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Abstract

Monetary integration of developing and transition countries is considered as a monetary strategy for immunization against international monetary instabilities. This paper corresponds to the growing interest in the integration theory and its application to the Economic and Monetary Union formation and to EMU enlargement. The paper shows a new level of understanding of the monetary integration issues that opens new opportunities for developing countries and countries with transitional economy to integrate in global economy through non-traditional method such as euroization. Advantages and disadvantages of euroization are analyzed.

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Introduction

The problem of monetary integration is highly up-to-date. One of the reasons is the establishment of the Economic and Monetary Union in Europe and the launch of euro as a common currency since January 1, 1999. Therefore, an acute need for a theoretical framework has arisen which could provide a solid base for the whole process of monetary integration and its evaluation.

In this context, the purpose of this paper is to analyses differentiated points of view on monetary integration of transition countries. The theory of Optimum Currency Area (OCA) has served as a framework in discussion about European economic integration at all its stages - from the beginning till the formation of the European Monetary Union (EMU). For the most transition counties, including Georgia monetary integration with EU looks as a long-term strategic perspective. To achieve this strategic goal mid-term intermediate targets should be determined.

The paper is organized as follows. The second section of this paper briefly summarizes the developments of the Optimum Currency Area theory (OCA) from the early 1960s (so-called the "early" theory) to present (the "new" endogeneity hypothesis) through analyzing the developments of its main criteria. The third section provides an analysis of non-standard procedure within the integration process, including variants of the exchange rate regime through the unilateral adoption of the euro. Pros and cons of this approach for developing and transition countries are investigated. The last, fourth section summarizes major findings of the paper and provides some agenda for future research of the subject.

As a last introductory remark, it is important to note that political commitment to regional monetary policy coordination is generally assumed to be the precondition and the underlying driving force of any integration process. It is a recognized fact that European integration is a political process, first of all. The importance of the political origins, motivations, and consequences of European integration cannot be underemphasized.

This paper concentrates on economic and specifically monetary reasons for regional monetary integration, assuming that the dynamics of monetary integration go beyond purely economic aspects.

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The Theory of Optimum Currency Areas: its versions.

Discussion on economic and monetary integration is essentially predicated on the Optimum Currency Area (OCA). The OCA is a useful starting point for any discussion on regional integration, and it has become popular due to the analysis of the pros and cons of monetary integration within the EMU.

The Optimum Currency Area theory was developed in the 1960s by Mundell, McKinnon, and Kenen. It addresses the central question of whether a monetary union should be pursued. Before starting the substantive discussion, a few words about definitions are in order.

Robert A. Mundell¹ defines the optimum currency area as a region in which factors of production are internally mobile but internationally immobile, so as to facilitate the intraregional redistribution of resources in response to demand shifts.

In economics an OCA also known as an optimal currency region (OCR), is a geographical region in which it would maximize economic efficiency to have the entire region share a single currency. It describes the optimal characteristics for the merger of currencies or the creation of a new currency (Optimum currency area; wikipedia.org).

Another definition of OCA stresses the way to maximize economic efficiency that is that an optimum currency area (OCA) is the optimal geographical area for a single currency, or for several currencies, whose exchange rates are pegged. The single currency, or the pegged currencies, fluctuate jointly vis-à-vis other currencies (Mongelli, 2008).

Various advancements in economic theory and practice have made it possible to progress from one stage to another in the OCA theory each of which has provided its own distinct contributions. Some (Mongelli, 2008) distinguish "early OCA theory" from a "new OCA theory".²

The early 1960s when the idea of an optimum currency area was born were characterized by the Bretton Wood exchange rate regime, capital controls in many countries, and starting process of European integration. The OCA theory emerged from the debate on the advantages and disadvantages of fixed versus flexible exchange rate regimes. The main OCA properties or criteria for monetary integration emerged from this

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¹ In 1961 Robert Alexander Mundell published his first article "Theory of Optimal Currency Area" which was the original of this theory. In 1999 he won Nobel Prize in Economics.

² In his earlier paper, Mongelli (2002) recognized four main phases of the optimum currency area theory. They are: "pioneering phase" from the early 1960s to the early 1970s; "reconciliation phase" during the 1970s; "reassessment phase" of the 1980s and early 1990s; and "empirical phase" over the last 15-20 years.

debate constituting the "early OCA theory" (for more details see (Corsetti, 2008)). In general, the OCA theory is based on the following criteria:

- Price and wage flexibility.

Price and wage flexibility are particularly important in very short run to facilitate the adjustment process following a shock. When nominal prices and wages are flexible between and within countries sharing a single currency, the transition towards adjustment following shock is less likely to be associated with sustained unemployment in one country and/or inflation in another. This will in turn diminish the need for nominal exchange rate adjustments. Alternatively, if nominal prices and wages are downward rigid some measure of real flexibility could be achieved by means of exchange rate adjustments if the countries do not share a single currency.

- Mobility of all factors of production including labor.

High factor market integration within a group of partner countries can reduce the need to alter real factor prices and the nominal exchange rate between countries in response to shock. Trade theory has long established that the mobility of factors of production increases both efficiency and welfare. Such mobility is likely to be modest in the very short run and could display its effect over time.

The mobility of capital is limited by the pace at which foreign direct investment can be generated by one country and absorbed by another.

Labor mobility depends on some costs, such as migration and retraining costs.

$\hbox{\bf -Integration}\ of\ financial\ markets.$

Financial integration can reduce the need for exchange rate adjustments. It permits to cushion temporary adverse disturbances through capital inflows, for example by borrowing from surplus areas or decumulating net foreign assets that can be reverted when the shock is over. This would reduce differences in long-term interest rates and would facilitate the financing of external imbalances.

- The degree of economic openness.

A country's trade behavior may be essential in determining optimality. A country which trade within an OCA represents a marked share in GDP and may profit from the OCA.

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The higher openness is, the more changes in international prices would directly and indirectly impact on domestic prices and as a result, would change domestic cost of living, assuming that country's prices to be statistically significantly different from the outside prices and assuming also that the purchase power parity theory would be rebalanced by the inflows

Economic openness has various dimensions including the degree of trade integration, the share of tradables versus non-tradable goods and services in production and consumption; the marginal propensity to import; and international capital mobility, etc.

- The diversification in production and consumption.

A high diversification in production and consumption, and correspondingly in imports and exports, cushions the possible negative impact of shocks to any particular sector of the economy. Therefore, diversification reduces the need for changes in the terms of trade via the nominal exchange rate and provides "insulation" against a variety of disturbances. Homogeneity can be pursued only if it validates the comparative advantage argument, otherwise it would be inefficient.

- Similarities of inflation rates.

External imbalances can arise from persistent differences in national inflation rates resulting from: disparities in structural developments, diversities in labor market institutions, differences in economic policies, and diverse social preferences (such as inflation aversion). When inflation rates between countries are low and similar over time, terms of trade will also remain fairly stable. This will, in turn, effect a constant trend in current account transactions and trade.

- Political integration.

The political will to integrate is regarded by some as the most important condition for adopting a common currency. Political will encourages co-operation and institutional linkages. A successful currency area needs a reasonable degree of compatibility in preferences toward growth, inflation, and unemployment and significant ability by policy-makers in trading-off between these objectives.

Despite its strong basic pioneering intuitions over recent decades the OCA theory has had several ups and downs. Particularly, plans for

economic and monetary integration along three stages of EMU (with the launch of the euro in 1999) went ahead but the OCA theory had a limited direct input. A "new OCA theory" starts emerging from the "early" OCA theory (National Bank of Slovakia, 2002). Some significant advancement in econometrics made it possible to renew several OCA properties by "operationalising" them and to study the transmission mechanism of shocks. Two hypotheses were developed: "endogeneity hypothesis" by Frankel and Rose and the "specialization hypothesis" by Krugman.

"Endogeneity hypothesis" developed by Frankel J. A and Rose A. K. (Frankel, Rose, 1998) underlines limit of OCA theory that is endogenous characteristics of its criteria. When Frankel and Rose test their "endogeneity hypothesis" empirically they find a strong positive relationship between the degree of bilateral trade intensity and the cross-country bilateral correlation of business cycle activity among OECD countries between 1959 and 1993. That is, greater integration historically has resulted in more highly synchronized cycles. They also show that gains from joining the currency area is a growing function of a degree of economic integration.

"Krugman specialization hypothesis" states that closer international trade could result in looser correlations of national business cycles. Paul Krugman argues that business cycles could become more idiosyncratic. As countries become more integrated they will also specialize in the production of those goods and services for which they have a comparative advantage. Members of a currency area would become less diversified and more vulnerable to supply shocks. Correspondingly their incomes will become less correlated.

Therefore, the basic idea of the OCA theory is that the adoption of the single currency is an optimum solution for countries or areas exposing to symmetric shocks or having a mechanism for the absorption of asymmetric shocks. Generally speaking in modern economic jargon, the opportunity costs of monetary union would be the loss of country's monetary autonomy and the loss of stabilizing through exchange rate policy. Potential benefits of a monetary union are benefits from policy delegation, gains from political integration, saving on transaction costs, and so on. These arguments have played an important role in the debate on EMU. The European experience with Economic and Monetary Union is the most important example of recently established currency unions and the one to which the OCA theory has been most frequently applied.

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Some of post Soviet transition countries such as Latvia, Lithuania, and Estonia successfully completed the final stage of transition period, fulfilling of the Maastricht criteria and as such they joint the EU in 2004. Now these countries are preparing for the next step—to joint the euro zone.

The Baltic countries' experience of economic and monetary integration is extremely important for Georgia but it is difficult to be repeated not just by Georgia but by the most of developing and transition countries because:

- European monetary integration is the result of wide scale economic integration including trade and financial convergence;
- membership of the economic union (EU in this case) is a prerequisite for admission to the monetary union (EMU);
- entry into EMU is permissible no earlier than two years after entry into the EU.

The length of this period is given by the Maastricht criterion for exchange rate stability and includes the participation of the currency in ERM – Exchange Rate Mechanism (currently in ERM II). If a country is not able to meet the criteria for entry into EMU after joining the EU, the country will be granted derogation (exception) for the adoption of the euro. Such status was previously enjoyed by Greece until June 2000 and is held to Sweden (National Bank of Slovakia, 2002).

Therefore, the European Union has outlined a three-step approach to the monetary integration of accession countries. The applicants will first join the EU, then enter the ERM II of the European Union and, finally, after fulfillment of the Maastricht convergence criteria, accede to the euro area, i.e. participate fully in Economic and Monetary Union. It is clear now, that OCA theory can not be immediately and fully applied to the most of transition countries and monetary integration with EU is not an available alternative for them. Decision-making of the authorities on integration and particularly on exchange rate regime is a complex matter. In transition countries this decision-making is even more difficult due to their economic situation. Economic and monetary integration of most of transition countries and of Georgia, particularly with EU looks as a long-term strategic perspective. To achieve this strategic goal mid-term intermediate targets should be determined.

Non-traditional ways of monetary integration: euroization.

- The monetary crises of 1990s and recent dollar crisis have given rise to new round of discussions about exchange rate policy and alternative exchange rate regimes. Globalization, increasing integration within the world economy, makes crises unpredictable and synchronizes the business cycle among the countries. In such a situation one can conclude that economies with 'unclear' exchange rate regimes are more exposed to speculative attacks, irrespective of their economic fundamentals. According to this theory, only a floating or fixed exchange rate regime is considered to be an acceptable exchange rate system. Fixed exchange rate regime in turn requires the adoption at least of one of the following strategies:
 - dollarisation of an economy,
 - formation of currency board, or
 - creation of regional currency union.

All three approaches have in common that central banks give up their right to set independent monetary policy for their countries.

Advantages and disadvantages of each of these strategies should be examined, but this paper focuses just on the first strategy—"dollarization of an economy" leaving the others for the further research.

Dollarization is used in varying senses that means everything from widespread illegal use of foreign currency alongside domestic currency to official approval for use of foreign currency as the main or sole means of payment, unit of account, and/or store of value. In other words, dollarization occurs when a foreign currency (hereon identified with the US dollar) is used in any of the three classical roles of money. The latter variety is called full or official dollarization³ that should be distinguished from unofficially (without formal legal approval) and semiofficially (or officially called bimonetary), where foreign currency is legal tender, but plays a secondary role to domestic currency (Wikipedia, 2008).

Discussions about the replacement of a national currency with another currency (with euro, for example) are ongoing not only in Latin America, but also in some of the transition economies of Central and Eastern Europe (in Poland and Estonia, for instance). These discussions

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³ To top it off, Argentina's President Menem has raised the stakes even further by proposing a dollarization plan according to which the peso would be fully replaced by the US dollar, accompanied by a monetary treaty with the US by which, among other things, the two countries would share Argentina's seigniorage. Later, however, this idea was abandoned (Calvo, 1999).

have had some in common. Particularly, they occurred because of the respective central bank did not monetizing adequately the economy or after heavy inflationary periods – e.g. hyperinflation in most post Soviet transition countries - where people lose trust in their currency as a value reservoir. The introduction of the euro on a unilateral basis which means the replacement of the domestic currency with the single European currency without participation in EMU, in fact is dollarization or unilateral euroization of their economies. At the same time, it may be also considered as an attempt of the non-standard ways of integration into the European Monetary Union (EMU).

At the first sight, the idea of early introduction of the euro in Central and Eastern European countries and other transitional countries seems to be a possible way of 'shortening' the period of monetary integration into the euro area. But as it was mentioned above, the European Union has clearly stated that unilateral introduction of the euro does not represent a feasible way of monetary integration to the EMU and it would be inconsistent with the philosophy of EMU defined in the EC Treaty, which requires a convergence process prior to the introduction of the euro. This position is also shared with the European Central Bank (ECB) and the national central banks of euro-zone countries. But dollarization (euroization) is not just a kind of fixed exchange rate regime, generally, it is one of the way of monetary integration as well. Let's analyze this aspect.

Dollarization or euroization in our case would involve benefits as well as costs for developing and transition countries. But it must be emphasized that advantages and disadvantages cannot offset each other, since they are of macro- and micro-economic levels, short- and long-term nature. In addition, they are interconnected and can be quantified only in part.

Common arguments in need of euroization for countries with transition economies are as the followings. Euroization would:

- be beneficial by reducing transactions costs, such as the costs of calculating dollar equivalents of national currency quantities;
- reduce market incompleteness, expanding the menu of financial options open to emerging-market governments and firms and, in so doing, would increase financial stability;
 - act as a commitment device, and thus would reduce the distortion

⁴ There is no single opinion about the spelling of this word. Some write as "eurosation" (See: National Bank of Slovakia, 2002); others write "euroization" (See: Backé and Cezary (2002), Christl (2004), Feige and Dean (2002)).

associated with policy incredibility;

• be beneficial because it legalizes the spontaneous dollarization that is already observed in several transition countries.

To be more specific, the main advantages of euroization include (a) lower interest rates, (b) reduced transaction costs and exchange rate volatility; (c) positive effect on macro-economic discipline and structural reform (for more detail, see: (National Bank of Slovakia, 2002)).

- Fall in interest rates.

The risk premium of domestic interest rates consists of two components: currency risk and default risk. Euroization would reduce the currency risk to zero and thus the level of risk premium would fall significantly. A cut in interest rates would have a positive effect on the fiscal position and economic performance of a country. But it should be noted that this assumption relates only to short-term interest rates. If inflation falls to the expected level, reduction in medium- and long-term interest rates would be smaller, since they are determined by other factors as well (propensity to save, return on investment, default risk, etc.). A fall in interest rate is expected to have a positive effect on the dynamics of real GDP and on the fiscal position of the country, because it would reduce the costs of domestic debt financing.

It should be stressed, that the results of euroization may be more comprehensive and controversial. Particularly, euroization is expected to fix short-term interest rate, which will be determined by the monetary policy of the euro area. This means that any imbalance between aggregate demand and aggregate supply in an economy should be eliminated through another economic mechanism, for example through manipulation of wages and prices, which are downward nominal rigid. If the country has no mechanism for adaptation to the imbalance, both the default risk and risk premium would increase. The country would not be able to borrow funds without an increase in costs. The positive effect of euroization in the form of a reduction in the exchange rate risk could be wiped out by an increase in the default risk.

- Fall in transaction costs and elimination of exchange rate volatility.

The expected elimination of exchange rate volatility and reduced transaction costs would create appropriate conditions for an upturn in international trade and growth in the economy. But it is more difficult to determine the effect of exchange rate volatility on international trade than

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The Political Economy of Monetary Integration in Transition Countries to calculate the fall in transaction costs. There is no precise estimation of these two euroization effects on the economy (Chang, Velasco; 2002).

Recent analysis has confirmed that the volume of trade between countries having a single currency is several times higher than between countries with different currencies (Volker, 2007), But the introduction of the euro on unilateral basis is not the same as the creation of a monetary union, since euroization does not create a common market like a monetary union. Therefore, euroization would have (if any) a lower positive effect.

- Positive effect on macroeconomic discipline and structural reform.

We may expect that the unilateral adoption of the euro in transition economies could have a positive effect on fiscal discipline and structural reform. But again, the process of integration into the EU by itself represents a significant stimulus for institutional and structural reforms, as well as for macroeconomic stability. So, it is not clear whether a change in the exchange rate regime and euroization in particular, could support the existing motives for reform and sound macroeconomic development.

- Increase policy credibility.

High expectations of financial panics and exchange rate crises has provided a strong impetus to calls for dollarization and/or euroization as a tool for stabilization. According to practical experiences, dollarization is used, for the most part, in countries that are in the initial phase of market reforms, countries with hyperinflation, or countries hit by a war conflict (Kucerova, 2003). Increase of policy credibility and stability is a required prerequisite to attract foreign investors and to accelerate inflow of foreign capital; both are necessary for undergoing successful market oriented reform.

The unilateral introduction of the euro has its disadvantages as well.

• Euroization implies that the government loses seigniorage as a source of real revenue.

These costs incurred as a result of withdrawal of the domestic currency from circulation and its replacement with a foreign currency using the foreign exchange reserves. In other words, the so called (stock) seigniorage would accrue to the ECB. Under the EC Treaty, seigniorage revenue is shared by the Member States of EMU, which would not be possible if the euro was adopted on an unilateral basis.

• After the unilateral introduction of the euro, the monetary authorities would no longer be able to act as lenders of last resort. Loosely speaking, a lender of last resort is an institution that stands ready to provide credit to commercial banks and other financial institutions in the event when they experience a sudden demand for liquidity. Such an institution is crucial in a banking system with fractional reserves in order to reassure bank depositors and short-term creditors that their claims will be always honored. This function of the central banks helps to prevent confidence crises and associated bank runs.

But the institution of the lender of last resort may be substituted, for example when the domestic banking system is owned by foreign institutions. For branches of foreign banks, it would be unimportant whether a euro transaction is carried out - within the domestic economy or abroad. If the branch of a foreign bank is short of resources, the parent bank could provide it with the necessary funds. But the elimination of the central bank's ability to act as lender of last resort may provide foreign banks with a competitive advantage, domestic banks will remain less attractive, and as the result an outflow of deposits from domestic to foreign banks may be expected.

• Euroization would prevent the implementation of an optimal policy. This is because the exchange rate would no longer serve as an adjustment tool and, in this respect, euroization resembles an irrevocably fixed exchange rate system. Monetary policy applied in the euro area would not take into account the economic situation in a particular country. If the nominal exchange rate is fixed, the absorption of shocks will require flexible wages and prices. If the adjustment of price and wage is not enough and/or the work force is not mobile, the economy may run into recession or suffer a slowdown in the rate of growth.

Thus, euroization may cause lower of economic growth and rise of unemployment.

• Euroization may increase the possibility of crises. Euroization protects a country against monetary crisis, but cannot prevent recession, bank failures, or the sudden outflow of capital. An unsustainable fiscal deficit or weak private sector may lead investors to withdraw their investments from the country, or to sell government bonds or other domestic assets. So, euroization buys credibility at the expense of a suboptimal response to shocks, and may or may not be worth it.

There is one more noneconomic disadvantage of euroization.

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Currencies are national symbols, and hence their elimination would be costly in terms of national pride, identity, and the like. Such an argument is sometimes politically effective and, in spite of its being quickly dismissed by many economists, may have some validity.

Again, it is not a simple task to estimate all costs and benefits of euroization. As we have seen, in some cases exactly the opposite would be true or disadvantages convert into advantages. It follows from the discussion, that whether euroization is desirable under such circumstances is, at the end, an empirical matter that depends on both economic conditions and political will.

Given the interest on monetary integration as a possible way to increase stability and welfare of transition countries, the analysis of the rest non-traditional ways of integration such as the formation of currency board and/or creation of (regional) currency union remain fertile ground for future research

Conclusion.

Volatile capital flows and exchange rates must be identified today as major sources of instability that have triggered intensive bloc building, including increasingly strong attempts to monetary integration. This holds true especially for developing and transition countries which economies are characterized by a significantly lower degree of financial development and where exchange rate volatility has a negative impact on economic growth.

As any integration process, monetary integration would require an advanced degree of political integration and willingness to undertake risk sharing. The political will to integrate is regarded as the most important condition for economic integration. Thus, European integration is a political process first of all, and European monetary integration has been part of the broader process of economic and financial integration.

The advancement of European integration has proceeded hand in hand with the advancements of economic theory. However, OCA theory is still a suitable framework for discussing the monetary integration. All characteristics or criteria of both the "early" and the "new" OCA theory such as price and wage flexibility, mobility of factors of production, financial integration, economic openness, diversification in production and consumption, and etc. are in used to provide a solid base for the whole process of monetary integration and its evaluation in different parts of the

world (Nnanna, 2002). However, the European experience of economic and monetary integration (the formation of monetary union similarly to EMU, particularly) would not be simply repeated by the most of developing and transition countries.

Developing and transition counties can enhance macroeconomic stability and economic development by integrating their monetary systems through different methods: adopting a set of rules that determines the value of their currency (by operating a currency board); or by alternatively adopting a foreign currency to be the domestic legal tender (called dollarization). This paper examines just one of the available non-traditional way that is euroization of an economy.

The analysis of benefits (general and particular) and costs (such as loss of seigniorage and the function to be a lender of last resort, loss of control over domestic monetary policy, etc.) of euroization shows that euroization must not be seen as a way of circumventing the stages set out in the EC Treaty. Since euroization is not an available way of 'shortening' the period of monetary integration into the euro area, it is still a non-traditional way of monetary integration of transition countries. Euroization would facilitate structural reforms and would increase policy credibility that has a special meaning in countries that are in the initial phase of market reforms, countries with hyperinflation, or countries hit by a war conflict. Thus, euroization is desirable under such circumstances and at the end, is an empirical matter that depends on both economic conditions and political will.

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