

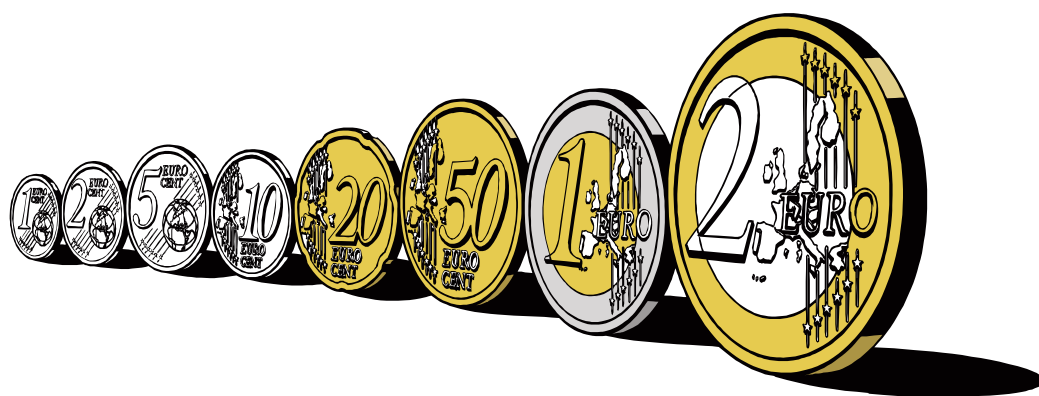


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# **STUDIE VLIVU ZAVEDENÍ EURA NA EKONOMIKU ČR (Study of euro introduction impact on the economy of the Czech Republic)**



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Bližší podrobnosti o tvorbě studie, autorech a dalších projektech Výzkumného centra PEF lze nalézt na internetových stránkách Výzkumného centra <http://www.pef.mendelu.cz/vyzc>.

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## Nontechnical summary

<p>No binding date has been set for the introduction of the euro in the CR ...</p>	<p>The entry strategy of the Czech Republic into the eurozone (Eurostrategy) from the year 2003 was based upon the presumed entry of the CR into the eurozone between 2009 and 2010. In the year 2006, however, conditions were inadequate to fulfill the fiscal criteria demanded under the envisioned timeframe, and the originally planned 2010 entry by the CR into the eurozone had to be delayed. In September of 2007, the government approved an updated "Eurostrategy" tied to the original strategy which did not set any concrete date for the entry of the CR into the eurozone. The entry should now take place only after fulfillment of the conditions for satisfaction of the criteria which have been set out, i.e., after public finances have been consolidated and the flexibility of the Czech economy strengthened.</p>
<p>On the other hand, the CR, upon entry into the European Union, made a commitment which must be fulfilled...</p>	<p>The group of countries referred to as the new members of the EU, of which the Czech Republic is one, were bound upon their entry in May 2004 and January 2007 to enter the eurozone sooner or later, i.e., to replace their national currency with the common currency, the euro. They possess only a sort of temporary exception to the introduction of the euro for the period until their economies are ready to take a step as important as entry into the eurozone. The countries in question bound themselves to take this step by their signing and ratification of the Accession Agreement. The problem, then, is primarily one of identifying an advantageous moment for entry into the eurozone. This may be identified as a moment at which the benefits connected with the change of currency will outweigh the costs associated with it.</p>
<p>Classification of benefits and costs associated with the introduction of the euro in the Czech Republic</p>	<p>The benefits and costs associated with the introduction of the euro in the Czech Republic, whether they be significant or less important, may be classified into various categories. In the study, the individual benefits and costs are divided on the basis of whether they are directly connected with the introduction of the euro (direct effects) or whether they make their presence felt in the economy in an indirect fashion via direct impacts and influence it only in the mid- or long-term (indirect effects). Both groups of effects may be further divided into one-time versus permanent effects and also into effects apparent in the preparation period, in the period during which the euro is introduced and in the medium and long-term.</p>
<p>Direct effects of the introduction of the euro in the CR</p>	<p>Direct benefits are those positive effects upon the economy accepting the unified currency which are directly attributable to its adoption: limitation of foreign exchange (FX) risk, lowering</p>

	<p>transaction costs, lowering of capital acquisition costs and greater price transparency.</p>
<p>Limitation of FX risk</p>	<p>The effect of eliminating FX risk versus the euro will be a long-lasting and instantaneous benefit for the Czech economy which also indirectly reflects its greater use of financial instruments denominated in euros and the overall development of the financial markets or, with presumed growth in foreign trade with eurozone countries, a consequent indirect positive impact on the growth of the economy. In the case of enterprises alone, savings are estimated to be 1.4% of GDP.</p>
<p>Transaction cost savings</p>	<p>Savings in transaction costs in the Czech Republic will be an instantaneous and permanent benefit for the Czech economy. The Hungarian National Bank estimates the overall amount of savings in transaction costs for the Hungarian economy at 0.18-0.30% of GDP. The Polish National Bank estimate also lies within this interval, at 0.21%, and the Slovak National Bank estimate of savings is 0.36%. A more precise estimate for the Czech Republic will make sense only after the date is set for entry into the eurozone.</p>
<p>Lower capital acquisition costs</p>	<p>Thanks to low inflation, the European Central Bank has been able to keep key interest rates low. It may thus be expected that after entry into the eurozone and acceptance of the common currency policy, the Czech Republic will also see low interest rates which facilitate access to capital. The Czech Republic, however, already has low interest rates – from September of 2007, e.g., the deposit instrument (facility) discount rate has been 2.25% while the ECB deposit instrument rate is 3%. From this, it follows that should the Czech Republic, e.g., enter into the eurozone in 2008, it would not be realistic to expect a drop in key interest rates. Nevertheless the interest rates offered by commercial banks in the Czech Republic are higher than in the eurozone, due to the larger margin between the lending and savings rates. In the case of the CR, the model estimates a reduction in real interest rates on accepting the euro which would be favorable for enterprise profitability; a reduction in real interest rates of 1% should be reflected in GDP growth of 0.06%. A reduction in the costs of capital acquisition would bring a lasting contribution to the Czech economy which would, however, become apparent over a medium timeframe, after intensification of competition in the Czech financial market.</p>
<p>Costs connected to the introduction of the euro in the CR ...</p>	<p>Direct costs are those negative effects upon the economy accepting the common currency which are directly attributable to its adoption. The most frequently mentioned costs are: loss of autonomous monetary policy, loss of foreign exchange policy and induced growth in price level.</p>

<p>... and a loss of autonomy in the area of monetary policy</p>	<p>Results of an analysis carried out by the International Monetary Fund intended to evaluate the difference in the effects of autonomous monetary policy carried out by the Czech National Bank and the common monetary policy of the ESCB on production gaps and on changes in inflation show only a modest impact on the economy of the CR in the event of entry into the eurozone. With the autonomous monetary policy, the standard deviation of the production gap was 1.7%; with the common monetary policy, it would be only modestly elevated at 1.9%. The standard deviation of inflation was determined to be 1.7% with the autonomous monetary policy, while with the ESCB it was 1.8%. From this, it follows that the loss of the autonomous monetary policy need not entail so great a danger for the Czech economy as suggested by studies of the harmonization analysis of the Czech economy with the economic cycles of the eurozone.</p>
<p>No threat of direct growth in price levels...</p>	<p>The introduction of the euro is tied to worries among population of a one-off price increase. Public opinion polls in March of 2007 indicated the fact that 79% of respondents in the Czech Republic expressed the conviction that the introduction of the euro would lead to higher prices. Similar opinions were held by respondents in countries founding the eurozone. In actuality, though, the introduction of the euro in the 12 member states of the EU in 2002 was not accompanied by any dramatic growth in overall price levels. The European Statistical Office (Eurostat) has calculated that the impact of higher prices due to the introduction of the euro contributed only 0.12% to 0.29% to the overall eurozone inflation rate in 2002 of 2.3%, as measured using the HICP (Harmonization Index of Consumer Prices).</p>
<p>Administrative and technical costs of the transition to the euro will mean immediate one-time costs for the Czech economy...</p>	<p>The administrative and technical costs of the transition to the euro will mean immediate onetime costs for the Czech economy and will be paid, dependent upon the type of entity, in the period beginning two to three years before the introduction of the euro and ending about a year after its introduction. For businesses, these costs connected to the transition to the euro have been figured at 0.86% of GDP. This is a rough calculation of costs on the basis of estimates from other studies concerned with the calculation of costs related to the introduction of the euro in other EU states. Relevant information for the Czech Republic would be possible to obtain by canvassing a sample of selected economic entities which, however, is not currently pertinent, in view of the lack of knowledge and the distant date for acceptance of the euro. A study by the Slovak National Bank estimates the administrative and technical costs for the entire economy at 0.3-0.8% of GDP. It is expected that IT costs will make up 60% of the administrative and technical costs connected with the introduction of the euro.</p>

Impact of introducing the euro on inflation in the CR

Worries about a leap in overall price levels in the Czech Republic immediately upon entry into the eurozone present one of the chief arguments supporting the so-called slow variant for accepting the euro in the Czech economy. The Czech Republic is among countries whose price levels are undervalued relative to the economic level achieved. In the present period, two channels lead to the equalization of price levels in the candidate and currently developed member economies in the eurozone. The first of these is higher domestic inflation in an economy which is "catching up" in comparison with the economy which is "being caught up with" (the so-called inflation differential). The other makes possible a process of price approximation by revaluing the nominal exchange rate. After the acceptance of the euro, however, the exchange rate as an instrument of price-level approximation will vanish. This will necessarily be expressed in a strengthening of the role of the second channel, higher inflation domestically than is seen in the eurozone. But is this inflation damaging? The answer is no, if its basis springs primarily from the process of catching up the economy. In other words, if the growth rate of work productivity in the Czech economy or other lagging economies is higher than in the eurozone. With regard to these arguments, the most likely development of the extent of inflation in the Czech Republic after acceptance of the euro may be characterized by the lasting positive influence of the inflation differential – i.e., moderately higher inflation in the Czech economy of several percentage points in comparison with the eurozone average.

The reason is a process of attaining a price level which corresponds to the closing of the gap between the economic levels of the Czech Republic and the developed countries of the eurozone. The process is expected to come only via the so-called inflation channel. The actual extent of inflation in the Czech economy in the period after the acceptance of the euro, however, will be influenced by factors other than just the process of catching up economically and in terms of price levels with developed members' economies. These clearly possess no correlation with monetary integration. They concern difficult-to-predict influences on the development of prices of key raw materials on the global markets, development of the economies of our strategic trade partners and, last but not least, aggregate wage growth in the service sector and in the industrial sector of the Czech economy. The influence of these factors on inflation is difficult to separate and predict from a long-term perspective. In spite of this, if we predict that in the course of our entry into the eurozone, no radical shocks are felt either on the supply side (e.g., crude oil, wages) or the demand side (e.g., fiscal) which have a significant influence on the evolution of domestic price levels, then it is possible to make an expert estimate which

	<p>sees the development of the extent of inflation in the period after the entry of the CR into the eurozone characterized by an inflation differential (i.e., the difference from the eurozone average) in the range of 2% to 5%. In practice, this means that if the ECB is able to hold to its long-term inflation target of 2%, the Czech Republic will report inflation in the 4–7% range. This interval is, however, conditioned upon the still unfinished and thus evolving process of price and real convergence between the Czech economy and the eurozone. With the rising level of Czech per capita GDP vis a vis the eurozone and the approaching equalization of price levels, the elimination of the differences in inflation indicated should occur naturally.</p>
<p>Is it possible to influence the growth in perceived inflation? Growth in prices during the euro transition period...</p>	<p>Buyers will compare the new price levels and entire production lines with the prices at which the goods were sold before. If they don't add up, an unjustified aversion to the new monetary units may arise. In the case of unjustified price changes, buyers can neither divine nor point to the motives of businesses which, under the pretext of currency change, increase prices. With a lack of knowledge of all the variables, they will point to the conversion rates as causes of the price increase. For these reasons, official statistics are in conflict with the "feelings" of citizens about the growth of prices in the transition period to the euro. From a consumer protection standpoint, it becomes important to introduce legal measures in an appropriate way showing the dual prices and to make use the analyses of the statistics bureau and price monitoring schemes (PriceWatch).</p>
<p>The introduction of the euro in the CR will contribute to gradual growth in foreign trade...</p>	<p>The introduction of the euro in the CR will markedly simplify foreign trade operations with partners in other countries in the eurozone. Currency exchange risk will be eliminated. Financial operations with these partners will take place in a single common currency and no currency conversion will be necessary. Payment operations will also be speeded and simplified. Freer trade should be reflected primarily in higher commodity and territorial specialization in the Czech economy and stronger competition from foreign entities on the internal markets of the Czech economy from the viewpoint of other eurozone countries. In agreement with international trade theories, these changes should be evidenced in growth in the volume of mutual trade. Increased competition from foreign entities will assuredly lead to further structural changes in the Czech economy. From a long-term standpoint, though, the growth in competition may be seen as a positive effect of the acceptance of the common currency, since this heightened competition will create pressure for greater efficiency throughout the national economy, even if this may impact negatively in the short-term.</p>

<p>Greater impact on small and medium enterprises...</p>	<p>Entry into the eurozone should have a much greater effect on small and medium enterprises (SMEs) than on large firms. Because the impact of SMEs on the Czech economy as a whole is fundamentally smaller than that of large firms -- in the year 2006, SMEs contributed approximately 34% to the gross domestic product -- there should be a relatively small impact on the Czech economy as a whole.</p>
<p>Exports and strengthening the exchange rate of the crown...</p>	<p>A specific and wholly individual factor present in the Czech economy in the case of entry into the eurozone is a sudden end to the trend of long-term strengthening of the Czech currency vis-à-vis the euro, i.e., toward the currency of decisive trade partners. Aside from the year 2003, there has been a long-term trend since 1999 of yearly appreciation of the Czech currency of an average 4–5 %, adding up to a rise in value for the Czech currency of approximately one-quarter over the last six years. This development has impacted export prices, unless exporters compensate by dropping manufacturing costs or taking less profit. Strengthening of the national currency thus impacts negatively upon the development of exports if those exports are not highly dependent upon raw material imports from abroad. Entry into the eurozone should eliminate this negative influence in trade with other eurozone members, which should serve as an impulse for the development of exports.</p> <p>Until now, the appreciating development of the exchange rate of the Czech crown has been explained by a number of economists in terms of real as well as price approximation of the Czech economy to developed countries. In the years from 1999 to 2006, the real exchange rate versus the euro (deflated by the GDP deflators) appreciated in value by approximately 4% per year, an impressive result arising from the strong undervaluation of price levels in relation to the real factors of the economy. This rate of growth may not, however, be expected to continue into the future, due to the presumption not only of a gradual closing of the gap arising from the undervaluation of price levels in the Czech economy compared to those of a developed economy, but also from the expectation of a gradual closing of the positive production gap (approximately up to the year 2010) and thus of the gradual cooling down of the Czech economy. Opinion on the strong real appreciation of the exchange rate is not univocal. Estimates concerning the real appreciation of the exchange rate are in the range of 1–3 % per year, with a tendency toward gradual decline.</p>
<p>Impact of the euro introduction on foreign trade...</p>	<p>The introduction of the common currency will in all likelihood not have an immediate impact on the development of exports. A growth impulse in the form of the elimination of FX risk in trade</p>



	<p>with eurozone countries will be compensated for by a decline in the absolute rate of the growth of exports brought about by the process of attaining a more open economy. The development of import volume should be subject to a similar trend as exports. It is, then, not possible to predict sudden changes in its volume due to the introduction of the common currency. Its development should be influenced to a great extent by global tendencies. At the same time, a moderate decrease in changes resulting from continuously approximating the extent of openness in these countries to the standard in European Community countries may be expected.</p>
<p>Effects of the euro introduction on direct foreign investment...</p>	<p>The introduction of the common currency (and elimination of FX risk) will remove one significant barrier to the free movement of capital. The common currency should lead to improved integration of financial markets and easier movement of financial resources between economies. Savings in one economy may be easily and cheaply located in another economy. The countries which gradually replace their own national currency with the common currency, the euro, may thus count on quickened growth in cross-border transfers of financial resources. Although the common currency may be expected to positively influence the mutual movement of capital, this is not possible to identify and establish unequivocally. We may thus maintain that there is a great likelihood that the influence of the introduction of the euro on the Czech economy will be overshadowed by regional and global economic trends in the area of direct foreign investment. The introduction of the common currency will not have an appreciable direct influence on the development of direct foreign investment flowing into the Czech Republic.</p>
<p>Impact of the introduction of the euro in the Czech Republic on economic growth...</p>	<p>It may be presumed that the real incomes of citizens of the Czech Republic will, upon entry into the eurozone, be on a lower level than in other member countries in the eurozone. The conditions which accompany the acceptance of the euro as a common currency will enable citizens, and especially producers (employers), to benefit from a long-term tendency toward approximating the average living standard in countries of the eurozone.</p>
<p>Impact of the euro introduction in the Czech Republic on citizens.</p>	<p>Czech citizens need not worry that their purchasing power will be reduced in connection with the introduction of the euro because of the devaluation of their savings. Simply converting from one currency to another should not, so long as rules of rounding and conversion are respected, lead to a disruption of the original price relations by which the buying power of citizens is preserved as regards domestic prices. This is true no matter which coefficient of conversion is used. The savings of citizens may thus not be devalued simply by transition to another currency. However, the</p>

	<p>process of price convergence which would arise in the context of higher domestic inflation versus the eurozone average, could cause a devaluation of savings after entry into the eurozone. The result could be lower real interest rates and reduced real savings values. The extent of devaluation would depend upon determination and development of interest rates in the eurozone and our inflation differential with the remaining member countries.</p>
<p>Impact of the euro introduction in the CR on enterprises</p>	<p>The overall impact of the introduction of the euro on the enterprise sector will be positive. This follows from the highly connected nature of trade and capital between Czech firms and countries of the eurozone. The impact on individual sectors, however, will be varied. One of the largest pure beneficiaries will be the processing industry. The energy sector, on the other hand, will be among the most burdened. The quantification of benefits and costs due to the introduction of the euro is very difficult in practice, and is further complicated in the case of Czech firms by ambiguity regarding the date the euro will be introduced. On the basis of the projected count for the year 2006, we have come to the conclusion that the benefits of the euro for this year total CZK 54 billion (1.68% of GDP) and the costs, CZK 28 billion (0.86% of GDP). The net impact of the introduction of the euro for the year 2006, then, would be positive in the amount of roughly CZK 26 billion (0.82% of GDP).</p>
<p>Effects of entry of the CR into the eurozone on the tax system...</p>	<p>In terms of both economic theory and empirical results, the introduction of the euro has no direct influence on the tax sector. The entry of the 12 member countries (from the original EU-15) into the eurozone was not connected to a growth in tax rates but rather with their moderate decrease. Although monetary integration markedly increased the mobility of capital and increased tax competition in this area, it did not lead to shifting of the tax burden, relevant changes in the tax quota or individual tax quotas or tax burdens for individual economic actors. The example of Slovenia, the last country to enter the eurozone, confirms what has been stated above. The influence of the introduction of the euro, then, may make itself felt in the tax domain indirectly: in the form of attempts to fulfill criteria for entry into the eurozone and in the attempt to fulfill the demands of the Stability and Growth Pact.</p>
<p>... and on the expenditure side of the budget...</p>	<p>The fiscal rules of the eurozone place a demand on tax policy in the short-term which is normally laid on tax policy with a medium timeframe. This is a limitation on budgetary expenditures. From a fiscal targeting standpoint, the chief task is to limit the expenditure side of public budgets, the center of gravity being sought in the reduction of mandatory expenditures. Because of the permanent, unsatisfactory trend in the development of the ratio of mandatory expenditures to budget revenues, a drop in expenditures for final</p>

	<p>government consumption and social benefits may especially be anticipated. This highly likely reduction in expenditures, however, is to a large extent not the result of efforts by the Czech Republic to enter into the eurozone but has other causes (the prior state of public finance, unrealized retirement reforms, demographic evolution, etc.).</p>
<p>The ERM II mechanism: a positive or negative of the process of European currency integration? On what basis should the length of stay inside the mechanism be chosen?</p>	<p>The country's stay inside the ERM II mechanism brings with it a number of advantages such as stabilization of the currency exchange rate and the consequent exchange rate risk, greater connection to the ECB in the form of exchange rate interventions, further heightened integration with the countries of the eurozone, a deepening of the single internal market, etc. There are, however, certain risks to the stay in ERM II, including a marked limitation of the monetary policy of the country in question, due to the fact that the central bank must primarily aim to stabilize the exchange rate. If, however, this does not touch upon the goal of stable price levels, potential exchange-rate interventions may be postponed. This could, however, lead to oscillation in the exchange rate with a negative impact on the economy. Also in the case of countries which prior to entry into ERM II had a regime of floating exchange rate, the transition to a regime of fixed exchange rate leads to complications. As an example, consider the sudden loss of the exchange rate mechanism as a possibility for the economy to react to asymmetric shocks; a floating exchange rate can aid the economy by, e.g., depreciating in a situation of worsening competitiveness of the country. This is apparent most especially in small, open economies dependent upon foreign trade. If, furthermore, the central bank has used the targeting of inflation as its chief currency policy régime, the economy remains threatened by the problem of an inconsistent monetary policy. Whatever the pros and cons of the ERM II mechanism, countries aspiring to membership in the eurozone have no other recourse. Economic and political authorities will thus have no alternative than to prepare themselves for the two years in question (potentially more) adequately and to make sure the economy gains the maximum from its ERM II membership.</p>
<p>Analysis of public opinion...</p>	<p>In implementing the euro and preparing for entry into the eurozone, macroeconomic and microeconomic analyses of the impact on the economy come into the foreground. Nevertheless important – even if often overlooked – is the evaluation of public opinion. The member state may but is not required to opt for a referendum on the common currency. Should it decide to hold one, public opinion will become key but it cannot be ignored even in the reverse case. The belief of citizens in the euro and the currency policy of the European Central Bank is very important and cannot</p>

	<p>be overlooked or even seen as secondary. Public opinion surveys of respondents in the CR show they demand to be informed several years before the transition (as early as possible or several years before the transition 58%). Citizens generally give the most credibility to information provided by the Czech National Bank (85%), European institutions (72%), commercial banks (72%), state administration bodies (48%), regional and local administration bodies (47%), consumer groups (43%) and mass-media (40%).</p>
<p>... and creating an information campaign</p>	<p>It is important to start with an information campaign well in advance of the introduction of the common currency. Its success will be provided for by specific contents focused on the impact of the transition on the day-to-day life of citizens and correct timing. The basis of success lies in people acquiring information from the sources they expect will inform them, from trustworthy sources in a particular timeframe and in adequate number, since multiplicity reinforces the resulting message. The core part of the campaign should start just before the actual introduction of the euro, because a strong interest of the public and the business sphere culminates during that period.</p>

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Tiráž k celé Studii

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Lacina, L. a kol.

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