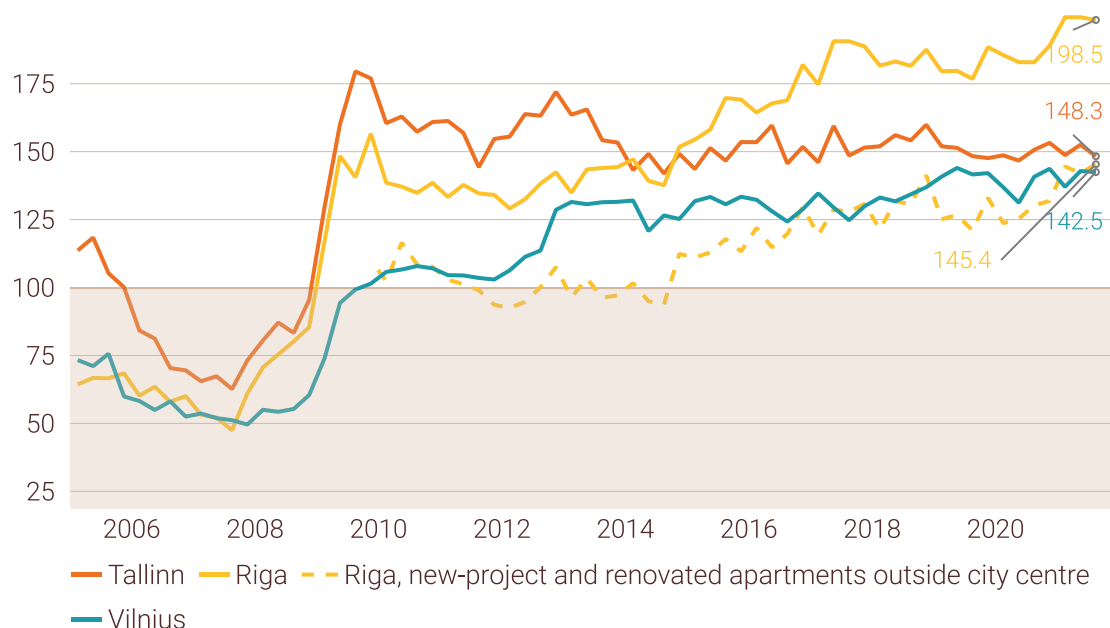


## Baltic HAI – Surging prices and strong wage growth

Rising housing prices dampen affordability growth, but activity is likely to remain high

### Baltic Housing Affordability Index



Sources: Swedbank Research & Macrobond

Note: Housing Affordability Index (HAI) is calculated for a family whose income is equal to 1.5 average net wages with an average sized apartment of 55 square meters. The HAI is 100 when households use 30% of their net wages for mortgage payments. When the HAI is at least 100, household can afford their housing, according to established norm. The higher the index, the greater the affordability.

- In the third quarter, compared with the same quarter last year, housing affordability increased substantially in Riga; in Vilnius, the increase was less pronounced, while in Tallinn it, on the contrary, decreased.
- A decrease in interest rates supported affordability in all the Baltics last quarter. In Tallinn, a dip in affordability was the result of rapid price growth exceeding wage growth. In Riga, strong affordability gains were driven by wage growth significantly surpassing the average price increase. Meanwhile, in Vilnius, lower interest rates were enough to ensure stronger affordability even though prices grew faster than incomes.
- Low interest rates are expected to support affordability in the coming quarters. Apartment price growth is likely to outpace wage growth in the near future, reducing affordability in Tallinn and Vilnius. Future affordability is unclear in Riga – wage growth will somewhat decelerate, albeit remain strong, while rising construction costs, coupled with elevated demand, will continue to pose upward pressure on the average price.

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## Real estate price growth accelerated in the third quarter

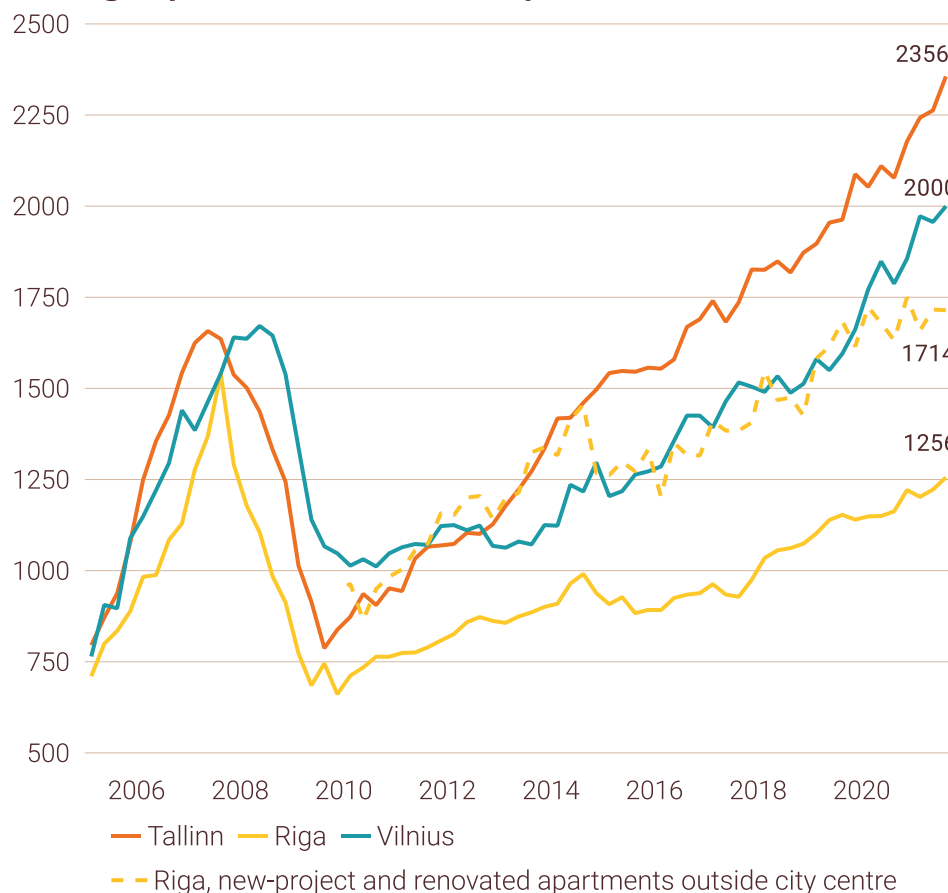
### Rising price level likely to depress future affordability

In Tallinn, apartment price growth accelerated to over 13% – the fastest pace in seven years. The retreat in housing market activity in the summer was short-lived, as the long-awaited pension savings landed on households' accounts in September and boosted housing investments. The supply shortage of new flats and increased construction costs have lifted prices of the new flats reservations. However, this is not fully reflected in the statistics yet. The completion of developments is taking time, and the share of new flats is back to the 2014 level, accounting for just 15% (pre-crisis share around 30%) of total transactions. Price growth on the secondary market, which is reflected in the statistics in real time, accelerated to 23% annually in November.

In Riga, the third quarter registered an average apartment price increase of 8% annually. Transaction prices of new-project apartments grew only by 5.9%. However, the prices of apartments currently available for reservation have seen a steeper rise. It is just a matter of time before the reservations turn into final transactions, and we see much higher growth rates reflected in the price statistics. We also expect the continued increase in construction costs of new-project apartments to be at least partially passed on to buyers farther down the road. The price growth of Soviet-era apartments amounted to 10% last quarter. Further on, price pressures in this segment have a limited upside as many of the buildings are nearing the end of service life and are not energy efficient.

In Vilnius, the total average price increased by 11.9% in the third quarter. However, the headline number conceals the true dynamic, as in the other Baltic capitals. New apartment sales mostly reflect deals made a year ago, and therefore clocked in a 0.7% contraction in prices. Current preliminary deals are done at a substantially higher price. Old apartments, on the other hand, appreciated over 25% and more accurately represent the whole market. The housing shortage currently experienced and continued increases in incomes may maintain pressure on prices in the immediate future. It remains to be seen if additional macroprudential measures will have the desired effect of dampening speculative demand.

Average apartment transaction price, EUR/m<sup>2</sup>



Sources: Swedbank Research & Macrobond

## Tightening labour markets fuel wage growth

### Real wage growth to be subdued in the near future due to high inflation

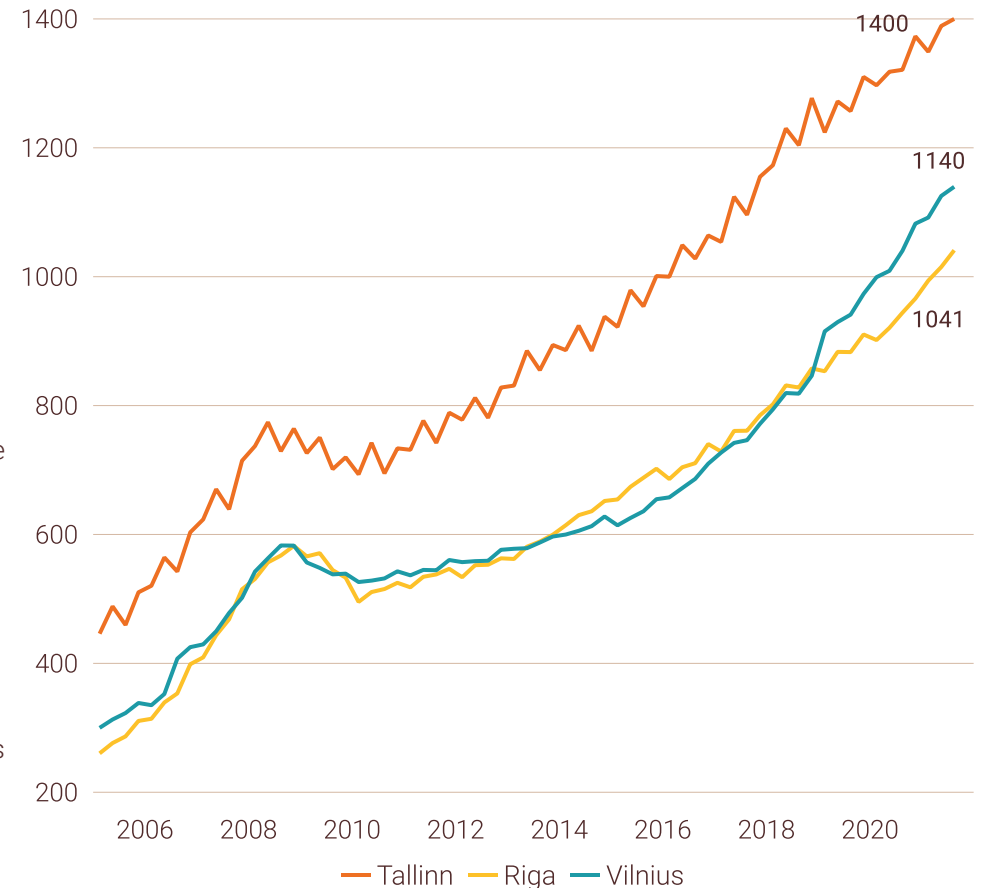
Strong wage growth continued in the third quarter and registered yearly growth of 9.6%, 10.3%, and 6% in Vilnius, Riga and Tallinn, respectively.

Broad-based economic growth and increasing demand led to a tightening labour market in all Baltic capitals. Widening labour shortages, coupled with pandemic-induced changes to the labour market, fuelled wage growth. The minimum wage hike and higher wages in the public sector, especially in the health care sector, additionally supported wage growth in Riga.

The tightening labour market, combined with labour shortages, will play an increasing role in future wage dynamics in the Baltics. At the same time, rapidly rising inflation will dampen overall purchasing power growth in the next couple of quarters and can have a negative effect on household confidence. It can potentially act as a factor limiting the willingness and ability to invest in housing. In fact, while real net wages are expected to still increase in Riga in the fourth quarter of 2021, they will likely remain unchanged in Vilnius and decrease in Tallinn. However, going forward, in 2022 as a whole real net wages are forecast to grow in all of the Baltics.

Wage growth and apartment price growth affect the amount of down payment needed, as well as the saving time. In the third quarter, the number of months needed to save for a down payment, which equals 15% of the apartment price, increased in Vilnius and Tallinn, but decreased in Riga. In Tallinn and Vilnius, the number of months needed was 30.9 and 32.2, respectively. In Riga it was equal to 22.1 (29.1 for new projects and renovated apartments).

#### Average monthly net wage, EUR



Sources: Swedbank Research & Macrobond

## Market activity remained strong in the third quarter

### Supply shortage in Tallinn and Vilnius likely to ease, at least partly, starting next year

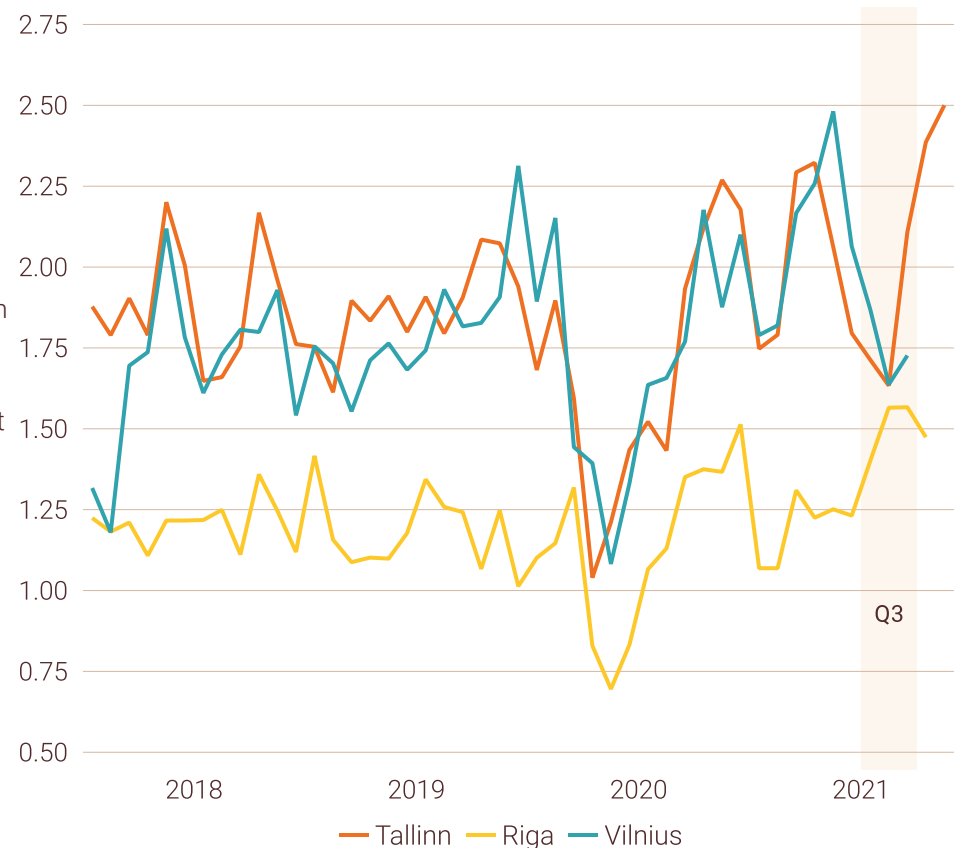
Funds released by the second-pillar pension reform in September have boosted demand in Tallinn. Additional withdrawals of pension savings, although a significantly smaller amount, accumulating on households' accounts in January, May, and September will continue to support housing demand. In the first three quarters of 2021, the number of construction permits was somewhat higher than a year ago; however, supply is struggling to keep up with higher demand in the Estonian capital. The stock of newly built apartments available for purchase continued to decrease in the third quarter. More developments are expected to enter the market next year and alleviate the situation.

In Vilnius, the lack of new apartment supply resulted in a collapse of registered sales in August and September. However, activity in the secondary market remained strong. Even with the strong housing starts numbers, many developers are facing bureaucratic hurdles, and new apartment inventory for sale currently is enough for just about half a year. Meanwhile, in Riga, the number of transactions increased by 26.5% from a year ago. The economic recovery has incentivised many developers to start new construction projects. Projects currently under construction, as well as in the planning pipeline, are exceeding last year's level, and supply is currently sufficient to meet demand. Demand is rising as well. The pace of reservations is on the rise; however, since most apartments are reserved before construction is finished, the observed higher activity in the newly built segment will appear in statistics only next year.

Responsible institutions are taking action regarding housing market activity in Estonia and Lithuania. The Estonian government plans to tighten the terms of guarantee for home loans for young families. The measures taken are likely to have a small effect on the market. In Lithuania, a 30% loan-to-value ratio requirement will be enacted for second and subsequent mortgages. Capital requirements for banks on mortgage loan portfolios over EUR 50 million will be increased by 2%.

#### Transaction activity in Baltics

Transactions per 1000 residents



Sources: Swedbank Research & Macrobond

# Baltic Housing Affordability Index: Methodology

## Objective

The Baltic housing affordability index (HAI) measures the degree to which households can afford buying an apartment with a mortgage loan in the Baltic capitals.

## Norm (the main assumption)

Household monthly mortgage payments do not exceed 30% of household income.

## Variables

- Average apartment price per m<sup>2</sup>: three-month average apartment transaction price per m<sup>2</sup> in Baltic capitals.
- Household income: 1.5 of average monthly net wages in Baltic capitals.
- Mortgage interest rate: three-month average annual percentage rate of charge (including interest rate and other related charges) for new housing loans to households, issued in euros, in the Baltics.

## Other assumptions

- Average apartment size: 55 m<sup>2</sup>.
- Down payment: 15% of total apartment price.
- Term: 30 years.
- Saving rate for down payment: 30% of household income.

## Calculation of HAI

The HAI shows actual household income in relation to the income that meets the norm. Thus, if the HAI equals 100, a household uses 30% of its income to service mortgage payments. If the HAI exceeds 100, the household has higher income than required to satisfy the norm. And if the HAI is below 100, the household does not have sufficient income to fulfil the norm.

$$\text{HAI} = \frac{\text{AverageINC}}{\text{NINC}} \times 100 \quad \text{where } \text{NINC} = \frac{\text{PMT}}{30\%}$$

where AverageINC – household income;

NINC – household income that satisfies the norm; and

PMT – monthly mortgage payment.

## HAI of new-project and renovated apartments

The calculation of HAI of new-project and renovated apartments for Riga is intended to improve the comparability of affordability levels across the three capitals because it considers new-project and renovated apartments – types of apartments more commonly purchased in Tallinn and Vilnius. It takes into account housing affordability in newly built and renovated apartments (i.e., done after 2000 outside the city centre).

All variables and assumptions, except for the average apartment transaction price, remain the same. That is, for the calculation of HAI for new-project and renovated apartments, the average apartment transaction price of newly built and renovated apartments (i.e., done after 2000) outside the city centre is used.

The new index and associated apartment price variable are represented by a yellow dashed line in the graphs of the report.

## Limitations

The HAI provides an indication of the average household situation, not that of a particular household. Household income and mortgage interest rates faced by a particular household may differ from those presented in the report. The HAI accounts for mortgage costs but excludes taxes and subsidies, including property tax and interest deductions. It also does not consider other household expenses that could affect the household's ability to service mortgage payments, such as rent, lifestyle, or existing liabilities. The HAI does not provide any direct guidance for business decisions, including lending and interest rate decisions.

The average apartment price per m<sup>2</sup> reflects past transactions and does not necessarily indicate the potential affordability or price of apartments in the future. Differences in apartment segment structure and the physical condition of newly built apartments at the time of purchase might affect the comparability of the average apartment price per m<sup>2</sup> across the Baltic capitals.

The HAI is of an informative nature and reflects macroeconomic developments, rather than banks' decisions and lending policies or the potential behaviour of individual households.

## Change of data

A data revision was made in the fourth quarter of 2019 for Riga. The history of wages, prices, and transaction counts was changed in 2011.

## Frequency

Quarterly

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