challenges to economic growth.

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