

## Autumn on the real estate market

A vibrant economy, a growing population, increasing salaries, a robust stock market and a delayed rise in indexed lending rates have fuelled demand on the real estate market. The greater supply of housing has apparently absorbed the high demand not to trigger as sharp price increases as witnessed in the housing boom of 2004-2005. However, Kaupthing Research forecasts the market cooling down in 2008 parallel to an economic downturn, and a strong supply at the same time as interest rates are kept high.

### High turnover, limited price increases

Turnover has increased sharply during the first part of 2007, and the weekly number of notarized contracts of sale is running close to the figures seen when the housing boom began in the autumn of 2004, parallel to the entry of the commercial banks to the mortgage loan market. However, property prices have not risen as aggressively as in 2004 despite the similar turnover, indicating that the supply this time round is far greater.

### Rising salaries, but interest rates slow to rise

Wage drift and tax cuts have boosted household purchasing power on the real estate market, while low employment has meant that people are more willing to take on debt. Furthermore, a labour shortage increases the likelihood of people getting a promotion or a higher paid job somewhere else. At the same time, it is only now that the increase in the Central Bank's policy interest rate is beginning to take shape in higher indexed lending rates from financial companies.

### Rising stocks buoying property prices

An increasing proportion of household's disposable earnings are now financial income and rising share prices have significantly boosted income. Admittedly, share ownership is unevenly distributed amongst the population, but nevertheless such a strong performance by a single asset class is bound to influence other assets, including real estate prices.

### Are winds turning on the real estate market?

Certain factors behind the rise in demand on the real estate market have begun to change in recent weeks. Interest rates have increased, the ISK has lost ground, inflation is on the rise and stock prices have slipped. However, the economy is still performing strongly, unemployment is low and the population is growing fast in the Greater Reykjavík area. There are no official figures on the supply of new residences but there are indications that supply will outpace demand by 2008.

### New forecast projects 9% rise in prices this year, 4% in 2008

Kaupthing Research's new real estate forecast projects a 9% rise in property prices this year, followed by a slow down on the market and the 12-month increase will bottom out at 2.5% at nominal value.

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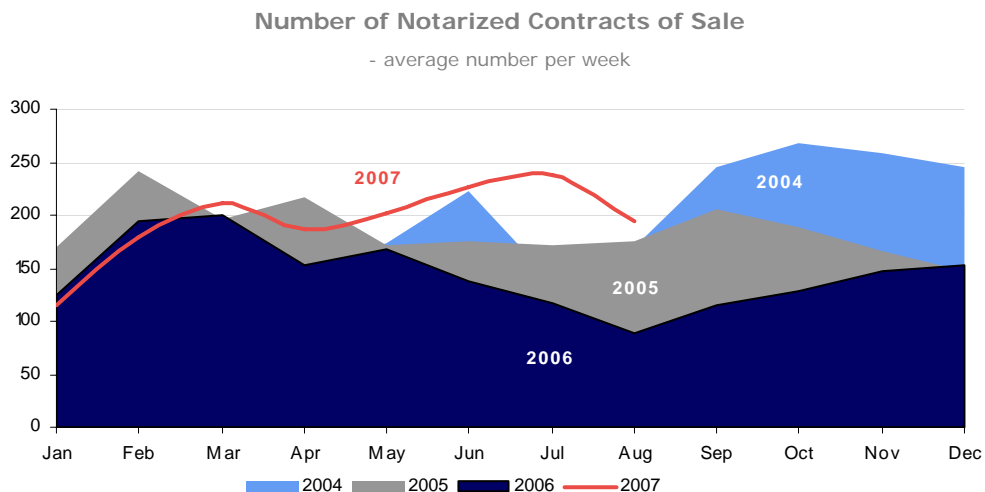
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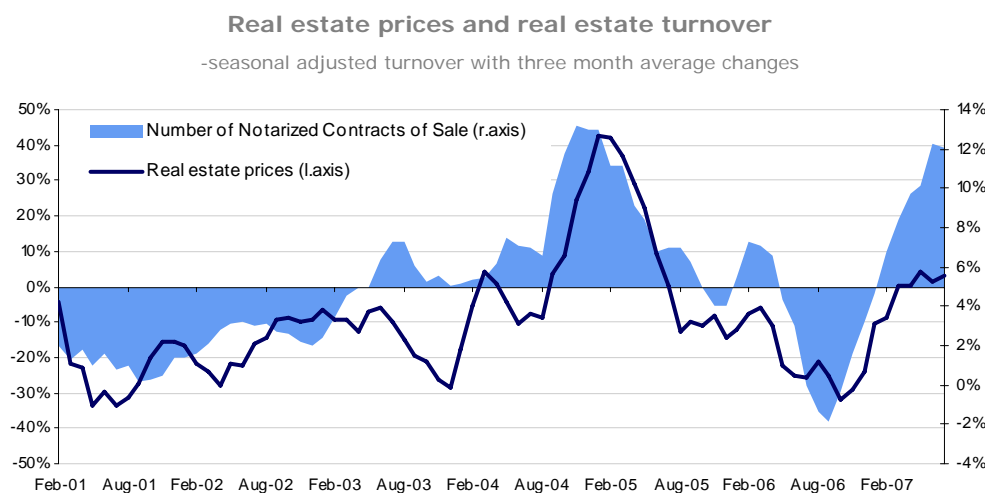
### Turnover almost at 2004 levels

Turnover on the real estate market has spiralled upwards during the first part of 2007, so much in fact that the number of weekly notarized contracts of sale is almost as high as the winter of 2004-2005 after the banks entered the mortgage loans market in Iceland. There are two interesting things about this high turnover. Firstly, how the market has taken off after a period of stagnation in 2006, in spite of the fact the Central Bank of Iceland has kept interest rates sky high.



source: The Land Registry of Iceland

Secondly, the current massive demand has not had as great an effect on prices as during the winter of 2004-2005. Property prices have only climbed 10% so far this year, compared with 25% increase during the first six months after the banks began to offer mortgages at the beginning of September 2004. This indicates that supply has been met rising demand this year and the market has been reasonably well balanced. However, official figures on the number of new residences are not available for this period.



Source: The Land Registry of Iceland

This sharp rise in demand seems to have five main causes.

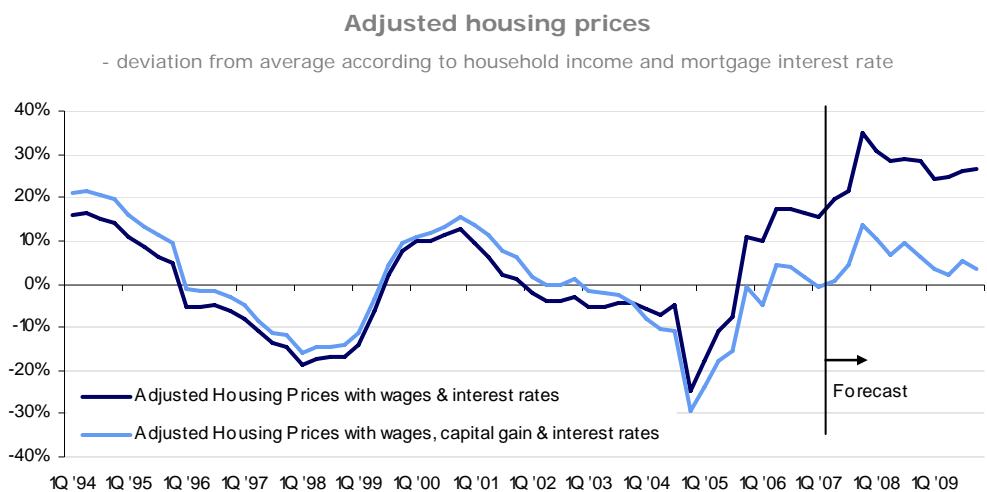
1. **Significant population growth:** There still seems to be considerable accumulated demand around, partly due to the significant growth in population in the Greater Reykjavik area. Over the last 12 months, the population of Iceland has grown by 7,100, or more than 2.5%. The large scale import of labour force also seems to have forced up rent prices, although precise figures are not available, and to have encouraged people to buy property instead. Some people may also have waited to buy property last year due to the ominous economic outlook but have now taken the leap. Confidence has grown this year and removed many people's doubts.
2. **Substantial increase in purchasing power:** Wage drift and tax cuts have increased household purchasing power, enabling many people to invest in property. What is more, unemployment has continued to decline, bestowing a increased sense of security on people and making them more willing to take on debt. It is in times of labour shortage that people are promoted or get new and better paid jobs.
3. **Delayed effect of monetary policy:** The effects of the Central Bank of Iceland's policy interest rate hikes have been slow to pass through to the capital markets in the form of high real interest rates and onwards into higher lending rates on mortgages. In fact it has taken a year for the Central Bank's rate hikes to materialize on the property market, and it was not until this autumn that the banks and the Housing Financing Fund raised their lending rates in line with rising real yields on the bond market, which is the real cost of borrowing in ISK.
4. **Correlation with the ISK:** The general public has to some extent managed to dodge the Central Bank's high interest rates by borrowing in foreign currencies to buy property. Around 20% of new mortgage loans in 2007 have been foreign-currency denominated loans. This is an indication of currency substitution in the face of high interest rates in Iceland. People also seem to have underestimated the risk inherent in such borrowing after the ISK was on an appreciating trend for almost a year. This risk became apparent in August when the ISK began to lose ground in the turmoil linked to the sub-prime crisis, particularly against low yielding currencies. For example, the ISK fell 25% against the yen in August.
5. **Correlation with share prices:** Approximately 20% of household's disposable income is financial income, and income from this source has been increasing rapidly in recent years. Share prices rose by 64% between July 2006 and July 2007. Admittedly, share ownership is unevenly spread among people - many people only little and a few own a lot – but nevertheless such a large scale increase in a single asset class is bound to have an effect on other classes, including property. It is likely that the most expensive property acquisitions, i.e. highest per square meter prices, have been supported by financial income. The strong performance of the stock market has therefore lifted the average deal size on the real estate market.

### When will property prices peak?

The question whether property prices are too high or too low is often answered with reference to household buying power, since interest rates determine the opportunity cost of investments in property and salaries determine how much capital can be put into buying a home. The property market is therefore considered too 'expensive' if property prices or the cost of capital rise more quickly than salaries.

In recent years the proportion of financial income in a household's total income has increased, so that today an estimated 20% of total household income<sup>1</sup> is in the form of financial income, compared to 3% a decade ago. In light of this, Kaupthing Research has estimated household purchasing power by taking into account wage trends on the one hand and financial income on the other.

The arrival of the banks on the mortgage loan market in the autumn of 2004 led to a rise in household buying power, in turn spurring massive demand on the real estate market and a rise in property prices. Despite considerable increases on the property market, prices never strayed far from long-term equilibrium, partly because of the fact that interest rates remained low at the same time and household income rose due to general salary increases and gains on the stock market.



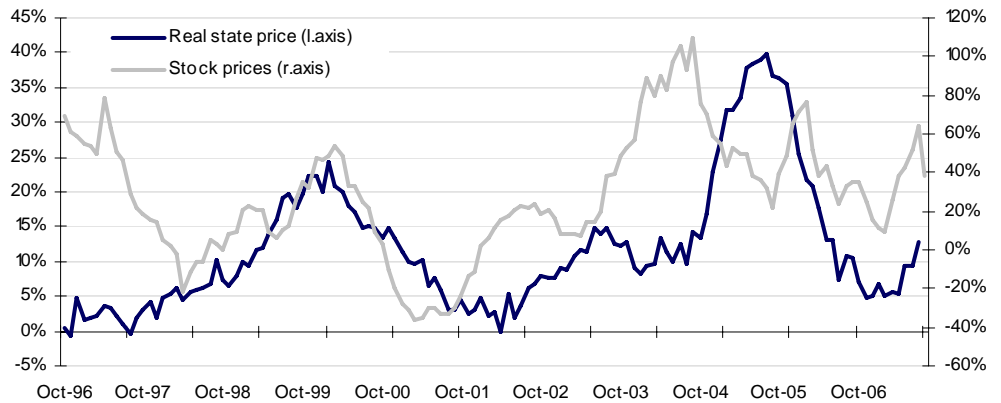
Sources: Kaupthing Research, The Land Registry of Iceland, Statistics Iceland, The HFF

If only salary income is taken into consideration, then the real value of property has skyrocketed over the last year on the back of rising interest rates and spiralling property prices and is currently about 20% above the average since 1994. If Kaupthing Research's forecasts on salaries, interest rates and property prices are accurate, then the real value will rise to 30% above the average before it starts to decline as interest rates fall. However, if it is assumed that 20% of household income is financial income, then the figure is very close to the long-term average and will rise to about 10% above the average this winter.

<sup>1</sup> Based on information from Directorate of Internal Revenue

### Real estate and stock prices

- changes form previous year



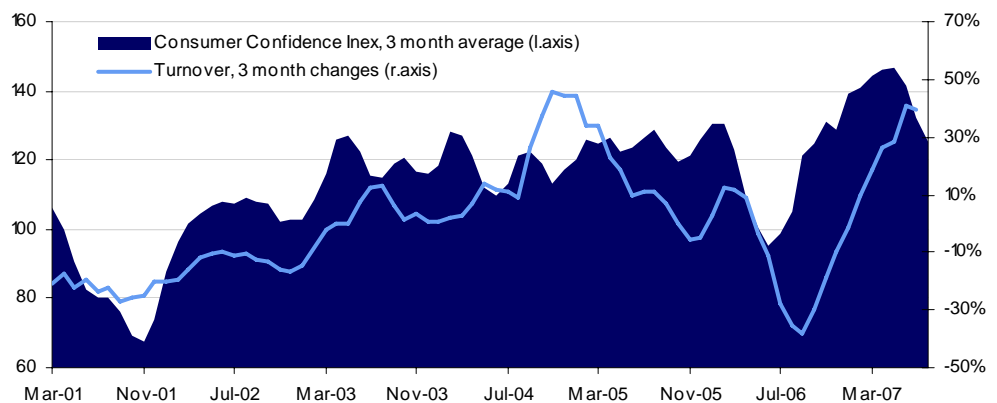
Sources: The Land Registry of Iceland, OMX Nordic Exchange in Iceland

Share ownership is of course unevenly spread, many homes only receive income from salaries. Nevertheless it is clear that gains on the stock market have influenced the real estate market, particularly in the case of larger properties. This means of course that if the situation on the stock markets takes a turn for the worse, the effects will be felt on the real estate market.

### Clues to demand trends

For most people, buying a property is the biggest investment they will ever make and is therefore a popular topic of discussion. The economic outlook is therefore of great significance for the turnover on the real estate market. Gallup's consumer confidence index has thus far been a good indicator of developments in turnover on the real estate markets. As the diagram below indicates, the sharp rise in the consumer confidence index has mirrored the rise in turnover so far this year.

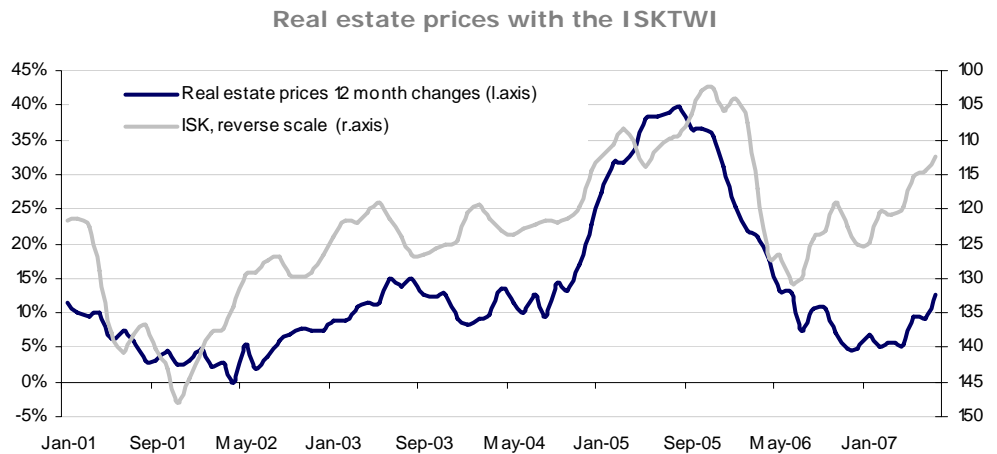
### Consumer confidence and real estate turnover



Sources: Capacent Gallup, The Land Registry of Iceland

The consumer confidence index has now turned and people seem to view the future with increasing concern, partly due to the instability on the financial markets in August. There are firm indications that turnover will shadow this increased pessimism and began to fall in the autumn.

Another risk factor for the real estate market is the instability of the ISK. The ISK has a three-way effect on the real estate market. Firstly, changes in the exchange rate affect the principal of foreign-currency denominated loans – and such loans have been increasing recently. Secondly the exchange rate of the ISK is critical factor in inflation in the short term and, for example, the depreciation of the currency increases the principal of an inflation-linked loan. Thirdly, the exchange rate of the ISK has a huge impact on people's expectations and their assessment of the future and a drop in the exchange rate always makes people pessimistic, which infects through to the property market.



Sources: The Land Registry of Iceland, The central Bank of Iceland

It is therefore hardly surprising that there is a strong reverse correlation between the price of real estate and the exchange rate of the ISK; turnover drops when the exchange rate falls and the real price of property declines. This makes the exchange rate of the ISK one of the main risk factors for the real estate market in the short and medium term, and Kaupthing Research believes that a sharp drop in the exchange rate could pose the greatest danger of a bigger than forecast drop in property prices.

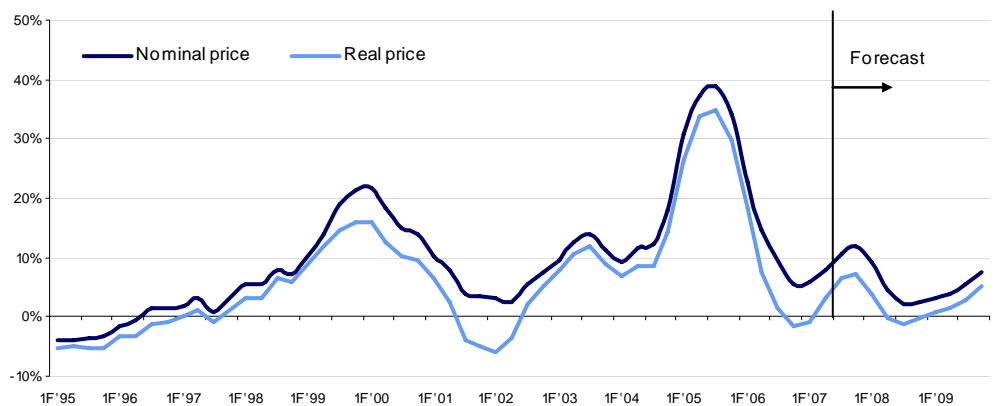
### Forecast on real estate prices in 2008-2009

Kaupthing Research expects activity on the real estate market to slow down towards the end of 2007, when the effects of the Central Bank's monetary policy begin to be felt in full. The effects are already starting to materialize in higher lending rates and more restricted access to credit. At the same time it is likely that the instability of the exchange rate will put people off taking loans in foreign currencies. Furthermore, the high interest premium on international capital markets following the sub-prime crisis has led to a deterioration in banks' credit terms. There is a risk that it will result in weaker credit terms for customers and higher required rates of return on equity when financing real estate transactions.

It is also assumed that the demand in the economy will cool down, the effect of which will also be felt on the real estate market. Kaupthing Research assumes that the price of property will increase slightly during the last few months of the year and the average increase in property price in 2007 will be around 9%. It is also expected that the rate of increase will tail off next year and that the 12-month rate of increase will bottom out at 2.5% at the end of next year. The real estate market will embark on a new course at the beginning of 2009 as the economy starts to pick up and lower interest rates, easier access to loan capital and higher household buying power will stimulate demand on the real estate market.

#### Real estate prices in the capital area

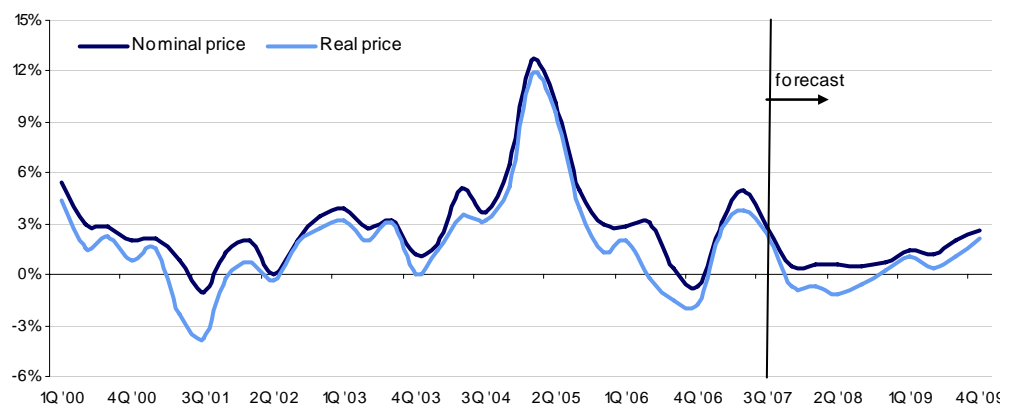
- changes from previous year



Sources: Kaupthing Research, The Land Registry of Iceland

#### Real estate prices in the capital area

- changes from previous quarter



Sources: Kaupthing Research, The Land Registry of Iceland

## Risk factors

Factors which could alter the forecast on real estate prices:

### Lowering the forecast

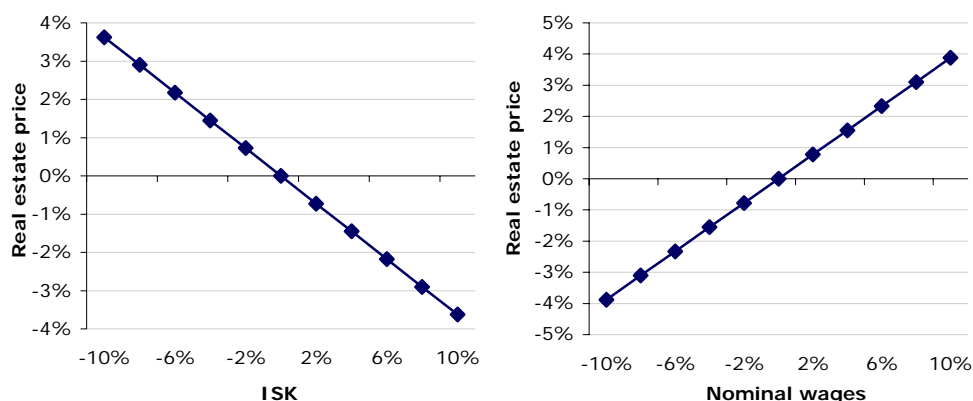
- **Depreciation of the ISK:** Kaupthing Research's exchange rate forecast assumes that the ISK will depreciate in the latter half of 2008, but this trend will be short-lived. A more pronounced or extensive period of depreciation, for example if the sub-prime crisis has more serious repercussions than first thought, could easily lead to a more rapid cool down of the real estate market.
- **Terms on the international credit markets:** The credit terms of banks across the world have worsened considerably recently. Although the Icelandic banks are generally on solid ground, they have not been totally spared. If the sub-prime crisis persists, access to credit will become more restricted and credit terms for homebuyers will be worse.
- **Hard landing:** It seems that there is considerable inflation pressure in the economy and the Central Bank needs to adopt a tight stance on interest rates over the next few quarters to keep it in check. Such a tight stance in the long term can increase the risk of a hard landing – the economy ends up in a bigger downswing than originally forecast
- **Supply of residential property higher than expected:** At the time of writing there is a lot of uncertainty regarding supply in 2007 and beyond. There are indications that the short-lived cool down in the real estate market in 2006 prompted the postponement of many investment projects in the property sector. However, it is clear that if supply recovers in the current upturn on the real estate market, it could result in an oversupply in 2008-2009.

### Raising the forecast

- **Labour market cool down not a certainty:** Kaupthing Research expects the labour market to cool down in the near term. At present, however, all labour market indicators are red hot, increasing the risk of a more persistent wage drift than previously thought. An overheating labour market significantly increases the likelihood of a strong property market with continuing wage drift and job security, which will sustain carefree spending and the import of foreign workers, boosting demand for housing.
- **Relatively quick series of interest rate cuts in 2008:** If the inflation outlook rapidly improves in 2008, the cost of capital may decrease quicker than expected by Kaupthing Research, making investments in property more affordable.

### Sensitivity analysis

- changes from Research's forecast



Source: Kaupthing Research

### Changes from previous quarter

	Housing Price forecast	Contribution of Housing Cost to CPI
1Q 2007	3,10%	0,67%
2Q 2007	5,02%	1,01%
3Q 2007	2,76%	0,90%
4Q 2007	0,54%	-0,25%
1Q 2008	0,55%	-0,13%
2Q 2008	0,60%	0,01%
3Q 2008	0,48%	-0,38%
4Q 2008	0,67%	-0,05%
1Q 2009	1,43%	0,94%
2Q 2009	1,17%	-0,24%
3Q 2009	2,04%	0,32%
4Q 2009	2,55%	0,46%

### Changes from previous year

	Housing Price forecast	Contribution of Housing Cost to CPI
1Q 2007	5,88%	1,29%
2Q 2007	7,93%	2,13%
3Q 2007	10,45%	2,88%
4Q 2007	11,88%	2,40%
1Q 2008	9,11%	1,59%
2Q 2008	4,51%	0,54%
3Q 2008	2,20%	-0,78%
4Q 2008	2,32%	-0,58%
1Q 2009	3,22%	0,52%
2Q 2009	3,80%	0,27%
3Q 2009	5,41%	0,98%
4Q 2009	7,38%	1,50%

Source: Kaupthing Research

### Precondition and forecast

- changes from previous year in average value

Year	Wages	Interest rates on housing loans	Demand*	ISK	Housing Prices (nominal prices)	Housing Prices (real prices)
2007	8,9%	5,0%	13%	119	9,1%	4,1%
2008	6,8%	5,9%	-11%	124	4,4%	0,4%
2009	5,3%	5,8%	-2%	121	5,0%	2,5%

\* Divergence from long-term average, according to Number of Notarized Contracts of Sale

Source: Kaupthing Research

#### Provisional release:

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