

A Multilevel Comparative Assessment Approach to International Services Trade Competitiveness: The Case of Romania and Bulgaria

Ana Bobirca, and Paul-Gabriel Miclaus

Abstract—*International competitiveness* receives much attention nowadays, but up to now its assessment has been heavily based on manufacturing industry statistics. This paper addresses the need for competitiveness indicators that cover the service sector and sets out a multilevel framework for measuring international services trade competitiveness. The approach undertaken here aims at comparatively examining the international competitiveness of the EU-25 (the twenty-five European Union member states before the 1st of January 2007), Romanian and Bulgarian services trade, as well as the last two countries' structure of specialization on the EU-25 services market. The primary changes in the international competitiveness of three major services sectors – transportation, travel and other services - are analyzed. This research attempts to determine the ability of the two recent European Union (EU) member states to contend with the challenges that might arise from the hard competition within the enlarged EU, in the field of services trade.

Keywords—Bulgaria, EU-25, international competitiveness, international services trade, Romania.

I. INTRODUCTION

INTERNATIONAL trade in services has risen markedly over the past two decades, with the value of trade in services now equivalent to over one-quarter of global trade and with the EU-25¹ being the world biggest exporter, as well as importer of services (26% of the total world trade in services). Services exports are increasingly important to the European Union (EU) economy: the latest Eurostat figures [1] show that, in the second quarter of 2006, the EU-25 recorded a deficit of 22.4 billion euros in its external current account, but a surplus of 16.5 billion euros in its external trade in services.

Paper submitted for review July 31, 2007.

Ana Bobirca is with the Academy of Economic Studies, Faculty of International Business and Economics, Bucharest, Romania (phone: +40-722-219-289; fax: +40-31-804-61-66; e-mail: ana.bobirca@rei.ase.ro).

Paul-Gabriel Miclaus is with the Romanian National Securities and Exchange Commission and with the Academy of Economic Studies, Faculty of International Business and Economics, Bucharest, Romania (e-mail: miclaus@cnavmr.ro).

¹EU-25 refers to the 25 European Union (EU) member states before the 1st of January 2007, i.e. Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, United Kingdom.

The EU enjoys a comparative advantage over its trading partners in various services sectors, which is not the case in many areas of manufacturing. Therefore, competitiveness of the European economy now relies largely on services [2].

This expansion in cross-border services transactions reflects the increasing importance of services industries within European economies, as well as the technological improvements and the ongoing liberalization of national markets, mainly as a result of the enlargement process, that also contributed to improve the economic performance of developing countries, through their integration in the EU economy.

Romania's services exports represent approximately 20% of its total exports with the EU-25, whereas for Bulgaria the situation is even more encouraging, i.e. 38.5%, suggesting a more pronounced tendency to converge with comparators in the rest of the EU as regards the services intensity of exports. Additionally, 71% of Romania's services trade (and, respectively, 57% of Bulgaria's services trade) is conducted with EU-25 countries, reflecting the more advanced liberalization measures and the higher degree of integration with the European market, as a result of the EU accession process.

The main purpose of this paper is to comparatively examine the international competitiveness of the EU-25, Romanian and Bulgarian services trade and to subsequently determine the competitive position of Romania and Bulgaria on the EU-25 services market. To this end, the paper addresses the need for competitiveness indicators that cover the service sector and sets out initial proposals for developing a set of such indicators.

The structure of the remainder of this paper is as follows. The first part introduces the concept of international competitiveness and presents, evaluates, and systematizes key issues of the complex analysis on international competitiveness. The second part of the paper sets out in detail the framework for calculating the proposed measures of services trade competitiveness and shows the importance of the methodological approach in interpreting the information provided by these indicators. The third part illustrates the EU-25 countries', Romania's, and Bulgaria's recent performance in services trade, based on a four-dimensional framework for measuring international trade competitiveness. The paper

concludes by explaining the competitive position of Romania and Bulgaria on the European services market and by identifying research issues that require further study.

II. PERSPECTIVES ON INTERNATIONAL COMPETITIVENESS

The concept of *international competitiveness*, although controversial and elusive, has gained acceptance and continues to attract the attention of both academics and policymakers worldwide. International competitiveness, within the context of trade in goods and services, refers to a nation securing and maintaining a trade advantage vis-à-vis the rest of the world.

International competitiveness is advanced whenever the economic welfare of a nation is enhanced through an increase in the flow of trade or through an alteration in the conditions of trade, starting from a presumed initial equilibrium [3]. Trade theory asserts that economic welfare is dependent on the production of goods and services that a country has comparative advantage in. This, in effect, means that international competitiveness is secured when production is in line with a country's comparative advantage situation. If countries perform well internationally and compete successfully for export markets, this could be a sign of their sound international competitiveness. Thus, at the international level, competitiveness can be defined as the ability of an economy to attract the demand for its exports and the investment to supply that demand, all within social norms that result in an improved standard of living for its citizens. This, in turn, depends on the macro and microeconomic policies, regulations and institutions that affect the productivity of the economy's factors of production and the costs of doing business.

A review of available literature and empirical evidences supports the notion that international competitiveness can be explained, to some extent, by a country's ability to export [4], [5]. There is, in fact, a self-recurring relationship between export performance and international competitiveness. Exports are the first level of international competitiveness affirmation. Improvements in export performance lead to an increase in countries' competitiveness. This effect is a result of enterprises skills, knowledge, propensity to innovate and use new technology, ability to exploit technological opportunities in a successfully commercial way etc. On the other hand, in striving to achieve successful exports in highly competitive global markets, a country is forced to improve its competitiveness. The more competitive a country is, the more economically powerful it is. Therefore, it is more capable to compete on the global market, to attract people with higher level of knowledge, skills, to buy new technologies etc., and to improve its export performance, as well as to achieve better export results. This can, in turn, favor additional innovations and trigger an improvement in its competitiveness. Consequently, export performance and competitiveness should not be considered in isolation, since they are mutually interdependent.

However, competitiveness should not be equated only with a country's ability to export. The evolution of export market shares is also an important element of trade competitiveness,

whereas the latter is just a component of a nation's competitiveness, defined by the European Declaration of Lisbon as the capacity to improve and raise the standard of living of its habitants, by providing more and higher quality employment, and a greater social cohesion. The gains or losses of world market shares by individual countries are often considered as an index of their trade competitiveness. However, market share growth depends also on structural factors. Due to changes in demand, a country's geographical and sectoral specialization at the beginning of the period is an important factor shaping the market share growth. Similarly, the country's ability to adapt its exports to such changes will also affect the final outcome.

Furthermore, the concept of international competitiveness in services encompasses also qualitative factors, which are difficult to quantify; the quality of services involved, the degree of specialization, the capacity for technological innovation, the quality of human resources are factors that may influence a country's services trade performance favorably. Likewise, high rates of productivity growth are often sought as a way of strengthening competitiveness. But it is not necessarily the case that favorable structural factors of this sort will give rise to increased sales on foreign markets. They may, instead, show up as improving terms of trade brought about through exchange-rate appreciation, while leaving export performance broadly unchanged. It is for this reason, as well as because these factors are hard to measure in quantitative terms, that consideration here is confined to a more specific and integrated method for determining Romania's and Bulgaria's relative competitive position in their services trade with EU-25 countries.

III. METHODOLOGY AND DATA

For the comparative assessment of the EU-25 countries', Romania's, and Bulgaria's international competitiveness of trade in services, the underlying methodological approach undertaken in this paper is based on a multilevel model encompassing a combination of four indices: (1) *Revealed Comparative Advantages (RCA)*, for which we use a version of Balassa's formula [6]; (2) *Comparative Export Performance (CEP)* [7]; (3) *Trade Overlap (TO)* [8] for the calculation of the overall importance of intra-industry, in comparison with inter-industry trade; (4) *Export Similarity (ES)* [9], [10] in analogy to the TO index.

(1) As a first step, we attempt to measure the international competitiveness of EU-25, Romania, and Bulgaria in services trade by using RCA indices.

The original RCA index was developed for measuring the degree of a country's specialization in individual industries through data on international trade in goods. The focus in this study, however, is on trade in services. A fundamental element of the RCA is the law of comparative advantage, which assumes trade in goods. Some existing studies, however, have indicated that the law of comparative advantage is applicable to international trade in services, as well as in goods. Both Hindley and Smith [11], and Deardorff [12] examined the relevance of the law of comparative advantage for trade in services, and they confirmed the

applicability of the theory in each examination. Sazanami and Urata [13], pioneers in the study of trade in services, used an econometric method to show the significance of comparative advantage to trade in services. Their work also supported the transferability of the theory.

There are a number of ways to examine whether or not a country has a comparative advantage in the export of a certain service. One common method is to determine how specialized a country is in the export of a service activity through constructing "Balassa indices" [6]. The formula we use here to measure a country's revealed comparative advantage (RCA) in services trade is given by:

$$RCA_{i,A} = \frac{X_{i,A}}{\sum_i X_{i,A}} \bigg/ \frac{\sum_A X_{i,A}}{\sum_i \sum_A X_{i,A}} \quad (1)$$

where $RCA_{i,A}$ represents the revealed comparative advantage for the services sector i of country A and $X_{i,A}$ corresponds to the exports of the services sector i by country A .

This formula represents the ratio of domestic specialization (numerator) against that of world specialization (denominator). When one sector has $RCA > 1$, it has a comparative advantage; when it has $RCA < 1$, on the other hand, it has a comparative disadvantage.

Through applying the formula above to world trade data, EU-25 countries, Romania, and Bulgaria, it is possible to identify the services sectors in which those countries have a comparative advantage. The higher (lower) the RCA index, the more (less) successful the trade performance of the country in question is in a particular service activity. The RCA reflects both the competitiveness in the domestic sector and the world supply capacity.

(2) As a second step, we estimate the structure of international competitiveness in services trade for EU-25, Romania, and Bulgaria, corresponding to the years 2003, 2004, and 2005. The comparative export performance (CEP) index [7] is also based only on export shares and therefore allows for a comparison of findings between the first two indices.

The formula we use to measure the CEP index is given by:

$$CEP_i = \frac{X_{i,A}}{\sum_A X_{i,A}} \bigg/ \frac{\sum_i X_{i,A}}{\sum_A \sum_i X_{i,A}} \quad (2)$$

where CEP_i represents the comparative export performance for the services sector i and $X_{i,A}$ symbolizes the exports of services sector i by country A . CEP index is thus calculated by dividing a country's share in the exports of a given service category by the share in the world exports of services. CEP index values above (or below) unity mean that the particular services sector has a larger (lower) share in the total exports of the analyzed country than the corresponding EU-25 or world share. Thus, the country in question can possess a relative advantage (or disadvantage) in the export of those services.

The two indices illustrated above (i.e. RCA and CEP), however, do not give a complete representation of a country's trade performance because only exports are considered. In some cases, they might give implausible information. It is possible, for instance, that a country has strong comparative advantage in the supply of a certain service and, at the same time, that the same country registers a value of imports of that service higher than its exports. Other indicators, reflecting both imports and exports should be considered.

(3) Thus, as a further step, we consider the overall importance for Romania, Bulgaria, as well as for the EU-25, of intra-industry in comparison to inter-industry specialization in international services trade, by calculating trade overlap (TO) coefficients, both at aggregate and sectoral level.

The intra-industry trade suggests how and to what extent the economy in question is already integrated into the world market, as well as the degree of liberalization that the economy has already realized throughout the economic development process. TO coefficient measures the level of specialization in the international trade of a particular services sector relative to the international trade between different services sectors of the economy.

The formula we use to measure the trade overlap (TO) coefficient is given by:

$$TO_i = 2 \times \sum_i \min(X_{i,A}, M_{i,A}) / \sum_i (X_{i,A} + M_{i,A}) \quad (3)$$

where TO_i represents the trade overlap for the services sector i and $X_{i,A}$ and $M_{i,A}$ the exports and, respectively, the imports of services sector i by country A ; "min" defines the magnitude of total trade that overlaps.

The coefficient can vary between zero and one. The closer it comes to unity, the more intra-industry specialization exists. A lower coefficient implies that trade takes the form of inter-industry specialization.

(4) Finally, we calculate whether or not the exports of Romania, Bulgaria, or EU-25 overlap in the period 2003–2005. Coefficients of export similarity (ES) are computed using the formula of Finger and Kreinin (1979), which measures the proportion of a country's exports matched by its competitor's exports in the same service category. The first step in the analysis is to calculate, for individual countries, the share of each services sector exports in total services exports. These shares are then compared between countries to obtain a measure of services export similarity. The Finger-Kreinin statistic is defined as follows:

$$ES_{A,B} = \sum_i \min(X_{i,A}, X_{i,B}) \quad (4)$$

where $ES_{A,B}$ represents the export similarity of countries A and B ; $X_{i,A}$ refers to the services sector i share in total services exports of country A ; $X_{i,B}$ refers to the services sector i share in total services exports of country B .

The ES coefficient can vary between zero and one. The closer it comes to unity, there is a greater degree of similarity between two countries (countries have identical export

patterns - intra-industry trade). On the other hand, a finding of zero indicates no export similarity between the countries in question, as well as no overlap - inter-industry trade. Finger-Kreinin is a relative index in that it compares the sector share in total exports of one country with respect to another.

In calculating these indices, the sample data is drawn from UNCTAD [14], EUROSTAT [1], and IMF - Balance of Payments Statistics [15] on trade in services by sector, a data-set which covers exports and imports of three principal services categories: *transportation*, *tourism and travel*, and *other commercial services*, according to the concepts and definitions of the IMF Balance of Payments Manual [16]. The data-set comprises the EU-25 countries, Romania, Bulgaria, and the world (178 countries) and covers a yearly time period counting 2003, 2004, and 2005.

IV. RESULTS AND DISCUSSION

A. Revealed Comparative Advantage

The main conclusions to be drawn from the RCA indices of Romania's, Bulgaria's, and EU-25' services trade by sector, calculated in relation to the world and to the EU-25 states, respectively (only for the former two countries), for the years 2003-2005 are (see Table I): (a) for *transportation services*, Romania and Bulgaria have a revealed comparative advantage, both in their trade with the world and in the relation to EU-25; the revealed comparative index is higher for the trade with the rest of the world, which demonstrates a lower degree of specialization in Romania's and Bulgaria's transportation services trade with EU-25; it is noteworthy that EU-25's specialization in such services is slightly increasing, with EU-25 switching to a comparative advantage in 2005; a similar pattern can be observed for Bulgaria's trade with EU-25, whereas for Romania the situation is different (higher comparative advantage, but declining); (b) for *travel services*, Romania's and Bulgaria's specialization index is higher in their trade with the EU-25 countries than in that with the world at large, with Bulgaria being in a stronger competitive

position than Romania; EU-25 appears to have a comparative disadvantage for the export of such services, with a tendency to raise its degree of specialization, against an increase of the world market size for such services; whereas Romania is slightly reducing its comparative advantage in relation to EU-25, Bulgaria is improving its position; (c) for *other services*, whilst the international context looks unfavorable, there appears to be an increase of the degree of specialization in the export of such services for Romania, both in its trade with the world and with EU-25; the EU-25 states have a comparative advantage in trading with these services, that is somewhat worsening in time. Bulgaria's situation, in this case, is considerably weaker than Romania's.

B. Comparative Export Performance

The main conclusions to be drawn from the CEP indices of Romania's, Bulgaria's, and EU-25' services trade by sector, calculated in relation to the world and to the EU-25 states, respectively (only for the former two countries), for the years 2003-2005 are as follows (see table II): (a) Romania and Bulgaria appear to have been maintaining their initial position of comparative advantage in the export of *transportation services*, both in relation to the world and to the EU-25 countries; both Romania's and Bulgaria's comparative advantages are stronger with respect to their overall international trade; EU-25 countries are improving their relative advantage in the export of transportation services; in the case of Romania, the results show that the country is highly competitive in terms of export performance in these services; (b) concerning *travel services*, Romania is decreasing its competitiveness, with CEP values below the unity and seems to be losing its advantages in trade with the EU-25 countries, whereas Bulgaria is strongly improving its relative advantage, especially in relation to EU-25; (c) the results for *other services* indicate that EU-25 states are best positioned for these services, although registering a slight decrease; Romania and Bulgaria have a relative disadvantage in the export of such services, much stronger for Bulgaria.

TABLE I
RCA INDICES BY SERVICES SECTOR

	Romania- world ^a	Bulgaria- world ^b	EU-25- world ^c	Romania- EU-25 ^d	Bulgaria- EU-25 ^e
Transp. ^f					
2003	1.87	1.24	0.94	1.59	0.99
2004	1.93	1.13	0.95	1.53	1.15
2005	1.45	1.33	1.08	1.42	1.10
Travel ^g					
2003	0.52	1.93	0.93	1.00	2.29
2004	0.49	1.94	0.90	0.93	2.14
2005	0.80	2.11	0.95	0.80	2.35
Other ^h					
2003	0.90	0.38	1.06	0.78	0.37
2004	0.87	0.40	1.08	0.82	0.40
2005	0.94	0.34	0.99	0.92	0.33

Source: own computation

^aRomania in its services trade with the world; ^bBulgaria in its services trade with the world; ^cEU-25 countries in their services trade with the world; ^dRomania in its services trade with EU-25 countries; ^eBulgaria in its services trade with EU-25 countries.

^ftransportation services; ^gtravel services; ^hother services

TABLE II
CEP INDICES

	Romania- world ^a	Bulgaria- world ^b	EU-25- world ^c	Romania- EU-25 ^d	Bulgaria- EU-25 ^e
Transp. ^f					
2003	1.87	1.24	0.94	1.59	0.99
2004	1.93	1.13	0.95	1.53	1.15
2005	1.43	1.33	1.08	1.42	1.10
Travel ^g					
2003	0.52	1.93	0.93	1.00	2.29
2004	0.49	1.94	0.90	0.93	2.14
2005	0.80	2.11	0.95	0.80	2.35
Other ^h					
2003	0.90	0.38	1.06	0.78	0.37
2004	0.87	0.40	1.08	0.82	0.40
2005	0.94	0.34	0.99	0.92	0.33

Source: own computation

^aRomania in its services trade with the world; ^bBulgaria in its services trade with the world; ^cEU-25 countries in their services trade with the world; ^dRomania in its services trade with EU-25 countries; ^eBulgaria in its services trade with EU-25 countries.

^ftransportation services; ^gtravel services; ^hother services

The trade patterns for the two countries analyzed and for EU-25, which have been revealed by the RCA indices, are generally and to a large extent confirmed by the CEPs.

C. Trade Overlap

1) *Aggregate TO coefficients*: It is expected that the TO coefficients for EU-25 would be higher than for any of the countries analyzed and would come close to unity. This would imply that EU-25 has already realized full intra-industry specialization in its trade with the world. Of the countries analyzed (see Table III), Romania's TO coefficients come closest to unity but are still slightly below the TO coefficients for the EU-25. Romania seems to be in a better position as compared to Bulgaria, showing a larger level of specialization in intra-industry services trade, and seems capable of catching up faster with the EU-25 countries in the near future. The TO coefficients for Bulgaria are much weaker, revealing a lower level of trade integration with EU-25, as well as a lower level of specialization. The results suggest mainly inter-industry specialization, with the gap between EU-25 and Bulgaria getting somewhat wider, confirming that Bulgaria is still lagging behind in the integration of its economic structures and specialization in intra-industry trade.

TABLE III
Aggregate TO coefficients

	Romania- world ^a	Bulgaria- world ^b	EU-25- world ^c	Romania- EU-25 ^d	Bulgaria- EU-25 ^e
2003	0.98	0.87	0.97	0.94	0.71
2004	0.95	0.87	0.96	0.93	0.73
2005	0.94	0.82	0.96	0.95	0.63

Source: own computation

^aRomania in its services trade with the world; ^bBulgaria in its services trade with the world; ^cEU-25 countries in their services trade with the world; ^dRomania in its services trade with EU-25 countries; ^eBulgaria in its services trade with EU-25 countries.

2) *TO coefficients by services sector*: The main results obtained from the estimations of the TO coefficients by services sector for the years 2003, 2004, and 2005 are as follows (see Table IV):

TABLE IV
TO coefficients by services sector

	Romania- world ^a	Bulgaria- world ^b	EU- 25- world ^c	Romania- EU-25 ^d	Bulgaria- EU-25 ^e
Transp.^f					
2003	0.97	0.98	0.99	0.82	0.85
2004	0.98	0.97	0.97	0.88	0.61
2005	0.99	0.96	0.96	0.96	0.80
Travel^g					
2003	0.97	0.78	0.99	1.00	0.75
2004	0.97	0.76	1.00	0.97	0.61
2005	0.92	0.70	0.99	0.99	0.93
Other^h					
2003	0.99	0.92	0.95	0.98	0.60
2004	0.94	0.99	0.94	0.94	0.53
2005	0.99	0.89	0.94	0.94	0.87

Source: own computation

^aRomania in its services trade with the world; ^bBulgaria in its services trade with the world; ^cEU-25 countries in their services trade with the world; ^dRomania in its services trade with EU-25 countries; ^eBulgaria in its services trade with EU-25 countries.

^ftransportation services; ^gtravel services; ^hother services

(a) Romania approaches intra-industry specialization in all three services sub-sectors analyzed; in all service activities, almost the entire value of its exports to the world is offset by similar imports; the situation is comparable in respect to exports and imports towards EU-25 countries, with a slight difference for *transportation services*, that tends to be offset in time; interestingly, Bulgaria's economy indicates the characteristics of intra-industry trade mainly for *transportation* and *other services*, in its trade with the world; (b) we notice, in Bulgaria's case, an important increase for *travel services* in their intra-industry specialization in trade with EU-25 countries; (c) as expected, the TO coefficients for EU-25 come close to unity. This emphasizes that the EU-25 has already realized full intra-industry specialization in its services trade with the world; (d) Romania's intra-industry specialization in *other services*, in its trade with EU-25 is somewhat declining, suggesting a potential for an appearance of the characteristics of inter-industry trade for this heterogeneous group of services.

D. Export Similarity

The estimated ES coefficients (see Table V) show that the degrees of export similarity between Romania and EU-25, as well as between Bulgaria and EU-25 are very high. Also, the export similarity of the Romanian and Bulgarian services exports, with respect to both their trade with the EU-25 countries, is quite low, much weaker than in relation to the world, but strongly increasing in 2005. This means that, as a consequence of Romania's and Bulgaria's accession to the EU, the Romanian services export industries compete, first of all, with exports originating from the EU-25 countries and then from Bulgaria, but at a lesser degree. The main question here is whether Romanian services exports bear complementary or substitutive features. Romania has the largest similarity in its services exports structure with the EU-25 countries, with a noticeable increase in 2005.

TABLE V
Export similarity coefficients

	Romania- Bulgaria (world) ^a	Romania- Bulgaria (EU-25) ^b	Romania - EU-25 (world) ^c	Bulgaria- EU-25 (world) ^d	EU-25 - World ^e
2003	60.10	19.79	80.29	65.41	96.81
2004	59.28	21.07	78.16	66.71	96.17
2005	66.05	61.76	93.01	64.94	98.31

Source: own computation

^a export similarity between Romania and Bulgaria in their services trade with the world; ^b export similarity between Romania and Bulgaria in their services trade with EU-25 countries; ^c export similarity between Romania and EU-25 countries in their services trade with the world; ^d export similarity between Bulgaria and EU-25 countries in their services trade with the world; ^e export similarity between EU-25 countries and the world in the services trade.

V. CONCLUDING REMARKS

The results and interpretations of the RCA, CEP, TO, and ES coefficients allow us to draw some essential conclusions with respect to Romania's and Bulgaria's international services trade competitiveness in the EU:

1. Romania has a specialization potential for *transportation services*, with a quite steady revealed comparative advantage, against the background of an unfavorable evolution of this activity, both at world level as well as at the level of EU-25; more importantly, Romania is gaining ground on the market for *other services*. Bulgaria has a strong and increasing comparative advantage and, consequently, a specialization potential in *travel services*.

2. To a certain extent, Romania has been trying to catch up and attempted to close the services development gap with the EU-25 countries, by the progresses made to reshape its services export structure towards *other services*, especially business services, suggesting that it is beginning to develop the modern services link. For Bulgaria, the results show that it still has a relatively long way to catch up with the European Union, except for *travel services*.

3. Romania's services trade in the three sectors analyzed is on the best way to create more the intra-industry type of specialization. Whereas the Bulgarian economy showed the typical industrialization pattern of developing countries in 2003 and partly in 2004, from 2005 it started to show features of intra-industry trade with the EU market, which points to the fact that the accession process had a positive impact on the services trade pattern of Bulgaria.

4. The accession process had a major influence in reshaping the international services trade structure of Romania, leading to a high export similarity with the EU-25 countries, especially in 2005.

5. In spite of the efforts undertaken by international institutions in order to progress in the knowledge of the services sector, it is necessary to have more extended series and precise statistics than the ones normally provided. The lack of information is especially severe with respect to international services trade. For that reason, in this paper it has been avoided to enter into details with respect to more specific services activities.

6. In macroeconomic terms, the forward linkages and backward linkages derived from the export of services are different, depending on their structure and quality. In other words, the implications for the economy are very different depending on the structure of services exports. The method applied in this paper for the study of the international services trade competitiveness avoids one approach to competitiveness that, at least from a statistical standpoint, seems to be either not specific enough or not operative enough, i.e. the quality and structure of services. These factors are extremely important when analyzing competitiveness, but the statistical approach is quite complex. For this reason, a statistical calculation of competitiveness in terms of quality has not been performed here and can constitute the subject of further research.

7. Becoming a full-member of the European Union will have positive effects on the process of overcoming the existing weaknesses in the services trade diversification and competitiveness of Romania and Bulgaria. Repeating the above analysis in a couple of years could bring results that would support this assumption and particularly prove the positive effects of becoming a European Union member in terms of services trade competitiveness.

REFERENCES

- [1] EUROSTAT, "Statistics on trade in services", 2002, 2003, 2004, 2005, 2006, 2007.
- [2] P. Mandelson, "External aspects of competitiveness", *European Services Forum*, Brussels, 2006.
- [3] D. Coldwell, "The Question of International Competitiveness", *International Advances in Economic Research*, volume 6, No 3, February 2000.
- [4] D. Dollar, E. N. Wolff, "Competitiveness, Convergence, and International Specialization", Cambridge, Massachusetts: The MIT Press, 1993.
- [5] J. Fagerberg, "Technology, Growth and International Competitiveness", Norsk Utenrikspolitisk Institut, VUPI rapport, No. 95, March 1986.
- [6] B. Balassa, "Trade Liberalization and Revealed Comparative Advantage", *The Manchester School of Economic and Social Studies* 33, No 2, 1965, pp. 99-123.
- [7] J. Donges, "The Second Enlargement of the Community", *Kieler Studien* 171, Germany, 1982.
- [8] J. M. Finger, D. de Rosa, "Trade Overlap, Comparative Advantage and Protection", in: Herbert Giersch (Eds), *On the Economics of Intra-Industry Trade*, Tübingen, 1979, pp. 213-240.
- [9] J. M. Finger, M. E. Kreinin, "A Measure of Export Similarity and its possible Use", *Economic Journal*, No: 89, 1979, pp. 905-912.
- [10] C. F. Laaser, K. Schrader, "European Integration and Changing Trade Patterns: The Case of the Baltic States", *Kiel Working Paper*, No 1088, January 2002, 51 pp.
- [11] B. Hindley, A. Smith, "Comparative Advantage and Trade in Services", *World Economy*, Vol.7, No.4, 1984, pp. 369-389.
- [12] A. V. Deardorff, "Comparative Advantage and International Trade and Investment in Services", in Robert M. Stern, (ed.), *Trade and Investment in Services: Canada/US Perspectives*, Toronto: Ontario Economic Council, 1985, pp. 39-71.
- [13] Y. Sazanami, S. Urata, "Trade in Services: Theory, Current Situation and Issues", Touyoukeizaishinpousya, 1990.
- [14] UNCTAD, "UNCTAD Handbook of Statistics", 2005, 2006.
- [15] IMF, "Balance of Payments and International Investment Position Statistics", 2003, 2004, 2005, 2006.
- [16] IMF, "Balance of Payments Manual (BPM5)", 1993.
- [17] B. Yilmaz, "International Competitiveness of Turkey with the EU: A Comparison with Greece, Portugal, Spain and the EU/12/15", in *The Political Economy of Turkey in the Post-Soviet Era*, edited by Libby Rittenberg, Praeger Publishing Company, 1996, pp. 79-95.
- [18] G. Lafay, "The Measurement of Revealed Comparative Advantages", in M. G. Dagenais and P. A. Muet (eds), *International Trade Modelling*, London: Chapman & Hall, 1992, pp. 209-234.
- [19] G. C. Hufbauer, J. C. Chilas, "Specialization by Industrial Countries: Extent and Consequence", in: Herbert Hirsch (Ed.), *The International Division of Labour, Problems and Perspectives*, International Symposium, Tübingen, 1974, pp. 3-38.