

The sectoral structure of an emergent economy in light of I-O analysis

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1) The paper attempts to reveal the main structural changes (in sectoral profile) produced during the transition “ study case: Romania.

2) As a leading method the I-O techniques are used, in Leontief model version.

3) There are involved information resulted from the I-O tables, homogenized as annual series for entire period 1989-2014. Extended classification of 88 branches was compacted into a fourteen sectors structure. Current prices were preponderantly used. 4. Contributions:

4.1. The paper explains, including analytically, the comprehensive significance of sectoral shares in GDP as an indicator of sectoral structure. It synthetizes both groups of factors influencing economic life - supply-sided and demand-sided.

4.2. Two measures of structural changes speed are involved: moving structural change coefficient (estimates intensity of adjustments produced between two successive years), and referential one (compares registered sectoral shares with a given fixed vector). Computing these parameters, the paper concludes that Romania has registered, from this standpoint, three distinct phases:

a) Decade 1990-1999. Dominated especially by demolition “ along with the centrally planned mechanism - of the main industries, transportation networks, large agrarian exploitations, educational system. At a macro-structural level this phase distinguished itself by a convulsive evolution.

b) Pre-accession to EU period, 2000-2006. Characterized by ceasing of the chaotic institutional changes and implementation of complex reforms based on the adopted Program for Integration and negotiations with European Commission. This phase induced a more stable sectoral structure.

c) Status as EU full member 2007-2014. Unfortunately, the official accession to the EU could not be integrally fructified because of the latest world crisis. Years 2009-2011 registered a slowdown and serious decline, followed by a modest recovery (2012-2014). The changes in sectoral structure intensified again.

4.3. The technical coefficients are used to reveal the intensity of inter-sectoral linkages. Over half of them belong to nonsignificant or very weak classes, and approximately a quarter to the moderate one. 22-23% of them are characterized by important inter-sectoral linkage intensity, being defined as nodal technical coefficients. The “cumulated direct effects”, consisting in the row/column sums of A matrix are also analyzed.

4.4. The paper evaluates real-nominal discrepancies which can occur during economic changes. Relating to output, the sectoral structure was determined in three variants: a) current prices; b) previous year prices (in I-O applications these are usually labelled as constant); and c) base 1995 prices. Thus there were identified three groups of aggregated sectors. One (sectors 1, 4, 5, 7, 11) is characterized by a long-lasting relative nominal depreciation; another (sectors 2, 6, 8) displays an approximately convergent dynamics; the last category (sectors 3, 9, 10, 12, 13, 14) reunites the main “winners” of this sui-generis “real-nominal competition”.

4.5. Overall, five patterns of sectoral dynamics were identified:

- The shares in GDP of sectors 1 (agriculture, forestry, hunting, fishing) and 5 (textiles, leather, pulp and paper, furniture) have been placed on a descending trajectory.

- The sectors 2 (mining and quarrying), 7 (other manufacturing industries), and 14 (professional

services - mainly businesses) also knew initially a descending evolution but, during the last period, one of them (2) has shown some signs of stabilization, while the others " even an increasing trend.

- There are sectors which have begun the transition on an ascending trend, only to continue by a descending evolution. The sectors 9 (transports, post and telecommunications) and 10 (trading services) are in such a situation.

- Oscillating dynamics do not lack as well. In some cases it ends by stabilization: sectors 3 (production and distribution of electric and thermal power) and 6 (machinery and equipment, transport means, other metal products). In others, however, the last part of interval seems to be associated rather with a descending trend (sector 4 - food, beverages and tobacco) or, on the contrary, with an ascending one (sector 11 - financial services and real estate transactions).

- The clearly defined ascending dynamics was also present. This concerns sector 13 - creative services.

The tendencies revealed by other authors for transitional economies " mainly "de- and re-agrarization" (the latter as a temporary phenomenon), "deindustrialization", and "tertiarization" - are also visible in the I-O analysis.