

**Geographic labour mobility as an element of the adjustment process
in a monetary union on the example of the eurozone and the United States**

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doctoral dissertation summary

The subject of the role of geographic labour mobility in the adjustment process that takes place in the eurozone and the USA in connection with asymmetric shocks, i.e., the strength of the migration mechanism in both of these currency areas, has been taken on due to high importance of labour mobility in stabilising monetary unions in macroeconomic terms. This is particularly relevant for the eurozone for which, given the contemporary economic and political realities, especially limited potential in international fiscal transfers, it is reasonable to take into account even the risk of disintegration.

The dissertation's objective is to compare the evolution and territorial differentiation of the role that geographic labour mobility plays in the areas of the eurozone and the USA in the adjustment process connected with asymmetric shocks, as well as to assess the importance of two supposedly significant determinants of this role in both mentioned currency areas. This objective is achieved through verifying the following three-part thesis:

1. In the long-term perspective the superiority of the USA over the eurozone area in the role of geographic labour mobility in the adjustment process diminishes, but despite this in the period of the euro existence this role is still much bigger in the USA than in the eurozone and even in the individual states forming it.
2. The differences among the individual eurozone states in the role of geographic labour mobility in the adjustment process occurring in their economies are bigger than analogous differences among the regions forming the USA.
3. The role of geographic labour mobility in the adjustment process taking place both in the eurozone area and in the USA is more significant when overall macroeconomic conditions are better and when negative asymmetric shocks have stronger effect on local economies characterised by relatively low wages.

The dissertation consists of an introduction, four chapters and a conclusion. The first chapter presents the role of and factors affecting geographic labour mobility in the adjustment process in monetary unions, especially in the eurozone and the USA. The second chapter describes the research method and the data used in the analysis. The third chapter concerns the first two parts of the thesis, i.e., the comparison of the evolution and territorial differentiation of the strength of the migration mechanism in the eurozone area and in the USA. The fourth chapter relates to the third part of the thesis, i.e., the significance of two potentially important determinants of this strength in Europe and in the USA.

The research method employed is based on analysing how in the area of the first twelve eurozone member states (EA12) and in the USA the differentiation of macroeconomic conditions among local economies forming these currency areas is reflected in the differentiation of local net emigration rates as a measure of labour flows. While verifying the first part of the thesis one analogously considers as currency areas also the EA12 states. While verifying the second part of the thesis one considers in this way both the EA12 states and the regions forming the USA (regions in the USA correspond to territorial entities referred to by the U.S. Census Bureau as divisions).

The EA12 area is analysed in decompositions into states, NUTS1 and NUTS2, the EA12 states in decompositions into NUTS1 and NUTS2, the USA in decompositions into nine regions and states / the District of Columbia and the USA regions in decomposition into states / the District of Columbia. The analyses for the EA12 area for decomposition into states and for the USA are conducted using data for the 1977-2013 period. The analyses for the EA12 area and the EA12 states for decompositions into NUTS1 and NUTS2 are conducted using data for the 1999-2013 period. The weighted least squares method is employed in computations, whereby numbers of people living in local economies are used as weights.

The verification of the third part of the thesis relies on analysing the strength of the migration mechanism in the area of EA12 and the USA in the context of overall macroeconomic conditions in both currency areas and the measures of geographic distribution of asymmetric shocks against the background of wage levels in local economies forming these currency areas. The ordinary least squares method is employed here.

The findings presented in the dissertation confirm the validity of the first part of the thesis with partial results suggesting in the long-term at most a modest increase in the strength of the migration mechanism in the eurozone area, a decline in this strength in the USA and a decline in the USA advantage over the eurozone area in terms of this strength.

It should be noted that the findings of a decline in the USA advantage over the eurozone area in the strength of the migration mechanism and of a decline in this strength in the USA confirm the most probable literature-based conjectures the thesis rests on. Consequently the effectiveness of the research method employed is confirmed, which is the accomplishment of the additional objective of this dissertation.

Contrary to the second part of the thesis, territorial differentiation of the strength of the migration mechanism in the USA turns out to be similar, or even larger, than in the eurozone. The analysis also indicates that territorial differentiation of this strength is high both in the eurozone and in the USA. Based on the results for the USA one may generally conclude that high territorial differentiation of the strength of the migration mechanism does not seem to pose by itself a fundamental problem for the functioning of monetary unions, including the eurozone. Based on the results for the eurozone and the USA one can also assume that high territorial differentiation of the strength of the migration mechanism in monetary unions is not an anomaly, but a normally occurring phenomenon. The analysis also suggests a low propensity among Germans to migrate internally in line with the needs of the adjustment process. This indicates that if Germany were affected by a negative asymmetric shock, its citizens would likely be unwilling to emigrate abroad.

While the analysis does not confirm the third part of the thesis, it should be noted that the results indicate a greater likelihood that the relationship between overall macroeconomic conditions and the strength of the migration mechanism is, however, positive, both for the eurozone area and the USA. With respect to the lack of confirmation for these two currency areas of positive relationship between, on the one hand, greater exposure of local economies characterised by relatively low wages to negative asymmetric shocks and, on the other hand, the strength of the migration mechanism, it can be stated that this lack of confirmation seems to be associated with little variation in the distribution of asymmetric shocks against the background of local wage levels in the two currency areas and/or with little territorial differentiation of the two

currency areas in terms of wage levels. Consequently territorial distribution of asymmetric shocks against the background of wage levels generally does not seem to have a significant effect on the strength of the migration mechanism in the eurozone and the USA. It cannot be, however, ruled out that this distribution may significantly affect the strength of the migration mechanism in monetary unions characterised by larger territorial disparities in wages than the eurozone and the USA.

In case of the eurozone one should, however, take note of partial results suggesting that after 2007 negative asymmetric shocks might have had concentrated in local economies characterised by relatively low wages heavily enough to bring about a significant increase in the strength of the migration mechanism.

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