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Poland's competitive position in the enlarged EU

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No. 95

Poland's Competitive Position in the Enlarged EU

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Poland's Competitive Position in the Enlarged EU

Abstract

Poland's overall competitive position in the enlarged EU has been weakening. Other new EU members, as well as the candidate countries Romania and Bulgaria have been performing better since about 2000 on both important counts: GDP growth, and employment growth. Although Poland's external competitive position, measured by the trade balance to the GDP ratio has improved, this is hardly an achievement. The trade balance has improved at the expense of rather low overall GDP growth - and the contraction in gross fixed capital formation. Weakness of overall growth combined with some improvement in foreign trade balance appears consistent with the tendencies on real wages, productivity and unit labour costs. Poland's labour productivity has grown more or less in line with labour productivity in other central European NMS. However, real wages and unit labour costs have stagnated when compared with other countries.

Stagnant unit labour costs appear to have been associated with unfavourable structural change in export. Poland's share in the EU-15 market rose much more slowly than those of other NMS. Moreover, Poland's share of EU-15 market in high-tech products rose at even more lower pace. At the same time Poland was losing quality/price competition in the EU-15 markets. Average price of Poland's manufacturing exports to EU-15 rose about 10% in relation to average prices of all manufacturing imports of the EU-15 countries (the years 2002-04 over 1995-98). Prices commanded by Czech, Slovak, Romanian and Bulgarian exports increased by about 20%. Compared with most other countries considered, Poland is competing with prices rather quality - especially in the low-tech, and high-tech products.

Introduction: Poland's overall competitive position is weakening vs. other new EU member states

Competitiveness is a pretty ambiguous concept. Of course it is more or less clear what kind of a business firm would be considered competitive. A competitive firm is faring well in the market. It is attracting investors, making profits, outsmarting other firms ('competitors'). First of all it is surviving - escaping bankruptcy or hostile take-overs.

The microeconomic concept of competitiveness does not easily apply to nations. Nations rarely (if ever) go bankrupt economically and disappear from the world scene - as firms often do. (Occasionally, nations are taken over by the stronger ones - though recently one observes rather proliferation of new nations, not the consolidation of the existing ones). Besides, the criterion of profit-making is a bit problematic in a national context. A country can work out huge profits - which are amassed by its capital-owning or managerial classes - while at the same time it may be reducing incomes of its own working classes, or inducing a steep rise in unemployment.

It would make more sense to attribute 'competitiveness' to a country which demonstrates the ability to sustain growth higher than in other countries, combined with unemployment levels that are lower than elsewhere. Equipped with such a notion of national competitiveness, let us now examine the longer-term performance of new EU member states on two criteria: growth in GDP and in employment.

Table 1. Longer-term performance of the new EU member states: indices of employment and GDP

| | 1995- | -2005 | 1995- | -2000 | 2000- | 2005 |
|-----|-------|--------|-------|--------|-------|--------|
| | D(E) | D(GDP) | D(E) | D(GDP) | D(E) | D(GDP) |
| CZ | 0.99 | 1.27 | 0.99 | 1.075 | 1.00 | 1.18 |
| HUN | 1.01 | 1.49 | 0.99 | 1.22 | 1.02 | 1.22 |
| POL | 0.95 | 1.50 | 0.99 | 1.3 | 0.96 | 1.16 |
| SK | 1.37 | 1.52 | 1.32 | 1.2 | 1.04 | 1.26 |
| SVN | 1.23 | 1.46 | 1.15 | 1.24 | 1.07 | 1.18 |
| EST | 0.95 | 1.82 | 0.91 | 1.28 | 1.05 | 1.42 |
| LAT | 1.05 | 1.84 | 0.99 | 1.26 | 1.06 | 1.46 |
| LIT | 0.98 | 1.70 | 0.97 | 1.18 | 1.01 | 1.44 |

Source: WIIW Data Base. D(E) is index of employment, D(GDP) is index of GDP.

Table 1 indicates that over the 10-year period 1995-2005 Poland's performance was rather poor, comparatively speaking. In terms of GDP growth Poland clearly outperformed

only the Czech Republic. In terms of employment growth, Poland was outperformed by all countries - except Estonia which had as poor a record on employment growth as Poland. Notice, however, that Poland performed much better in the first part of the period considered (1995-2000). In my opinion Poland's good performance in the earlier period had much to do with the policies instituted around 1993 and conducted until about 1997. In the second period (2000-2005) Poland was definitely outperformed - on both counts - by all other countries. Its GDP growth was the lowest. As the only country it registered a fall in employment. The worsening of Poland's performance relative to other new member states (NMS) in the second period must - in my judgement - be ascribed to mistaken macro (and social) policies applied after 1997, and to the misguided institutional reforms instituted in 1998.

The return to the successful macro policies of the earlier period does not seem likely at all, at least in the foreseeable future. It is even less plausible that some of the reforms responsible for the worsening of Poland's performance relative to other countries (e.g. the reform overhauling the pension system) would be reversed. Barring some glaring policy mistakes in other NMS, it would therefore seem that Poland is likely to continue to perform less impressively than other NMS also in the future.

Poland's external competitive position is improving at the expense of capital formation

A competitive country does not have to be a champion of export performance. Japan and Germany are among the world's externally most competitive countries as both generate huge export surpluses. At the same time their overall growth is unimpressive, to say the least. Moreover, unemployment in Germany has been rather high for over a decade. Neither Japan nor Germany are thus very competitive (in the sense defined above) - when compared with, let us say, the UK or Ireland. The problem, at least with Germany, is that the strength of its external competitiveness is at the same time the source of its internal weakness. For about 10 years Germany has been experiencing a cost deflation (wages lagging much behind the labour productivity) vs. its main EU partners¹. This has two - closely related - consequences: First, German exports crowd out domestic production in less cost-efficient countries (in the Euro area these are Italy and Spain among others). Second, under the impact of wage incomes lagging much behind the rising potential output, employment and domestic demand stagnate.

¹ For example the German unit labour costs were about 20% lower than in Spain (in 2005). In 2000 that differential was only about 3%.

Of course, a satisfactory performance in foreign trade (in goods and services) is pretty much a necessary component of competitiveness: In the long run a country running high trade deficits is certain to invite trouble - at some future date. Moreover, such a country is promoting higher growth and higher employment elsewhere - possibly in its direct competitors. Needless to say, good performance on the 'external front' may, under imaginable conditions, be also a source of the overall prosperity. This is the case of 'export-led' growth, characterised by high contributions of both domestic demand and foreign balance to the overall GDP growth rates.

Given the fact that Poland's GDP growth was relatively weak over the last five years, it is perhaps not quite surprising that the country's external position has improved.

Table 2. GDP indices and the trade-balance/GDP ratios, 2000-2005

| | D(GDP) 2005/2000 | TB/GDP 2000-05 | D(GDP) 2000/1999 | TB/GDP 2000 | D(GDP) 2005/2004 | TB/GDP 2005 |
|-----|---------------------|-------------------|---------------------|----------------|---------------------|----------------|
| CZ | 118.2 | -1.4 | 103.9 | -3.1 | 106 | 0.2 |
| HUN | 122.1 | -3.0 | 105.2 | -3.8 | 104.1 | -1.2 |
| POL | 115.6 | -3.0 | 104.2 | -6.3 | 103.4 | -0.3 |
| SK | 126.4 | -4.3 | 102 | -2.3 | 106 | -4.5 |
| SVN | 117.9 | -0.7 | 104.1 | -3.5 | 103.9 | -0.5 |
| EST | 142.4 | -6.0 | 107.9 | -3.9 | 109.8 | -6.4 |
| LAT | 145.7 | -11.9 | 106.9 | -7.6 | 110.2 | -15.1 |
| LIT | 143.7 | -6.2 | 103.9 | -6.5 | 107.5 | -7.0 |

Source: WIIW Data Base. TB is trade balance (goods and non-factor services).

As can be seen (Table 2), Poland's TB/GDP ratios for the years 2000-05 are more or less consistent with the GDP growth rates over that period - though other central European NMS (excluding the Baltic countries) managed to grow faster - and yet generated lower trade deficits. More recently, Poland's trade performance has improved: in 2005 Poland had the second-lowest TB/GDP deficit - but also the slowest growth. It is quite obvious that the relation between growth and the TB deficit is a bit more favourable in Poland than in Hungary. But that relation seems even more favourable now in the Czech Republic which had very high growth in 2005 and a TB surplus. The question worth asking is whether the improvements on foreign trade were not achieved at a too higher cost. To answer this question we look now at the sources of growth in individual NMS.

Table 3. Percentage contributions of domestic demand, consumption, gross fixed capital formation and foreign trade to the average yearly GDP growth (2000-2005)

| | Domestic Demand | Consumption | GFCF | Trade Balance | GDP growth |
|-----|-----------------|-------------|------|---------------|------------|
| CZ | 3.2 | 2.1 | 1.2 | 0.4 | 3.6 |
| HUN | 3.6 | 4.1 | 1.6 | 0.5 | 4.0 |
| POL | 2.0 | 2.3 | -0.3 | 0.9 | 3.0 |
| SK | 4.5 | 2.6 | 1.3 | 0.3 | 4.9 |
| SVN | 2.9 | 2.1 | 0.9 | 0.5 | 3.4 |
| EST | 9.3 | 5.4 | 3.3 | -1.7 | 7.6 |
| LAT | 10.8 | 5.5 | 4.3 | -2.7 | 8.1 |
| LIT | 10.2 | 6.2 | 2.7 | -2.6 | 7.6 |

Source: WIIW Data Base. GFCF is gross fixed capital formation. Domestic demand = Consumption + GFCF + Change in stocks + Statistical discrepancy.

Table 3 sheds some light on the background of Poland's success on the 'external front'. First, it appears that the contribution of the foreign trade balance to the GDP growth was the largest in Poland (on average 0.9 percentage points over the period 2000-05). Foreign trade was a stronger engine of GDP growth in Poland than in other NMS. (In the Baltic states foreign trade was actually a 'brake' on growth - as it contributed negatively to the overall growth). But, correspondingly, the contribution of domestic demand to the GDP growth was lower in Poland than elsewhere. Moreover, only in Poland the gross fixed capital formation has been contributing negatively to growth. Thus, the success on the 'external front' has been linked to the overall weakness of the domestic demand, and happened to coincide with receding investment. Gains of foreign trade have proved smaller than the losses on the domestic demand².

Table 4. Growth rates of real wage, labour productivity and unit labour costs annual averages for 2000-2005, in %

| | Real wage | Productivity | Unit labour cost* | Unit labour cost** |
|-----|-----------|--------------|-------------------|--------------------|
| CZ | 3.8 | 3.3 | 3.6 | 7.4 |
| HUN | 6.3 | 4.0 | 8.2 | 9.3 |
| POL | 1.6 | 3.4 | 0.9 | 0.9 |
| SK | 2.7 | 3.8 | 4.7 | 6.8 |
| SVN | 3.4 | 2.3 | 6.7 | 3.4 |
| EST | 6.5 | 6.0 | 4.1 | 4.1 |
| LAT | 5.6 | 5.9 | 3.8 | -0.8 |
| LIT | 4.7 | 6.5 | -0.9 | 0.4 |

Source: WIIW Data Base. 'Real wage' is gross real wage, deflated with CIT; 'Productivity' refers to GDP per employed person, at constant prices of 2000; 'Unit labour cost*' is GDP per person employed, at constant prices of 2000 divided by average gross nominal wage; 'Unit labour cost**' is adjusted for the current exchange rate (against Euro).

² For comparison, the German GDP growth for the same period was 1.2% per annum, with 0.4 p.p. contribution of domestic demand and 0.8 p.p. contribution of trade balance. Ireland's GDP growth of 6.3 % consisted of contributions from domestic demand (4.4 p.p.) and trade balance (1.9 p.p.).

Weakness of the Poland's domestic demand coupled with some improvements in foreign trade is consistent with the trends on productivity, wages and unit labour costs. As can be seen (Table 4), Poland's real wage has been rising quite slowly. This explains weak expansion of Poland's domestic demand. In all other countries real wages have been rising quite strongly (see Table 4) - which squares with the robust expansion of domestic demand. The huge gap between gains on labour productivity and real wage has been responsible for stubbornly high unemployment in Poland. Interestingly, Poland's gains in labour productivity were not much lower than in other central European NMS (in fact these gains were higher than in Slovenia and the Czech Republic). But, with weak growth in wages, Poland's unit labour costs (whether at domestic prices, or at the exchange-rate terms) have been virtually stagnant. This stands in stark contrast to what has been going on in other countries - especially in the Czech Republic and Hungary, but also in Slovenia. The fact that these countries have been able to combine strongly rising wages (and unit labour costs) with definite improvements in foreign trade is indicative of qualitative upgrading of their export commodities. Such an improvement seems to have been missing in Poland (but also in the three Baltic countries).

Poland's unfavourable structural change: evidence from data on exports to EU-15

The share of Poland's exports of products of manufacturing to the 'old' EU-15 in the latter's total manufacturing imports has risen by 47 % since 1995-98³. The shares of such exports of Poland's main competitors rose faster: by 77 % (the Czech Republic), 66 % (Hungary), 82 % (Slovakia). Even Romania performed better, with export share rising 65%. Moreover, the advantage of Poland's competitors in more sophisticated types of goods is even larger (see Table 5).

³ The indices discussed in this section compare the averages for the years 2002-04 with the averages for the years 1995-98.

Table 5. Shares of manufacturing goods' exports of central and east European countries to EU-15 in the respective latter's total imports (in %)

| | | Low-tech | Medium-low tech | Medium-high tech | High-tech | Total manufacturing |
|-----|---------|----------|-----------------|------------------|-----------|---------------------|
| CZ | 1995-98 | 0.85 | 1.26 | 0.74 | 0.18 | 0.71 |
| | 2002-04 | 1.11 | 1.70 | 1.70 | 0.76 | 1.25 |
| EST | 1995-98 | 0.20 | 0.24 | 0.04 | 0.05 | 0.12 |
| | 2002-04 | 0.32 | 0.28 | 0.08 | 0.15 | 0.18 |
| HUN | 1995-98 | 0.86 | 0.76 | 0.74 | 0.51 | 0.71 |
| | 2002-04 | 0.79 | 0.82 | 1.45 | 1.45 | 1.18 |
| LIT | 1995-98 | 0.26 | 0.22 | 0.08 | 0.03 | 0.14 |
| | 2002-04 | 0.40 | 0.30 | 0.08 | 0.04 | 0.17 |
| LAT | 1995-98 | 0.24 | 0.34 | 0.03 | 0.01 | 0.15 |
| | 2002-04 | 0.32 | 0.31 | 0.02 | 0.01 | 0.14 |
| POL | 1995-98 | 1.60 | 1.43 | 0.63 | 0.20 | 0.92 |
| | 2002-04 | 1.94 | 1.81 | 1.56 | 0.40 | 1.35 |
| SLO | 1995-98 | 0.57 | 0.48 | 0.36 | 0.09 | 0.36 |
| | 2002-04 | 0.40 | 0.47 | 0.43 | 0.16 | 0.35 |
| SK | 1995-98 | 0.37 | 0.60 | 0.30 | 0.04 | 0.31 |
| | 2002-04 | 0.49 | 0.73 | 0.91 | 0.16 | 0.57 |
| BG | 1995-98 | 0.33 | 0.40 | 0.10 | 0.02 | 0.19 |
| | 2002-04 | 0.47 | 0.50 | 0.10 | 0.03 | 0.24 |
| HR | 1995-98 | 0.39 | 0.21 | 0.10 | 0.03 | 0.18 |
| | 2002-04 | 0.35 | 0.29 | 0.08 | 0.08 | 0.17 |
| RO | 1995-98 | 0.86 | 0.61 | 0.14 | 0.02 | 0.35 |
| | 2002-04 | 1.73 | 0.61 | 0.32 | 0.11 | 0.58 |

Source: WIIW calculations based on COMEXT Data Base. Low-tech goods are the products of NACE industries 15-22, 36-37; Medium-low-tech - NACE 23, 25-28; Medium-high-tech - NACE 24, 29, 3134-35, High-tech - NACE 30, 32-33. BG stands for Bulgaria, HR for Croatia and RO for Romania.

Poland's share in exports of high-tech products rose slightly over 100% - much less than the Czech Republics or Slovakia's (each with an over 300% rise) or Hungary Croatia and Estonia (close to 200% rise). Romania's share of high-tech exports increased over 5-fold.

Losing quality/price competition in the export markets

There is yet another dimension of structural change - qualitative changes in production and exports (within the specific types of products) which are normally reflected in prices received on a country's exports (relative to prices received by the competitors). The measurement of such price/quality improvements involves the calculation of average prices per 'ton' of various types of goods. The specific algorithm underlying the relative unit value ratios reported below is described in Box 1⁴.

⁴ The calculations were done by Dr. Robert Stehrer, WIIW. For more on the methodology of Box 1. see for example Landesmann, M. and R. Stehrer (2003), 'Evolving competitiveness of CEECs in an enlarged Europe'. *Rivista di Politica Economia*, vol. XCII, No.I-II, pp. 23-87.

Box 1. Calculation of the unit value ratios

In the calculation of relative unit values of traded products the COMEXT trade database at the most detailed 8-digit level is used. Denoting the value of exports to the EU of commodity i by country c in year t by v_{it}^c and the quantity (measured in tons) by x_{it}^c , the export unit value is defined as

$$u_{it}^c = v_{it}^c / x_{it}^c \quad (1)$$

The unit values of country c 's exports to the EU are then compared to the unit values of total EU imports (from the world, including intra-EU trade) by calculating the logs of the unit value ratios

$$r_{it}^c = \ln (u_{it}^c / u_{it}^{EU}) \quad (2)$$

where u_{it}^{EU} denotes the unit value of total EU imports for a particular commodity i in year t . Taking the logarithm of (u_{it}^c / u_{it}^{EU}) ensures a symmetric aggregation across products for ratios larger and smaller than 1 (see below). In logs, the ratio is thus larger (smaller) than zero if the export unit value of country c is larger (smaller) than the unit value of total EU imports.

Very detailed (8-digit) product level UVR are aggregated to the unit value ratios for the level of 3-digit NACE industries and further to industry groupings (low-tech, medium-low-tech etc). This is done by constructing a weighted sum of the unit value ratios r_{it}^c across the products belonging to a particular industry j (or an industry group). The weight used for a particular commodity i in such an aggregation is the share of its export value in the industry's exports of country c . Denoting the set of commodities i belonging to an aggregate j (industry or industry grouping) by $i \in I(j)$ the weights are calculated as

$$w_{it}^c = v_{it}^c / \sum_{i \in I(j)} v_{it}^c \quad (3)$$

The unit value ratio for a particular aggregate j is then

$$r_{jt}^c = \sum_{i \in I(j)} r_{it}^c w_{it}^c \quad (4)$$

This measure can be interpreted analogously to the unit value ratios for a particular commodity as mentioned above.⁵

The results of the application of the algorithm explained in Box 1 to the COMEXT data are shown in Table 6. Informally speaking, each item from Table 6 represents a ratio of average prices received by a country (say the Czech Republic) on its specific exports (say of low-tech goods) to the average price of all such goods imported by the countries of EU-15. Thus the item 0.840 (for the Czech exports of low-tech goods in 1995-98) means that these goods were exported at a 16% discount (16% = 1 minus 0.840) as compared with exports from other countries. The corresponding item for 2002-04 is 1.048 - meaning that prices

⁵ As the COMEXT trade data may contain errors at the detailed product level, we have – in our procedure of calculating unit value ratios – deleted very extreme levels of relative unit values. The criterion used to classify an observation as an outlier was derived from the levels of the so-called ‘adjucant values’ in the distribution of the unit value ratios in the following way: The lower (upper) adjucant values are defined as the 25th (75th) percentile of the data minus (plus) 1.5 times the interquartile range (i.e. the range from the 25th to the 75th percentile). The lowest adjucant value in the data was found for Bulgaria in 1995 with about 2.5 ($\approx -\ln 12$) and the highest adjucant value for Slovenia in 1999 with about 1.75 ($\approx \ln 5.75$). In the calculations observations where $r_{jt}^c > \ln 12$, i.e. at a value larger than the highest and lowest adjucant values in the sample were discarded. This means that observations where the ratio (u_{it}^c / u_{it}^{EU}) was higher than 20 or lower than 1/20 have been classified as outliers and removed from the sample. Using this criterion the extreme outlier values have been removed without biasing the data.

received by the Czech exporters for the low-tech products were higher than those of other suppliers. The change in relative price (here from 0.840 to 1.043) is interpreted as reflecting improvement in quality (outperforming the average quality change of exports from other destinations).

Table 6. Unit value ratios for exports of central and eastern European countries to EU-15

| | | Low-tech | Medium-low tech | Medium-high tech | High-tech | Total manufacturing |
|-----|---------|----------|--------------------|---------------------|-----------|------------------------|
| CZ | 1995-98 | 0.840 | 0.817 | 0.690 | 0.706 | 0.776 |
| | 2002-04 | 1.048 | 0.913 | 0.915 | 0.895 | 0.935 |
| EST | 1995-98 | 0.833 | 0.950 | 1.024 | 0.442 | 0.838 |
| | 2002-04 | 1.034 | 1.015 | 1.005 | 1.688 | 1.107 |
| HUN | 1995-98 | 0.987 | 0.921 | 0.894 | 1.013 | 0.939 |
| | 2002-04 | 1.123 | 0.997 | 1.078 | 0.953 | 1.033 |
| LIT | 1995-98 | 0.699 | 0.979 | 0.913 | 0.789 | 0.813 |
| | 2002-04 | 0.843 | 1.099 | 0.916 | 0.739 | 0.915 |
| LAT | 1995-98 | 0.719 | 0.957 | 0.774 | 1.330 | 0.812 |
| | 2002-04 | 0.917 | 1.108 | 0.981 | 1.833 | 0.990 |
| POL | 1995-98 | 0.802 | 0.846 | 0.665 | 0.860 | 0.789 |
| | 2002-04 | 0.869 | 0.872 | 0.864 | 0.821 | 0.867 |
| SLO | 1995-98 | 1.129 | 0.860 | 0.834 | 0.783 | 0.934 |
| | 2002-04 | 1.255 | 0.935 | 0.844 | 1.200 | 0.984 |
| SK | 1995-98 | 0.824 | 0.857 | 0.762 | 0.670 | 0.808 |
| | 2002-04 | 0.946 | 0.922 | 1.094 | 0.906 | 1.017 |
| BG | 1995-98 | 0.737 | 0.805 | 0.696 | 0.687 | 0.756 |
| | 2002-04 | 0.938 | 0.929 | 0.793 | 0.883 | 0.906 |
| HR | 1995-98 | 1.036 | 0.878 | 0.820 | 1.293 | 0.958 |
| | 2002-04 | 1.140 | 0.792 | 0.820 | 2.739 | 1.071 |
| RO | 1995-98 | 0.720 | 0.796 | 0.663 | 0.596 | 0.731 |
| | 2002-04 | 0.956 | 0.895 | 0.903 | 0.838 | 0.924 |

Source: WIIW calculations based on COMEXT

The message of Table 6 is quite unpleasant. On price/quality improvements at the level of total manufacturing Poland's has been strongly outperformed not only by Estonia, Latvia, Slovakia and the Czech Republic - but also by Romania and Bulgaria (see Table 7). Only Slovenia registered lower rates of growth of relative export prices for the total manufacturing. But it must be noticed that the Slovenian export prices are much higher than Poland's.

Table 7. Indices of unit value ratios 2002-04 over 1995-98

| | Low-tech | Medium-low tech | Medium-high tech | High-tech | Total manufacturing |
|-----|----------|--------------------|---------------------|-----------|------------------------|
| CZ | 1.247 | 1.118 | 1.327 | 1.267 | 1.205 |
| EST | 1.241 | 1.068 | 0.982 | 3.817 | 1.321 |
| HUN | 1.138 | 1.083 | 1.206 | 0.941 | 1.100 |
| LIT | 1.206 | 1.123 | 1.004 | 0.936 | 1.125 |
| LAT | 1.276 | 1.157 | 1.267 | 1.378 | 1.219 |
| POL | 1.082 | 1.031 | 1.299 | 0.954 | 1.098 |
| SLO | 1.111 | 1.087 | 1.012 | 1.532 | 1.054 |
| SK | 1.149 | 1.076 | 1.436 | 1.352 | 1.259 |
| BG | 1.272 | 1.154 | 1.139 | 1.286 | 1.198 |
| HR | 1.100 | 0.903 | 0.999 | 2.118 | 1.118 |
| RO | 1.328 | 1.125 | 1.361 | 1.406 | 1.264 |

Source: WIIW calculations

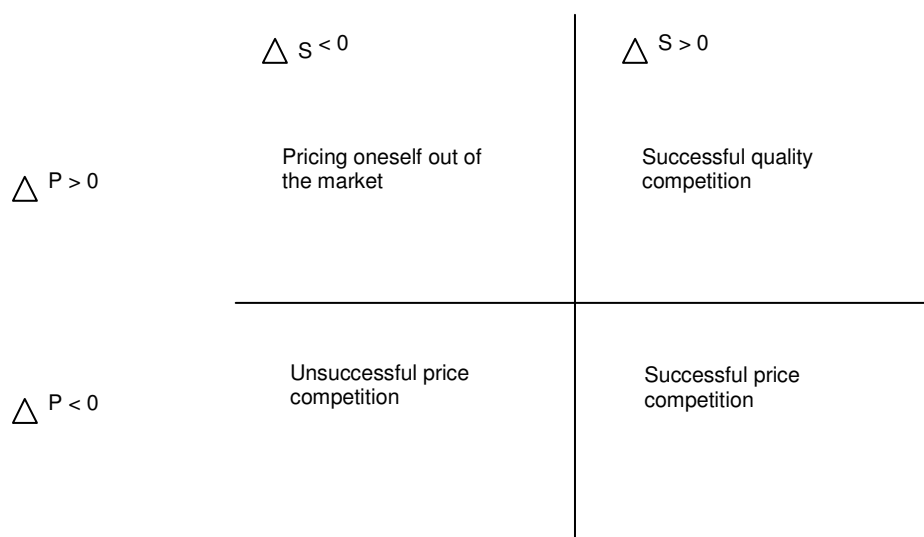
Polish exports' quality improvements have been unimpressive in three out of four industry groups. Only in medium-high-tech goods (motor vehicles, other transport equipment, machinery etc) Poland's export prices rose at a speed comparable to that observed in the Czech Republic, Hungary and Romania. Nonetheless Poland's export prices for the medium-high-tech products are the lowest now. Even Bulgarian and Romanian exporters receive higher prices for their medium-high-tech products. The situation is even worse in the low-tech and medium-low-tech products. Here the improvements are minimal - much lower than in other countries - and that despite very low initial levels. Finally, one must notice a decline in prices received for high-tech products. As a consolation, this has happened also to Hungary and Lithuania.

Changes in the market shares indicate that Poland is competing with prices rather than quality

Rising relative price of exports may be associated with a falling share in the export market. This situation is interpreted as 'pricing oneself out of the market'. Alternatively, if the rise in relative price of exports is associated with an increase in the market share, one may talk of 'successful quality competition' (foreign buyers demand more of the country's products despite its prices rising faster than the competitors'). Then, if the relative price of a country's exports declines, one talks of price (but not quality) competition. The price competition may be successful (if the country's market share increases), or unsuccessful (if the market share contracts).

The four combinations of rising/falling relative export price and the market share can be illustrated graphically (see Fig. 1⁶) in a diagram with two co-ordinates. The horizontal axis measures change (growth rate) in market share of a country or in EU-15 markets (more precisely: in total EU imports in that industry type). The vertical axis measures the change (growth rate) in the unit value ratios (or relative export prices).

Figure 1. Price/quality competition and market share development



Note: ΔP is the growth rate in export price (relative to the average EU import price), ΔS is the growth rate of market share.

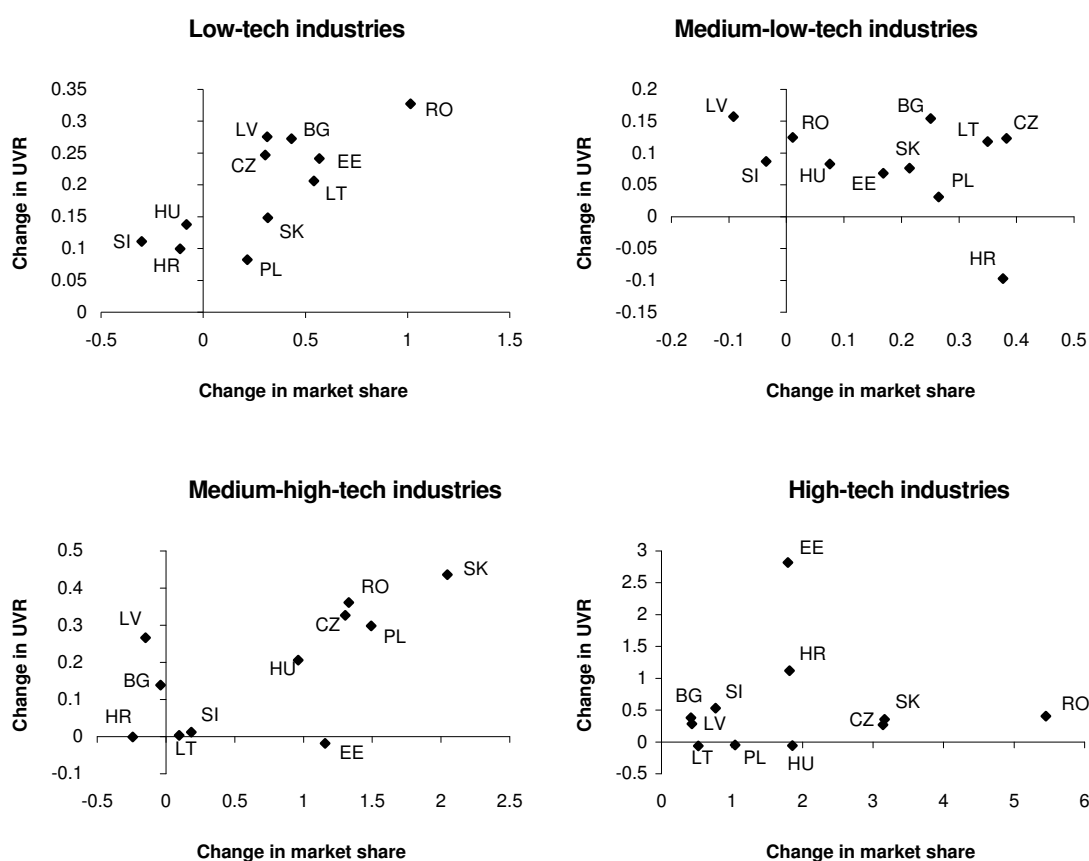
Figure 2 shows the performance of the central and east European countries on price/quality dynamics and the market share dynamics (2002-04 over 1995-98) for four groups of manufacturing export products and for total manufacturing exports. As can be seen. Poland is located in the 'successful quality competition' quadrant (except in the high-tech products, where it is rather located in the 'successful price competition' quadrant. However, in any group of products it has been outperformed by other countries, whose coordinates are located to the north-east to Poland's. In case of the low-tech products Poland's performance was hugely inferior to Slovakia's, Czech Republic's, the three Baltics countries', Bulgaria's and Romania's. In the medium-low-tech products Poland was outperformed by the Czech Republic and Lithuania. In medium-high-tech products Poland's position is much better, inferior only to Slovakia's. However, in the high-tech products, Poland fares quite badly. Overall, on the entire manufacturing level, Poland loses out on quality competition to Hungary, Czech Republic, Slovakia Estonia and Romania. It retains a clear advantage only over Slovenia.

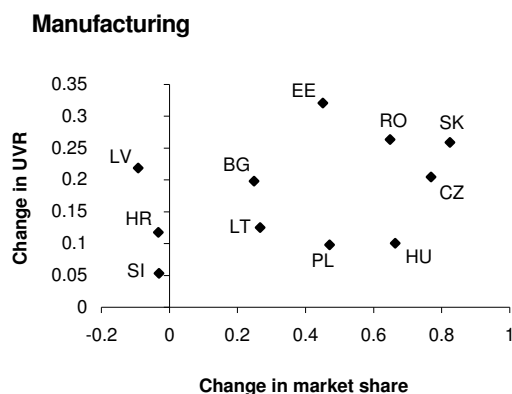
⁶ Fig.1 is an adapted version of a device proposed in Landesmann, M., J. Wörz, (2006): 'CEEC's Competitiveness in the Global Context', WIIW Research Report (forthcoming).

Concluding remarks

Poland's competitive position in the enlarged EU has been weakening: other new EU member states as well as Bulgaria and Romania seem to have been performing better. Improvements on labour productivity and unit labour costs have been responsible for the weakness of domestic demand and stagnant employment. Under such conditions foreign trade was an important source of the overall GDP growth - primarily restricting growth of imports. At the same time these improvements did not contribute to outstanding improvements in exports. Poland's shares in the EU-15 markets have risen at slower rates than those of other central and east European countries. Moreover, Poland has been lagging behind its direct competitors in quality/price upgrading.

Figure 2. Changes in quality/price competitiveness and in market shares in EU-15 markets, 1995/98 to 2002/04





Source: WIIW calculations. UVR refers to the relative export price.

Weakening of Poland's competitiveness may, to some extent, result from relatively low level of foreign direct investment. Poland's FDI stock / GDP ratio, currently at 29%, is lower than in the Czech Republic (51%), Hungary (59%), Slovakia (35%), Latvia (32%), Estonia (98%), Bulgaria (40%), Croatia (43%). Other low-FDI countries also perform less successfully - at least in foreign trade: Slovenia (22% FDI/GDP ratio), Lithuania (27%). Clearly, Poland's ability to attract FDI could be enhanced - provided it improves its reputation on corruption, legal environment, bureaucracy, etc.