The Riksbank's monitoring of the Swedish mortgage market expanded statistics base

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As lending to Swedish households for housing purposes grows, the Riksbank is increasing the resources it allocates to monitoring the housing market in Sweden. As a result, the standards for available statistics and the quality of these statistics have been raised. This report summarizes the statistics developed within the framework for the investigation into the risks on the Swedish housing market. The statistics include an indicator for an inventory of unsold homes, information about how long homes were available for sale and the ratio between the list and sale price. Furthermore, the results from a survey of real estate agents in Sweden are presented.

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1. Introduction

Statistics Sweden (SCB) is responsible for a large portion of the statistics about the Swedish housing market. The statistics reported on SCB's website include, for example, Real Estate Price Index (quarterly) and Real Estate Prices (monthly). SCB also reports statistics of prices for tenant-owned apartments based on transfer prices for tenant-owned apartments. However, these statistics are based on annual data. Because of this, the Riksbank has also used statistics for tenantowner apartments from Hemnet and Svensk Mäklarstatistik in its analysis of the development of the housing market. These statistics give tenant-owner apartment prices per square meter (rolling three-month moving average) on a monthly basis since January 2002.

At the same time, as lending to Swedish households for housing purposes grows, the Riksbank is increasing the resources it allocates to monitoring the housing market in Sweden. As a result, the standards for available statistics and the quality of these statistics have been raised. One example of this are statistics that can facilitate the analysis of house price fluctuations and risks on the Swedish housing market, including variables that can be interpreted in terms of supply and demand. .

This report presents a brief description of the results of the Riksbank's project to develop new statistics and indicators and proposes further developments for housing market statistics.

New statistics for the housing market

New statistics include an inventory of unsold homes, information about how long these homes were available for sale and the ratio between the list and sale price. The data include statistics for both tenant-owner apartments and one- and twodwelling buildings broken down into the following categories: National, Greater Stockholm, Greater Gothenburg, Greater Malmö and National (excluding the major cities). The statistics are reported both with and without new production.

The Riksbank, in cooperation with The Association of Swedish Real Estate Agents, will also regularly conduct surveys of the real estate agents' expectations regarding the developments on the housing market.

2.1 INVENTORY OF UNSOLD HOMES

In several countries, for example the U.S., statistics about an inventory of unsold homes have been used for a long time as an indicator of the supply on the housing

The geographical borders for Greater Stockholm, Greater Gothenburg and Greater Malmö are based on SCB's definition. National (excluding the major cities) includes all municipalities except the municipalities included in the three major cities specified above.

market.2 An increased inventory or supply can often be an indicator of pending price contractions on the housing market. In Sweden, Svensk Mäklarsstatistik and Hemnet have together developed statistics that can be used as an indicator for the supply of houses. This data reflects the number of homes (tenant-owned apartments and one- and two-dwelling buildings) that are for sale and is based on advertising data from Hemnet (see charts 1-3). Supply is clearly influenced by significant seasonal fluctuation as demonstrated in charts 1-3. In Greater Stockholm, the seasonal fluctuations appear to be somewhat higher than in the other major cities. The difference in absolute terms, however, is most probably due to the greater number of homes in Stockholm. In addition to the number of homes for sale, the Riksbank also studies how long the houses have been available on the market. For example, charts 4-5 illustrate that considerably more tenant-owned apartments were available for sale for more than 30 days in October 2008 than in both October 2009 and October 2010. The change in time-to-sale distribution appears to be relatively uniform between the major cities and the rest of the country. In general, the number of days an object is available for sale, assuming the number of new objects has not changed too excessively, is used as a rough measurement of the demand for houses. If more apartments are available for a greater number of days, this can be a sign of a pending decline in housing prices when taking seasonal fluctuations into consideration.

2.2 RATIO BETWEEN SALE PRICE AND LIST PRICE

The ratio between the sale price and the list price can also be used as an indicator for the situation on the housing market. This ratio cannot be interpreted as a pure measureof demand since the numerator is affected by the buyers and the denominator by the sellers. However, with some caution, the ratio can be used as a measure of the bidding intensity as well as as an indicator of demand when list prices are assumed to be more sticky. A rising ratio can be interpreted as higher competition between bidders, assuming that the seller did not set too low of a list price. Charts 6-9 show the ratio between the sale price and list price. It is clearly evident that the bidding intensity has been relatively low during the autumn of 2008, when the average sale price was lower than the list price (i.e. the ratio is less than one) for one- and two-dwelling buildings. In addition, the ratio appears to give an earlier indication of the future development of housing prices than compared to SCB's Real Estate Price Index, see chart 9.

Chart 7 also shows that there are also clear regional differences, although there is extremely high covariance between the regions, which can indicate a similar trend for demand across the entire country.

² The method used to calculate an inventory of unsold homes can vary between countries.

2.3 MÄKLARINSIKT – A SURVEY OF REAL ESTATE AGENTS ORGANISED BY THE ASSOCIATION OF SWEDISH REAL ESTATE AGENTS

A study of qualitative indicators, for example real estate agents' expectations about the trends on the housing market, can, in addition to the analysis of advertisement data and data on actual house sales, can provide valuable information about developments on the housing market. The Riksbank has therefore established a cooperation with The Association of Swedish Real Estate Agents, which has conducted a long-running survey called Mäklarinsikt that is sent to a large number of real estate agents across the entire country. During the autumn of 2010, the Riksbank, in collaboration with The Association of Swedish Real Estate Agents, surveyed real estate agents about topics related to their expectations with regard to changes to supply and demand on the housing market and price and interest rate levels. During the autumn of 2010 the survey was expanded to also include questions about how Finansinspektionen's recommendation for a loan-to-value ceiling could affect the housing market. The survey thus provided insight into what the real estate agents' expect with regard to both the general price development and how specific factors can affect housing prices, see charts 10 and 11. The charts illustrate that the forecast horizon strongly affects their expectations and that there are regional differences. One such difference is, for example, that the Stockholm and Gothenburg regions have a higher share of agents that believe housing prices will rise in the coming year. In two years, the expectations are more unified across all of the regions. One interesting observation is that real estate agents in Greater Stockholm report the smallest impact on housing prices as a result of the mortgage ceiling.

Chart 12 shows the agents' expectations regarding the level of the variable mortgage rate in one, three and five years for the National category and the three major cities. According to the responses, the expectations for interest rates are similar across the country. Chart 13 shows the breakdown of the agents' expectations regarding the level of the variable mortgage rate in one, three and five years. Both the average interest rate and the distribution of the responses indicates low interest rate expectations for the next few years. In five years the average expected mortgage rate is very close to the historical average for short-term mortgage rates.

3. Summary

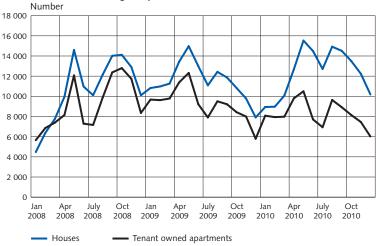
With the help of an expanded base of statistics, the Riksbank can deepen its analysis of the Swedish housing market. The analysis of the housing market is expected to require increasingly more data in the future.

One plausible resource could be the new apartment register that is expected to be completed in 2011.3 The register can be used to provide information about the development of prices for individual homes. For example, this could be used to create a price index that is based on comparisons of the same home over time. Other qualitative indicators such as surveys directed at private individuals that own or are expected to buy homes could also provide additional information about the situation on the housing market and the households' behaviour when faced with sharp fluctuations in price or changed regulations on the housing market.

The apartment register entails that each person who lives in an apartment building will be registered to the apartment in which they live. According to Statistics Sweden (SCB), they will begin gathering new statistics based on the registers that are formed when the registration is finished.

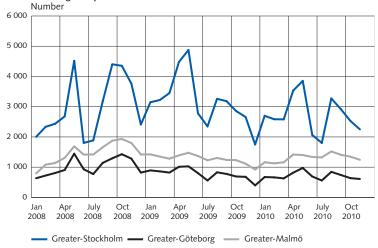
4. Chart appendix

Chart 1. Number of dwellings (houses and tenant owned apartments) for sale nation wide, excluding new production



Source: Mäklarstatistik.

Chart 2. Number of dwelllings (tenant-owned apartments) for sale in major cities, excluding new production



Source: Mäklarstatistik.

Number 2 500 2 000 1 500 1 000 0 Jan Apr July Oct Jan Apr July Oct Apr July Oct 2008 2008 2008 2008 2009 2009 2009 2009 2010 2010 2010 2010

- Greater-Stockholm - Greater-Göteborg - Greater-Malmö

Chart 3. Number of dwellings (houses) for sale in major cities, excluding new production

Source: Mäklarstatistik.

1 000

0

1 to 10

October 2008

11 to 20

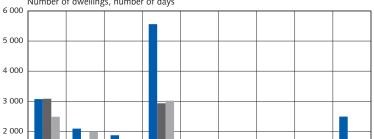


Chart 4. Number of tenant-owner apartments for sale by number of days for sale, nation wide and nation wide excluding major cities, excluding new production Number of dwellings, number of days

Sources: Mäklarstatistik and Riksbanken.

> 30

October 2009

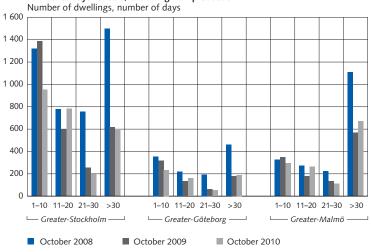
21 to 30

– Nation wide

359

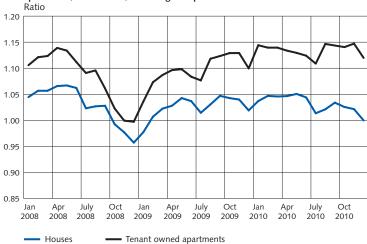
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Chart 5. Number of tenant-owned apartments for sale in three major city areas by number of days for sale, excluding new production



Sources: Mäklarstatistik and the Riksbank.

Chart 6. Ratio between sale price and list price for houses and tenant-owned apartments, nation wide, excluding new production



Source: Mäklarstatistik.

Ratio 1.30 1.25 1.20 1.15 1.10 1.05 1.00 0.95 0.90 0.85

Chart 7. Ratio between sale price and list price for tenant-owned apartments in major cities, excluding new production

Source: Mäklarstatistik.

Oct

2008 2009

Jan

0.80 Jan

2008

Apr

2008

July

2008

Chart 8. Ratio between sale price and list price for houses in major cities,

Apr

2009

— Greater-Stockholm — Greater-Göteborg — Greater-Malmö

July

2009

Oct

2009

Jan

2010

Apr

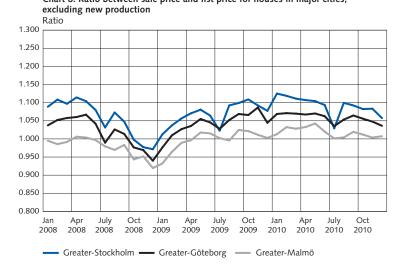
2010

July

2010

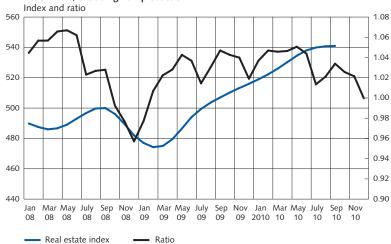
Oct

2010



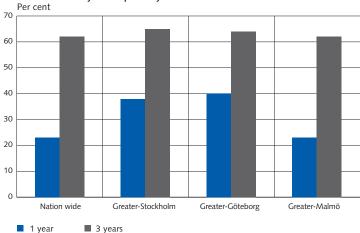
Source: Mäklarstatistik.

Chart 9. Real estate index and ratio between sale price and list price for houses nation wide, excluding new production



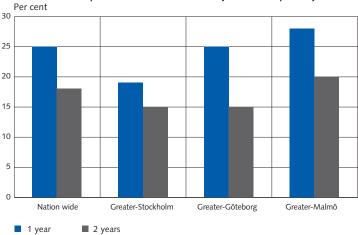
Sources: Mäklarstatistik, Statistics Sweden and the Riksbank.

Chart 10. Share of real estate agents who believe in rising sale prices for houses in one and three years respectively



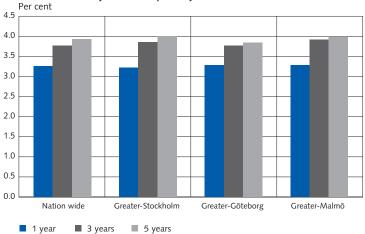
Sources: The Riksbank and The Association of Swedish Real Estate Agents' survey, Mäklarinsikt

Chart 11. Share of real estate agents who believe that the loan to value cap will lead to lower sale prices for houses in one to two years time respectively



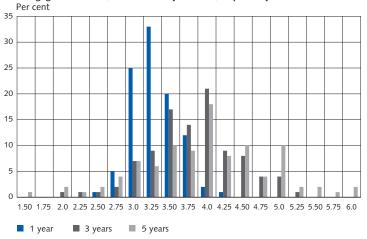
Sources: The Riksbank and The Association of Swedish Real Estate Agents' survey, Mäklarinsikt.

Chart 12. Real estate agents expectations of the average variable mortgage rate in one, three and five years time respectively $\frac{1}{2}$



Sources: The Riksbank and The Association of Swedish Real Estate Agents' survey, Mäklarinsikt.

Chart 13. Distribution of real estate agents expectations of the average variable mortgage rates in one, three and five years time, respectively



Sources: The Riksbank and The Association of Swedish Real Estate Agents' survey, Mäklarinsikt.