Labour mobility and labour market adjustment in the EU

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Context

- The economic crisis provoked a rise in unemployment rates in the EU

- The creation of EU to create an optimum currency area (OCA), whose characteristics were : labour mobility across area's regions (Mundell, 1961), openness with capital mobility and price and wage flexibility across the region (Mc Kinnon, 1963), and production diversification (Kenen, 1969)

- Labour mobility within the OCA theory should enable European workers to move from a country to another in order to reduce unemployment in countries where high unemployment rates prevail, and offer a new labour force where there is a lack of workers

Context

- The "Lucas critique" of much existing research into asymmetries within the euro area is precisely that shocks will have a far smaller asymmetric effect than hitherto because EMU will in itself change behaviour

- The geographical mobility may now be less important as a factor of adjustment than occupational mobility because of the recent developments in information technology.

- The emigration of the youngest, most skilled and most enterprising elements of the workforce can in itself condemn a region to permanent decline. At the same time, areas of net labour immigration can face large short-term costs - for example, the need to provide accommodation and the payment of social benefits.

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Determinants of mobility flows : a gravity model

To analyse the determinants of mobility flows authors have used the gravity model.

- The integration of the demographic variable represented by the interaction of population in origin and destination country under the log specification :

$$lnMIG_{ijt} = \beta_0 + \beta_1 ln(pop_{it} * pop_{jt}) + \beta_2 ln(dist_{ij}) + \beta_3 ln(pcgdp_{jt}/pcgdp_{it})$$
$$+\beta_4 ln(ur_{jt}/ur_{it}) + \beta_5 ln(stock_{ij0}) + \beta_6(lang_{ij}) + \beta_7(link_{ij}) + \beta_8(eu_{ij}) + \beta_9(ea_{ij}) +$$
$$a_t + a_i + a_j + u_{ijt}$$

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$$a_t + a_i + a_j + u_{ijt}$$

- Gravity models encounter difficulty when using data sets that include negative or zero values ; some solutions are being investigated, but the challenge remains (Ramos,2016)

Determinants of mobility flows : a gravity model

It is unlikely that greater mobility of labour, either within or between Member States, can ever become a major instrument of adjustment within the EU without the removal of some major institutional and legal obstacles Amati and Patterson, 1998) :

- Rules on the right of residence
- Restrictions on the right to social security
- Nationality restrictions
- Transferability of pension rights
- Mutual recognition of qualifications and in recruitment to the public sector.
- lack of information about jobs in other Member States, etc.
  $\hookrightarrow$ Integration a measure of labour market flexibility : tightness of entry laws (Entry Laws Tightness), protection legislation, etc. (Cigagna and Sulis, 2013).

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Dynamic response of labour mobility to country-specific shocks : a VAR model

Authors have used a VAR Model to assessing the dynamic response of labour mobility to asymmetric labour demand shocks. The VAR modelling approach is, however, not without its limitations

- The first issue concerns the theorical nature of the VAR approach. It do not impose a priori theoretical structure on the data. It allows the regularities contained in the data to tell the story (Ramaswamy and Rendu, 2000). BVAR has been shown to provide better forecasts than conventional unrestricted VARs (Diebold, 1998 ; LeSage and Krivelyova, 1999 ; Litterman, 1986).

- Findings from a VAR may be sensitive to model specification (inclusion or exclusion of variables) (McNees, 1986 ; Runkle, 1987). Therefore, caution should be exercised in interpreting the results of VARs.

Dynamic response of labour mobility to country-specific shocks : a VAR model

- Authors have integrated Log of relative real wages in the VAR model as first differences and have used Panel unit roots tests to confirm their non-stationarity. However, many empirical studies (Lu,2001) have argued that if the time series are non-stationary, the order of integration needs to be determined using the augmented Dickey-Fuller (ADF) test (Dickey and Fuller, 1979).

- Regressing cointegrated time series may lead to incorrect inferences about the parameters and entirely spurious relationship (Davidson and MacKinnon, 1993 ; Engle and Granger, 1987). Econometric research shows that VARs with unit roots and some cointegration may be problematic and usually underestimate the forecast error variance at long horizons (Freeman et al. 1998).

Thank you