### E-BRIEF



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# When can we expect price convergence in the enlarged EU?

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The recent waves of EU enlargement (2004 and 2007) have given new impetus to the discussions about the political and economic consequences of further expansion of the Union. While controversial issues such as tax competition, reallocation of businesses and labour migration are cause for extensive debate, another major economic goal the enlargement of the internal market for goods - seems to be proceeding smoothly without major obstacles. Yet it also has a profound impact on the lives of EU citizens; most notably, it affects day to day shopping patterns, influencing what Europeans are able to buy and how much they must pay for it. A recently completed project carried out by CASE and DIW analyzed the effect of the 2004 EU enlargement on price levels. This brief concisely presents select issues related to price convergence and links them with the results of the project.

#### PRICE EFFECTS AT WORK

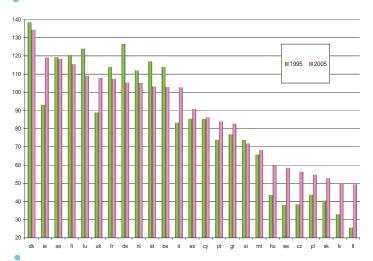
One of the major benefits of the expansion of the single market is the expectation of lower prices. The emergence of new producers and importers increases competition. This leads to the convergence of prices towards the level offered by the most efficient supplier. The welfare gains are obvious - consumers across EU member states enjoy cheaper and more diverse goods.

However, this is not the only price effect at work in the enlarged EU. Another aspect of price convergence is the gradual increase in price levels in countries that are 'catching up' in terms of per-capita income. This is particularly true in New Member States, which have enjoyed sound economic growth for a number years now (much faster than in EU15 on average) and have seen their prices increase simultaneously. This upward movement occurs due the strong correlation of domestic incomes and wages with domestic rents, transportation costs and many other 'local' costs that determine the retail price of both goods and services. It is therefore reasonable to expect fast-growing countries (e.g. New Member States, Ireland and Spain) to have higher inflation than the slow growers (core old member countries).

#### COMPARATIVE PRICE LEVELS AND THEIR DETERMINANTS

These two effects are among the most powerful in shaping relative price developments in the current-day EU. They are, however, very difficult to disentangle as we can only directly observe their combined end-effect on prices. Furthermore, comparative cross-country price data are rather scarce and the only comprehensive source is the OECD/Eurostat-led European Comparison Programme which provides the highly aggregated relative Comparative Price Levels (CPLs). The CPLs are a relative measure of prices in that they tell us what happens to price levels in one country relative to those in another country or countries and no information about the actual absolute price level (e.g. in euro or zloty) can be inferred from them. Figure 1 presents the CPLs1 in each of the 25 EU member states<sup>2</sup> as a percent of the EU25 average in 1995 and 2005.

## Figure 1. Comparative Price Level of Household Consumption Expenditure across EU25 countries (EU25=100)



Note: CPLs have been sorted by the 2005 CPL in descending order. Due to the unavailability of data in MT in 1995, CPL has been replaced with the value from 1999.

Source: Furostat

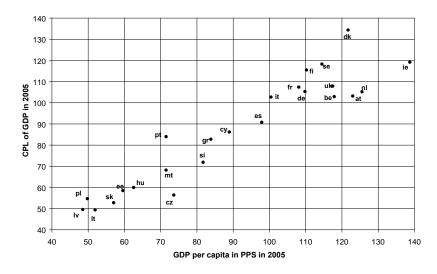
1 CPLs of the total household consumption expenditure

<sup>2</sup> Due to data unavailibility, 1999 is taken for Malta instead of 1995.

Several interesting features of EU price developments can be discerned:

- As expected, post-communist NMS have the lowest price levels in both periods with Lithuania, Latvia and Slovakia at the bottom of the ranking with prices below 45% and 60% of the EU25 average in 1995 and 2005, respectively. At the high-end are wealthy EU15 countries, e.g. Scandinavian countries, France, Belgium and Luxembourg.
- The evidence of the income-price correlation reflected in rich countries generally being the most expensive ones is confirmed by Figure 2, which plots the Comparative Price Levels against the GDP per capita. The upward-sloping shape of the scatter plot suggests that countries with high incomes are more likely to have higher price levels.
- Figure 1 provides strong evidence for the presence of the catch-up process: countries that have enjoyed prolonged periods of healthy growth have seen their prices rise by the most between 1995 and 2005 (IE and most NMS), while price levels of the underperformers have generally declined in relation to the EU25 average (DE, FR and AT).

Figure 2. Comparative Price Level and GDP per capita in 2005 (as % of the EU25 average)



Note: GDP per capita In PPS (Luxembourg not shown due to the outlier value), Comparative Price Levels for the total Individual Consumption Expenditure by Households Source: Furostat

While Figure 2 makes clear that rich countries happen to also have high prices, income levels do not explain everything. Ireland and Sweden have the same comparative price level and yet their GDP per capita differs by more than 25% of the EU25 average. On the other hand, Portugal and Czech Republic exhibit comparable GDP per capita levels, but in terms of prices, Portugal's CPL is nearly 30% higher than the Czech

CPL. Clearly, there is room for other factors to explain
why prices differ across EU countries even though they
are all part of the EU single market.

Some of these factors have been investigated in a
rigorous econometric framework by the authors of the
final report (Price Convergence in the Enlarged Internal
Market). A more integrated and open goods and services
market leads to more intense competitive pressures
which in turn should have a dampening effect on prices.
The formal analysis presented in the report confirmed
the role of competition-related factors (such as trade
openness or import penetration) in dampening price
levels³. Thus, any steps aimed at facilitating the free flow
of goods and services within the EU are very likely to
bring prices down.

#### ARE PRICES CONVERGING?

With these two effects clearly at work, are we indeed
observing price convergence at the EU-level? In other
words are we seeing prices of identical goods moving
closer to each other in individual member states? Is the
movement more towards the more expensive countries
or are we observing price drops as well? Figure 3
presents a measure of dispersion<sup>4</sup> of CPLs in individual
EU-25 countries in the period 1999-2005 for several
broad groups of goods and services. It can be thought of

as an indicator of cross-country differences in prices in the same group. First, it is important to mention that considerable differences in the degree of dispersion among these groups is broadly in line with their tradability, i.e. the facility with which they can be traded internationally. Therefore, price levels of categories dominated by goods, which are more likely to be exported, are much less dispersed than for services, which are generally shielded from foreign competition and for which prices are determined in domestic markets.

Regardless of this important difference, figure 3 points to a gradual decrease of dispersion for almost all goods-services categories considered. Most notably, highly tradable goods such as clothing and footwear, and machinery and equipment but also

communications — subject to significant liberalisation
attempts in recent years, have all seen substantial price
convergence. Standing out are construction, recreation
and culture, as well as, hotels and restaurants. These
are all service-dominated categories where no clear decline in cross-EU dispersion has been observed.

 <sup>3</sup> Overall, the strength of the relationship and the comparative significance of income-related and competition-related factors depends on the type of goods/services considered and on the level of data

detail, i.e. whether broad (e.g. goods, services) or narrow (e.g. meat,

dairy, furnishings) categories are used for calculations.

 <sup>4</sup> Coefficient of variation

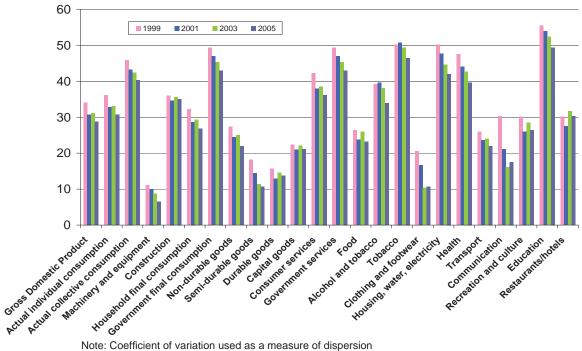
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#### WHAT DOES IT REALLY MEAN?

The most important policy implication of these results is the confirmation of the role of competition and greater market integration at the EU level in restraining prices. If enlarging the internal market is to be fully successful, ensuring the free flow of goods and services, fostering trade and overall economic openness must be high on the Brussels agenda. In particular, this concerns the highly debated issue of full liberalisation of services for which an integrated single market is yet to be established and legally ensured, in spite of national service industry woes.

- market continue to be removed and clear-cut steps are
- taken to meet this goal. This would have a much-needed
- dampening effect on prices in the EU. It would also
- counter the upward price trends emmanating from the NMS as they catch up with EU income levels.
- While the resulting price developments at the EU level
- are the outcome of both competition and catch-up
- factors, the former remains largely under the control
- of the European authorities while the latter is not. In
- light of this, the EU should fully commit to establishing
- well-functioning goods and services markets. This

Figure 3. Dispersion of price levels among EU25 countries over time



Note: Coefficient of variation used as a measure of dispersion Source: Individual calculations based on data from Eurostat

Despite significant progress, much remains to be done in completing the creation of the single market for goods, especially in the area of mutual recognition of national technical standards on safety, packaging, and labelling which would remove all obstacles to the de facto free flow of goods. On the other hand, there is a legitimate reason to expect rising prices in those poorer EU countries that are on their way to catch up with the richer EU founding member states. Higher inflation in those countries is a natural consequence of rising income and wages and this must be recognised in European policy making and dealt with appropriately.

So, what does it really mean for price convergence? The observed process of a gradual decline in cross-EU price differences, as seen in Figure 3, can be sustained and even sped up if the obstacles to creating a single goods  would ensure the continual convergence to a common price level due to both declining prices in wealthy EU economies and rising prices in poorer member states. Putting priority on the former process can accelerate price convergence and ensure that it occurs towards the lower rather than the higher price level.

The full report will be available soon at: www.case.com.pl

Przemysław Woźniak specialises in issues related to macroeconomics, monetary policy and inflation as well as economic transition of Central European and Balkan countries. He has led and worked in numerous international research projects as well as technical assistance projects in Montenegro, Serbia and Bosnia and Herzegovina. He obtained an MA (1997) and a PhD (2002) in economics from Warsaw University. Dr. Woźniak has worked as an economist for CASE since 1996 and •is a member of the CASE Supervisory Council.

The views in this publication are solely those of the author, and do not necessarily reflect the views of CASE - Center for Social and Economic Research.

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