REAL ESTATE BUBBLE BURSTS AND GOVERNMENT POLICY DURING CRISIS: EXAMPLES OF ESTONIA, IRELAND AND SWEDEN

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Abstract

The objective of current article is to view previous experience with real estate crises and taking into account such experience find suitable policy reactions to overcome the current Estonian crisis as smoothly as possible. Beside overall theoretical guidelines for overcoming the crisis, examples of Sweden and Ireland are viewed. The policy issues suggested for Estonia include some changes in tax laws, avoiding expansionary fiscal policy, making lending stricter and borrower responsible to higher extent, cooperation of different authorities to tackle problem of bad loans, initiating wage and price cut, paying more attention to exporting sector.

Keywords: real estate crisis, asset bubble burst, crisis policy.

Introduction

Recessions, crises or other problems are common in a nowadays economic environment, occurring systematically over time. In the light of the world economic downturn in 2008 Estonia faces a real estate bubble burst, which is spreading rapidly into the real economy. In such difficult times government has an important role to play and its action can lead to recovery or deterioration of the situation. Although problems are often country specific, depending on the monetary system, taxation, membership in international organizations and other factors, still several universal guidelines could be brought out from the previous crisis overcoming policy practice. The first part of current paper summarizes main theoretical and practical policy reactions to real estate bubble burst. The second part summarizes the course of different real estate bubble bursts (examples of Sweden, Ireland and Estonia). The last part of the paper suggests government policy measures for minimizing and overcoming real estate bubble burst impact on Estonian society, using also the comparative examples of Swedish and Irish activities. Results of the paper can be very well used for further academic research, but also by policy makers to widen their understanding of crisis processes.

1. Theoretical background
1.1. Economic crises and real estate bubble bursts

A very popular topic in modern economic research (both in micro- and macroeconomic levels) has been economic crisis, viewed from its different sides – policy responses to crisis, crisis management, crisis causes, crisis processes etc. The term *crisis* has a variety of different definitions, of which one is: a situation where there are a lot of problems that must be dealt with quickly so that the situation does not get worse or more dangerous (Longman English dictionary). Similarly to crisis definition, *economic crisis* has a variety of meanings, but in the commonest sense we understand it as sharp downturn in economic environment that does not settle quickly and needs intervention. It is evident, that changes in economic environment must be rapid to grow into crisis, because otherwise market participants can react to changes swiftly without any extremes. The term crisis is often used alongside with terms *recession*, *bubble burst*, *bust*, *end of cycle* etc. – their meanings dependent of situation and of author can be the same or different. From literature we can find a number of different economic crisis forms: asset bubble bursts (i.e. US real estate market in 2008), currency crisis (i.e. Zimbabwe dollar in late 2000s), sharp rise in imported product prices (Russian gas price rise in 2008-2009), loss of competitive advantage of some industry (European clothing industry in last decades) etc. In all previous examples we see a sudden sharp anomaly compared to former situation, which without further intervention can give rise to extremely negative scenarios in economic environment.

Real estate bubble burst (or real estate bust) can be seen as one example of economic crisis and its most common features in literature are (not necessarily all occurring simultaneously):

1. remarkable decrease of real estate transactions,
2. remarkable decrease of real estate demand and growth of real estate supply,
3. remarkable drop in real estate prices,
4. growth in the number of bad mortgage loans,
5. bankruptcies and payment difficulties of real estate firms and individuals.

In many cases the previously mentioned features succeed each other in some logical chain, for instance sharp drop in buying activity results in the drop of prices. In wider economic perspective the features of real estate bubble burst are inevitably connected to other economic indicators, whereas real estate bubble burst can precede or succeed some other crisis processes in local or international economic environment. For instance high unemployment can cause sharp rise in the number of people having payment difficulties, which in turn rises the share of property or loans connected to such people, eventually for instance rising real estate supply at market through defaulted mortgage sales. Derived from the previous when viewing a real estate bubble burst, its reasons and effects on economy, other processes in economic environment have crucial importance on determining the depth and length of real estate crisis.

Literature suggests several indicators that could be used for asset bubble burst measurement. Most of such indicators are mainly widely used macroeconomic measures, which historically have proven to be good crisis markers. Detken and Smets use in their framework variables grouped into three categories: asset prices, real variables, monetary variables (Detken, Smets 2004). In case of real estate as one type of assets, the list of possible indicators is in many cases much more specific, taking into account even different qualitative measures (see Jaffee 1994b). Helbling proved in his work that real estate bubble burst occurs simultaneously with sharp slowdowns in economic activity and with outright recessions, which gives support for the usage of not real estate specific indicators (Helbling 2005).

When looking into previous literature of real estate bubble bursts, the common burst preceding features marked are:

1. too risky lending (high leverage, insufficient guarantees, lack of business planning etc.),
2. poor regulations (financial, bankruptcy, urban planning, real estate etc.),
3. rapid economic growth (especially because of abnormal local consumption),
4. low interest rates and debt growth,
5. grown imaginary welfare.

(see for instance: Herring, Wachter 1998; Collyns, Senhadji 2002; Berg, Ostry 1999)

It must be noted, that due to remarkable differences in economic environment and situations, previously listed features can have some variation among countries and circumstances, but in cross-section of previous examples of features most of them are still present. More variation we can find in the extent and influence of specific features.

1.2. Policies to overcome crisis

Every crisis more or less needs government intervention, whether it would be with financial, legislative, communication or other measures. As real estate bubble burst is often preceded or succeeded by other problems in economy, in literature we can find a lot of evidence of policies of overall stabilization that are not only real estate sector specific. Such distinction between policies is necessary, because otherwise there are possibilities to interpret government action not correctly – for instance state loan to support some industry has definitely no direct effect on real estate sector. In large, the literature divides policies into two: short-term and long-term policies (see Moreno *et al.* 1998). Short-term policies are directed to solve or minimize the problems (economic environment stabilization), whereas long-term policies are directed to problem avoidance in the future and creating basis for new growth. Table 1 gives a list of main government policies during asset bubble burst.

Previously given policies are in many cases cross-sectoral and not only real estate sector specific. For instance buying problematic firms is common policy in banking sector, but it is tightly connected to real estate sector, as such loans can be mostly mortgage loans.

An important issue lies if and to what extent should government pay to overcome real estate crisis and in the following examples part we see cases of government cost. For instance it is important to argument, whether it is justified to pay with government funds for losses of private firms and excessive risks taken. Different crisis situations have cost governments up to 25% of GDP (Caprio, Klingebiel 1996).

Table 1. Short-term and long-term policy measures to off-set an asset crisis

Short-term	Long-term
1. **Direct financial aid.** Aid can be in a form of loan or irredeemable support. Recent evidence comes from USA financial and automotive sector. 2. **Reorganization of problematic firms.** Firms are reorganized, which can mean breaking a firm into several parts, carrying out fundamental changes without breaking a firm, incorporating firms etc (i.e. in USA procedures according to Chapter 11). 3. **Buying problematic firms.** Government buys problematic firms or a part of them (i.e. Parex Banka case in Latvia). 4. **Suppressing panic.** Media is used as an instrument to avoid further serious problems (Russian government action, although rouble was devaluated). In many cases media plays crucial role in determining the extent and length of crisis. 5. **Fiscal measures.** Decisions about taxation are common during crisis. Some type of fiscal measures can be still classified as long-term initiatives (for detailed discussion about fiscal measures during crisis see Blanchard *et al.* 2008).	1. **Audit of regulations that failed to prevent the bubble formation and burst.** The most common action after bubble burst is to go through different regulations to find out why such situation could emerge and make necessary correctives (i.e. G20 leaders, IMF and other institutions have agreed in the necessity to improve international financial market regulations). 2. **Recovery of international and local trust and capital flows**. The restoration of international /local trust and capital flows can be achieved with the help of different measures. It can include package fiscal, monetary, labour, foreign trade etc. polivy measures.

Source: Composed by authors.

2. Swedish experience with property crises

This section deals with the largest crisis in the Swedish property market since the Second World War. It occurred during the early 1990s, following a rapid growth of house prices and construction volumes in the other half of 1980s. After five years of remarkable growth, the market experienced a three year period of falling property prices and the crisis spread to other sectors of the economy as well. Overall, the Swedish GDP shrank by 6% and unemployment rose from 3% to 12% during the most difficult years.

Table 2 summarizes some of the main indicators of the Swedish property market development, highlighting the start of the boom in 1985, start of the crisis in 1990 and the end of the crisis in 1997. As always, it is judgmental to set a univocal date for the beginnings and ends in an economic crisis. However, based on other scholarly works and official statistics, these years were turning points for most of the indicators.

Table 2. Selected indicators of the Swedish property market (1980-1997)

Indicator	Base year 1980	Start of the boom 1985	End of the boom 1990	Middle of the crisis 1993	End of the crisis 1997
Investments in the construction sector (real prices, 1980 = 100)					
One-family homes	100	62	88	39	26
Apartment buildings	100	198	241	195	76
Corporate property	100	93	107	84	96
Property value in real prices (1980 = 100)					
One-family homes	100	70	97	72	76
Second homes	100	75	103	83	87
Apartment buildings	100	94	165	93	n.a.
Corporate property	100	244	422	144	n.a.
Number transactions (1980 = 100)					
One-family homes	100	113	108	65	107
Second homes	100	118	125	93	111

n.a. – not available

Sources: Jaffee (1994a) based on Swedish Statistics Office and Bank for International Settlements and authors' estimations or calculations based on *Bostads- och byggnadsstatistisk årsbok* (2008).

The main reasons behind the boom and the later crisis in the Swedish property market could be outlined as follows:

1. Aggressive marketing of property credits during the boom years, following the liberalization of the credit market in 1985. Before that the Swedish banks were allowed to determine neither their credit volumes nor their interest rates (Boksjö, Lönnborg-Andersson 1994). After the liberalization, most banks saw a window of opportunity thanks to the relaxed regulations. The Swedish stock of credits rose rapidly from 100% of the GDP to 150% of the GDP. During 1986 and 1988, the annual growth rates of credits exceeded 20% (Wohlin 1998).
2. Generous subsidies and tax breaks to loan takers and housing developers. In the early 1980s Swedish homeowners were allowed to discount 64% of their interest payments in their tax declaration (Jaffee 1994a). In addition, housing developers could apply for a subsidy from the government for the construction of rental apartments to vulnerable groups, such as students and pensioners. It has been estimated (Jaffee 1994a) that various kinds of subsidies to the construction sector were around 4% of the GDP, a figure that was considerably higher than those in France or Finland (around 1.5% of the GDP) and the Federal Republic of Germany (1% of the GDP).
3. Macroeconomic conditions made credits cheap. During the late 1980s, Sweden ran a comparatively high rate of inflation, which reduced the real interest rates. An analysis done at Uppsala University demonstrates that for a while, the real interest rates were negative when considering the tax breaks mentioned in

point 2 (Boksjö, Lönnborg-Andersson 1994). Table 3 provides further details of the macroeconomic development prior and during the crisis.

4. Imbalances in the property market development. During the construction boom of the late 1980s, an uneven number of dwellings were completed in different parts of the country. While in the major cities, the construction volumes were lower than population increase, the opposite was true for some smaller towns. As the crisis hit in 1990, the imbalances led to steeper price decreases in those towns were comparatively too many new homes had been built (Jaffee 1994a).

Table 3 demonstrates that macroeconomic conditions also supported first the boom and later a crisis in the property market. Following two devaluations of the Swedish krona, there was an upward pressure on inflation. The consumer price index doubled during the period of 1981 to 1991. Interest rates increased steadily as the crisis commenced. For two days in September 1992 the main interest rate of the Swedish Central Bank was 500 per cent in a desperate effort to maintain the fixed exchange rate of the krona. Thereafter the fixed exchange rate policy was given up.

Table 3. Selected macroeconomic indicators in Sweden (1980-1997)

Indicator	**Start of the boom 1985**	**End of the boom 1990**	**Middle of the crisis 1993**	**End of the crisis 1997**
Consumer prices change (%)	7.0	10.1	4.8	0.4
GDP change (%)	2.2	1.0	-2.1	2.5
Main interest rate (January 1)	n.a.	12.0	11.0	4.1

Sources: Swedish Statistics Office, Central Bank of Sweden.

Once the crisis hit, the Swedish government took a number of measures to tackle the economic and property market crisis.

1. One of the most influential steps was the establishment of “bad banks” to take over the problematic loans. Two banks (Nordbanken and Gota Bank) had run into serious difficulties by 1992. The government decided to take over the ownership in those banks. The mortgage portfolio was analyzed and problematic credits were transferred into “bad bank”, independent financial institutions aiming to find a solution to the credits. Initially, the “healthy” parts of the two banks continued operate as normal. In 1993, the banks were merged and later partially privatized. The “bad banks” operated until 1997, when it was deemed that they were no longer needed (Lundgren 1998). Jennergren and Näslund (1998) estimate that the total cost of using „bad banks” as an instrument to deal with the financial crisis was around 35 billion Swedish kronor. It has been estimated that the total cost of bad credits that the Swedish banks had to bear was around 200 billion kronor (Lundgren 1998).
2. Already before the crisis had begun, some of the generous tax breaks and subsidies to homeowners were altered. The share of interest payments that could be discounted in the income declaration was first reduced from 64% to 50% and later on to 30% (Jaffee 1994a).

3. Bank Support Committee (*Bankstödsnämnden* in Swedish) was formed. The aim of the Committee was to evaluate the need for public sector support to financial institutions and, in case support was deemed to be necessary, to determine the amount. The Committee considered where it was likely that bank would survive the crisis in medium term, given the share of bad credits, value of mortgages and other factors. During the crisis, all seven larger banks in Sweden applied for the credit, with the exception of Handelsbanken. S-E-Banken withdrew its application but all other banks received financial support from the Committee (Ingves and Lind 1998).
4. The central government ran an expansionary fiscal policy during the crisis. This caused a budget deficit of up to 12% of the GDP at its highest. In a short term perspective, such a measure stimulated the economy and consequently avoided an even greater drop in the GDP (Bäckström 1998). However, such a policy is not sustainable in the long run and could lead to higher taxes at a later stage. Indeed, the overall share of taxes in the GDP increased during 1995 to 2000 (Ekonomifakta 2009).

Ingves and Lind (1998) suggest that one of the reasons for a rapid recovery form the crisis was the politician's ability to collaborate at difficult times. For example, the opposition parties were included when major decisions, such as the establishment of the Bank Support Committee, had to be taken. In addition to economic policy measures, the crisis was also tackled through the actions of households and enterprises. While during the boom years, consumption had exceeded savings, the trend was quickly reversed in the early 1990s. Exporters also contributed to a relatively smooth and rapid solution of the crisis (Bäckström 1998).

3. Ongoing property crisis in Ireland

Taking into account different data and position of analytics, it can be said that the Republic of Ireland is currently witnessing a real estate bubble burst. Ireland has seen enormous growth rates during the past years and has been called one of the most prosperous countries in the world (so-called Celtic Tiger). However currently there has been significant drop in its position in the world's competitiveness list (World Competitiveness Yearbook). The situation in Ireland is deteriorating gradually, but no major problems (compared to the magnitude of Swedish experience) have risen so far and that is why by now no specific data of government measures and their effectiveness is available. Still certain action has been announced and they can be analyzed for suitability in Estonian circumstances.

First of all main factors contributing to Irish real estate boom are being viewed:

1. Employment and income started to rise, which increased the possibilities of buying real estate and that in turn the demand for real estate. At the same time productivity was stagnant.
2. Ireland's high salaries made it an attractive working place for people all around Europe, especially for a large number of Eastern European workers, which in turn accelerated the demand for real estate.

3. Favourable euro-zone interest rate policy made cost of loans low and in addition high growth in real estate value made real estate collateral practically risk free.
4. Government's budget constantly rose, which made it possible to spend more and contribute to private sector driven bubble.
5. Ireland had remarkably liberal planning policy and there were no remarkable development obstacles throughout the country.

Table 4 shows main indicators of Irish property market. A downturn has been evident starting from 2007, reflecting in following features:
1. Sharp drop in house completions.
2. Sharp drop in loan approvals.
3. Drop in property prices (since the mid-2008 situation has become much worse, being also property type and location specific, but there was no official data available)
4. Problems in servicing the loans, liquidation sales.

Table 4. Selected indicators of the Irish property market (1988-2008)

	1988	**1998**	**2006**	**2008**
Total house completions	15 654	42 349	93 419 (peak figure)	48 190 (11 months)
Estimate of housing stock (incl. vacant)	1 005 000	1 329 000	1 804 000	1 882 000 (year 2007)
Loan approvals	42 543 (1 430.0 €m)	68 925 (5 654.9 €m)	114 593 (31 382.2 €m)	35 181 (9 948.3 €m) – half year
Average new house and apartment price (€)	52 450	125 302	305 637	313 678 – half year
Average second-hand house and apartment price (€)	50 501	134 529	371 447	356 638 – half year
National house building cost index	100 – year 1991	124.9	194.2	209.4 (average 10 months)

Source: Department of Environment, Heritage & Local Government.

Table 5. Selected macroeconomic indicators in Ireland (2006-2009)

	2006	**2007**	**2008**	**2009 (forecast.)**
GDP growth	5.7%	5.3%	-1.4%	-4.0%
Unemployment	4.4%	4.5%	6.3%	9.2%
CPI	4.0%	4.9%	4.1%	-1.0%

Sources: Bank of Ireland; Addendum to the Irish Stability Program Update.

The Government of Ireland has agreed upon package of economic measures to fight the forthcoming difficulties and the measures include three main categories: stabilizing public finances, short-term stabilization of economy and working to initiate major reforms in society. Of those main attention has been drawn on economy stabilizing measures as most urgent and tightly connected to real estate. (Irish Government Agreement … 2009)

Beside measures like stimulating and restructuring economy, cutting government costs, working to keep as many jobs as possible, certain action has already been planned concerning problems in real estate sector and in banking sector influenced by real estate sector. For instance Irish government is going to assist those who get into difficulties with their mortgages and in early 2009 a new statutory Code of Practice in relation to mortgage arrears and home repossessions will be brought forward, and the mortgage interest scheme will be reviewed; it is recognized that stabilizing the financial and banking sector is essential (Irish Government Agreement … 2009).

Ireland has so far been known for very low repossession rates of real estate by banks and building societies, mainly because of the Irish Banking Federation Code of Practice for Mortgage Arrears (Irish Banking Federation). The first half of year 2009 will show how the government directed changes in that code, but also other assistance measures will have effect. As repossession rates have so far shown no rapid growth, government has so far given no financial aid to banking sector.

4. Estonian experience with real estate crises combined with structural and cyclical crises

Following section deals with the Estonian real estate and construction sector crises, which started to spread into the other economic sectors in the early 2009. The real depth of the crises is not clear yet and therefore currently is possible to explain the main reasons of the crises and describe the expansion mechanism of the crises. Beginning of the Estonian real estate crises was under rather different macroeconomic environment compared with highly developed economies (Swedish case above). But it shares some common elements of the catching up economies with extremely rapidly growing domestic demand and excessive loans inflow (partly the Irish case).

In order to provide better insights into the logic of Estonian real estate crisis development the Estonian macroeconomic environment as well fundamentals of the privatization policy of the housing used by Estonian government will be provided. Major stylized facts about the reasons of real estate crises are following:

1) During the 1990's Estonia just started its rapid economic convergence process and Estonian income level was still lagging seriously behind the EU-15. Estonian PPP adjusted GDP per capita formed only 42.3% of EU-15 average in year 1999 (Eurostat 2009). Therefore all factors facilitating nominal and real convergence process (e.g. differences in factor prices, unmet demand of customers, outdated housing stock etc) started to work. Between 2000 and 2007 Estonian economy experienced in average GDP growth rate of 8.2% which is among the highest in the group of emerging economies (Eurostat 2009).

2) During the late 1990's due to the Asian and Russian crises the interest rates in Estonian economy were very high – around 12% (see Table 6), reflecting the high risk perceptions of foreign banks toward investing into Estonian economy.
3) Message given in 1998 by EU about the inclusion of Estonia into the first group of EU new entrants provided foreign investors (particularly from Finland and other Scandinavian countries) strong incentives to invest into Estonian economy. The inflow of FDI into Estonia increased rapidly.
4) After the Russian crises in 1998 almost 95% of Estonian banking sector was acquired by foreign investors (SEB, Swedbank). Positive news about the Estonian future joining with EU reduced the risk perspectives and ended up with the rapid reduction of interest rates provided by foreign banks to customers in Estonia.
5) Privatization policy of Estonian government was extremely important enabling factor of the real estate boom. Prior to privatisation in January 1993 the Estonian state owned 25.8%; municipalities 34.7%, cooperatives 5% and private sector 34.5% of all housing units (Eesti eluruumide … 2002). Through the privatisation process ownership as well responsibility and maintenance of housing was transferred from the state and municipal governments to individuals. Virtually the whole housing stock built during the Soviet period by state and municipalities (around 400 000 square metres) was given using so-called privatization vouchers (without any real payment) to the families living in those apartments (Derrick *et al.* 1999). By the end of 2001 the privatization was finished and around 95.8% of housing units were in private ownership, which was among the biggest ratios in the Europe (Eesti Vabariigi … 2002).
6) The outcome of the privatisation was the creation of the huge group of owners, who gained opportunity to use their property as collateral in order to get loans from the banking sector. This lucrative opportunity created strong interest among foreign commercial banks to offer housing loans for the renovation and building new better quality houses and apartments. Extremely intensive competition between foreign banks for the Estonian customers combined with the decline of EURIBOR created rapid reduction of interest rates. It was already the launching signal of the real estate boom.

The above described combination of the use of privatized housing stock, reduction of interest rates and huge increase in housing loans provided by the foreign owned commercial banks, strong economic growth, moderate inflation and rapid wage increase resulted in the unprecedented growth of housing market. This imbalance was further fuelled by the tax incentives provided by the Estonian government to the individuals in the form of deductions from the housing loan interest payments.

Table 6. Growth of selected macroeconomic and real estate sector indicators in Estonia between 1999 and 2008 (cumulative, 1999=100)

Indicators	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**
Nominal GDP	100	114	130	145	163	181	208	246	286	299
Consumer price index	100	104	110	114	115	119	124	129	138	152
Average gross wage	100	111	124	138	151	164	182	212	255	282
Stock of home loans in value	100	133	180	276	444	698	1219	1992	2619	2891
Apartment price in Tallinn *	100	106	173	233	225	300	339	508	573	480
Numbers of transactions with property	100	114	124	120	140	150	187	187	148	86
Total value of property transactions	100	132	158	190	250	328	566	847	657	309
Average interest rate of home loans*	12.1	11.6	11.0	9.6	5.2	4.1	3.8	4.1	5.4	6.6
Growth of living space (in thousand. m2)	68	65	80	70	110	220	280	330	390	570

* Average quality apartments, price of the square metre, 3 rd quarter of all years
** Interest rates in percentage during the third quarter of all years

After the break-up of the Soviet Union in 1991 housing construction in Estonia dramatically decelerated and between 1996 and 2001 only around 60-70 thousand square-metres of living space was built (Eesti Vabariigi … 2002). But in 2003 the dwelling stock increased by 110 and in 2008 already around 570 thousand square-metres. The housing market boom was supported by a massive expansion of the mortgage market. Outstanding housing loans grew from EEK 4.5 billion (€286 million) in 2000 to EEK 97 billion (€6.2bn) in 2008 or in relative terms from 4.7% of GDP in 2000, to 41% in 2008. It means that housing loans grew 29 times between 1999 and 2008 (Estonian Bank 2009). It created huge demand for properties in Estonia – e.g. the average price of 2-room flats in Tallinn (capital of Estonia) rose by 573 % from 2000 to 2007 (see in Table 6). Estonia experienced between 1998 and 2008 the highest house prices increase within the whole Europe (see Figure 1). The percentage changes in house prices (or the house price index) over 10 years using the latest data available, not adjusted for inflation was in Estonia 352 percent, followed by Spain (172%) and Ireland (157%). In contrast the housing price increase in Germany was only 3%. (Global Property Guide 2009).

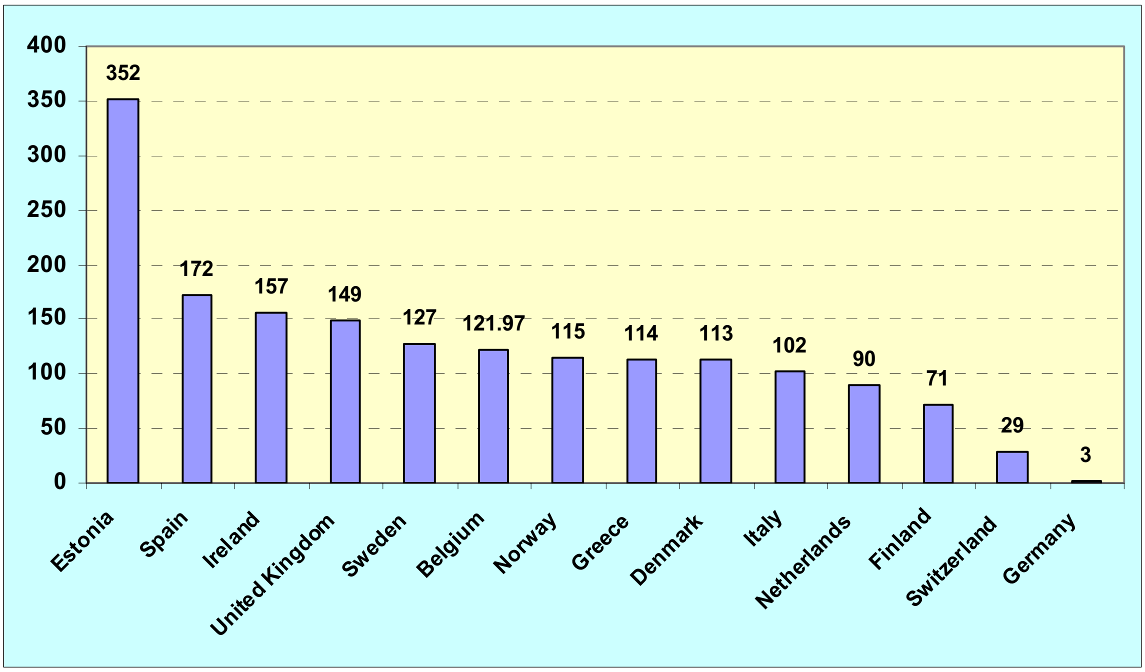

Figure 1. House price change in Europe within last ten years in % (between 1998 and 2008). (Global Property Guide 2009)

But after the years of rapid growth, the Estonian property market experienced a stagnation in late 2007 and during the 2008 property prices started to decline. Tightening loan standards in the wake of the international financial crisis, falling house prices and an abrupt turnaround of consumer confidence have put an end to expanding domestic demand, which has been shrinking since mid-2008. Pro-cyclical fiscal policy of Estonian government has added negative stimulus.

The rapid decline of the property prices is just beginning in early 2009. The spreading of the crises from the real estate and construction sector into other sectors of the economy started during the second half of 2008. Overall, the Estonian GDP shrank by 2% in 2008 and the forecasts for the GDP decline in 2009 are between 5 and 8 percent. Unemployment rose from 4.5% in 2007 up op 9% by the end of 2008 and forecasts are around 12-14 % for the end of 2009.

Estonian government behaviour during the current crises has been quite weak and followed pro-cyclical approach. During the rapid economic growth years fiscal policy was expansionary and aimed to reduce taxes and expand government spending. Particularly toward property market government launched tax incentives to the individuals in the form of deductions from the housing loan interest payments. The most important problem of the government was postponement of the accepting the idea, that property market crises will spread over into the whole economy. The government accepted late 2008 a state budget of Estonia for the 2009, which was extremely optimistic and unrealistic. Already in February 2009 the need for the huge negative supplementary budget (EEK 8bn or €500million) became evident and it will be sent to the parliament mid February 2009.

Conclusion and policy recommendations

In this article we have discussed the causes and courses of property market crises and pointed to policy measures to overcome the crises using examples from Sweden, Ireland and Estonia. While the macroeconomic conditions might vary, a number of similarities can be found across the three countries and their respective situations.

Based on the examples discussed above, we can suggest that a property crisis is preceded by a period of rapid economic growth and/or expansion of the credit market. In a situation where the possibility of borrowing at a low interest rate emerges, banks and households take the opportunity offered by the market. As a consequence, the loans flow into the mortgage market putting an upward pressure on prices, which in turn generates a highly speculative property market. For a while, the credit and property markets will expand but at a point where the discrepancy between the fundamentals of the economy and the actual price levels becomes unsustainable, the bubble bursts and the country slides into a crisis. An important issue is also favourable planning policy and availability of building permits, which additionally boosts property market.

Based on a comparison of the Irish and Swedish experiences with the Estonian case, we propose the following policy (of which some are short-term and other long-term) recommendations for the management of the current property crisis in Estonia:

1) Subsidies and tax breaks are a common tool to stimulate property markets but they should be employed with caution. The Swedish experience suggests that generous subsidies may cause an overheated credit market where the risks are born by the government. For example, before the Swedish property crisis, 50% of interest costs were tax deductible, leading to negative real interest rates at certain periods. In Estonia, the situation is potentially worse, because taking into account maximum deduction sum a large proportion of borrowers can deduct 100% of interest cost. However, we would not recommend changing the tax rules stricter for the time being because this could do further harm to those affected by the crisis. Instead, provisional change of tax rules to help the most endangered social groups could be thought of. For instance one possibility in local circumstances would be to give problem families temporary possibility to deduct not only interest payments, but also principal payments. Other options would include connecting deductions with number of children, working members of household, area of living space per one member of household etc. But after coming out of the crises it is recommended to phase out favourable tax treatment and credit guarantees of housing loans, which fuelled the housing boom (see e.g. also OECD recommendations, 2009).

2) In the long-term, we would encourage policy measures that give the loan-taker more responsibility and make lending stricter. At the moment the bubble has been driven by relatively free lending policy of commercial banks and poor credit scoring. The other issue is the lack of sufficient self-finance (many loans were issued with 0% self-finance). Leaders of G20 countries agreed already in late 2008 that banking regulations need to go through thorough audit (G20 declaration full text). The short-

term regulative issue would be to force Estonian banks to start cooperation through Estonian Bank Association to agree upon unified code of practice on mortgage arrears.

3) Expansionary fiscal policy would expose Estonia to considerable risks. In the Swedish case, the government opted for a solution based on an expansionary fiscal policy, leading to budget deficit and inflation. The conditions of the Estonian economy, most importantly the fixed exchange rate regime (currency board system) and the prospects of joining the Euro in a few years, make such an approach unfavourable for Estonia. Heavily expansionary policy could increase the inflationary threat and also push budget deficit above the three percent thus eliminating any prospects to fulfil Maastricht criteria and join euro-zone.

4) In order to restore competitiveness of the Estonian economy resources should be shifted from serving domestic demand (including property market related activities) to producing for export demand, despite the currently very weak international demand. This measure would help to avoid loss of jobs due to contraction of businesses oriented to domestic market. Government has already announced extensive package for export oriented SMEs.

5) For compensating the collapse of the domestic demand households and firms need to accept lower prices and wages. Deflation is better than devaluation for several reasons. The most important is the fact, that the whole housing loan stock of households and also big part of firms loans are nominated in euro (around the size of 95% of annual GDP). Correction in bubble-time living standard back to more steady state level is needed. When price correction is mostly done by market without government intervention (except no additional value added tax should be introduced) then wage drop could be made easier through labour law.

6) Financial stability should be strengthened, while distortions that contributed to the housing boom should be removed. Given the role of foreign-financed credit in the boom combined with the current recession Estonian Financial Supervision Authority should carefully monitor risks and intensify cooperation with the foreign supervisory bodies. In addition government and municipalities should look through land zoning and building permit issuing regulations in order to cool down development activity.

7) Government should work together with Estonian Bank and foreign commercial banks in order to tackle “bad loan” problem and find balanced solutions to avoid collapse of housing market and create system of softening conditions for households in difficulties.

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