



# AN ASSESSMENT OF THE POTENTIAL EFFECTS OF THE EURO CHANGEOVER ON SLOVAKIA'S BUSINESS SECTOR

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*Introducing the euro will mark the final step on Slovakia's road towards full integration into European Economic and Monetary Union. The entry of Slovakia into the euro area will affect all corporate entities and could have both a direct and indirect effect on their further activities. In this context, it is necessary to take a closer look at how the euro changeover will affect the business environment.<sup>1</sup>*

## Effect of the business environment structure during the euro changeover

The structure of the business environment in Slovakia is to a considerable extent similar to that in euro area countries. It may therefore be expected that the euro changeover will affect corporate entities similarly as it did in the euro area countries. It is generally assumed that the preparation costs for the euro changeover will be lower in Slovakia than in the EU-12, which is related to the method of euro changeover and to certain differences, in both the costs and benefits of euro adoption resulting from the specific structure of the Slovak corporate sector.

In comparison with the euro area, Slovakia has relatively fewer enterprises in the services sector and a greater number in industry. Since changeover costs related to administration and technical preparation are usually higher in services, especially in retail, the changeover costs in Slovakia are expected to be somewhat lower.

The high share of sole traders in Slovakia will also help to keep down the financial cost of preparing for the euro changeover. That said, sole traders will face the (one-time) burden of adjusting to the new situation.

## Effect of the euro changeover on the business sector

The adoption of the euro could have significantly different effects on individual entrepreneurs and enterprises.<sup>2</sup> This will depend not only on the extent of their involvement in foreign trade within the euro area, but also on the size of the enterprise and the industry in which it operates. All these factors will determine whether a corporate entity is directly or indirectly affected by the euro changeover.

In the short-term, the introduction of the euro will save enterprises money, mainly through the absence of transaction costs and the elimination of exchange rate volatility. In the medium-term, the changeover will lead to a higher inflow of foreign investments and growth in foreign trade.

While the corporate sector will be predominant in reaping the benefits of the euro changeover, it will also be the sector of Slovakia's economic life which bears the brunt of its costs. These include mainly the one-time technical and organizational costs related to currency conversion. Over the long-term, businesses may face an increase in competition owing to greater price transparency within international trade and, indirectly, an adverse effect from the greater volatility of certain macroeconomic indicators, following the loss of Slovakia's control over its own monetary policy.

## Benefits of the euro changeover for the business sector

The most important benefit that the euro's introduction will bring the business sector is the abolition of transaction costs related to euro transactions. In the Slovak economy, these costs represent around 0.36% of GDP.<sup>3</sup>

Transaction cost savings will not be reflected in all enterprises equally. The main determining factor in the redistribution of these savings will be enterprises' share of foreign trade with the euro area. Their share of this trade indicates that the largest part of transaction cost savings will accrue to large enterprises. In terms of industry, the biggest savings in transaction costs may be expected in manufacturing, which accounts for the bulk of foreign trade.

The adoption of the euro will also benefit enterprises by eliminating exchange rate risk. The cost savings related to the elimination of exchange rate risk in euro transactions is estimated at approximately 0.02% of GDP. It should be

<sup>1</sup> A detailed analysis of each of the euro changeover's effects on the Slovak economy is provided in the NBS report entitled "The effect of introducing the euro on the Slovak economy", available online at [http://www.nbs.sk/PUBLIK/06\\_KOL1.PDF](http://www.nbs.sk/PUBLIK/06_KOL1.PDF).

<sup>2</sup> For the purposes of this analysis, enterprises include only non-financial enterprises.

<sup>3</sup> NBS (2006).



noted, however, that around 20% of the transactions included in this calculation are made by households and that cost savings arising from the removal of exchange rate volatility in enterprises will therefore represent around 0.016% of GDP.

Besides eliminating direct costs related to exchange rate volatility, the fixing of the exchange rate will support overall macroeconomic stability. Membership of monetary union will protect the country against several large shocks and crises which, although very rare, have a substantial impact on a large part of the economy when they do in fact occur. Monetary union membership may, especially for a small and open country, support stabilization in the event, for example, of exceptionally large regional turbulences such as cannot be hedged against over the long-term on the financial markets.

The introduction of the euro should also lead to a decline in real interest rates. Real interest rates on corporate loans are currently at or below 2%, and following the euro changeover they may fall to around 1-1.5% (NBS, 2006). Lower interest rates will encourage investments, which will be reflected in greater corporate productivity and efficiency.

Given the size structure of enterprises and their engagement in foreign trade, the biggest direct effect of the euro changeover is expected to be felt by large enterprises that make the biggest contribution to exports. The direct effect will result mainly from transaction cost savings. In relative terms, however, it is small and medium-sized enterprises (SMEs) that will, through foreign trade, profit most from the euro changeover. This is mainly because of indirect benefits, i.e. the fact that the single currency offers SMEs opportunities to develop foreign trade. The euro will enable the removal of the "barriers" that are now a factor in keeping SMEs focused on the internal market. Often because of exchange rate volatility, and the impossibility or costliness of hedging against this volatility, SMEs have decided not to engage in foreign trade. The transaction costs of foreign trade also play a role in this regard, as do administrative costs for accounting, invoicing and cost calculations in a foreign currency. The euro will remove such barriers for SMEs and make it easier for them to conduct foreign trade.

A medium-term expectation for the euro changeover is that it will make Slovakia more attractive to foreign direct investment (FDI). Additional growth in foreign trade and FDI will be reflected in stronger economic growth, rising household incomes and subsequently an increase in household consumption. As living standards rise, so the significance of the services sector will grow; the adoption of the euro will therefore have a secondary positive effect also on those business sector industries whose low engagement in foreign trade will not let them profit significantly from the direct benefits of the changeover.

Given the number of various factors that will bear upon

Slovakia's business sector, it is not certain whether the said benefits will come about to the extent and with the intensity indicated above. According to the European Commission, the adoption of the euro in the current euro area countries brought with it greater efficiency in the allocation of resources.<sup>4</sup> As far as enterprises are concerned, it is simpler to identify their competitive position and to realistically evaluate their strengths and weaknesses. Conditions have improved for directly comparing the products and prices of rivals and suppliers. For many enterprises, the euro changeover has been a cue to break into new markets (now with low risk) and to launch cooperation in production, trade, marketing, and even research.

### **Euro changeover costs for the business sector**

An adverse effect of the euro's introduction will be the one-time costs related to currency replacement. At present in Slovakia there are very few analyses or materials on which to determine how much these one-time costs will be.

For many of the steps linked to the euro changeover, entrepreneurs will make preparations 2 to 3 years in advance. Among the most important tasks that corporate entities will have to carry out will be the adaptation of information systems and accounts, and preparation for dual pricing and dual circulation, as well as for potential training of employees.

Adoption of the euro in Slovakia will include certain differences that did not exist in euro area countries, and these must therefore be taken into account when quantifying costs. Among the principle differences will be the method of the euro changeover – the so-called "Big Bang" scenario. The period of dual circulation will also differ: whereas the euro area originally reckoned on six months and eventually settled for two months, Slovakia will have only 16 days. Another significant difference will be the fact that Slovakia can draw on the experience of the present euro area countries, as well as the other countries that will be newly admitted to the euro area in the Big Bang. Many enterprises in Slovakia have foreign owners; their investments are equivalent to a third of GDP and 67% of this amount originates in the euro area. Those enterprises which have parent companies based in the euro area will make considerable use of their experience in regard to the euro's introduction. Another important factor is that the euro already exists as a currency which Slovak enterprises know and frequently use and which is commonly incorporated in their information systems. All these factors should work to bring down the

<sup>4</sup> European Commission (2002).



costs of the euro changeover in Slovakia in comparison with the costs incurred by neighbouring euro area countries.

In order to quantify more precisely the euro changeover costs for Slovakia, the National Bank of Slovakia has conducted two surveys among entrepreneurs. The first survey was carried out on behalf of the NBS by the Statistical Office of the Slovak Republic (SO SR). Using survey interviews, the SO SR addressed 1,400 small and medium-sized enterprises and received 955 responses, which represents a return of 68% and is sufficiently representative of SMEs. The NBS conducted the second survey on a sample of large enterprises in the form of postal questionnaires. Of the 180 enterprises addressed, 68 replied for a return of 38%. Given the small sample of large enterprises, its composition cannot be considered as representative.

Based on the surveys, the average costs per SME were estimated to be approximately 0.27% of annual turnover, and the average costs for a large enterprise were put at 0.09% of annual turnover. For the economy as a whole, the costs for the business sector represent 0.26% of GDP or, in 2005 prices, around SKK 3.7 billion. The survey data should, however, be treated with a certain caution, considering that many SMEs, unlike large enterprises, are not yet able to estimate their euro changeover costs. This may also explain the relatively small differences in costs between size groups of enterprises.

**Table 1 Cost estimate for enterprises according to number of employees**

Number of employees	Costs relative to annual turnover (in %)
<b>Small and medium-sized enterprises</b>	
Micro-enterprise 0 – 9	0.22
Small enterprise 10 – 49	0.29
Medium-sized enterprise 50 – 249	0.28
Average	0.27
<b>Large enterprises</b>	
250 – 499 employees	0.24
500 – 999 employees	0.11
1,000 and more employees	0.07
Average	0.09

Source: NBS, own calculations.

The approximate distribution of costs by sector can also be determined using the surveys. It should be noted, however, that the representation of the wholesale and retail industries in the sample is above-average in comparison with their actual generation of value added in the Slovak economy. This shows that the costs estimated in this way are probably overvalued. The fact that mining, education, finance and insurance industries are insuffi-

**Table 2 Estimated euro changeover costs for SMEs according to industry**

Industry	Industry as a share of the sample (in %)	Enterprise's ratio of costs to annual turnover (in %)
agriculture, hunting, forestry, fishing and fish farming	3.0	0.2
mining	0.02	2.0
manufacturing	19.0	0.3
production and distribution of electricity, gas and water	2.0	0.1
construction	13.0	0.2
wholesale and retail	40.0	0.3
hotels and restaurants	1.0	0.4
transport, warehousing, posts and telecommunications	7.0	0.2
finance and insurance	0.1	0.1
real estate, rental and trade activities	2.0	0.1
education	0.03	0.6
health and social assistance	2.0	0.2
other societal, social and personal services	3.0	0.7
other industries	9.0	0.3

Source: NBS, own calculations.

ently represented in the sample could distort the data on the ratio of costs to annual turnover for an enterprise in a given industry.

Quantification of the costs related to replacing software and information systems produced similar results in comparison with the quantification of the total costs of the euro's introduction. The largest share of SMEs do not expect any additional costs, the next biggest share predict costs of up to 0.1% and a similarly sized share are not yet able to determine these costs. The situation is different with large companies since all enterprises in the sample were able to quantify their costs and all enterprises also expect additional costs related to the euro changeover. According to 66% of large enterprises, these additional costs should represent up to 0.1% of annual turnover.

The costs will vary from one enterprise to another and will depend on the contractual conditions agreed with the software firm. The supply of a software application includes the possibility to have it upgraded on a regular basis, and the final IT costs related to the euro changeover may depend on what kind of upgrading is arranged. Where an enterprise has arranged a complete upgrading package that covers legislative amendments, then the transition to the euro will not require any additional software costs. The actual price for software upgrading is at present difficult to determine, given that many Slovak software firms have not yet begun addressing the development of the



software upgrades required for the euro transition. It may be described as positive that 65% of enterprises do not see the euro transition in the IT field giving rise to any problems. Equally positive is that 64% of enterprises do not expect the euro changeover to require a change in hardware.

For small entrepreneurs, and especially sole traders, one of the most important issues will be problems related to cash registers. The survey showed that 42% of respondents do not use cash registers. Cash registers which record only in Slovak koruna and cannot be reprogrammed are used by 27% of the respondents. The remaining 32% of entrepreneurs use registers which can be reprogrammed and will be able to record in euros. It should be noted, however, that entrepreneurs are mostly unaware of this issue, which may result in a lack of knowledge in regard to the possibility of converting cash registers to euros. It may therefore be that the conversion of cash registers will be easier than the surveys suggest.

Another item that will affect costs, particularly in the retail and wholesale sector, is dual pricing. The surveys found that 77% of enterprises adjust their prices more than once per year, and only 23% adjust their prices less often than that. The costs incurred by enterprises in relation to dual pricing will not, in the true sense, represent an additional financial expenditure on implementation of the pricing, but will rather reflect the work capacity taken up when employees put it into practice. Most entrepreneurs do not expect the euro transition to bring problems in either price-setting or in dual pricing.

Among the last of the significant items that may affect the level of euro changeover costs could be the organization of training for employees and the creation of special working groups to see through the euro transition. It is clear from the surveys that a majority of entrepreneurs are not prepared for creating special plans or special working groups for ensuring the euro transition, and a majority likewise are not yet ready to organize training for their employees.

### **Effect of the euro changeover on foreign trade and FDI**

The introduction of the euro should be most apparent in the context of foreign trade. According to empirical studies, foreign trade with euro area countries is expected to increase by between 30% and 90%. The positive effects of the euro changeover on corporate entities will be determined mainly by the extent of their engagement in foreign trade with the present members of the euro area, but also with its future members. The euro changeover will, however, differently affect individual sectors, as well as individual corporate entities, depending on their size and engagement in foreign trade.

In the context of foreign trade, however, the introduction of the euro could also have adverse consequences for the business sector. As it will be easier to compare prices with those abroad, so Slovak entrepreneurs may face increased competition. It should be noted that after the euro changeover in the euro area countries, not all sectors saw a rise in price competition and price differences continue to exist. Greater price transparency is more substantially reflected in marketable goods than in non-marketable goods. This effect should become more pronounced, especially after the new Member States have joined the euro area.

As regards the structure of exports from Slovakia according to their technological intensity, it may be seen that the products exported to the euro area mostly have a medium technological intensity. The share of products with a low or medium-low technological intensity is falling. If production with high technological intensity is to be increased within Slovak industry, the crucial factor will be the inflow of FDI and development of industries that could initiate an increase in the technological level of the economy. Regarding the fact that countries tend to draw a distinction between technology-intensive industries and labour-intensive industries, there is little likelihood of Slovakia seeing a dynamic inflow of FDI into industries with high technological intensity. It may therefore be assumed that this trend will remain unchanged following the euro's introduction; a large part of Slovakia's exports will be provided by medium-high technology manufactures and there will be a gradually declining share of industries with low and medium-low value added. Production of high technology manufactures is usually linked to research centres of universities and large firms, which as yet in Slovakia have not been developed, and the building of such research infrastructure will take some time.

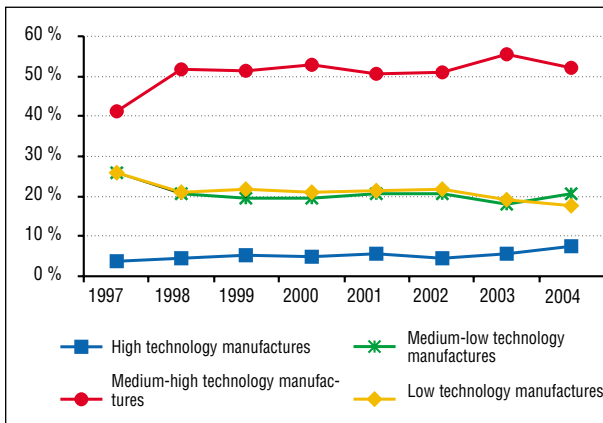
The euro changeover should therefore be most beneficial for SMEs in medium-high technology manufacturing industries (engineering, electrotechnical industry, means of transport production). The potential impact lies in the potential development of foreign trade, facilitated by the effects of the single currency.

As for the structure of exports to euro area countries, manufacturing accounts for 98%. In regard to transaction cost savings, the pace of foreign trade growth and the inflow of FDI, the euro changeover will have a different effect from one industrial sector to another depending on the specific activities in the industries.

The potential effect of the euro on Slovak foreign trade with the euro area can be inferred from the existing development of the bilateral trade balance between euro area countries. From the data so far available (foreign trade growth is estimated in the medium-term horizon), there is clearly a substantial increase in trade between euro area countries.

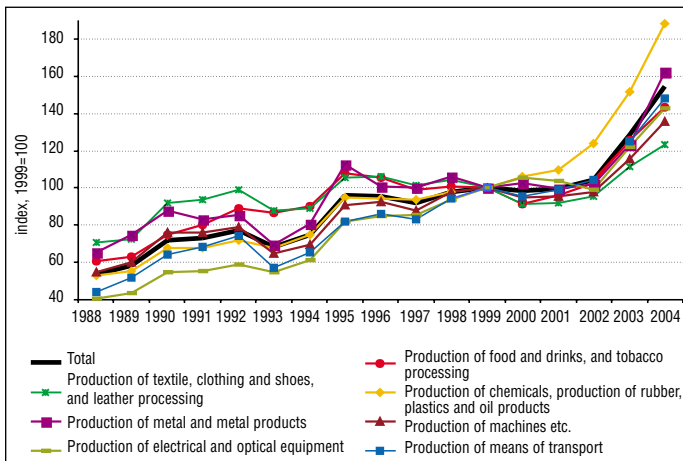


**Chart 1 Slovak exports to the euro area according to technological intensity**



Source: OECD, STAN Bilateral Trade Database, International Trade by Commodity Statistics (ITCS) 2006.

**Chart 2 Bilateral trade in selected commodities between euro areas countries**



Note: Data up to 1995 do not include Austria.

Source: OECD, STAN Bilateral Trade Database, International Trade by Commodity Statistics (ITCS) 2006.

Significant growth only happened, however, after the introduction of the euro in cash form in 2001, and not after its introduction in non-cash form in 1999.

This effect may be explained by the fact that during the transition period, firms recorded largely in national currencies, which preserved the "barriers" to the development of foreign trade with the single currency. The euro in non-cash form was used predominantly by large enterprises. A majority of enterprises (77%) did not go over to recording in euro until after 1 January 2002.<sup>5</sup>

<sup>5</sup> "Erfahrungen der KMU betreffend den Übergang zum Euro" (2005) – a survey conducted by the University of Trier at the request of the European Commission. The survey was carried out on a sample of 2,402 SMEs across the euro area, and it was aimed at ascertaining the progress of the euro's introduction in SMEs.

<sup>6</sup> European Commission (2003), European Commission (2004).

In terms of commodity structure, the euro changeover had the largest impact on the chemical industry and in particular the pharmaceutical sector. High growth was also recorded in the iron and steel trade and in the construction and repair of ships. As regards technological intensity, growth was highest in high technology manufactures (the chemical, electrotechnical and engineering industries).

Bilateral trade data shows that the euro contributed to a deepening of mutual trade between euro area countries, and thus confirmed one of the principle effects predicted for the single currency.

Related to the introduction of the euro is an expected increase in FDI inflow. A comparison of euro area countries with EU countries outside the euro area indicates the effect of the euro on foreign investment. The euro changeover made the euro area more attractive for the placement of FDI. Statistical data confirms that since 1999, the degree of foreign investment in euro area countries has been higher than in countries outside the euro area.<sup>6</sup> This is especially the case with investments between euro area countries. At present, 88% of the FDI in Slovakia originates in EU, and 67% comes directly from euro area countries. Given the expected displacement of some labour-intensive production, the euro changeover in new Member States may be a factor which allows them both to maintain production within the borders of the EU, and to accelerate the process.

As regards the future structure of the FDI inflow from the euro area, most of the investment is expected to head for manufacturing and the services sector. Investments should be directed mainly into manufacturing industries geared for exports, especially those industries with medium-high technological intensity. The FDI inflow into the trade and services sector from euro areas countries will probably show a rising trend. The inflow of investment into this sector is closely linked with the level of domestic demand and household purchasing power. Considering their expected growth in Slovakia, this sector is becoming increasingly attractive to investors from the euro area.

#### Bibliography:

1. Clemens R. et al. (2005): "Erfahrungen der KMU betreffend den Übergang zum Euro"; Project Nr. 2003/ENTR/03/05, Trier.
2. European Commission (2002): "Benefits of the euro for the economy and businesses"; Brussels.
3. European Commission (2003): "Quarterly report on the euro area No III/2003"; Brussels, September.
4. European Commission (2004): "EMU after 5 years"; European Economy Special Report No 1/2004, Brussels, July.
5. National Bank of Slovakia (2006): "Vplyv zavedenia eura na slovenské hospodárstvo" (Effects of the euro changeover on the Slovak economy), Bratislava, January.