Monetary Policy and Asset Prices: What Role for Central Banks in New Member States?

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Abstract

The paper deals with the relationship between monetary policy and asset prices. Besides surveying the general discussion, it attempts to extend it to recent developments the New Member States of the EU (NMS), namely in the Czech Republic, Hungary, Poland and Slovakia (EU4). After a brief description of current macroeconomic situation in the NMS, the appropriate reaction of monetary policy to asset prices bubbles is dealt with and the main pros and cons associated with this reaction are summarised. Afterwards, the risks of asset markets bubbles in the EU4 countries are evaluated. Since the capital markets are still underdeveloped and real estate prices boom seems to be natural reaction to the initial undervaluation, the risks are viewed as rather small. The conclusion is thus that for a central bank in mature economies as well as in the NMS is crucial to conduct their monetary policies as well as its supervisory and regulatory roles in a way that does not promote build-up of asset market bubbles. In exceptional times, central banks of small open economies must be ready to use monetary policy steps as a kind of insurance against adverse effects of potentially emerging asset market bubbles.

Keywords: Monetary Policy, Asset Markets, Central Banking, New Member States

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1. Introduction: Current Developments in New Member States

The new Member States of the European Union (NMS) went through successful stabilization process. With low inflation and pressures for the nominal appreciation of domestic currencies, their central banks lowered short-term interest rates to historically low levels. Figure 1 shows the development of monetary policy interest rates of the selected NMS, namely of the Czech Republic, Hungary, Poland and Slovakia (EU4). There is a significant downward trend in all rates, with the exception of Polish rate during 2000 and Hungarian policy swings during 2003. The lowest rates were always seen in the Czech Republic during the period monitored, which is the only economy with experience of negative interest rates differential against ECB rates.¹

*Figure 1: Monetary Policy Interest Rates in the EU4 (%)*

![Graph showing monetary policy interest rates in the EU4 from 1999 to 2004.](image)

*Note: CR=Czech Republic, H=Hungary, P=Poland, SK=Slovakia.*

*Source: Eurostat, the EU4 central bank web pages.*

Figure 2 presents the development of the average lending rates of the EU4 countries, which also slope down during the last decade, especially in Hungary, Poland and Slovakia. The Czech lending rates moved to very low levels already in 1999. The long-term nominal interest rates went also sharply down, not only thanks to the expectations of the euro adoption. In addition, restructured and privatized banks recently began again to extend credit to corporate sector as well as to the households.

The combined effect can be seen mainly in rapid credit expansion in the household sectors, in housing loans segment with yearly increases between 30 to 50% in most countries – see Figure 3. There are fears that the mix of credit boom and optimistic expectations may support investments of a speculative kind and create asset bubbles similar to those experienced by many developed economies in the past. And in the same way, the formation of these bubbles may not be accompanied by visible pressures for consumer prices inflation which is the main focus of central banks. And at the same time, the NMS became part of the worldwide discussion on the impact of low interest rate environment, high liquidity and easy credit availability on the asset markets and on the role of monetary policy in supporting and subsequently taming the asset price inflation.

The central banks in the NMS thus now face the same questions as their counterparts in many developed countries: Are current monetary policies supporting the build-up of asset market bubbles? Should central banks incorporate asset prices into their policy decision process and react by interest rate changes to the asset price inflation? These particular questions have been discussed lively in recent years among central bankers and academics in the US and many other countries. Our intention is to help to extend the discussion also to the local scene, though it may look premature at least to some observers. For these reasons, we will focus mainly on the mentioned EU4 economies.
2. How Should Monetary Policy Respond to Asset Prices?

2.1 Importance of Asset Prices for Central Banks

Whether monetary policy should actively seek to encourage asset price\textsuperscript{2} stability or even whether monetary policy should seek to prevent or at least reduce asset price bubbles really was one of the key current topics of debate is among central bankers. Despite what media sometimes say, hardly any central banker argues that central banks should completely ignore asset prices and focus only on consumer prices defined in terms of consumer price index (CPI) changes. As stressed for example by Bollard (2004), the economists agree that central banks should take asset prices into account, they disagree on whether they should respond to asset prices drifts.

Central banks automatically take asset price developments into account when setting monetary policy, even if formally they focus on price stability defined solely in terms of prices of consumption. This is primarily because asset price movements impact on CPI inflation and large movements in asset prices can have significant implications for CPI inflation. If prices of real estate, for example, are rising faster than inflation, people try to build more houses. To do it they demand more materials used for building, putting pressure on their prices. In addition to that direct impact, asset price movements also feed into CPI inflation through the "wealth effect". As asset prices rise, people tend to feel wealthier. This can apply with any kind of asset, but in many countries we see this mostly through house prices, due to the high proportion of household wealth associated with housing. The Czech

\textsuperscript{2} By an asset price we mean the price of something bought to generate income or to sell for a profit later. Examples are physical assets - like real estate or collectables - and financial assets - like shares, bonds, foreign exchange and other financial instruments.
Republic also belongs to countries in which housing has got a major share in household wealth, and at the same time, share of net financial assets is relatively low and does not have a clear tendency to grow. In countries with developed and broad stock markets the wealth effect applies also to share prices.

Asset prices also feed through into spending and hence inflation in other ways. For example, asset price increases improve balance sheets, increasing the borrowing capacity of firms and individuals. Increases in net worth tend to increase the willingness of lenders to lend and borrowers to borrow, facilitating a general expansion in spending as well as an expansion in spending on the investment to appreciating assets. Most of the time asset and consumer prices roughly move together and asset prices present no major problem for monetary policy. There are however times when asset prices move well out of line with underlying economic fundamentals. Sometimes, asset prices can become disconnected from reasonable expectations of future earnings, resulting in speculative bubbles that cannot be justified by economic fundamentals. Sooner or later, speculative bubbles will burst. But a damage they can do to the economy may be quite huge. This brings us to the question of whether central banks should try to constrain asset price bubbles.

2.2 Three Main Opinions on Asset Price Bubbles

The economists have a variety of opinions on this particular question. We prefer dividing them into three groups. The first one is comprised of those who say that central bank should pay attention to asset markets’ developments, but cannot and should not try to constrain asset price bubbles on their own. Ben Bernanke, famous academic economist, former Fed governor and a future Fed chairman, seems to serve as the speaker of the group. We will use his words to define the other two groups while explaining his views on the issue. We will then question his views and explain why more active approach may sometimes be justified.

Bernanke (1999, 2001 or 2002) suggest a very simple rule for central bank policy regarding asset-market instability: Use the right tool for the job. Bernanke (2002) says that the Fed has two sets of responsibilities – maximum sustainable employment, stable prices, and moderate long-term interest rates on one hand, the stability of the financial system on the other. To achieve that, the Fed has two sets of policy tools: policy interest rates and a range of powers with respect to financial institutions. By using the right tool for the job, he mean that the Fed will do best by focusing its monetary policy instruments on achieving its macro goals, while using its regulatory, supervisory, and lender-of-last resort powers to help ensure financial stability.

Bernanke agrees that a central bank must monitor financial markets intensively and continuously. To the extent that a stock-market boom causes higher spending on consumer goods and investments, it may indicate future inflationary pressures. Policy tightening might therefore be an adequate reaction. But the goal of reaction should be to contain the incipient inflation, not the stock-market boom. Central bank cannot be arbiter of security valuation. In other words, a central bank should use monetary policy to target the economy, not the asset markets. He believes that a far better approach is to use micro-level policies to reduce the incidence of bubbles and to protect the financial system against their effects.
To protect financial system, the central bank should use its regulatory and supervisory powers instead. In particular, it should ensure together with other financial sector regulators that financial institutions and markets are well prepared for a large shock to asset prices. To achieve that, commercial banks must be well capitalized and well diversified and they should stress-test their portfolios against a wide range of scenarios. The central bank can also contribute to reducing the probability of boom-and-bust cycles by supporting more transparent accounting and disclosure practices and working to improve the financial literacy and competence of investors. And if a sudden correction in asset prices does occur, the central banks's first responsibility is to do its part to ensure the integrity of the financial infrastructure-in particular, the payments system and the systems for settling trades of securities and other financial instruments. If necessary, the central bank should provide ample liquidity until the immediate crisis has passed.

Bernanke (2002) “sends” the advocates of a more active monetary policy response to asset prices into two broad camps, differing primarily in how aggressive they think the central bank should to be in attacking the bubbles. The first group favours the lean-against-the-bubble strategy. Its representatives agree that the central bank should take account of and respond to the implications of asset-price changes for its macro goal variables. But also, according to this view, a central bank should try to gently steer asset prices away from a presumed bubble path. The theoretical arguments that have been made for the lean-against-the-bubble strategy are not entirely without merit. It seems that it may be worthwhile for a central bank to take out a little "insurance" against the formation of an asset-price bubble and its potentially adverse effects. Bernanke nevertheless assumes that "leaning against the bubble" is unlikely to be productive in practice.

The second group comprises those preferring a more activist approach. Bernanke labels it aggressive bubble popping. Aggressive bubble-poppers would like to see a central bank raise interest rates proactively to eliminate potential bubbles. Bernanke views this particular approach as risky and dangerous. He supports this opinion by pointing out to Federal Reserve Policy in the 1920s. When the interest rates peaked in August 1929, the economy was already slowing, though the stock prices were still rather high. The Fed was trying to prick the stock market bubble but succeeded only to kill the economy. It seems to us that something of the sort may also happened in Japan during 1990s. The result was the lost decade of Japanese economy.

We agree that generally there are clear-cut arguments against an activist approach. First, a central bank cannot reliably identify bubbles in asset prices. This seems to be a crucial argument. What we know is that monetary policy response to an asset price increase should depend on the source of the increase. And we agree that central banks should not react to asset prices unless the indicate changes in expected inflation. Unfortunately, it is rather difficult to know at a certain point in time whether the increase reflects fundamental improvements or excessively optimistic expectations. It is thus also difficult to know whether the asset prices changes indicate improved productivity or higher expected prices. But in some occasions we can be quite sure that bubble is on the way because we simply cannot find fundamentals behind asset price drift.
Second, even if a central bank could identify bubbles, monetary policy does not possess appropriate tools for effective use against them. A small increase in policy interest rate can only lead to correspondingly modest decline in the likelihood or size of a bubble. It is unlikely that a small increase in short-term interest rates, unaccompanied by a significant slowdown of economy, will induce speculators to modify their equity or real estate investment plans. Interest rates simply have a limited power to affect the perceptions which move asset prices in the first place. To materially affect some asset prices, such as housing, interest rates might need to move probably by much more than would be required just to keep CPI inflation comfortably within the target range. Since interest rate changes affect not just house prices, but also the prices of most other assets, goods and services, there would be secondary, unintended consequences, with potentially serious consequences for the economy as a whole.

Third problem is timing of a central bank’s reaction. Once a central bank becomes sure that a bubble has emerged, it will probably be too late to act with interest rate hikes. These may conflict with other economic forces that began to act, instead. Given the lag that we think applies between an interest rate move and its effect on the real economy, the risk is high that policy moves would be wrongly timed and only make matters worse. If interest rates are high at the moment that a bubble bursts, those high interest rates will still impact on the economy two years on. This would make the landing harder.

Fourth, pursuing a separate asset price objective could mean having to compromise on normal inflation objective. Seeking to stabilise rising house prices or an overheated stock market might mean having to force inflation lower than otherwise would be required. It might also mean greater variability in the real economy, interest rates and, potentially, the exchange rate.

Does all that mean that Bernanke is right? We would say that in many ways yes. But we would also say that Bernanke ignores some important aspects. First he seems to ignore the question what to do if the bubble is emerging without any signs of inflationary pressures? Inflation measured in terms of consumer prices has not always signalled when imbalances in the economy have been building up. A strong expansion in credit and increasing asset prices have preceded almost all banking crises and the majority of deep recessions in countries around the world over the past one hundred years. In many cases inflation has at the same time been low and stable before the crisis.

Central bank reaction to growth in asset prices is believed to be adequate only when signals exist that economy may become overheated. However, prevailing monetary policy models used to forecast inflation pressures often derive demand pressures (approximated by the output gap) from current inflation pressures. Given that, some signals that inflation pressures may increase in a more distant future may be ignored, especially if monetary policy horizons are too short.

Here we can provide a realistic scenario for a small open economy. It may appear when higher economic growth creates excessively optimistic expectations that lead to nominal appreciation of domestic currency. In such a situation, a very low inflation can prevail even under a rapid credit growth and asset price acceleration for rather a long time. When the open inflation pressures finally appear, it may be too late for monetary policy to react. Forecasts of
resource utilization and inflation can also be systematically inaccurate because the models and assessments used do not take account of the independent role that asset prices and debt can play. Also, as a result of structural changes, historical relationships may have changed, thus causing the central bank, for example, to come to incorrect conclusions about the output gap and potential growth. Nevertheless, the central banks in increasing numbers compile financial stability analyses that should reveal these particular risks.

If these analyses identify the risk of emerging bubble, responding is rather challenging. Nonetheless, the risks of the landing from the build-up and bursting of large asset price bubbles warrants taking some risks in an attempt to moderate the problem. There are cases when the asset price misalignment is sufficiently obvious that one can be confident enough to take the risk. Such situations are likely to be rare. And the risks may be considerable. In such a situation, tightening monetary policy may lead consumer price inflation even outside the target range. Central bank can be then blamed for squeezing growth from the economy. Nevertheless, by raising interest rates at an early stage when asset prices are starting to accelerate and before the expansion in credit has become too sharp, the central bank can indeed achieve somewhat lower inflation than is desirable in the short term, but may avoid a subsequent collapse in asset prices that could lead to considerably lower output and inflation in the longer term. And somewhat tighter monetary policy than otherwise would be able to counter an over-optimistic pricing of financial assets and properties.

2.3 Prudential Measures and Regulatory Features as a Solution?

Bernanke also seems to forget that micro-policies are also difficult to apply in reality. He is not the only one. The new issue of the IMF World Economic Outlook (September 2005, p. 133) argues that "in cases where house price inflation remains robust, a combination of moral suasion and if necessary prudential measures could help limit potential risks; over the long term, regulatory features - including those that potentially constrain supply - that may exacerbate price pressures need also to be addressed".

Hilbet et al. (2005) provide an extensive list of such measures and features. Among prudential measures, higher and differentiated capital requirements, tighter loan classification and provisioning rules, dynamic provisioning (accounts for the phase of business cycle in calculating loan-loss provisions), stricter assessment of collateral, or tighter eligibility criteria for certain loans are suggested. Supervisory measures include increasing disclosure requirements, closer inspection, periodic stress testing. Some countries also applied administrative measures like bank-by-bank credit limits or mandatory credit rationing. These measures are not generally viewed as "first best option" for taming excessive credit dynamics. This applies especially for the "prudential measures" that should be used only when normal prudential measures (limits) do not work well and when the new ones can move the system towards the "best practice". All this sounds well, but reality is a bit frustrating. It is rather

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3 The recommendations seem to build on recent IMF Working Paper by Hilberts et. al. (2005).

4 This sort of measures was used in the Czech Republic at the end of 1990s. Supervisory authority required the banks to mount up provisions for covering the loss credits collateralized by real estate to 100% value during three years. The reason behind the measure was the evidence that banks during 1990s were lending against rather overestimated values of real estate.
difficult to find examples of the "prudential measures" or "regulatory features" that would be in use in developed countries. A typical applicant is a developing or transitional country in major problems, though sometimes an attempt to apply them appears in mature economies too.

Can some measures of this kind be recommended to the Czech Republic or other NMS if a housing bubble emerges in the future and at the same time, no problems with price stability exist? Probably not, not only because the framework has been already strengthened and there is hardly any room for further tightening. Besides that, the banking sector is preparing for the adoption of Basel2 rules. These together with international accounting rules make the application of some nonstandard measures not so easy.

The possibility to use prudential measures (in terms of anticyclical action) with the intention to address asset price bubbles was convincingly questioned by Bollard (2004). He finds administrative instruments blunt, harming newcomers to the market, distorting resource allocation and potentially depriving the private sector of sound investment opportunities. Prudential measures are unlikely to be very effective in addressing asset price cycles too. The implementation of policy changes would take time, after which there would be a potentially long and variable lag in the impact on asset prices. The use of such tools for macroeconomic purposes conflict with the objective for which such tools were originally designed - i.e. financial stability. Indeed, the use of prudential regulation to moderate asset price cycles might backfire in some circumstances, creating perverse incentives for banks to bias their lending into riskier ends of the lending spectrum, which in turn could reduce the stability of the financial system.

3. Asset Markets and Risk of Bubbles in the NMS

Restructuring and strengthening of financial sectors in the NMS increased significantly the access to external financing. This facilitates the development of investments in various asset markets (stock market, housing markets, bond market). Despite remarkable progress, some of these markets are generally still relatively thin and undeveloped relatively to mature economies. Nevertheless, this does not mean that the risks are relatively small. It may rather imply that it is more difficult to analyze these markets and detect potential imbalances. The difficulties are enhanced by the data incompleteness as to the developments of the asset markets in the NMS.

From the point of view of international investors, the foreign exchange and stock markets the most interesting in countries that are of our focus. Domestic investors usually predominate in real estate markets with the exception of some major cities. Naturally, fast growth of domestic credit should have a potential to initiate bubbles in these particular markets. Unfortunately, lack of reliable data on these markets in the NMS prevent us from providing comparisons and deriving conclusions. Besides looking at the EU4 economies, we will comment separately on the Czech asset markets events. This is a natural reflection of a specific knowledge and lower uncertainty as to the data.
Despite rapid growth of credit to private sector, prudential indicators do not indicate a sizable increase in financial vulnerabilities in the banking systems of the EU4 countries and the NMS in general. Banks are well capitalized, they make hefty profits and the share of nonperforming loans in their portfolios is declining. However, these are normally lagging indicators of banking problems. We must therefore pay attention to potential risks of rapid credit expansion. The implications of rapid credit growth to private sector are very often discussed with other the EU4 central banks. We usually agree that the risks are relatively low or even nonexistent. The reason is quite simple – the low base phenomenon.

3.1 Foreign Exchange Markets

There is an asset price that is a subject to direct reaction of monetary policy of many central banks – exchange rate. This reaction is given by the straight impact of exchange rate on the inflation. There might be disputes whether or not foreign exchange is an asset as well as whether or not monetary policy interest rates should react to exchange rate swings. In practice, exchange rate is such an important variable that central banks, especially in small open economies, can hardly ignore. Many central banks, which apply the floating regime, therefore adjust their interest rates or intervene when facing significant exchange rate changes (Frait, 2005).

The currencies of the EU4 countries became popular assets among international investors soon after the initial period of transition. The exchange rates of these currencies have been rather volatile in some periods and some swings may be viewed as bubbles. Figure 4 shows year over year changes of the EU4 currencies, which demonstrates relatively high correlation of appreciation and depreciation waves.

Figure 4: Dynamics of Nominal Exchange Rates of the EU4 against EUR (y_o_y, %)

Note: CZK=Czech Koruna, HUF=Hungarian Forint, PLN=Polish Zloty, SKK=Slovak Koruna; (+) appreciation, (-) depreciation. Shadow part identifies the membership of the EU.
Source: Eurostat, IMF-IFS CD-ROM and authors’ calculations.

In the Czech Republic, a bubble-like situation was observed in 2002 when the CNB viewed the sharp appreciation of the koruna as unjustified by the fundamentals, labelled it a bubble
and responded by interventions as well as interest rates cuts. The CNB was explaining its stance by the supposition that the appreciation was caused by the ill-perceived expectations of massive capital inflows due to privatization sales. The CNB thus tried to spread the correct information among the market participants and acting on top of speaking was necessary to secure credibility of the information content. The fact is that finally the koruna started to depreciate and up to now is still a bit weaker compared to its peak in July 2002 (left hand side of figure A1 in the appendix). The right hand side of this figure then shows what we can expect from floating exchange rate regime: y-o-y appreciations by 10 to 15% followed by similar depreciation. PLN seems to be even more volatile than CZK: 20% up in 2001, then 15% down in 2003 and 20% up again in 2005. HUF also behaves like this though the focus of the authorities on the exchange rate limits the fluctuations.

3.2 Stock Exchange Markets

Probably the first asset market bubble registered during the recent history of the Czech economy followed the voucher privatization in 1993-1995. During this period more than 60% of population obtained shares in hundreds of firms or privatization funds. Despite the initial optimistic expectations, the bubble burst soon since most of the shares were losing the value rapidly. The bust is captured, though only partially, by the decline in the official CNB-120 and PX-50 stock market indices⁵ - see figure 5.

Figure 5: Stock Market Indices in the Czech Republic (points)

![Graph showing stock market indices](image)

Note: CNB_120 = The Czech National Bank monitored trends in the share price movements of 120 issues traded on the Prague Stock Exchange. The component companies were chosen to reflect the economy as a whole and thus all industries (1st March 1995 = 1000 points); PX50 = consists of the most attractive domestic stocks traded on the Prague Stock Exchange in terms of turnover and market capitalization (5th April 1994 = 1000 points).

Source: www.cnb.cz

⁵ There were two waves of voucher privatization. The shares from the first one started to be listed in June and July 1993 (622 plus 333 titles), from the second one in March 1995 (674 titles). The CNB-120 index was published from the end of 1993 till 31.12.1999. Publishing of PX-50 began in April 1994 and throughout time changed composition completely. The index is thus rather an imprecise description of the voucher shares performance. Many shares of individual firms as well as privatization funds that were not included in the index lost value completely and were removed from any trading.
The allocation of the shares among the population surely had a kind of wealth effect which was probably not that strong. Hanousek and Tůma (2002) conclude that the consumers behaved according to the permanent income hypothesis and demonstrate that only a minor part of newly created assets actually lead to an immediate increase in household consumption. Strong growth in domestic demand of the period was thus driven primarily by the corporate credit boom brought about by loose financial constraint of the newly emerged banking sector. It was no surprise that the stock prices bust was followed by the real economy bust later on (Frait 2000). Monetary policy could not react much because its objective during those days was to keep the exchange rate fixed.

How about current stock markets in the EU4 countries? Recent sharp increases in stock exchange indices have already opened debate on potential overvaluation due to purchases of foreign investors searching for some higher yields. Figure 6 displays almost ten years history of stock exchange indices in the EU4 economies. The movement were similar especially among Czech, Hungarien and Polish capital market. Especially from the second half of 2003 we observe clear strong growth of all indices

Figure 6: Stock Market Indices in the EU4 (1995Q1=100)

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Note: CR=Czech Republic (PX50), H=Hungary (BUX, rhs), P=Poland, SK=Slovak Republic. Shadow part identifies the membership of the EU.

Source: Eurostat and authors’ calculations.

Our ambition is not to add to this particular debate. Instead, we tried to find to what extent the cycles in EU4 stock exchanges were associated with corresponding business cycles. With this in mind, we calculated output gaps and stock exchange gaps by detrending the original series by Band-Pass filter. The final outcomes are presented in figure 7, which also confirms that the development of the Czech, Hungarian and Polish capital market is in accordance with the development of the real GDP. This relationship was not valid for significant period in the Slovak case.

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6 See for example Christiano and Fitzgerald (2003).
The results suggest that stock prices generally reflect economic activity. Positive output gaps would in this case indicate future inflation pressures, the associated positive gap in stock prices would then provide no new piece of information. Reality is a bit different. Standard monetary policy models base their estimations of actual output gap more on the current state of inflation pressures than on the data on economic activity. Monetary policy models in some countries therefore do incorporate stock market data. The inclusion of stock market depends on a country and a structure of model used. However, the features of stock markets in EU4 countries (like limited issuance of quoted equity or a low level of market capitalization) mean that their information content has rather a limited importance. Figures 8 confirms, that the highest market capitalization is in the Czech Republic (from the second half of 2002) and that in all the EU4 countries their levels increse (strongly in the Czech Republic, Hungary and Poland, slowly in Slovakia).
3.3 Housing Market

The growth rates in mortgage markets in the NMS countries in recent years seem to be tremendous. However, the share of mortgages on GDP is still negligible compared to countries like Netherlands or Great Britain. This is captured well by figure 9 plotting growth in mortgage lending between 1998 and 2004 against mortgages stock as a percentage of GDP. All EU4 countries are where they should be as economies in a catching-up process.

Housing loans are the fastest growing component of credit in the EU4 countries too. How much should central banks be concerned with potential house prices bubble? It is difficult
generally to say because we do not have comparable data series at our disposal. As far as the Czech Republic is concerned, available data presented in figure 10 can hardly be interpreted as a risk of a bubble. Despite remarkable dynamics in land prices, real estate prices seem to be flat in the last two years. Price increases so far must be viewed mostly as movements towards more realistic values.

Figure 10: Real Estate and Land Prices in the Czech Republic and Prague (1999Q1=100)

Note: CR=Czech Republic. Shadow part identifies the membership of the EU.
Source: Czech Statistical Office and the internal calculation of the Czech National Bank.

3.4 Global Liquidity, Housing Loans and Real Estate Prices

In the last few years, low nominal and real interests plus high global liquidity were reflected in many countries by relatively high growth in credit and money supply. At the same time, many countries have experienced a real estate prices boom. There is an interesting discussion among economists whether the money supply dynamics causes real estate prices to rise or whether increased money creation is only a natural consequence of increased money demand due to the wealth effect of real estate prices developments. This particular discussion is important for assessing the inflationary potential of current money supply dynamics. If it is a consequence of the above defined wealth effect, the inflation risk may be low since after the real estate price growth slows down, demand for money will slow down too. Money supply growth rates would then tend to much lower numbers.

Of course, money supply growth may add to real estate price expansion. In many countries, credit dynamics is apparently associated with housing loans extension. We could see number of countries with real estate price increase of more than 10% yearly in recent years (France, Greece, Ireland, Italy, Spain, Great Britain, South Africa, New Zealand, U.S.A. or Australia). According to the Economist (that compiles representative indices of real estate prices), relatively to income, the real estate prices peaked historically in 2004 in the U.S., Australia, Great Britain, France, Ireland, Netherlands, New Zealand and Spain\(^7\). In some countries, structural changes in financial markets seem to be behind it. In some countries of the euro area, the fall of nominal interest rates to a German level acted as a booster. We plot credit

\(^7\) Currently we can see stagnation or even a decline in real estate prices in some of these countries.
growth and real estate prices in figure 11. We can see a relatively strong correlation. Still, we cannot assign a causal relation to it.

Figure 11: Correlation between credit growth and real estate prices in developed countries

Note: DOMESTIC_CREDIT = 65.96 + 0.088 * HOUSE_PRICES
Source: own calculations based on IMF IFS and the Economist indices (Economic Intelligence Unit database).

Real estate market trends should be of concern of central banks in countries in which real estate prices have a strong impact on consumer spending. This applies primarily to economies with prevailing mortgages with floating interest rate and with widespread “mortgage equity withdrawal” (borrowing that is secured of the housing stock but not invested in)\(^8\). And these are the same countries that are prone to real estate market bubbles associated with periods of low real interest rates and strong credit expansion.

A dominant view among central bankers is the one that does not associate actual growth in real assets with the inflation because it does not have influence on value of money expressed in goods and services. The reason is simple - the future inflation should already be embodied in real asset prices. These can be expressed as discounted value of future incomes from holding the assets. The discount factor for real asset valuation can be approximated by real interest rate. If central banks base their decisions on the estimated future inflation, they stabilize in a certain way real interest rate. The prices of real assets then do not constitute a new piece of information. The application of this particular logic to real estate prices is nevertheless questionable. Number of activities linked to real estate influence value of money in terms of goods and services. The changes in real estate prices then have a direct impact on domestic demand via the wealth effect or via the ability to borrow against collateral. Real estate prices change can thus be, under some circumstances, viewed to some extent as new information for policymakers. As far as the EU4 countries are concerned, current credit dynamics does not seem to pose risks to asset markets and financial sectors. For their monetary policies thus “benign neglect” still makes sense.

\(^8\) One of the examples is Netherlands where decline in real estate prices growth from 20% in 2000 to zero in 2003 lead to drop in consumption and to recession. It may hardly make a sense to blame the euro.
4. Conclusion

Central banks do have tremendous difficulties in identifying and taming asset price bubbles. Neither monetary policy instruments nor the supervisory and regulatory measures can be much helpful when a bubble occurs. It is therefore crucial for a central bank to conduct its monetary policy as well as its supervisory and regulatory roles in a way that does not promote build-up of asset market bubbles. Monetary policy must therefore be maximally forward-looking. Central banks should not be thinking only in terms of the next two years which is a standard of monetary policy models. Given the potentially long-term nature of asset price misalignments, analyses of financial stability supporting monetary policy making must look at longer horizons while applying risk management approach to financial market developments. In exceptional times, central banks of small open economies must be ready to use monetary policy steps as a kind of insurance against adverse effects of potentially emerging asset market bubble. Reaction to other sort of bubbles should be rate, depends on particular conditions prevailing in a particular moment. As far as EU4 countries are concerned, current credit dynamics does not seem to pose risks to asset markets and financial sectors. For their monetary policies thus “bening neglect” still makes sense.

References:
Appendix

Figure A1: The Nominal Exchange Rates in the EU4

Note: rhs: (+) appreciation, (-) depreciation.
Source: Eurostat, IMF-IFS CD-ROM and authors’ calculations.