JOURNAL
OF EUROPEAN ECONOMY
Vol. 5 (№ 3). September 2006
Publication of Ternopil State Economic University

Claus-Friedrich LAASER,
Klaus SCHRADER

POLAND'S INTEGRATION INTO THE EU DIVISION OF LABOUR: A BENCHMARK FOR UKRAINE?

Abstract

The paper focuses on the Polish transformation process as well as on the structural adjustments in its trade patterns in the course of transition and integration into the European Union. The Polish «road to Brussels» might serve as a benchmark for institutional transformation and economic development of the Ukraine willing to integrate into the EU division of labour even though the EU does not grant an explicit accession perspective. Regarding systemic transformation, Poland has undergone a thorough process of institutional change to create a functioning market economy and to adjust to the *acquis communautaire*. The statistical analysis and a gravity model of Polish trade relations show that the country has successfully integrated into the EU Common Market although the degree of integration with the other EU members varies substantially, notably for Polish exports. The sectoral analysis of Polish trade flows reveals that the technology content has increased significantly, indicating the participation in advanced production networks.

Key words:

Systemic transformation, Polish trade patterns, Eastern enlargement, regional integration, gravity model, specialization patterns.

Laaser Claus-Friedrich, Dr., Senior Economist, Kiel Institute for the World Economy, Germany.
Schrader Klaus, Dr., Head of Research Area, Kiel Institute for the World Economy, Germany.

1. A Road to Brussels for Ukraine?

The Eastern Enlargement of the European Union (EU) on 1 May 2004 has profoundly changed the economic environment for Ukraine: The EU Common Market is now only a stone's throw off Ukrainian production locations. Yet, Ukraine is still outside the Common Market, and it is not a member in the small club of candidate countries. Hence, the question of appropriate relations with the EU arises. An answer may give the EU's *Partnership and Cooperation Agreements* (PCA) with its neighbours in the East being effective since the late nineties. In addition, the EU has triggered off the instrument of *European Neighbourhood Policy* (ENP) in 2003, which incorporates experiences from the recent enlargement process. The ENP rests on PCAs but advances this instrument by initiating a political dialogue with the neighbouring countries on the necessary steps for establishing sustainable and functioning democracies and market economic systems[1].

Although the EU stresses that the ENP approach is tailored for immediate neighbours of the enlarged EU without an explicit accession perspective, formal parallels to accession partnerships with the former applicants are clearly discernable: ENP is intended to support political and economic reforms and modernisation in the neighbouring countries. It covers (a) political issues concerning democracy, human rights and rule of law, (b) institutional aspects towards creating functioning and competitive market economies, (c) regulatory reforms in important sectors of the economy, and (d) options for cooperation in fields of mutual interest. It also provides recommendations on potential convergence towards the EU legal base, the *acquis communautaire*[2]. In contrast to former accession partnerships ENP reform recommendations are not mandatory. But institutional convergence promises to reduce the transaction costs of trading with the Common Market substantially.

The parallels between ENP and the monitoring process for former applicants make it worthwhile for neighbouring countries such as Ukraine to consider the reform steps of the former applicants towards the Common Market as a benchmark for their own institutional and economic development. The eight new Central and Eastern European EU-members of 2004 had to transform their political, legal and economic frameworks just in the same way as it is required of

[1] Cf. European Commission (2004a: 2–5). Originally, the ENP was designed to apply to immediate neighbours of the EU both in the Mediterranean Region and in the East, i. e. the latter including Belarus, Moldova, and Ukraine. In 2004, it was extended to Armenia, Azerbaijan and Georgia in the Southern Caucasus region sharing a maritime or land border with current candidate countries Bulgaria, Romania and Turkey. At the moment, in Eastern Europe ENP is not activated with regard to Belarus (European Commission 2006).

[2] Cf. European Commission (2004b; 2004c; 2004d), which provide the Commission's ENP country report, the ENP strategy paper and the joint ENP Action Plan for the Ukraine.

Ukraine. Hence, imitating the former applicants' «road towards Brussels» may pay for the ENP countries. Even though a full accession perspective is not granted by the EU explicitly, the access of goods and services to the Common Market will be facilitated, and domestic economic development will be improved[3].

Poland, Ukraine's direct neighbour to the West, may serve as a suitable benchmark in adjusting to the rules of the Common Market. Poland started its «road towards Brussels» with a trade and cooperation agreement in the late nineteen eighties. The so-called Europe agreement of December 1991 rendered a substantial reduction of trade barriers to the Common Market for the first time.

In 1997 Poland was among the first Central and Eastern European applicant countries which were invited to accession negotiations. By granting full membership on 1 May 2004, the EU certified the country to fulfil the Copenhagen political criteria, having established a functioning market economy and having made sufficient progress in adjusting its legal framework to the *acquis communautaire* (European Commission 2000, 2003, and Laaser and Schrader 2003a).

Beyond this process of institutional integration, the second challenge for Poland was to make use of free access to the markets of the rich EU-15 core-members and to find its role in the European and international division of labour. This meant the re-direction of regional and sectoral trade patterns from the former socialist division of labour towards market-driven trade relations mirroring comparative advantages of Polish exporters and importers.

Accordingly, the paper is organised as follows: First, the Polish efforts and achievements to fulfil the institutional requirements of the EU accession are outlined. Second, against this background of institutional integration, the regional trade patterns emerging in the course of EU integration are analysed, thereby applying a gravity model to elaborate the intensity of regional integration. Third, a sectoral analysis delivers complementary insight into the specialisation patterns of the Polish economy and its comparative advantages on the world and European markets. Finally, on the one hand, conclusions are drawn with respect to the level and degree of Polish participation in the EU Common Market. On the other hand, it is discussed which perspectives Poland's integration into the EU division of labour might suggest for a potential applicant country such as Ukraine.

[3] In the literature it is argued that it is not only the Common Market which exerts its gravitational power on the neighbouring economies of the EU. In the same way, the process of adjusting to commonly shared basic norms and implementing pertinent rules with the option of integrating into this system may spur the development of democratic systems in transformation countries (Emerson and Noutcheva 2004: 2).

2. Institutional Requirements of Poland's EU Accession

Looking at the progress Poland made in the institutional transformation since 1991, two different dimensions have to be considered: In the first stage, the focus of efforts and action was laying at designing a market economy per se and making it work successfully; in the second stage, after having laid the ground of a market economic system, the transformation process changed its character towards adjusting the legal framework to the large and complicated set of rules of the EU, the *acquis communautaire*.

Creating a Functioning Market Economy

In 1997 the EU Commission acknowledged the significant progress Poland made in transforming the country into a functioning market economy and invited Poland to participate in the first round of accession talks with the former socialist countries. In the view of the EU Commission, the legal and economic reforms had progressed in a way that the essential institutional elements of a market economy had been realized. The positive evaluation was based on the progress made with respect to the following core elements of the reform[4]:

(1) *Legal Base and Rule of Law*: The basic elements of a properly functioning legal order were not introduced in Poland, in principle, until the end of the nineties. Basic human rights, the freedom of the members of the society, protection against political arbitrariness, guarantees of the market order itself and the enforceability of claims from private contracts were ensured for the most part. Reservations existed with respect to frictionless functioning of the legal and political system, which resulted from the disputes about division of powers among the president, the government and the parliament. Moreover, the authorities still lacked the rou-tine and effectiveness, notably the administrative and judicial experience of the long-established civil service. In particular, the state administration and the court system were not reliable and adequate, thus making it difficult for citizens to enforce their legal claims.

(2) *Property Question*: In order to design a consistent market system, the role of private property has to be defined. Private property – especially over means of production and real estate – is an indispensable condition for the efficient resource allocation in an economy. It is mainly the incentive and control situation of the acting individuals that is touched by this question.

[4] See Schrader (1999).

It was not surprising that in Poland, similar to other economies in transition, it was exactly the privatisation of larger state-owned enterprises that posed one of the most severe challenges for policy reformation due to influential branch ministries, old management structures, trade unions and distribution policy. After a paralysing discussion, the Polish mass privatisation program finally started in 1995. Although at the end of 1998 about 95 per cent of state enterprises were said to be privatised, major privatisation projects in the chemical, energy, steel, telecommunication and banking sectors were still waiting for completion in the early 1999. Even in the immediate pre-accession period, the privatisation of «strategic» enterprises caused political problems, and the willingness to privatise at least parts of the public infrastructure, e. g. ports or railways, was rather restricted.

(3) *Liberty of the Markets and Competition Rules*: The incentive and control mechanism of private property rights can guide the individuals' decisions to allocate resources and efforts if the price mechanism serves as an information and coordination system. To make the price mechanism work, it has to be freed from public and administrative interventions, the market entry of potential suppliers has to be guaranteed, the bankruptcy regulations have to ensure the market exit of non-competitive suppliers, and the institutionalised control over competition has to prevent suppliers from cartelising markets and abusing economic power.

In Poland, the prices for goods and services had been substantially liberalized; only some price controls remained in such sectors as energy, transport, telecommunications, housing and public services, where state monopolies or special market access regulations existed. On labour and capital markets pricing was free with the exception of minimum wages and regulations affecting state enterprises. A politically independent competition authority exclusively responsible for the competition policy and protection of competition was not established, cartel agreements were not banned in all cases. Entry barriers on the markets for goods and services were comparable to those in Western countries. But with respect to market exit, Poland was the only reform country where the liquidation of small and medium sized state enterprises developed to the most successful privatisation method.

(4) *Macroeconomic Stabilisation*: Macroeconomic stability, on the one hand, requires a stable monetary order, which can best be achieved by an independent central bank constrained to pursue the objective of price level stability. On the other hand, fiscal stability requires a sound tax system and seriously restricted opportunities for deficit spending.

Although the Polish central bank lacked political independence, monetary stabilisation took place during the nineties. But monetary policy heavily depended on political good will, which is not a safe guarantee for a sustainable stabilisation process. With respect to fiscal discipline, the pressure of the IMF was necessary to stop an extensive deficit spending and to reduce the Polish budget deficit to a level below the «red line» of 3 per cent of GDP. A serious threat to fiscal stability were the shortcomings of the tax administration which had difficulties to enforce the new Western-style tax system.

(5) *Open Economy*: The process of market reforms and the intention of the reform countries to integrate their economies into the international division of labour can prove their seriousness by the degree the national economies are opened to foreign competition. Openness refers to the degree of foreign trade liberalization, convertibility of the national currency, and attractiveness of the legal setting for foreign direct investments.

Regarding foreign trade policy in Poland, a number of import tariffs – which aimed at protecting various sectors of the economy – were not abandoned. Especially agriculture was protected by the wall of high import tariffs; in some cases, quotas completed the protectionist picture. Concerning convertibility, restrictions on current account transactions were given up, but controls on capital account transactions were maintained. In contrast, at least the exchange rate system had the necessary degree of flexibility: although a crawling peg system aimed to stabilise the Zloty in relation to the basket consisting of the Euro and US-Dollar, the allowed fluctuation of the Zloty within a generous band around the central rate was close to a floating of the Polish currency. Finally, the legislation on foreign direct investment was in line with the corresponding legislation in most of the other Central and Eastern European reform countries. No prohibitive approval or registration procedures existed, repatriation of profits and incomes was not restricted, investments were protected by law and international agreements, and wholly foreign-owned companies were permitted.

Remaining Obstacles and Adjustments to the Acquis Communautaire

Summing up, in Poland the basic institutional «homework» appears to have been done already in the late nineties – with the exception of the reform shortcomings mentioned. In the course of accession, the second phase of institutional integration started, i. e. the adjustment of the applicants' domestic rules to the entire set of rules and regulations of the EU: the *acquis communautaire*. Since the decision of the European Union to engage in membership negotiations with the EITs (Economies in Transition) in Central and Eastern Europe, the ongoing transformation process in Poland has been under permanent supervision and guidance of the European Commission. The Commission published its progress reports on the institutional changes in all the EITs annually. Moreover, the so-called accession partnerships addressed the most pressing shortcomings and possible solutions for reform bottlenecks. In the case of Poland, the assessment report confirmed that, despite all remaining shortcomings, the country made substantial progress in its transformation efforts: the European Commission certified Poland in the year 2000 that it (i) «…continues to fulfil the Copenhagen political criteria…» and (ii) «…is a functioning market economy and should be able to cope with competitive pressure and market forces within the Union in the near term, provided that it stays with its present reform path» (European Commission 2000).

However, in the Commission's assessment, Poland shared a problem with the other candidate countries: The initial step of setting the rules and regulations did not necessarily imply that the enforcement of the rules and the training of the pertinent administrations really took place. Although the Commission accepted the rules in general, it criticised the obvious lack of enforcement. The results of the efforts to organize a modern, effective and well-trained public administration were insufficient, the administrative and judicial system still lacked the professional experience needed to practice the rule of law.

Another point of critique was made with regard to missing fiscal stability and efficiency of fiscal administrations, thus endangering macroeconomic stability. As a further shortcoming, the current account deficit appeared to be too high and presented a permanent threat of exchange rate adjustments. Moreover, the lack of labour market flexibility, inefficient regional policy regime and delays in the privatisation process, notably in the steel sector and other sectors with a substantial number of state-owned enterprises, were criticized in the EU's 2001 progress reports (cf. European Commission 2001).

In short, the European Commission still detected a number of shortcomings, less so with respect to the transformation process in general. Instead, the Commission's critique focused on the application and enforcement of rules and on the applicant's adjustment to formal guidelines of the *acquis communautaire*. In this context, however, two critical issues should be raised:

(1) The *acquis communautaire* contains quite a number of rules and regulations which have little in common with a genuine market economy. A pertinent example is given by the common agricultural policy (CAP). The Commission criticized all applicants' adjustment processes to CAP rules and mechanisms as well as agricultural structural reforms – even though, from a market economists' point of view, the resource-wasting CAP-regime should be abandoned at all. Moreover, the process of «deepening» and competency centralization from member states towards the EU level leads to a blowing-up of the *acquis communautaire*.

(2) The question whether this «deepening» is justified in each single field of economic policy activities has been an issue of dissent among economists. To be sure, the subsidiarity principle does not appear to be the primary guideline of the Commission's efforts to harmonize the policies of the member states. In some respect, the progress towards adjusting to EU rules and policies is not necessarily the progress towards forming a market economy. Nevertheless, Poland's accession required the adoption of all the rules of the *acquis communautaire*.

3. Regional Centres of Poland's Trade Integration

In the early nineties, Poland's economic development was strongly affected by a structural crisis in the course of the transformation process that also put an end to the socialist division of labour. But already in the first half of the nineties, market reforms and macroeconomic stabilisation gave rise to a recovery process with a growing domestic product: the Polish per capita income climbed up from 33 per cent of the EU-15 average in 1992 to the level of 40 per cent level by 1997. Since the end of the nineties, the catching-up process has slowed down, generating a relative per capita income of about 42 per cent in relation to the EU-15 in the accession year 2004 (OECD 2005, EUROSTAT 2005).

In contrast to this stagnant development, Polish trade has gathered momentum since 1992. While world exports increased by about 150 per cent by 2004, Polish exports even more than quadrupled (plus 460 per cent) in the same period (WTO 2006, GUS, var. iss.), thus indicating Poland's successful reintegration into the international division of labour. Apparently, the rising competitiveness of Polish products and free access to the EU's Common Market contributed to this process. In line with this development, the Polish export quota has gradually approached 30 per cent – a striking result when compared e. g. with the value of about 31 per cent of a rather export-intensive German economy. Accordingly, a large share of Polish growth, which has been accelerating again since 2002, appears to be export driven (EIU 2006: 5, OECD 2004a: 23–29).

One crucial explanation for Poland's dynamic trade is the early shift in Polish trade relations towards the Common Market already in advance of the Europe Agreement in 1991: Even before 1991, its trade with the EU countries came close to a share of 50 per cent, without being the result of the minimization of trade activities due to the breakdown of the socialist division of labour (Schrader 1999: 202–205). In the course of the nineties this process continued and Poland made significant progress of integrating into the Western European division of labour. This progress was mirrored by the EU-15 share of more than two thirds of Polish exports and the EU-15 import share of about 60 per cent during recent years (Table 1). However, Polish trade with the EU-15 is by no means evenly distributed: The regional focus over the whole transition and accession period, especially for exports, is on Germany, with one third of the exports and one quarter of the imports. At the same time, the trade partners next in the ranking – France, Italy, the Netherlands and the United Kingdom – were left far behind.

Table 1.

Poland's Regional Foreign Trade Patterns 1992–2004[a]

	1992	1994	1996	1998	2000	2002	2004
Exports							
EU-15	65.5	69.2	65.8	68.3	70.0	68.7	67.3
Germany	31.3	35.7	34.4	36.3	34.9	32.3	30.0
France	3.6	4.0	4.4	4.7	5.2	6.0	6.0
Italy	5.5	5.0	5.3	5.9	6.3	5.5	6.1
EU-new member states[b]	5.9	6.9	7.9	9.9	10.5	11.5	11.8
V4-countries[c]	5.1	4.8	5.9	6.5	7.2	7.7	8.7
Central- and Eastern Europe[d]	15.0	13.5	18.8	18.3	15.0	16.0	18.4
CIS[e]	9.0	8.2	12.2	11.0	6.6	6.7	7.8
Russia	5.5	5.4	6.8	5.7	2.7	3.2	3.9
Ukraine	1.4	1.6	4.0	3.8	2.5	2.9	3.7
Baltic Sea Region	45.3	50.0	49.9	50.5	46.9	46.6	44.8
Western[f]	39.5	43.8	41.9	43.1	42.1	40.8	38.3
Eastern[g]	5.8	6.2	7.9	7.4	4.8	5.8	6.5
Imports							
EU-15	61.9	65.3	63.9	65.9	61.2	61.7	59.6
Germany	23.9	27.5	24.7	26.4	23.9	24.3	24.4
France	4.4	4.5	5.5	6.4	6.4	7.0	6.7
Italy	6.9	8.4	9.9	9.4	8.3	8.4	7.9
EU-new member states[b]	4.6	5.1	6.2	6.5	7.5	7.6	8.6
V4-countries[c]	4.1	4.3	5.4	5.6	6.2	6.4	7.2
Central- and Eastern Europe[d]	15.7	13.5	14.9	12.8	17.9	16.7	17.6
CIS[e]	11.3	9.3	9.1	6.5	11.0	9.6	10.0
Russia	8.5	6.7	6.8	5.0	9.4	8.0	7.2
Ukraine	1.0	0.9	1.1	0.8	1.0	0.9	1.2
Baltic Sea Region	41.4	44.0	39.4	39.2	41.1	39.9	39.5
Western[f]	32.5	36.8	32.2	33.8	31.0	31.5	31.4
Eastern[g]	8.9	7.1	7.2	5.4	10.1	8.4	8.1

[a] Shares in total exports or imports in per cent (special trade concept).
[b] Countries becoming EU full members on 01.05.2004: Estonia, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia, Czech Republic, Hungary, Cyprus.
[c] Besides Poland, Visegrad-countries are Slovakia, Czech Republic, and Hungary.
[d] Albania, Belarus, Bosnia-Herzegovina, Bulgaria, Czech Republic, Croatia, Hungary, Macedonia, Moldova, Poland, Romania, Russia, Serbia and Montenegro, Slovakia, Slovenia, Ukraine.
[e] The CIS comprises: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan.
[f] Denmark, Germany, Finland, Norway, Sweden.
[g] Estonia, Latvia, Lithuania, Poland, Russia.

Source: GUS (seq. vol.); own compilation and calculations.

Polish trade with the EU gains additional importance if trade with the new member states is included. In this case, the EU's export share of about 80 per cent and import share of nearly 70 per cent reveal the outstanding role of the Common Market for Polish trade activities. Furthermore, Polish trade with the EU's new members is regionally concentrated on the other Visegrad countries. Half of the Polish Visegrad trade is with the Czech Republic, close relations with which have developed in the course of the nineties[5]. With respect to other Central and Eastern European countries, the Russian and Ukrainian markets have kept some weight: These countries account for more than four fifths of the still visible Polish CIS exports; while CIS imports are dominated solely by Russia. But the comparatively high Russian import share of more than 7 per cent must be attributed to mineral products which cover the lion's share of the total Polish imports from Russia. Finally, Poland's Baltic Region Sea Trade reflects the general distribution of weights: Polish trade with Germany dominates trade with the Western Baltic Rim countries, while at the Eastern Baltic Rim trade with Russia is prevailing.

The intensity and spatial structure of Poland's integration into the international division of labor and into the EU Common Market can be further analysed by means of a gravity model[6]. The pooled gravity analysis of Polish foreign trade in the period of 1992 to 2003 exhibits that Poland has successfully integrated its economy via its exports into the international division of labour since the early nineties (Box 1). Poland is exporting significantly to large and well funded markets with high GDPs, while the coefficient of the distance variable takes a normal value amidst the range usually to be found in the gravity analyses. Regarding the European neighbourhood controlled for by contiguity dummies, a distinct turn of Polish export flows towards the EU in general is clearly discernable, yet with the concentration of export relations on specific partners within the EU: trade relations with the other new EU members appear to be intense also in the context of the gravity model. Among the EU-15 members, Polish export relations with Germany turn out to be outstanding even after controlling for Germany's large market potential and immediate vicinity to Poland. Less distinct, but still significantly above average are export flows to Scandinavia and to the rest of Western Europe. Despite the general turn towards the EU, the contacts to the CIS are still substantial as measured against the current market potential of these countries. Polish imports, on the other hand, do not concentrate on specific partners as it is the case of exports, but are more evenly distributed (for details see, e. g., Laaser and Schrader 2005). It can be concluded that the Polish economy has made use of all advantageous integration options so far – either provided by world markets in general or by direct or indirect neighbourhood. While Polish import integration

[5] On February 15, 1991, Poland, former Czechoslovakia and Hungary signed the Visegrad Declaration to develop free trade and support free factor flows as part of the efforts to establish close economic and political cooperation (Visegradgroup 2005).

[6] This type of models – dating back to Linder (1961), Tinbergen (1962) and Linnemann (1966) – is often deployed in empirical international economics in order to assess the shaping forces of foreign trade flows.

is truly global, the appropriate label for export integration is «spatially concentrated», given Poland's concentration on specific partners on its export side.

4. Poland's Changing Role in the International Division of Labour

Shifting the focus of analysis from regional to sectoral trade patterns, the observation is supported that the Polish economy has profoundly re-defined its role in the international division of labour since the early nineties. Export and import growth, as well as regional reorientation, coincided with substantial shifts in the commodity structure of Polish trade flows. All together, the change of Polish foreign trade patterns in the nineties renders the impression that the former focus on primary products vanished and that the hitherto moderate level of vertical integration in manufacturing deepened. As regards manufacturing trade, a shift towards technologically more sophisticated products is discernable.

In order to gain insight into this development, a factor-intensity classification approach has been deployed to Polish trade flows. The pertinent classification scheme is derived from the seminal product life cycle hypothesis of Vernon (1966) and Hirsch (1974). It says that highly developed countries have comparative advantages in the production of research-intensive goods (so-called «Schumpeter-goods»), while less developed countries specialize on raw material-intensive goods (so-called «Ricardo-goods»), as well as on labour- and capital-intensive goods («Heckscher-Ohlin-goods»). «Schumpeter-goods» can be further subdivided into *mobile* and *immobile* goods, selection criterion is the feasibility of separating research and production spatially. In the case of mobile goods, this kind of separation is feasible because complementary relations between research and production are limited; spatial separation is no barrier to the knowledge transfer necessary for the production of mobile goods. Under these circumstances mobile goods are more easily to imitate than immobile goods (Klodt 1987: 29–37; Heitger et al. 1992: 43–45).

The factor intensity analysis of Polish sectoral trade patterns corroborates a distinct shift towards technologically more advanced products (Table 2): On the one hand, trade with raw material-intensive goods declined with export and import shares shrunk to the range of the 15 per cent level until 2004, the RCA value being negative[7].

[7] The concept, dating from Balassa (1965), rests on the standard notion that a country will specialize on the production of those commodities for which it has a comparative advantage according to its relative factor endowment. The reporting country will reveal such a comparative advantage, if it realizes either a more than proportional net export compared to total trade or – in the case of a negative total trade balance – at least a less than proportional net import in that commodity group. This is exactly the case if RCA-values are > 0 in a commodity group. In contrast, RCA-values < 0 reflect comparative disadvantages.

Table 2.

Polish Foreign Trade Patterns and International Competitiveness According to Factor Intensities 1993–2004

	1993	1994	1995	...	2002	2003	2004
World							
RIG							
Exports	25.5	24.1	22.5		13.9	13.7	15.1
Imports	26.6	24.0	22.1		16.9	16.6	17.1
RCA	–0.04	0.01	0.02		–0.20	–0.19	–0.12
LIG							
Exports	31.6	33.9	35.7		34.4	34.4	29.9
Imports	23.8	25.3	25.2		24.4	24.1	20.9
RCA	0.29	0.29	0.35		0.34	0.36	0.36
CIG							
Exports	20.7	20.7	18.7		15.3	14.3	14.3
Imports	7.6	8.0	8.7		11.0	11.3	10.2
RCA	1.00	0.95	0.74		0.33	0.24	0.34
MSI							
Exports	8.7	8.7	9.9		14.6	14.6	14.1
Imports	18.1	18.7	19.8		21.0	20.7	21.0
RCA	–0.74	–0.77	–0.70		–0.36	–0.35	–0.40
ISI							
Exports	13.5	12.6	13.2		21.9	23.1	26.6
Imports	23.5	23.6	23.7		26.8	27.4	30.8
RCA	–0.55	–0.63	–0.58		–0.20	–0.17	–0.15

RIG = Raw material-intensive goods, LIG = Labour-intensive goods, CIG = Capital-intensive goods, MSI = Products of mobile Schumpeter-industries, ISI = Products of immobile Schumpeter-industries; assignment based on SITC 3 (cf. Box 2).
[a] In per cent of total exports or total imports (special trade concept).
[b] The formula for RCA-values for commodity group *i* is:
RCAi = ln [(Exporti/Importsi) : (ΣExporti/ΣImportsi)].

Source: EUROSTAT (2005), Schrader (1999: 208–213); own compilation and calculations.

On the other hand, exports of R&D-intensive commodities have increased from 20 to more than 40 per cent and, what is even more surprising, with a focus on «immobile Schumpeter-goods» – a domain of the most advanced countries. Imports of both types of «Schumpeter-goods» also increased, but the increment is far less pronounced. These tendencies reflect the distinct gain in Polish competitiveness in producing technologically advanced commodities – the RCA-value is still negative, but at a distinctly lower absolute level. The joint exports of «mobile» and «immobile Schumpeter-goods» currently even outperform exports of the still large group of labour-intensive goods. Nevertheless, labour-intensive goods still comprise about 30 per cent of Polish exports and are Poland's traditional domain with a highly positive RCA value. In contrast, capital-intensive goods lost importance and competitiveness during the observation period for the most part.

Focusing the analysis on trade with the highly industrialized EU-25 countries as the main trading partners even underlines Poland's new role in the international division of labour (Table 3): As expected, in the period 1999–2004, raw material-intensive goods play a faltering and minor role whereas the Polish EU exports of «Schumpeter-goods» has gained a similar weight compared with world exports, with «immobile Schumpeter-goods» dominating again. It is not surprising, however, that Poland's technology-intensive imports from these group of industrialised countries have developed more dynamically than the respective world imports. Hence, Poland's comparative disadvantage vis-à-vis the EU-25 in the production of these goods is still more distinct. Nevertheless, the negative RCA-values decreased significantly in the case of «immobile Schumpeter–goods» during the observation period. Finally, Polish exports of traditional labour-intensive goods still have a comparatively high weight in trade with the EU-25 countries, the positive RCA exhibits strong comparative advantages although this trade is by far not one-way.

5. Poland as a Benchmark for the EU Integration?

Poland's stepwise EU accession and the corresponding transformation process may serve as a benchmark for countries like Ukraine which still have the perspective to cooperate with the EU more closely. Even if the EU accession of hitherto CIS countries is not on Brussels' present agenda, the monitoring of the Ukrainian institutional and economic progress can be regarded as an invitation to strike the way of an «as-if» candidate country. Ukrainian efforts to fulfil the EU criteria would have two positive effects: on the one hand, the reform process and correspondingly the economic development of the country would gain momentum; on the other hand, in the future, the EU would run out of good arguments to deny a positively evaluated Ukraine the accession perspective. To be sure, Poland's way to create a functioning market order and to adjust to the *acquis communautaire* is by far not the best blueprint for Ukraine. But it reveals what kind of reform obstacles may emerge or persist and how to overcome them. This kind of learning from the neighbour could also serve as a pedagogic tool for the Ukrainian policy finding process: It is improbable that the barriers to entry into the EU would be lower than in the case of Poland. Benchmarking would therefore implicate a more ambitious reform policy.

Table 3.

Polish International Competitiveness According to Factor Intensities in Foreign Trade vis-à-vis EU-25 1999–2004[a]

	1999	2000	2001	2002	2003	2004
	EU-25					
RIG						
Exports	14.0	13.8	14.0	13.0	12.8	15.2
Imports	8.5	9.5	9.2	8.5	7.9	9.2
RCA	0.50	0.38	0.42	0.42	0.48	0.50
LIG						
Exports	40.4	36.5	35.4	35.1	35.4	31.1
Imports	28.7	27.5	27.3	26.9	26.8	22.7
RCA	0.34	0.28	0.26	0.27	0.28	0.31
CIG						
Exports	13.6	12.7	13.5	13.4	12.1	11.9
Imports	9.6	9.9	10.6	11.6	11.5	10.0
RCA	0.35	0.24	0.24	0.14	0.05	0.17
MSI						
Exports	14.3	14.2	14.3	15.1	15.2	14.4
Imports	21.3	22.1	21.1	20.4	19.8	22.1
RCA	–0.40	–0.44	–0.39	–0.30	–0.27	–0.43
ISI						
Exports	17.8	22.9	22.9	23.4	24.6	27.6
Imports	32.0	31.1	31.8	32.6	34.0	36.0
RCA	–0.59	–0.31	–0.33	–0.33	–0.32	–0.27

[a]Cf. Table 2 for methodical notes.

Source: EUROSTAT (2005); own compilation and calculations.

Beyond institutional integration, the Polish integration into the international and European division of labour sketches a window of opportunity possibly open for the Ukrainian market economy. Successful integration into the international division of labour can be regarded as a prerequisite for new EU-members for catching up vis-à-vis the highly developed core members of the European Union. In this respect, Poland moved to the right track: It underwent far reaching adjustments of its regional and sectoral trade patterns during the nineties before it safely arrived in the haven of the EU Common Market.

With respect to the development of regional trade patterns, it can be observed that Polish regional export structures feature a rather asymmetric integration pattern: Integration with the core EU-15 countries largely means exports to the «pathfinder partner country» – Germany. More than proportional export relations exist with the other new EU members, too. The cooperation efforts under the realm of the Visegrad treaty and the Central and Eastern European Free Trade Association (CEFTA) appear to render their pay-off. Still rather intensive exports to the CIS countries suggest that Poland is acting as a bridge to the East. Polish import integration turns out to be much more symmetrical: Poland is closely linked to world markets and, at the same time, cultivates intensive relations with all its neighbours in Europe. The links from the CIS to Poland are of a specific nature, as imports from that area are dominated by energy and raw materials. A synoptic view on the export and import side renders the impression that it is the participation of the Polish economy in multinational production networks that shapes regional trade patterns.

The analysis of sectoral trade patterns corroborates this impression: The analysis of Polish sectoral export and import patterns reveals that structural change proceeded as expected – the technological upgrade of Polish trade is highly visible. But it was not anticipated how fast and distinctly these changes have happened so far. Especially, the increase in exports of manufacturing products with higher vertical integration or with higher R&D intensity is striking. Up to now, production sites for these types of commodities were part of the uncontested «core competencies» of Western highly industrialized countries such as Germany. One driving force of this process is the increasing emergence of Europe-wide or even world-wide production networks since the second half of the nineties. These networks leave more and more traces in regional and sectoral foreign trade patterns of catching-up countries such as the new EU member countries. In the case of Poland, integration into these networks is apparently not confined to labour-intensive less sophisticated productions, but also covers technologically advanced productions. Polish forms are no longer mere «workbenches» for labour-intensive, low-wage, and standardized products. In how far the Ukraine can follow Poland on its successful approach towards the Common Market, at least with respect to trade integration, will highly depend on the degree the country will continue to do its necessary homework. This includes creating a genuine market order per se embedded into a sustainable democratic order, and adjusting its legal standards according to the *acquis communautaire*. This would facilitate the access to the Common Market and avoid hampering effects of non-compliance with EU standards. The Common Market offers chances as well as risks, but the opportunities to seize the chances and to bypass the risks are created at home.

Appendix

Results of Gravity Estimates for Poland's Exports 1992–2003

lnXPL= – 13.94*** + 0.86 ln GDPj*** + 0.47 ln GDPPL*** – 0.01 ln PClj – 1.15 ln DISTPLj*** +
(– 4.47) (24.96) (3.89) (– 0.37) (– 22.05)

0,35 SCAND** + 1.29 DE*** – 0.02 AU + 0.26 WEST* + 0.16 MEDITERRAN +
(2,43) (6.62) (– 0.13) (1.79) (1.14)

1,19 BALT*** + 0.92 CZSKHUNSLO*** + 1.37 CYMT*** +
(6,74) (4.68) (6.15)

0,99 RUS*** + 1.32 BELUKR*** + 1.31 RESTCIS***
(6.75) (7.32) (9.49)

with n = 1307, R2 = 0.76 and F-value = 283.48***.

Variables:

XPL and *GDPPL* = Poland's exports and gross domestic product, *GDPj* and *PCIj* = trading partners' gross domestic product and per-capita-income, *DISTPLj* = distance between Warsaw and trading partners' capital; contiguity dummies *SCAND* for Scandinavia, *DE* for Germany, *AU* for Austria, *WEST* for Western Europe except Germany, *MEDITERRAN* for Mediterranean EU-15 members except France, *BALT* for Baltic states, *CZSKHUNSLO* for other new EU-members from Central and Eastern Europe, *CYMT* for Cyprus and Malta, *RUS* for Russia, *BELUKR* for Belarus and Ukraine, and *RESTCIS* for other more distant CIS countries.

T – values in brackets (White corrected); *** = coefficient significant at 1 p. c. error level, ** = at 5 p. c., * = at 10 p. c.

Source: GUS (var. iss.); World Bank (2004); Indo.com (2004); own calculations.

Assignment of Commodities according to Standard International Trade Classification (SITC) to Commodity Groups of Specific Factor Intensities[a]

Commodity groups	Commodity division no. according to SITC rev. 2
Raw material-intensive goods (RIG)	0, 2 (except 26), 3 (except 35), 4, 56, 57
Labour-intensive goods (LIG)	26, 6 (except 62, 67, 68), 8 (except 87)
Capital-intensive goods (CIG)	1, 35, 53, 55, 62 , 67, 68, 793
Products of mobile Schumpeter-industries (MSI)	51, 52, 58, 59, 75, 76, 77
Products of immobile Schumpeter-industries (ISI)	54, 71, 72, 73, 74, 78, 791, 792, 87

[a] The assignment scheme originally is based on SITC rev. 2 and has been converted to SITC rev. 3.

Source: Klodt (1987), Heitger et al. (1992: 43 ff.), Schrader (1999: 251); own compilation.

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The article was received on May 17, 2006.