# ECONOMIC TRANSITION IN EUROPEAN COUNTRIES: TRADE REORIENTATION AND GLOBAL REINTEGRATION

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## 1] Introduction

It is difficult to think of historical cases when countries were subjected to more dramatic external shocks and had to undergo more fundamental reorientation of their external trade as it was the case for the transition economies following the collapse of the Berlin Wall. Simultaneously, they had to face deep internal shocks originating in the demise of central planning. The shocks led to fundamental changes in the system of resource allocation, leading to dramatic changes in the system of ownership, industrial organization, legal and administrative institutions, incentives and in the role of economic policy.

The external economic shock was brought about by the breakdown of CMEA<sup>1</sup> trading arrangements and the diversion out of the CMEA markets, which accounted for the bulk of trade of all transition countries. Suddenly, the transition economies (TEs) found themselves without reliable external markets. This had serious adverse effects on their exports, aggregate demand and on domestic production due to the disruption in the supplies of imports. Moreover, all these shocks took place during the Gulf War, which led to big increases in world prices of energy and a sharp deterioration in the terms of trade of most TEs. The effects of the shocks were equally dramatic, as we shall see below.

With the benefits of hindsight of more than 20 years since the collapse of central planning, we now know that several TEs have succeeded in the adjustment process very well. This clearly raises the question how these TEs managed to do so and what were the challenges for policy makers. Hopefully, the experience of those countries will be helpful to other countries facing similar adjustment challenges and difficulties, and the need for policy reforms in the external sector of their economies.

The main aims of this contribution are threefold: (1) To identify the main problems and challenges of adjustment in TEs; (2) To assess the success with which the TEs have been able to address those challenges through domestic restructuring and better integration into the world economy; (3) To evaluate the factors explaining their success in general.

A few remarks on our methodology should be noted. Transition countries cover a highly diversified group of countries not only in terms of their size, endowments and

<sup>&</sup>lt;sup>1</sup> CMEA (The Council for Mutual Economic Assistance, also called Comecon) was the economic integration bloc of eleven Communist countries under the hegemony of the Soviet Union.

location, but also in terms of their policies. For reasons of space, therefore, we limited our study to the countries in Eurasia, with a strong orientation on Central and Eastern Europe. Our descriptive approach is relatively simple and eclectic, and we shall primarily draw on the existing literature with only a small part constituted by our own research. However, we shall also make a normative assessment in the final section of the key factors explaining the success of trade adjustment. We proceed by only outlining the main arguments, and the reader will have to consult other relevant literature for the details. Our emphasis in the study of adjustment is put on the performance measured in terms of trade volumes and their geographical and sectoral distributions, leaving aside such important issues as costs of adjustment, the impact of trade on income distribution and poverty or the interdependence of policies.

# 2] Difficult Initial Economic Conditions and Policy Challenges

The initial conditions for adjustment were extremely difficult. The difficulties can be divided under two separate headings – policy challenges and deteriorating economic performance. The fundamental policy challenge was the need for a complete dismantlement of a system in which markets had been almost completely eliminated and replaced by an administrative system of economic governance (Appendix 1). Since the very inception of the centrally planned system, international trade became its weakest point – a place where all the shortcomings of the administrative system became most apparent. The major task was to restore, and in some cases introduce afresh, the operation of markets. In the area of international trade this meant opening up the economy to foreign competition and to new markets, and integrating the countries into the global economy.

Economic difficulties faced by policy makers in the early 1990s were also daunting:

a. Prior to 1989-91, TEs experienced a prolonged economic slowdown which was reflected in the stagnation of their international trade (see Appendix 2). Persistent problems of inefficiency resulted in a continuous departure of effective real exchange rates from equilibrium, requiring increasing subsidization of exports and taxation of imports in order to maintain a degree of trade balance.

b. The immediate effect of the 1989 political changes was a decline in domestic production, spending and external trade (Drabek and Smith, 1995), which led to lay-offs, falling fiscal revenues and to monetary easing.

c. Mobilization of domestic resources and financial intermediation were poor due to the extremely weak and under-capitalized financial sector. Commercial banking in communist countries was rudimentary. On the other hand, most TEs had a relatively low level of external debt exposure and could, therefore, facilitate their adjustment through external borrowing.

d. The introduction of market-based prices, the loss of external markets, the distorted tax system and large government expenditures led to the emergence of 'twin deficits' – on fiscal and current accounts (Drabek, 1995). This, in turn, led to a large financing gap, which required a radical government response aimed at domestic resource mobilization, restraint of domestic spending and access to external borrowing. This pressure shaped the new economic strategy, which had to be built on increased openness to world markets, strict financial and macroeconomic discipline and well-functioning product and factor markets.

e. The price interventions and currency controls prior to the transition resulted in a serious over-valuation of the official exchange rate.

f. The ongoing Gulf War in the Middle East led to a further deterioration of terms of trade of the TEs, as already noted above.

g. Once domestic markets were opened up to world markets and prices liberalized, no TE could resist the pressure of open inflation, which was previously suppressed by price controls (Drabek, Janacek and Tuma, 1994). Physical infrastructure supporting the external sector (roads, railroads, ports, airlines, telephones and other related services) were in an extremely poor state, and had to be revamped by extensive investments. Moreover, much of the infrastructure was directed towards the CMEA markets rather than the West and the global markets.

h. There was a critical shortage of skills in financial, business, accounting and legal services. On the other hand, most enterprises were overmanned and government bureaucracy greatly overstaffed.

# 3] Policy Adjustment to Shocks in More Detail: Radical Trade Restructuring in the Tes

The range of policy interventions required to address the challenges listed above was vast. Policy design could often be 'imported' but what actually matters in such situations is the quality of policy implementation and enforcement, which must be masterminded at home. Brand new legislation or extensive amendments were needed with regard to domestic and foreign commercial transactions, thousands of state corporations had to be placed on a commercial basis and, in most cases, privatized. New start-up companies had to be established and legal coverage had to be provided for service industries which were historically neglected and they were, therefore, in a nascent state. New financial institutions (e.g. money and stock markets) had to be created and the commercial banking transformed by massive takeovers by foreign banks. Another immediate task was to introduce proper market-consistent policy instruments such as taxation, public procurement and allowing free price formation in the markets for goods, services and factors (Falcetti *et al.*, 2000; Fischer and Sahay, 2000).

During the 1990s trade protection was substantially reduced (e.g. completely phased out with the EU-15 and slashed by converging to the level of the EU external tariff). Tariffs were either kept low in low-tariff countries or set at fairly low levels in high-tariff countries (Drabek and Bacchetta, 2004). Foreign exchange transactions were liberalized, state trade monopolies eliminated, foreign trade activities and decisions decentralized. Domestic competition was greatly increased through a wide-ranging privatization of state production and trading enterprises, and the establishment of foreign companies was greatly liberalized. New markets were opened up by signing Europe Agreements (precursors of the Agreements of Accession to the European Union) and either by joining or renegotiating the membership in GATT/WTO. In 1992 the Visegrad countries also signed the Central European Free Trade Agreement (CEFTA) with a very liberal programme (Kaminski, 1999). As we shall see further below, the signing of these agreements created powerful incentives for closer trading links with the EU and for trade reorientation from the East to the West.

TEs established laws and institutions facilitating international trade and investment. The system of various surcharges, levies, subsidies and bureaucracies was simplified or eliminated altogether. Corporate taxation was relatively modest. Assistance was offered to firms with the provision of information on foreign markets complemented with trade insurance and guarantees. Physical infrastructure improved with the access to EU cohesion funding, expanding bank finance and with the entry of foreign investors. Another central issue was the exchange rate policy when nearly all countries allowed an initial sharp devaluation of currency, stimulating exports and curbing imports (Drabek and Brada, 1998).<sup>2</sup> Foreign currency restrictions on the current account were eliminated almost immediately.<sup>3</sup>

Another element of the trade policy reforms was membership in multilateral institutions – the IMF and IBRD (Drabek 1995 and 1996) and in the WTO (Michalopoulos, 2000). Furthermore, the integration of TEs into the global economy was enhanced through membership in other global and regional economic and political organizations, such as the European Bank for Reconstruction and Development (also the Asian Development Bank in the case of countries in Central Asia) and the Bank for International Settlements. The main economic objectives of these policy initiatives were to: (1) increase the credibility of government policies, (2) improve access to foreign markets for exports, (3) improve access to foreign financial markets and (4) increase the effectiveness of capital and labour markets by enhancing the mobility of capital and labour.

In a particularly important step towards attracting FDI into the region, TEs signed numerous bilateral investment treaties (BIT) in order to provide security of property rights and a degree of transparency with internationally binding legal commitments to their policies. Many of these measures have been taken autonomously by the countries themselves, but many measures resulted from the countries' membership in international organizations (such as provisions concerning foreign currency restrictions regulated by the IMF Articles of Membership) or in the European Union (such as regulations concerning SPS and TBT measures under the *Acquis Communautaire*). Moreover, the domestic reform process was also probably accelerated by indirect pressures from abroad, such as the conditioning of MFN market access in the United States by the Jackson-Vanik Amendment. These policy initiatives also anchored trade policy commitments to more realistic exchange rates and increased their transparency.<sup>4</sup>

# 4] Empirical Evidence on Trade Restructuring

How successful have the TEs been in adapting to new market conditions and to serious domestic economic disequilibria? An answer to this question, using several criteria, is in short – 'very successful' even though the performance obviously varied from country to country. The empirical evidence on the salient features of trade re-orientation and adjustment is provided in Table 1 and in Appendix 3.

<sup>&</sup>lt;sup>2</sup> The policy debate and the actual policies are discussed in Rosati (1997).

<sup>&</sup>lt;sup>3</sup> The importance of currency convertibility for the TEs is discussed in Flemming and Rollo (1992), in papers included in their Part I.

<sup>&</sup>lt;sup>4</sup> What role was played in the adjustment process by these organizations is not entirely clear. Membership was clearly essential even though the rules of these organizations may not always be conducive to adjustment. See Bown and McCulloch, 2005. For more relevant discussion, see also Drabek (1995) and (1996).

# Table 1: Review of the indicators of international trade development:Comparison of TE with the developed market economies in different periods of time

Row	Indicator	Region or	Voor	Valua	Voor	Voluo	Sourco
1	Exports/ GDP ratio	EU-15	1992	19.8%	2010	29.2%	IMF,
2	Exports/ GDP ratio (nominal)	EU-10 accession	1992	24.2%	2010	49.3%	IMF, OECD
3	Exports/ GDP ratio (nominal)	Russia	1994	22.9%	2008	27.9%	Rosstat
4	Annual growth rates of all exports	EU-15	1992- 1999	4.4%	1999- 2010	4.5%	OECD
5	Annual growth rates of all exports	EU-10 accession	1992- 1999	11.3%	1999- 2010	12.7%	OECD
6	Annual growth rates of exports with EU- 15	EU-10 accession	1992- 1999	14.2%	1999- 2010	11.2%	OECD
7	Share of exports to the EU-15	Visegrad 4 (PL, H, CZ, SK)	1990	34.1%	2010	60.6%	UNECE and Eurostat
8	Unit nominal price in EUR per kilogram of exports of EU-15	EU-15 to EU-15 (intra- region)	1999	€1.22	2010	€1.55	Eurostat
9	Unit nominal price in EUR per kilogram of exports of EU-15	EU-15 to non-EU 15	1999	€1.92	2010	€2.52	Eurostat
10	Unit nominal price in EUR per kilogram of exports to EU-15	EU-10 to EU-15	1999	€0.66	2010	€1.67	Eurostat
11	Unit nominal price in EUR per kilogram of exports of EU-15	EU-10 to non-EU 15	1999	€0.43	2010	€1.17	Eurostat
12	Annual growth rates of technologically advanced exports	EU-15 versus EU-10	1999- 2010	4.3%	1999- 2010	14.1%	Eurostat
13	Shares of sophisticated manufacturing products on total exports *	EU-15	1999	68%	2010	67%	Eurostat
14	Shares of sophisticated manufacturing products on total exports *	EU-10 accession	1999	58%	2010	68%	Eurostat

15	Kilogram prices of exported sophisticated manufacturing products *	EU-15	1999	€3.62	2010	€4.45	Eurostat
16	Kilogram prices of exported sophisticated manufacturing products *	EU-10 accession	1999	€1.34	2010	€3.47	Eurostat

\* For the purpose of this article, 'sophisticated' manufacturing products include chemicals, rubber, plastics, metals, machinery, transport equipment and controlling and optical instruments.

## Sources of data:

*IMF*, World Economic Outlook Database, June 2011, OECD, International Trade by Commodity Statistics (ITCS), June 2011

*Eurostat, External Trade Database, <u>http://epp.eurostat.ec.europa.eu/newxtweb/</u>, July 2011 Rosstat, Russian Federation Statistics Service, Moscow, June 2011* 

UNECE, Geneva, Statistical database of the Economic Commission for Europe, 1991, 1995 and 2005.

## **Comments to Table 1:**

1. In rows 1-3 and 7 we see that the openness of transition economies proceeded much faster than in the developed regions of Europe.

2. The changes in TE were facilitated by a whirlwind of institutional measures liberalizing the trade and the reallocation of resources, allowing for an early jump-start of imports which were followed (after a short initial slump) by intensive growth in exports (rows 4-6).

3. In the early period (until 1999) the trade diversion from East to West (and especially to the EU-15) dominated. Nevertheless, international trade in TE even accelerated in 2000-2010 (notwithstanding the large losses in 2007-09) and expanded into markets outside the EU-15 (rows 5-6).

4. Except for a geographic re-direction of trade there was proceeding a deep qualitative restructuring in exports of TE that we could assess by kilogram prices of exports (rows 8-11). Meanwhile such prices were improving at a rate of 2.5% in the EU-15 (i.e. at a rate slightly higher than inflation), the ten accession countries kept improving their unit prices at 8.5% annually during 2000-2010. That was in excess to increasing the physical quantity of total exports by 4.3%, elevating so the gains in value of total exports of EU-10 to phenomenal 12.8% annually.

5. Alternatively we could assess the changes in the structural composition of TE trade by looking at their growth rates in exports of technologically more sophisticated manufacturing products (row 12). Meanwhile these exports in EU-15 grew nominally by 4.3%, in accession 10 countries it was 14.1%.

6. Therefore the EU-10 could in 2010 get ahead of EU-15 in the share of such manufacturing products on total exports (rows 13-14).

7. In rows 15-16 we can see that the main changes contributing to the EU-10 catching up with the EU-15 occurred in the more sophisticated manufacturing sectors, whose kilogram prices grew much faster relative to both EU-15 and their own unit export prices in remaining industries. This again happened in addition to EU-10 faster growth in physical quantities.

8. If we looked more closely at the changing industrial structure of exports in TE, we could see that EU-10 achieved their highest annual gains in scientific and controlling instruments (17.9%), rubber products (15.7%) and machinery and transport equipment (14.6%). The latter became by its share of 46.6% on EU-10 total exports the dominant export industry in the region.

9. We could also observe an asymmetry in the pattern of industrial specialization. In contrast to other EU-10 countries, three Baltic countries and Bulgaria relied neither on machinery nor sophisticated manufacturing, even though their overall growth in exports and improvements in quality were equally staggering as in remaining countries.

10. Last but not least, both the data and the empirical studies point at the following bottomline: by comparing the spectacular growth rates and degrees in qualitative catching up in tradable sectors with the remaining (i.e. non-tradable) sectors in TE, we could raise a conclusion that the extent of contribution of the tradables to an overall economic transformation of TE was more significant, revealing higher degrees of efficiency and consistency with principles of markets, such as competition and innovation. In another words, the transformation in the tradable sector was one of the greatest highlights of post-Communist transition. The performance of the non-tradable sector (and there the performance of its subsectors related to the interventions of European Commission, central and regional governments, and political parties) was largely trailing behind, slowing down the overall growth and efficiency.

The following changes and conditions can be considered as crucial for the success of the transition in foreign trade:

# a) Geographical re-orientation.

Given the sudden collapse of the intra-CMEA trade, the most immediate task for TEs was to re-orientate their trade from 'lost' to new markets. The effectiveness of the process and, in particular, the speed with which the re-orientation took place was quite remarkable, as documented by the example of Czech exports (see Figure 1). The most dramatic change was the sharp drop in the share of markets in Russia and the Ukraine on the one hand, and the dramatic gains of Germany and Austria on the other. After the economic stabilization at the turn of the millennium there was a slight rebound and return to some of the 'abandoned' markets of the former Soviet Union. Similar conclusions about the intensity and speed of market re-orientation can be reached in the majority of TEs, as can be seen in rows 3-7 of Table 1.



Figure 1: Changes in the Geographical Distribution of Czech Exports, 1971 – 2010

Source: The CSO Yearbooks of 1973, 1983, 1993 and trade databases of 1999 and 2010.

b) Trade Openness and Intensity.

The second remarkable feature of the reorientation process was the change in trade intensity. Reconstructing trade data for the early 1990s and making them comparable with pre-1990 data is an extremely complex and difficult task, as already noted. Nevertheless, it is safe to suggest that any decline of trade – to the extent that it occurred

- was temporary and short-lived. Moreover, the trade re-orientation took place extremely fast. The high speed of trade adaptation allowed the domestic adjustment to take place at *higher levels* of trade and income and, therefore, with relatively lower social costs than would otherwise have been the case. The increase in trade openness can be seen from the data in rows 1 and 2 of Table 1. One most notable exception has been Russia whose trade openness hardly changed during the 1990s (row 3 of the same table).

c) Exports as drivers of economic growth.

The rapid trade recovery also played an extremely important role in the TEs as a driver of economic growth. From the very beginning of transition, exports turned from economic 'laggards' into an important segment of aggregate demand and a factor of GDP growth in nearly all TEs. For example, the Czech export/ GDP ratio rose from 37% in 1990 to 77% in 2008. To put it differently, Czech exports increased nearly 11-fold during that period while the Czech nominal GDP in USD terms increased 6-fold. After deducting the value of the import content from exports, the share of exports in GDP increased from 28% to 40%.

d) Imports as drivers of competitiveness.

Imports have also played an extremely important role in TEs. The effect has been both direct and indirect. The direct impact was generated through imports of key inputs for production and from imports as a means of technology transfer (Halpern *et al.*, 2005). The indirect effect came from the strong links between the growth of exports and that of imports, reflecting a growing dependence of export competitiveness on the latter via external outsourcing. Using once again the example of the Czech Republic, the Czech total exports had a 24 percent import content in 1990, and the share increased by 2008 to 48 percent.<sup>5</sup> It should also be noted that imports also played an important role in stimulating domestic competition and thus increasing the countries' competitiveness and efficiency. In some of the smaller TEs, this contribution could turn out to become the decisive growth factor (e.g. Slovakia, Hungary, Estonia), forcing domestic firms to achieve world standards of competition.

*e)* Sustainability of adjustment in quality.

Poor quality of manufactured exports characterized exports of the TEs prior to the changes in 1990. Achieving qualitative changes in the commodity structure of exports was, therefore, a crucial condition for a breakthrough in the ability of TEs to adapt to the new market conditions by re-shaping their comparative advantages. This would put the countries on a more sustainable path of growth which, too, should bode well for the future. The competitiveness of countries' exports is often assessed in terms of their ability to diversify exports towards higher value-added commodities and gains in terms of trade by exporting 'quality'. The latter is sometimes assessed by kilogram prices. Although this technique of measuring quality must be used cautiously, it provides useful indications of long term trends.

The TEs other than those exporting natural resource-based products typically 'specialized' in low value added products for export, which were associated with low dollar average unit prices of exports. In order to capture the evolution of 'quality' changes over time, we proxied unit prices by the kilogram prices of exports in time series. For example, as shown in Figure 2, in 1988 the kilogram price of average Czech exports to the EU-15 was \$0.31 (adjusted for inflation). This was a mere 17% of the

<sup>&</sup>lt;sup>5</sup> See Measuring Globalization: OECD Economic Globalization Indicators. Paris, OECD, 2010.

kilogram prices of its EU-15 imports, while in 1948 (the year of the Communist takeover) there was no evidence of any difference between the unit prices of exports and imports. The traditional interpretation of these numbers has been that:

i] The products exported from those countries were sold on world markets with a large discount, compensating for their technological backwardness, lack of goodwill, poor marketing, reliability and prestige.

ii] The structure of exports was biased towards less sophisticated products and products with a high content of natural resources and unskilled labour, reflecting a structural rigidity.



Figure 2: Unit (kilogram) prices of Czech exports and imports with the EU-15, 1992-2010 (In EUR and in constant prices of 2009)

**Sources**: Czech Statistical Office, Prague, Trade Statistics of the Czech Customs, database of March 2011 and CPI indices of Eurostat, 2010. Authors' estimations.

The process of trade adjustment had to be three-pronged: i] upgrading the quality of products by increasing the value-added content through R&D and capital-intensive technologies. This process was greatly helped by substantial inflows of FDI and technology transfer; ii] a better management of firms achieved through privatization and integration of local businesses with global markets; iv] giving more weight to more profitable exports. The radical liberalization of trade policy was the key instrument in guiding business decisions in that direction. A similar picture signalling improvements in export structure and in the quality of production can be found in Hungary, Poland, Romania and Latvia, among others. Corresponding improvements in unit and kg prices for other TEs can be seen in rows 8-11 and 15–16 of Table 1. Furthermore, the qualitative changes in the structure of production and exports can also be documented by fundamental changes in the integration of local firms into global production networks, especially those originating in the EU area.

More comments on the role of quality of exports and imports can be found in Appendix 4.

f) Spinoffs from increasing returns to scale.

The pre-dominance of inter-industry specialization has gradually turned in TEs into intraindustry trade (IIT) and specialization with a rising share of exchanges of similar products (Drabek and Smith, 1995). Moreover, the participation of local firms in global supply chains has also increased (Fidrmuc, 2001). After just a decade of transition, some smaller economies reached degrees of IIT comparable to advanced market economies. Initially, TEs could not but compete in the so-called horizontal IIT, i.e. by exporting low quality products and importing sophisticated products, which belonged to a similar product classification. In the later stages of transition we could observe the convergence to vertical IIT where TEs gained from direct R&D spillovers to trade (see Damijan *et al.*, 2003 and Besedes, 2011).

# g) The mixed blessing of natural resource endowments.

Russia, Ukraine and other countries of the Commonwealth of Independent States (CIS) have followed a different path: by retaining their specialization in products with a high content of natural resources (such as oil, gas, iron ore, steel). Unable to attract significant volumes of FDI into other industries, their export growth depended highly on the natural resources (with accompanying dangers of 'Dutch disease'). Using the gravity model, Babecka-Kucharcukova *et al.* (2010), analyzed the factors shaping the trade of these TEs and found that exports were essentially supply-constrained, impeded by inefficient infrastructure, shortage of capital and credit, volatility of world prices, the slow and costly process of diversification of the manufacturing sector, unresolved problems in agriculture and in the management of property rights. They argued that each country's ability to benefit from globalization depended on their internal progress with transition, focusing particularly on the quality of the legal framework, improved transport, energy supplies and education, and compliance with WTO rules for liberalized trade.

## 5] Assessing the Adjustment Performance: Factors Explaining Success or Failure

The early 1990s witnessed a major debate among economists about the adjustment of TEs to the external and internal shocks following the collapse of central planning. There were two critical issues at stake in the debates – one was related to the magnitude in the decline of output in the immediate post-1990 period and the other concerned the success of adjustment policies in those countries (Winiecki, 2002). The magnitude of the decline of output was partly a statistical problem due to serious shortcomings in the national income accounting and in trade statistics during the central planning period.

The debate about the latter issue – the success of adjustment policies – was far more complicated and controversial. Many observers thought that the decline of output was too drastic and a result of policy failures. Some even argued that the decline was preventable since the adjustment did not necessarily require strict fiscal and monetary tightening as is normally the case in countries with balance of payments difficulties.

Drawing on the literature and more recent empirical evidence, our conclusion concerning the adjustment performance is straightforward: contrary to the views of the 'transition optimists' we do not find any major surprise in the performance of the TEs. The adjustment took place as would be predicted by trade theory. Fundamental changes had to be expected in the process which greatly resembled a form of 'creative destruction'. It is only the magnitude of the decline in individual countries that still needs to be explained. The drop in exports to CMEA countries could not be immediately replaced by an increase of exports to other markets, whose comparative advantages had to be discovered and adjustments had to be

made on the supply side. Hence their decline added to a drop in domestic aggregate demand, linked to the disruption of production, growth of unemployment and tight public finances.

Nevertheless, the performance of countries differed. For example, the Visegrad-4 countries experiencing a 56 percent drop in their CMEA exports during 1989-1992, but recovered these losses by nearly doubling their exports to OECD countries in the same period. We can identify six main areas, which could explain why the various countries' trade adjustment performance differed from one another:

(1) Speed and effectiveness of macroeconomic and financial stabilization. Macroeconomic and financial stability was critical for the design and implementation of liberal trade policies (Drabek, 1995). In some TEs, trade liberalization was held back by uncertainties about inflation, exchange rate, external debt, taxes and access to credits.<sup>6</sup>

(2) Increase in competitiveness. Poor export competitiveness of TEs prior to 1990 was a particularly serious issue as we have argued above (Hughes and Hare, 1992, Dulleck *et al.*, 2003). The critical factor for rising productivity, efficiency and increased competitiveness of local firms was privatization and entrepreneurship. All TEs have experienced improvements in the competitiveness of their firms even though the improvements differed from country to country, depending on the speed and effectiveness of institutional reform.<sup>7</sup>

(3) Effective export diversification. The speed of export diversification differed from country to country. For example, the process was much faster in the countries of Central Europe and the Baltics in comparison to most other European TEs. This was reflected in the different degree of integration of countries into global supply chains (greatly facilitated by the prospects for the EU accession), increases in intra-industry trade, the explosion of tourism-related services, and the emergence of successful SME start-ups.<sup>8</sup>

(4) Efficiency of markets. Given the countries' different history, their experience with operations of product and factor markets was clearly different. This created different conditions for legislative and institutional reforms and it affected the efficiency of market operations. For example, labour markets in countries such as Poland, the former Yugoslavia and Romania had been more flexible than those of other TEs. Labour mobility between enterprises and jobs was important particularly in view of the large disruptions following the changes in 1990. The differences in labour mobility could be among the explanations of different patterns of adjustments to the shocks (Jurajda and Terrell, 2002; Fidrmuc, 2002).

<sup>&</sup>lt;sup>6</sup> The role of exchange rate policy was particularly important. One of the critical issues was the question of stability of nominal exchange rates that accompanied appreciation in the real exchange rate. Much of the debate at the time was whether government should pursue a more flexible exchange rate policy. Halpern and Wyplosz (1997) argued that such appreciations should not be resisted because of their wider effects on efficiency and productivity.

<sup>&</sup>lt;sup>7</sup> The literature looking at the improvements in export competitiveness is fairly large and covers different methodologies ranging from changes in real effective exchange rates, net value added in world prices to kilogram prices. It generally supports the conclusion reported herein. See, for example, Landesmann and Stehrer (2002).

<sup>&</sup>lt;sup>8</sup> The rise of entrepreneurship and start-up firms is explained in Winiecki, Benáček and Laki, 2004. For a discussion of determinants of export structure of TEs in the post-1989 period, see Hoekman and Djankov, 1997, and Crespo-Cuaresma and Wörtz, 2005.

(5) Trade adjustment and positive role of foreign investment. Industrial and financial restructuring – two major challenges of TEs at the time – required considerable new investment into fixed and financial assets. FDI could provide access to new foreign markets, bring new technologies, new management techniques, help raise depleted reserves of international currency and mobilize new resources without a corresponding increase in domestic taxation. The available empirical evidence confirms the positive role of FDI in the process of adjustment (Javorcik, 2004) and different perceptions of risks by foreign investors of investing in TEs (Lankes and Venables, 1997), which led to different rates of FDI inflows in TEs. Nevertheless, the extent of spillovers continues to be debated even though the presence of spillovers is not disputed (Havranek and Havrankova, 2011).

(6) Imports and Productivity. As noted above, Halpern *et al.* (2005) stress the role of imports in the process of stimulating productivity growth. This explains why raising the import content of exports became so important in transition. The argument is interesting in itself because both theory and empirical evidence usually emphasize other factors of productivity growth such as investment, better management, and technology or labour skills.

(7) *Incentives*. What probably characterized the post-1990 policy most was the changes in incentives for firms and households, with significant effects on international trade. Price liberalization, the enforcement of property rights, attractive taxation, rationalization of the exchange rate regimes, competition policies, privatization and changes in corporate management, financial restructuring and, last but not least, open trade policies played an extremely important role in stimulating investment, increasing corporate efficiency and their profitability.

We believe that local combinations of the above factors were the main explanations for the different degrees of success in the adjustment performance achieved by different countries. An attempt to generalize the performance of individual TEs was made by some economists who tried to capture the role of policy and other factors on the adjustment performance but, ultimately, the performance will depend on the specific conditions of each country. It will be up to the individual researchers to determine which of these factors was important in each particular country.

#### Appendix 1. Systemic shortcomings of centrally planned foreign trade

Domestic prices in the formerly centrally planned economies were poorly linked to costs of production and utilities. The link between domestic relative prices of traded goods and relative world prices was extremely weak, and changes in world prices were not automatically transmitted into changes in domestic prices. Exports and imports strongly depended on international barter agreements, especially within the CMEA with exports typically only seen as payments for imports. The official exchange rates were 'artificial' and domestic currencies not freely convertible. Foreign currency was administratively rationed and subject to wide-ranging restrictions. A complex system of taxes and subsidies was used to isolate domestic prices from changes in world market prices, thus forming a myriad of *de facto* multiple exchange rates pertinent to specific product categories or even producers. Foreign trade was carried out by monopolies formally separated from domestic firms which eliminated competition, protected domestic firms and undermined the processes that would normally stimulate greater efficiency.

While formally in place, tariffs had no economic effect on domestic prices and had, therefore, no allocative function. They were only used in international negotiations as a (weak) bargaining instrument. The allocation of imports was determined by plan targets and administrative decisions, which in effect constituted quantitative restrictions. Exports were also subject to strict administrative controls. Trade financing by credit was virtually non-existent as financial transactions were essentially used only to monitor the physical movements of goods and services. The decision-making of trading companies and domestic firms was subject to the demands of planners and government officials rather than to the dictum of profitability.

It is true that Communist command economies failed completely in basing their pattern of specialization on the principle of Ricardian comparative advantages because it depended crucially on the effective market performance, its perfect market pricing, equilibrium exchange rates and free decision-making of exporting and importing agents – which were completely politically unacceptable. However, there arose a paradox that the Heckscher-Ohlin comparative advantage based on endowments, plus the importance of scale economies were well understood and captured by the central planners in shaping the structure of trade between socialist countries, which mitigated the otherwise drastic misallocations in the production guided by import substitution, self-sufficiency and autarchy. Kornai's seminal work on the role of various indicators of shortage in real functioning of planned economies (Kornai, 1980) and studies by Drabek (1980, 1981) and Benacek (1986), pointed to a surprisingly rational performance of international trade in CMEA countries, provided the rationality is measured by Heckscher-Ohlin macroeconomic balancing logic.

#### **Appendix 2. Trade performance prior to 1990**

An assessment of trade performance of TEs prior to 1990 is extremely difficult due to serious problems of trade statistics (their coverage and valuation). According to most experts, however, growth rates of exports were generally extremely low. During the period of 1975-1988, for example, the nominal growth of CPEs' exports only reflected the dollar inflation in world markets. According to the United Nations, the conversion of CPEs' exports in intra-regional trade into nominal dollars yielded the value of \$48.5 billion for 1975 and \$47.5

billion for 1988.<sup>9</sup> The much more reliable data for exports to developed countries based on 'mirror statistics' of the Western partners revealed that the CPEs' average annual nominal growth rate for the same period was 6.9%. However, allowing for high dollar inflation during the 1970s and 1980s, even that real growth was negligible. The mire of foreign trade statistics in 'socialist' countries is also revealed by frequent revisions and by conflicting reports of different national institutions. For example, the 1988 total exports of the Soviet Union were reported by the UNECE in 1989 to be \$110.5 billion while the updated statistics published in 1992 slashed that figure right down to \$62.02 billion.<sup>10</sup>

The quality of statistics did not improve during 1990-1993 when the data were affected by liberalization of foreign trade, and when the deep depreciation of exchange rates led to tax evasion, under-reported exports and imports and speculative commercial transactions. The poor growth of trade performance reflected the extremely low efficiency of their countries' economies (Hughes and Hare, 1992). The low economic efficiency resulted in persistent losses through the deterioration in the terms of trade with market economies and to a lesser extent in trade with the Soviet Union.

# Appendix 3. The break-through in the views on trade re-orientation and growth

Further supporting evidence for the success of trade re-orientation in the TEs comes from studies assessing the adjustment process with the help of gravity models. The most prominent was the study of Hamilton and Winters, 1992, who used the gravity model to predict trade volumes of TE under the assumption of liberalized international trade driven essentially by fundamental economic factors such as level of income, distance from markets, and diversification of production structure. Their hypothesis was that the Cold War and the central planning system deeply distorted the 'normal' flows of trade, and that liberalization of trade policy should lead to much higher trade levels at a given GDP than without the policy changes. Using a sample of 76 well performing market economies, they estimated the model coefficients characterizing the pattern and intensity of such trade. Despite serious data problems<sup>11</sup>, their most important conclusions have withstood the scrutiny of time. They

<sup>&</sup>lt;sup>9</sup> Source: Economic Bulletin for Europe, UNECE, Geneva, (44), 1992, p.132. In reality there was no reliable system of comparing the evolution of their mutual trade; 'convertible rubles' were actually not convertible internationally, trade statistics in nominal domestic currency were distorted by an unknown inflationary bias, and the value of barter lacked any informational content.

<sup>&</sup>lt;sup>10</sup> Compare *Economic Survey of Europe 1989-90*, UNECE, Geneva, Appendix Table C.4 with *Economic Bulletin for Europe*, UNECE, Geneva, (44), 1992, p. 132.

<sup>&</sup>lt;sup>11</sup> As we have already noted, both GDP figures and exchange rates available to Hamilton and Winters were seriously distorted, which also distorted their estimated intensity of trade among the TEs. We have updated the 1985 data used by these authors by drawing on the latest reconstructed data at the UNECE in Geneva. We have found that the GDP data for TEs used by Hamilton and Winters were slightly overvalued, and that their real trade with market and developing economies was underestimated by about 15 percent, and that the trade among TEs was overestimated by approximately 40 percent. In brief, we presume with our revised estimations that the movement towards the potential (or 'normal') trade of TEs after liberalization would be somewhat less dramatic and that the intra-CMEA trade (among TEs) did not drop as sharply as Hamilton and Winters suggested.

predicted a considerable expansion of trade even without any changes of output (GDP), and that the core countries of the EU-15 would become the main trading partners of the TEs after their liberalization. They also predicted significant shifts in the commodity structure of trade. As the level of education and skill levels of employees were comparable to those of the less developed West European countries, the trade creation would be in sectors producing goods embodying medium-level and, partially, high level technology.

These conclusions implied that the fall in the total trade of the TEs would be shortlived and that a boost of their trade volumes to 'normal' levels could be expected quite rapidly. They also implied that the specialization in exporting labour-intensive products would be short-lived. As the firms restructured, there would be a tendency to reallocate production to more capital (including human capital)-intensive industries. The gains from more trade with Western countries would more than compensate for the losses from less trade with the former socialist countries. The drive towards more trade in technologically more sophisticated products would be enhanced by intensive inflows of FDI.<sup>12</sup>

Ultimately, the success of trade re-orientation was even more spectacular than what Hamilton and Winters predicted. Their predicted volumes of trade (adjusted for inflation) of the TEs with the EU-15 were reached in the majority of analyzed countries during the first 10 years of transition. Some countries achieved it even faster: Hungary and Poland in 1995, Czech Republic and Slovakia in 1998 (which required boosting their exports to the EU-15 nearly 6-fold in real terms relative to 1985!). The targets for the trade openness ratios relative to the world and EU-15 were achieved only somewhat later, approximately in the period 1997-2003, by which time the total exports of the TEs actually accelerated and doubled.

Russia, as well as some other countries of the former Soviet Union, fell behind the predicted trade volumes for much longer. Relying largely on exports of natural resources, Russia could not expand its exports at the rates akin to those for manufacturing exports of Central Europe. Russia's development is driven by domestic demand, and exports do not take the role of drivers of innovation and entrepreneurship, as became the rule in smaller TEs and in China.

Later on there were several papers estimating various impacts of liberalization in TE on the evolution of their trade by using gravity models. For example, Jakab, Kovács and Oszlay (2001) brought new insights into the controversy claiming that TE exhausted their potential for an accelerated trade creation on advanced markets already in mid 90s and their trade share with the EU countries would remain constant. Their analysis tested the speed of convergence to potential trade, the results of which contradicted such a hypothesis, at least for small countries. This was explained by changes in the product structure of exports and by new waves of FDI attraction.

Of course, this controversy is bound to continue with a question 'when the phenomenal trade boom in countries of Central and South Eastern Europe is likely to stop'? It is an issue closely related to effects of the EU accession, reception of trade privileges, creation of European Monetary Union and Euro adoption by TE. Bussière, Fidrmuc and Schnatz (2008) concentrated on the trade of TE with euro area, pointing to a possibility that these countries as a bloc could become its leading trade partners. Since the trade integration between eight EU member states from the first accession round and the euro area has been for long very intensive, the potential for further expansion of trade contacts with Eurozone rests with the remaining Central and Eastern European countries. Authors also stress that the

<sup>&</sup>lt;sup>12</sup> See, for example, Damijan *et al.*, 2003.

proper analysis and prediction should account for both structural changes in the trade and the progress of transition – especially the restructuring of institutional framework.

Here we have dealt largely with the Central European TE. However, not all TE follow a similar pattern of trade performance. For example, members of the Commonwealth of Independent States or countries in South-Eastern Europe diverge largely: they are less open to trade, their industrial trade is more biased to natural resources or their trade is exposed more to less developed countries, following their different geography, endowments and comparative advantages. Babecka-Kucharcukova, Babecky and Raiser (2010) examined the factors shaping trade in these less intensively investigated countries. They argue that the country's ability to benefit from globalisation depends on the progress with transition, where the leading indicators are the quality of legal framework for contract enforcement, improved infrastructure and the compliance with the WTO rules for liberalized trade.

# Appendix 4. The roles of product quality, differentiation and intraindustrial exchanges in transforming the trade

TE used to be isolated from the global economy for 40-70 years and their transition started from a situation when they were stuck in deep macro and microeconomic disequilibria. The circumstances of intensive restructuring and transforming the sector of exports from main laggard to a leader in development surprised many economists, as is best described by Winiecki (2002). Chronic production inefficiencies were eliminated as new owners and managers of rising private enterprises responded to new pro-market policies and incentives, and found their windows of opportunities in expanding to foreign markets, reaping gains from comparative advantages and economies to scale. We could observe that the path-breaking role of trade in TE had several forms: export-led growth, though dominant and best analyzed in the majority of countries, was complemented by an opposite causality – the growth-led exports. In addition, there was an extremely important stimulus to development by import-led growth, as was best described by Halpern et al. (2005).

A success in external exchanges in TE can be traced to their gains in the terms of trade, i.e. when a given volume of exports is able to purchase higher volumes of imports in the evolution of time. This can be achieved for example when due to raised quality the unit prices of exports increase faster than in the rest of world and faster than the costs incurred in effecting the innovative upgrades. Carlin and Landesmann (1997) provided a systematic analysis of the conditions in TE that strengthened the competitiveness of TE in the sector of tradables. The ensuing sound changes were found to be in line with theoretical foundations. The upgrades in quality were measured by both the intensity of increasing kilogram prices and the changing structure of exports, which give more weight to products with higher requirements of physical capital and R&D. We could also observe that countries with lower intensity of restructuring, slower institutional revamping or endowments biased to natural resources do not gain so much from product and technology innovation.

According to the new theory of trade, the gains in exports and imports in technologically advanced countries shift from comparative advantages to increasing returns to scale, product differentiation and intraindustrial exchanges. Fidrmuc (2001) provides extensive empirical evidence showing that nearly all TE have been increasing their involvement in intraindustrial trade. Prior to transition, this modern type of trade was dominant in none of these countries, even though in some pairs of smaller communist countries (e.g. between Czechoslovakia and Hungary) IIT reached high level of importance.

The sweeping changes after 1989 brought a new incentive to shrink the too wide "specialization" (in reality it was a sign of autarchy) and gain more from diversification relying on intraindustrial trade. After mere 10 years of transition some smaller economies reached degrees of IIT comparable to advanced market economies. Initially, TE could not but compete in so-called horizontal IIT, i.e. by exporting down-market (low quality) products and importing high-market (sophisticated) products, which belonged to similar product classification. In the later stages of transition we could observe the convergence to vertical IIT where TE gained from direct R&D spillovers R&D through trade. These mechanisms are studied in the papers of Damijan et al. (2003) and Besedeš (2011).

The appreciation in the real exchange rate is an accompanying indicator of the success in transition that was driven by gains in the tradable sector. Paper by Halpern and Wyplosz (1997) explains why such appreciations should not be resisted by yielding to policy "corrections" and why they are actually necessary for bringing their economies to equilibrium.

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