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## **Export Potential of SMEs and Euro Adoption in the Czech Republic**

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***Abstract:***

*The objective of this essay is to assess the expected impact of the euro substitution for the Czech crown on exports of small and medium sized enterprises. The assessment has led to a theoretical definition of the transmission mechanism concerning the impact of the currency change on exports. It is the trade effect, transmitted through the elimination of certain transaction costs and exchange rate risk. This effect may also be promoted by the Rose Effect, specifically via SMEs. The Rose Effect is unlikely. This results from 1) currently high share of exports of SMEs in total export that corresponds to the share of GDP generated within the SME sector; 2) above-average share of Czech SMEs that export today.*

***Key Words:*** Euro Area, Trade Effect, Transaction Costs, Exchange Rate Risk, Rose Effect

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***JEL Classification:*** F14, F15, M16

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## 1. Introduction

The Czech Republic is currently one of the “Members States with a derogation” relating to the euro adoption. Each member state may, at its discretion, set the euro area accession date. What have the official visions relating to the Euro adoption been in the Czech Republic so far? The draft strategy for the euro area accession of 2002 talks about preparations so as “not to rule out” the year of 2007. The Government-approved *Accession strategy* of 2003 mentions the “period of 2009-2010” that was later specified to 1 January 2010. In October 2006, the Government of the Czech Republic decided to annul the original plan of the euro area accession in 2010. The new date has not been set, not even in the *Updated Strategy* of 2007.

The existing debt crisis of certain euro area member states leads to scepticism in respect of the single European currency. This results in a cautious position of the euro area non-member states with regard to the replacement of their respective national currencies with the euro. Marsh (2011) indicates the causes of distrust are “the pressures on EMU’s existing membership“ (p. 4) and concludes that „the enlargement of the euro area has more or less ground to a halt“ (p. 288). The euro area enlargement is not very likely in the near future.

However, by joining the European Union in 2004, the Czech Republic automatically undertook to take part in the third stage of the formation of Economic and Monetary Union as well – i.e. to accept a single European currency. The commitment to adopt (sooner or later) the euro still remains.

The objective of this essay is to explore, what impact may be expected from the euro adoption on exports of small and medium sized enterprises (SMEs <sup>2</sup>). The first part mainly explains the general impact of a common currency adoption on exports of companies (“trade effect” and its component, the “Rose Effect”). The second part specifically addresses the SMEs in the Czech Republic.

The essay relies on the existing literature dedicated to the expected impacts of a monetary union accession. With regard to general theoretical literature, this namely concerns Baldwin, Wyplosz (2006) and De Grauwe (2007). The effects of a single currency on the mutual trade of the monetary union members are discussed in a number of papers. The primary one is the study entitled *One Market, One Money* (Commission, 1990). Furthermore, it namely concerns the working papers of the European Central Bank (e.g. Mongelli, Vega, 2006). The consequences of the ten years of the euro existence are summed up in the European Commission study *EMU@10* (EC, 2008). The expected impacts of the monetary integration on Czech

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<sup>2</sup> A small enterprise (according to the Commission Regulation no. 800/2008) is an enterprise, which employs less than 50 employees and the assets or turnover of which do not exceed EUR 10 million. A medium-sized enterprise must meet similar indicators – up to 250 employees, EUR 43 mil. in assets, and EUR 50 mil. in turnover.

companies are namely discussed in the analysis of the Ministry of Industry and Trade (2006) and Lacina et al. (2008).

## **2. Impact of the Single Currency Introduction on Exports**

One of the expected benefit of a single currency adoption will be the stimulation effect on the international trade (so-called trade effect): „[...] we review recent empirical research and endorse two conclusions: monetary unions do promote trade between their members but *do not* reduce bilateral trade between their member states and countries outside such unions“ (Begg et al., 2003, p. 5).

Utilization of the euro instead of the existing national currency brings about two changes in foreign trade within trade with the euro area (see De Grauwe, 2007, p. 77):

1) Certain transaction costs are eliminated, especially those associated with the foreign currency management – e.g. conversion of foreign currencies, increased payment system costs associated with the use of foreign currencies, costs associated with the administration of other accounts (i.e. foreign exchange accounts), costs arising from more complex bookkeeping of foreign currencies, etc. The disappearance of the aforementioned costs promotes competitiveness and stimulates exports.

2) The exchange rate risk and the costs associated with the mitigation thereof disappear.<sup>3</sup> This leads to the stimulation of mutual exports and imports. This fact is addressed in detail in the European Commission study *One Market, One Money* (1990). „The main theoretical argument as to why exchange rate variability should adversely affect trade is that risk-adverse agents will reduce their activity in an area, such as trade or investment for export, if the risk, i.e. the variability of the return they can obtain from this activity, increases. [...] The most direct channel for nominal exchange rate variability to affect international trade arises because most international trade contracts involve a time lag between the time the contract is made, and when the exporter obtains his payment.“ (Commission, 1990, p. 72).

While it is possible to mitigate this risk through hedging, it leads to higher costs for firms. Increased costs are clearly the reason why “only a small part of intra-EC trade is hedged in reality” (Commission, 1990, p. 75).

The “trade effect” may be associated with a relatively high growth in trade with zero exchange rate risk. This occurs as a result of two effects on exports of companies (Mongelli, Vega, 2006, pp. 15 – 16):

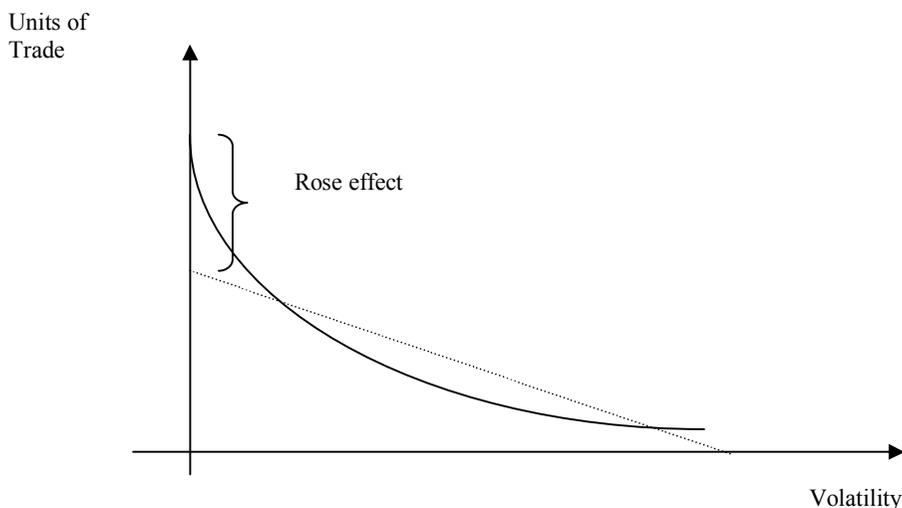
- Existing export companies increase their exports;
- The number of export companies increases; new exporters emerge, namely from among large number of small businesses.

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<sup>3</sup> „However, business surveys provide strong evidence that [...] foreign exchange risk is still considered a major obstacle to trade.“ (Commission, 1990, p. 63).

In case the exchange rate risk elimination leads to the significant predominance of the second effect, the so-called Rose Effect occurs. This effect is shown in Figure 1. The trade-off line for exchange rate volatility and trade ceases to be linear, becoming convex, thus showing strong increase in trade.

**Figure 1. The Rose effect: a trade-off between volatility and trade**



**Source:** Mongelli, Vega., 2006, p. 16.

### 3. Expected impacts on the exports of SMEs in the Czech Republic

There are many estimates relating to the stimulation effect of the single currency introduction on exports in various monetary unions. Rose and Stanley (2005) performed a meta-analysis of 34 studies in total, comprising 754 findings. They claim “a robust, economically important, positive trade effect from monetary union” (p. 348). They analyzed different results of individual studies using various econometric methods, coming to a conclusion about the stimulation of mutual trade of monetary union members (expressed as a share of the sum of export and import in GDP) as a result of using a common currency by 30 – 90% (p. 359). Baldwin (2006, p. 48) comes to a conclusion about a more modest increase in the mutual trade of the euro area states, „say the number is between 5% and 10% to date. Most of the evidence suggests that this number may grow as time passes, maybe even doubling.“ Baldwin and Wyplosz (2006, p. 368) also conclude that the mutual trade of the euro area member states increased more than the trade of states outside of the euro area.

According to the study of the European Commission *EMU@10* (European Commission, 2008, p. 4), the euro had the following impact. Mutual trade of the euro area Member States increased from one fourth to one third of GDP in the past

10 years; one half of this increase is attributed to the effect of exchange rate risk elimination and lower costs.

Can we expect a strong stimulation effect of the single currency introduction on exports especially in case of SMEs and impact of the Rose Effect?

The study of the Ministry of Industry and Trade (2006, pp. 38 – 40) only defines general impact areas of the euro adoption on exports of SMEs compared to large enterprises:

- On the one hand, SMEs – compared to large enterprises – will significantly capitalize on the elimination of transaction costs. These costs were higher for SMEs than for large enterprises, which had better negotiating position with banks;
- However, on the other hand, the costs of the euro adoption will be higher for SMEs than for large enterprises, as large enterprises already keep their documents and accounts in euros;
- With regard to the impact of exchange rate risk elimination, the study states that “Both large and small enterprises should, without any significant differences, profit from the elimination of the exchange rate volatility” (p. 40).

Therefore, the conclusion concerning the special stimulation of exports in the SME sector is not unambiguous.

A comprehensive study of expected impacts of the euro adoption in the Czech Republic (Lacina et al., 2008) claims that the SME sector will generate higher savings (implicitly expressed: transaction costs savings) than large enterprises. However, “we can actually only expect a relatively minor impact on the Czech economy as a whole” (p. 117) due to the “relatively small importance” of SMEs for the Czech economy compared to the significance of large enterprises<sup>4</sup>.

When examining the expected intensity of the Rose Effect relating to SMEs in the Czech Republic, we will – unlike the previous authors – take two factors into account.

1) Existing share of SMEs in the total export and in the total output of the national economy: In case of the share in exports significantly below the share in the total output, we could expect a strong increase in exports. However, this is not the case - see Table 1 for statistical data.

**Table 1. Share of SMEs in the national economy of the Czech Republic (%)**

Share in value added		Share in exports	
2010	2011	2010	2011
53.9	54.4	51.3	51.5

**Source:** Ministry of Industry, 2011, pp. 12, 14; 2012, pp. 9, 11.

<sup>4</sup> The share of SMEs in GDP amounted to 34% in 2006 (ibid).

2) Existing number of exporting SMEs: In case of a relatively low number, the impact of the euro adoption on exports of SMEs could be strong. According to a survey of the European Commission among small and medium sized enterprises (of 2010), 25% of SMEs exported in the EU on average, as opposed to 35% in the Czech Republic (Ministry of Industry, 2011, p. 48).

Both indicators – i.e. the share of SMEs in exports and the number of export enterprises – indicate that we cannot expect a significant increase in exports on the part of SMEs, stimulated by the single currency adoption.

#### **4. Conclusions**

The euro adoption in the Czech Republic has been postponed for many years. However, this postponement does not result from insufficient readiness of the Czech economy, i.e. its nominal and real convergence to the economy of the euro area. It results from the current economic problems of the euro area as well as from an adverse position of the present Czech political representation on the single currency adoption.

It is safe to expect the stimulation of exports of Czech companies to the euro area states from the euro adoption (the so-called trade effect), namely due to the reduction of certain transaction costs associated with international trade and due to the elimination of exchange rate risk (replacement of the CZK/EUR exchange rate with the EUR/EUR exchange rate<sup>5</sup>). However, the quantification of such benefit is very ambiguous – with such trade increase ranging from a few percentage points to several tens of percent.

However, high increase in exports following the euro adoption, in theory explained by the Rose Effect, caused by the involvement of small and medium sized enterprises currently no exporting, is not likely. The reasons for this are: 1) currently high share of exports of SMEs in the total export, which fully corresponds to the share in GDP generated within the SME sector; 2) above-average share (compared to the European Union average) of Czech SMEs that export today.

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<sup>5</sup> The decline in the exchange rates volatility following the euro adoption is analyzed in Helisek, 2011.

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