

1. INTRODUCTION

The present report is an attempt to examine the international competitiveness of seven "Central and Eastern European Transition Countries" (CEECs)¹ through a set of indicators reflecting both competitiveness related to the countries' relative cost and price differentials as well as competitiveness related to qualitative factors.

1.1 A definition of competitiveness

The notion of the competitiveness of nations is a controversial and complex issue. There are some authors which deny the importance of this concept especially in a world of flexible currency regimes², others decry the importance of the concept in analysis and policy³. Even if it is considered as important, the concept of competitiveness lacks an universally accepted definition as well as a broad consensus on the appropriate empirical measures. International competitiveness generally refers to the ability of a country to expand its shares in domestic and world markets. Some definitions focus predominantly on external balances, implicitly assuming that exports and imports will not be balanced even in the long run⁴ by flexible currencies. Most studies however combine the issues of the external balance with domestic performance. This effort results typically in definitions like "the ability to produce goods and services that meet the test of foreign competition while simultaneously maintaining and expanding domestic real income" (OECD/TEP, 1992, p. 237) or "growth without trade imbalances". We want to stress additionally that market results can be based on different levels of social stability and environmental standards. This leads to the definition of competitiveness as "the ability to maintain market shares while at the same time being able to earn sustainable and high incomes as well as maintain and improve social and environmental standards" (Aiginger, 1987, 1995). The World Economic Forum in Geneva applies several hundred objective and subjective indicators to assess whether a country "proportionally creates more wealth on the world market than its competitors"⁵.

Whatever definition is chosen, the factors underlying competitiveness fall into two parts. One part is the cost side, if costs are low then a country can export goods, this part component of competitiveness is called price or cost competitiveness in the literature. The other part of competitiveness is more difficult to explain: if products are innovative, or consumer specific, if goods are of a high quality, if the exporting entity enjoys a good image, then a country can export goods even if they are not cheaper than rival goods. Markets are labelled as quality oriented, characterised by a low price elasticity, they are heterogeneous. If enterprises compete successfully by quality or in high tech industries we speak about technological competitiveness. Since the competitive edge is defined by many other factors than technology, some authors speak about "the non price components of competitiveness". We want to combine all non price issues under the term "qualitative competitiveness".

1.2 Structure of the report

In chapter 2 the report starts with an analysis of the main macroeconomic conditions and features characterising the world economy in the transition period of the CEECs up to now. The analysis will focus on a description of major trends in the world economy, the economic development in the OECD and the CEECs and will report on the progress in industrial restructuring of the different CEECs. The purpose is to delineate CEECs' external and internal economic environment under which competitiveness was or was not achieved in the transition countries.

In the chapters to follow, the distinction between qualitative competitiveness and the competitiveness on a cost and price basis is central. The measurement of the quality component of competitiveness is the focus of the contributions in part 3 of the report. The study combines several approaches and introduces new methodological tools to assess the qualitative competitiveness with a focus on trade analysis and trade specialisation.

Economic theory basically offers two approaches to explain differences in countries' trade and specialisation patterns. In the first, the notion of comparative advantage (relative cost advantages over trading partners) occupies the central place as an explanation of specialisation patterns. Comparative advantages in turn may result from various different sources according to different theories. The core idea, however, is always the existence of comparative advantages explaining trade between countries at different stages of development, with different factor endowments or production technologies, trade that is most likely to be of an inter-industry type.

On the other hand, the theories of comparative advantage are not able to explain intra-industry trade (IIT), that is an exchange of differentiated goods that fall into the same product category. The bulk of IIT takes place among industrial countries sharing similar factor endowments and production technologies. Basically, economies of scale (specialisation advantages) and preference diversity creating the potential for product differentiation are taken to be necessary and sufficient conditions for the generation of intra-industry trade.

Accordingly, in the study we will first set out to analyse the pattern and the changes in the pattern of inter-industry trade specialisation. Traditional trade theory in a Heckscher-Ohlin setting predicts, that countries will tend to specialise in the export of goods whose production is intensive in factors with which they are abundantly endowed. According to the new trade theories which explain trade in terms of technology, technology diffusion/adjustment lags and continuous innovation processes, less developed countries will specialise in the export of old, mature goods where production processes become routine and less skilled labour has to play a greater role. As the export structure of countries changes from resource intensive and labour intensive industries to human capital intensive, technology intensive industries we would interpret this as an improvement in the structure and quality composition of exports. If countries compete successfully in high-tech industries and focus on markets in which quality and know-how are more important than low-price strategies we speak about technological competitiveness, one aspect of qualitative competitiveness. Instead of looking at R&D in- and output directly (i. e. looking at data on R&D expenditure, qualifications of workers, patents or citations in scientific journals) technological competitiveness can be evaluated by looking at indicators directly measuring economic performance of goods of different technological sophistication in the international product market.

Following this line of reasoning, Wolfmayr-Schnitzer, in chapter 3.1, tries to assess the qualitative competitiveness of transition countries by an analysis of actual trade specialisation in

terms of technology classes. A trade classification method introduced by Legler (1982) and further elaborated by Schulmeister - Bösch (1987) and Schulmeister (1985, 1990) is applied to discriminate between high-tech and low-tech sectors and the different sophistication of goods according to the main inputs used (human capital, physical capital, labour, other resources).

Much in the same way, Havlik (chapter 3.2) then provides an analysis of East European exports to the EU market at the detailed 3-digit NACE level to identify the most competitive sectors. He then looks at the factor contents of CEEC exports to the EU of the sample of industries which he identified as most competitive and compares this with the average factor intensity of total EU imports.

Then the report moves on to look at the evidence for intra-industry trade (IIT) and the pattern of quality differentiation in intra-branch trade.

The contribution by Wolfmayr-Schnitzer (chapter 3.3) analyses the development of intra-industry trade (IIT) between the CEECs and the OECD in the transition period up to 1994. As IIT is a phenomenon that is mainly observed in trade among industrialised countries with similar demand and supply characteristics, an increase in the share of IIT in CEECs' trade with the OECD is taken to be a signal of a decrease in the developmental and technological gap between the countries of the two regions. To assess quality position of CEECs in international product markets more directly, unit values are used as a criterion to disentangle horizontal (different varieties of a product that are of similar quality) and vertical IIT at the 3-digit SITC level and to distinguish between high quality vertical IIT and low quality vertical IIT.

Aiginger (chapter 3.4) uses unit values, revealed price elasticities and indicators on product heterogeneity and market fragmentation to measure qualitative competitiveness of the economies in transition. Specifically, he introduces the concept of "revealed elasticity" which uses information on unit values and the quantity balance in trade to distinguish between markets in which the unit value signals costs and those in which it reflects quality differences. Accordingly then, first, a *country specific* segmentation of markets into price and quality sensitive markets leading to four segments for each country, is developed. In a second application of the revealed elasticities approach an *industry specific* classification is created. Using trade flows of 18 countries, industries are ranked according to the number of countries in which the price sensitivity or the quality sensitivity dominates, respectively. While in the country specific segmentation of markets the revealed elasticity is determined for each country individually, the second application results in a "once and for all categorisation", relevant for all countries. Finally, the author applies an industry specific market classification based on the methodology put forward by Oliveira Martins (1995, 1996) to distinguish between fragmented and segmented markets and industries with low and high product differentiation and compares this approach with the concept of revealed elasticities.

Landesmann and Burgstaller (chapter 3.5) examine the quality position of CEEC producers on EU markets by means of comparisons with reference countries. These reference countries were chosen to be a group of industrialised countries, representing the more advanced countries, Southern European economies, representing a group most likely to be comparable to the CEECs and last not least a group of Asian countries. The authors apply two types of procedures to detect vertical product differentiation on EU markets. In a first exercise, unit values at the detailed product level are calculated across the whole range of competitors in EU markets and then compared to the average price in total EU imports. In an other step, products within industries were ranked by their unit values, and three quality segments demarcated, and the degrees to which the different national exporters' product structures fell into these different quality segments compared. The analysis of the location of

different producers in the "quality segmented" structure of EU product markets was conducted for a range of branches of the engineering sector, of the textiles, clothing and footwear sector and the food, drinks and tobacco sector.

Part 4 of the report then concentrates on exchange rates and an assessment of the cost and price competitiveness of CEECs. In chapter 4.1 Havlik examines the development of wages, labour productivity and unit labour costs in individual CEECs to identify competitiveness on a cost basis. In chapter 4.2 Mooslechner and Hauswirth then go on to analyse exchange rate movements during the period 1989 to 1995 and assess changes in the price or cost competitiveness of CEECs by calculating (real and nominal) effective exchange rate indices.

Finally, to take account of the increasing importance and role of foreign direct investment flows in the transfer of resources in the form of capital, technology, research, management, etc., and the increasingly important contribution of transnational corporations to growth in productivity and improvements in product quality as well as the growth in trade, part 5 of the report assesses the role of foreign capital in the transition process of the CEECs. In a first step, Stankovsky reviews the development and scope of FDI in Eastern Europe in total and by industries and tries to assess the effect of FDI on economic growth and exports of CEECs. In a second step, he examines the contribution of foreign enterprises to the improvement of the efficiency and productivity in the Czech Republic and Hungary, by basically comparing different efficiency indicators of foreign owned enterprises and domestically owned enterprises.

A separate statistical volume containing comprehensive background tables and figures, allowing the reader to reproduce results in more detail is available on diskette on request.

NOTES

- 1 Czech Republic, Slovak Republic, Hungary, Poland, Slovenia, Bulgaria, Romania.
- 2 Cooper (1961), Balassa (1962), Suntum (1986).
- 3 Porter, Reich and Krugman are the most prominent economists playing down the importance of the notion of the competitiveness of a nation, albeit out of different reasons and with different vigour. Porter (1990, p. 6ff) comes very close to the position that the term competitiveness of a nation makes no sense, stressing that it cannot be that a country is "competitive in all industries". Porter arrives at this view after dismissing different concepts of competitiveness ("every firm is competitive", "positive balance of trade", "market share", "job creation") and then stresses that the search for a convincing explanation of both national and firm prosperity must begin by asking the right question. We must abandon the whole notion of a "competitive nation" as a term having much meaning for economic prosperity. The principle goal of a nation is to produce a high and rising standard of living for its citizens. The ability to do so depends not on the amorphous notion of competitiveness but on the productivity with which nation's resources (labour and capital) are employed (Porter, 1990, p. 6). And later on this page: "The only meaningful concept of competitiveness at the national level is national productivity." In his review of Porter's book Robert Reich (1990) writes "National competitiveness is one of the rare terms of public discourse that have gone directly from obscurity to meaninglessness without any intervening period of coherence". Krugman maintains the meaninglessness of the concept and stresses the danger of policies focusing on competitiveness: "Competitiveness is a meaningless word when applied to national economies and the obsession with competitiveness is both wrong and dangerous (Krugman, 1994, p. 44)".
- 4 The final reasons for the non adaptability have to be investigated, but long term "misalignment" are empirical facts if we look at the long term imbalances of the current accounts in USA and in Japan. For the use of real exchange rates as most important indicators of competitiveness see Lipschitz - McDonald (1992).
- 5 The definition implicitly stresses the zero sum nature of the concept: whenever some countries are competitive, then there must be others which are not. A problem of implementation in the Forum's evaluation is that some indicators (environment, social security) are valued as positive in one performance group and as negative in another. A third problem is that absolute size versus per capita performance and absolute performance versus gains relative to the starting position of a country are mixed up.

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