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REMARKS ON FINANCIAL CRISIS, SPECULATIVE BUBLES AND SOME SPECIFICS IN THE CZECH ECONOMY

Abstract:

This paper deals with financial crisis and bubbles on financial markets. Authors first compare theoretical approaches to the crisis, then identify common characteristics of past financial crisis and the recent crises, then analyze price bubbles as a possible source of the crisis, ways of their estimation and possible responses of economic policies. The analytical part is focused on the case of the Czech Republic, as the paper finds some specific features in the bubble performance in the Czech Republic, as the Czech economy was characterized by the low cost of labour and very low price of properties, a heritage of the transformation era.

Keywords:

financial crises, speculative bubbles, specifics features in the Czech economy

JEL Classification: E32, G01

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Introduction

Free markets ideology presents markets as self correcting and efficient. In reality market equillibrium is probelmatic and markets sometimes fall into depression. This is also how financial markets work. Recently many studies have confirmed that the „invisible hand“ does not ensure avoiding fluctuations and high volatility. Economists take sharp discusion on what to do, if anything at all. Among many others Carron and Friedman (1982), Aizenmann and Noy (2013), Bernanke, B. (1983), Bordo and Harold (2014).

Either theoretically, either in real sense, financial crises are not easy to study and predict. In economic theory there are two main aproches to definition of financil crises. They were posed by Minsky (1977) and Kindleberg (1978). Both definitons connect financial crises with natural business cycle. Minsky presents financial markets as fragile and prone to crises and fluctuations. Minsky distinguishes between three kinds of financing investments – hedging, when future firms´cashflow repays all their borrowings, spekulative financing, when firms are able to pay interest on their borrowings with their cashflow, but must roll over their debt to repay the principal, and the riskiest way of financing investment – so called Ponzi investment, when firms´ cashflow is not enough to pay even interest on their debt and firms are speculating on appreciation of the underlying asset to cover their liabilities. If the appreciation does not happen, firms remain exposed. In the last 3 decades speculative and Ponzi mode prevailed, meaning that financial markets were very vulnerable. Kindleberg, on the other hand, works with speculative mania as result of external or internal shocks and profit seeking. Both authors conclude that financial markets show far higher volatility and crisis propensity than other markets. Economies could avoid their troubles by relying on hedge financing, but when growth looks assured, temptation to borrow more seems to be irresistible. Periods of economic stability give way, surprisingly, to financial instability.

A different point of view is offered by Reinhart and Rogoff (2009) who studied crises over centuries. They find out that in last two centuries there were 5 long periods of instability of financial markets. Coherently with other historical studies, the authors start studying history of financial crises from Dutch Tulip crises in 1637, though liquidity crises are well known yet from Roman Empire times. Increase of instability of modern financial markets and higher propensity to crisis towards the end of 20 th century is often believed to be connected with liberalisation of financial markets, new technologies used on

financial markets, spread of eurocurrency markets and rise of portfolio investments. However, we believe that roots of recent financial crises can be seen above all in real shocks – fall of Gold standard and Bretton Woods regime or oil shocks in 70th to name some of recent important shocks to world economy.

Roots of financial crises

The demise of the Bretton Woods regime in 1971-3, infact, marked the beginning of deregulation of financial markets. Money market and market oriented mechanisms for capital allocation went hand in hand with elimination of direct controls on bank lending as well as relaxing rules and lines between savings banks, commercial banks and insurance companies. Banks and other financial instituions were free to develop what will be later called „financial derivates“. Depositors no longer lended to firms or governments, but bought a melted-down financial derivate with foggy fundaments. Such a freedom had its costs – to name the best known – the US loan crisis in 1980s or Japan financial and economic crisis in 1990s. Subsequently, a stricter supervision was urgently claimed.

Supervision was very lax, if ever applicated before mid 1990s when calls for a more systematic regulation arrised. In the EU (similarily as in many developed countries) European System of Financial Supervision was developed and integrated national regulatory authorities. The main aim of the „newly born“ supervisory framework was to reduce risk and severity of future financial crises[1]. Regulators correctly understood that thanks to globalization and improvements in communication next financial crisis would very likely be severe and would spread up worldwide.

History tells us quite plainly that regulators are fighting always the last war and financial innovation is ahead of regulators. In 2007 the collapse of Lehman Brothers and AIG prompted a huge increase in perceived risk, escaleted financial stress and started the most severe postwar crisis to date. Thus, the shock came from financial sector this time, although, in some countries, the main trouble originated in real estate market or from budget deficits by Hsu (2017). Excessively expansionary economic policies fueled a speculative bubble in real estates financed by new and complex financial instruments. While policymakers were persuaded that at markets tended towards equilibrium as

[1] https://eiopa.europa.eu

people digested all available information, debt levels apparently reached a „breaking point“ called often „Minsky Moment“. Apparently safe instruments issued by apparently reliable financial institutions were sold enthusiastically worldwide. Subsequent bust in 2009 spread across the globe in a flash leaving many economies collapsed.

The anatomy of this last crisis was not unsimilar to all previous crises – bubble fueled by expansion of credits – panic (failure of the first bank – LBs) – bubble burst and run for liquidity. This crash causes decline in prices and increases insolvencies and bankruptcies. Eichengreen and O´Rourke (2010) find that decline in industrial production in a few months prior to last crisis has been at least as severe as in the period following shortly the 1929 peak. Also global stock markets are falling even faster now than in the Great Depression. This corresponds to the IMF Economic Outlook[2] findings that the higher the long-run growth rate of an economy, the shallower the recession and the greater the amplitude of expansions. Minsky, decades before, also found a positive relationship between lenght of „good time“ periods and severity of subsequent burst.

It has been proved that since the mid-1980s, recessions in advanced economies have become less frequent and milder, while expansions have become longer lasting. Off course, this may be the result of good luck, primarily reflecting the absence of large shocks to the world economy, but Minsky´s prediction was fulfilled – after so long period of prosperity, the last crisis couldn´t be but severe.

If recent downturn was not as severe as during the Great Depression, it was largely thanks to different policy response in the two cases. Many countries implemented countercyclical policies, bank stabilization programs and bailout packages – however costly, they helped significantly to moderate the descent of output. Interestingly, the implemented expansionary monetary and fiscal policies (incl. Bank stabilization programs) failed to shorten the crisis which ended to last over 4 years.

At this point the questions like „When will the next crisis hit? Have we entered a quiet era?“ arrise. Answers to these questions are everyone´s guess. They depend on how succesfull new mesures imposed by regulators and governments will be, and however, lessons from history tell us that crisis tend to re-appear randomly. Economic models continuously fail to estimate economic future based on past behavior and people are far

[2] World Economic Outlook 2009 – Crisis and Recovery, IMF, APR 2009

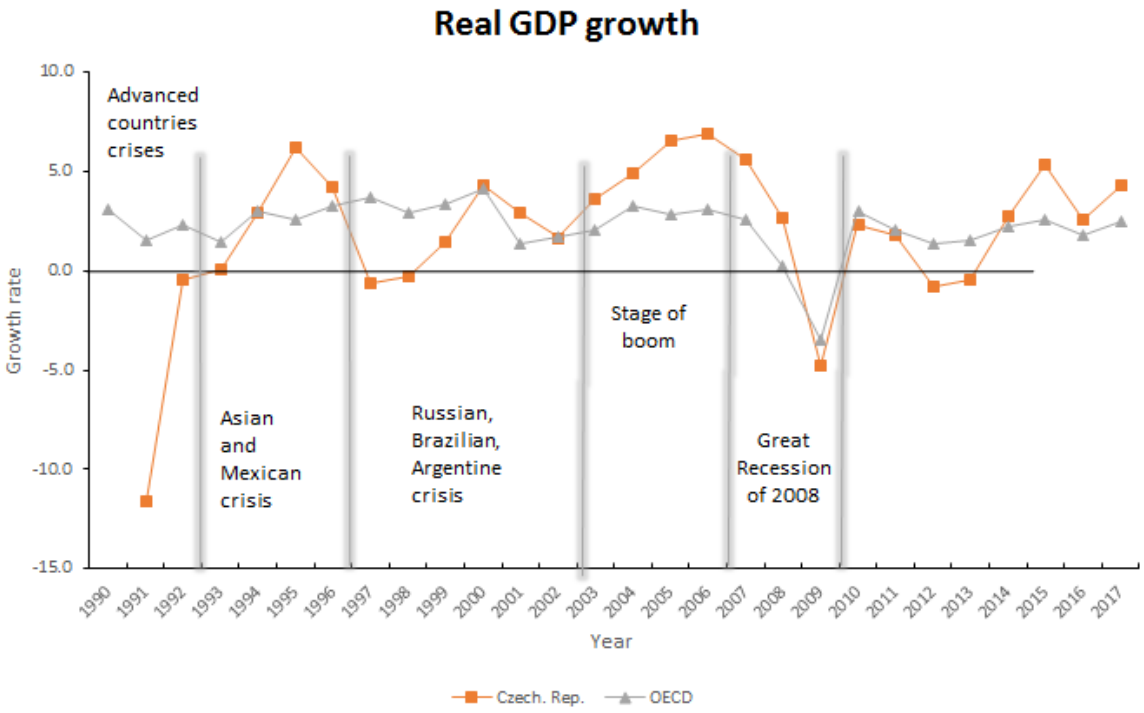
from being rational actors. In time, memories of the 2008 turmoil will dim. Firms will again race to expand, banks to fund them and regulators to loosen constraints. So the question is not „if“ but „when“.

Last financial crisis – evidence from data

The last financial crisis began in the USA in 2007 and during one year spread all over the world by financial and trade channels. In the years preceding this crisis economists were convinced that crisis is hard to hurt developped economies and only emerging markets are keen to crisis. Economic reality from the 1990s (Mexico, Brazil) was supporting this generaly spread belief.

The severity and lenght of recession succeeding the 2007/8 financial crisis is often compared with the Great recession 1929-33. The following graph (1) shows the GDP drop off in the USA, European Union and the Czech Republic.

Graph1:



Speculative bubles

Speculative bubbles can be observed in early stages of all financial crisis when price of assets devotes from equilibrium market price called „fundamental“. It is off course difficult to recognize the bubble from regular growth in asset price. As Gurkaynal (2005) argues, speculative bubbles are usually identified ex post, in the moment of subsequent dropp of in asset prices. Identification of speculative bubbles even during the bubble is hardly possible as the asset price is determined by factors either inside the „fundamental“ either outside this „fundamental“, as for example investment optimism or herding.

Growth in asset prices represents excess return for investors. As Bordo, Jeane (2002), or Borio, Lowe (2002) argue, bubbles and subsequent bursts have serious impact into the real economy, mainly connected with bad investments or excessive consumption fuelled by illusion of growing wealth. The most dangerous are so called pro-cyclical assets such as real estates and technology shares. Growth in prices in these markets is steady and usually fast in good times and fuels optimistic expectations. The risk is thus underestimated and bursts are more severe.

Approach to bubbles veries among economic schools. Keynes (1936) argues that bubbles are likely in the economy, while e.g. Friedman (1953) stresses that rational behaviour will eliminate bubble creation. Contempory theories on existence of bubbles in the economy relies on behavioral economics, thus on behaviour of economic subjects, not necessarily rational in every moment. Rational subjects would recognize the risk of bubble and would arbitrarily prevent the bubble from growing. De Long (1990) argues that arbitrage is often unefficient and prices grow continuously. Irrational economic subjects repeat mistakes, often because of overconfidence.

Methods of testing data and identifying bubbles usually use ratio indicators such as price to earnings or price to return. Hlavacek and Komarek (2009) tested bubble on real estates market in the Czech Republic. Estimations usually do not provide a 100% reliability. The OECD (2007) study on OECD economies did not identify speculative bubble and describes markets of OECD countries as very stable. Nevertheless some indicatiors as price to income or price to return were gorwing, interest rates were very ow nd decreasing nd mortgage market was very generous. The hit of financial crisis soon after the release of this study was a big surprise for many economists.

Detection of financial crisis is far from being simple and easy. Financial crisis and bubbles are caused partly by quantificable indicators, partly by soft indicators, such as psychological factors influencing behaviour of economic subjects, mainly investment decicionmaking, asymetric information or herding.

While Minsky and Kindleberg see the bubble on asset market connected to excessive optimism in the boom phase which leads to risky investments, Taylor (2007), Bullard (2012) describe loose monetary policy followed by credit expansion as primary cause of bubble creation. This concept merges the Minski approach to financial crisis with the Austrian business cycle theory, which founds the roots of financial crisis in low interest rates. The buble burst overspils the uncertainty and risk feelings into the real economy. Consumption, wealth efect and new credits drop down. Reinhart Rogoff (2009) finds that the GDP decline lasts for approximately 2 years, but it takes 4 years to recover the previous rate of growth.

Dissimilarities in impact of financial crisis 2007/8 in the Czech Republic

The Czech real estate market was not hit by financial crisis in the first moments after the bubble burst as it happened e.g. in the USA. Prices of real estates kept growing steadily not only in the 2007 but during all year 2008. Differences in real estates price dynamics come from the fact that the Czech economy is still an economy in transition, thus the growth of prices on real estate market can be partly explained by convergence to developped countries price level. The bubble risk was lower in case of the Czech republic also measured by Price to Return a Price to Income indicators. Values of these indicators were lower in the Czech Republic compared to the developed economies during 2007 and 2007.

If we again compare the Czech Republic position in 2007/8 with Western Europe countries and the US, we find that regional differencies are much higher, while socio-economic consequences are much lower in the Czech Rpublic. The bubble risk is higher in Prague (Czech capital), but socio-economic impacts are low in Prague. Also, the Czech real estate market experiences a spekulative demad growth in 2002-2003 when the country joined the EU. The real estate market prices growth during 2007/8 was driven by wage growth and long lasting growth of employment, most visible in the capital, off course.

The Czech economy can be described as an economy in transition with an immature mortgage market, low liquidity on real estate market and long lasting state regulations of rents. A considerable share of housing properties was privatized at low cost from the state ownership and traditionaly a large proportion of own savings is used for new property acquisitions. This is why there is not a strong relationship between real estates prices and loans to households. Prices react to change in loans with a gap of over one year.

Conclusions

Complexity of financial crisis and spekulative bubbles fuels a long lasting economic disputes on sources of their creation. Some economists see their origin in external shocks, others in excessive credits and price growth. Different aproaches give different monetary policy recommendations for central banks. Long enforced recommendation *mop up after*, aimed to minimize ex post costs, did not work wery successfuly during the last crisis. The new approach *leaning against the wind* – consists in an active and soonest reaction of central bank to financial impalance. As the frequence of financial imbalances is growing, the second approach results as more appropriate response of monetary policy.

The Czech economy experienced high levels og economic growth and macroeconomic stability during 2005-2007. Only with a considerable delay, in late 2008, the economy was hurt by a recession accompanied by drop of HDP, rise of unemployment, rise of government spendings and decrease of investments. This recession was fueled mainly by external sources. A short lasting recovery came in 2010-2011, followed by a second recession in mid 2011. Gradual growth during 2013-14 switched into overheating in the last few quarters. Constant strong growths of real estates prices would deserve a further research in sense of possible existence of spekulative bubble.

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