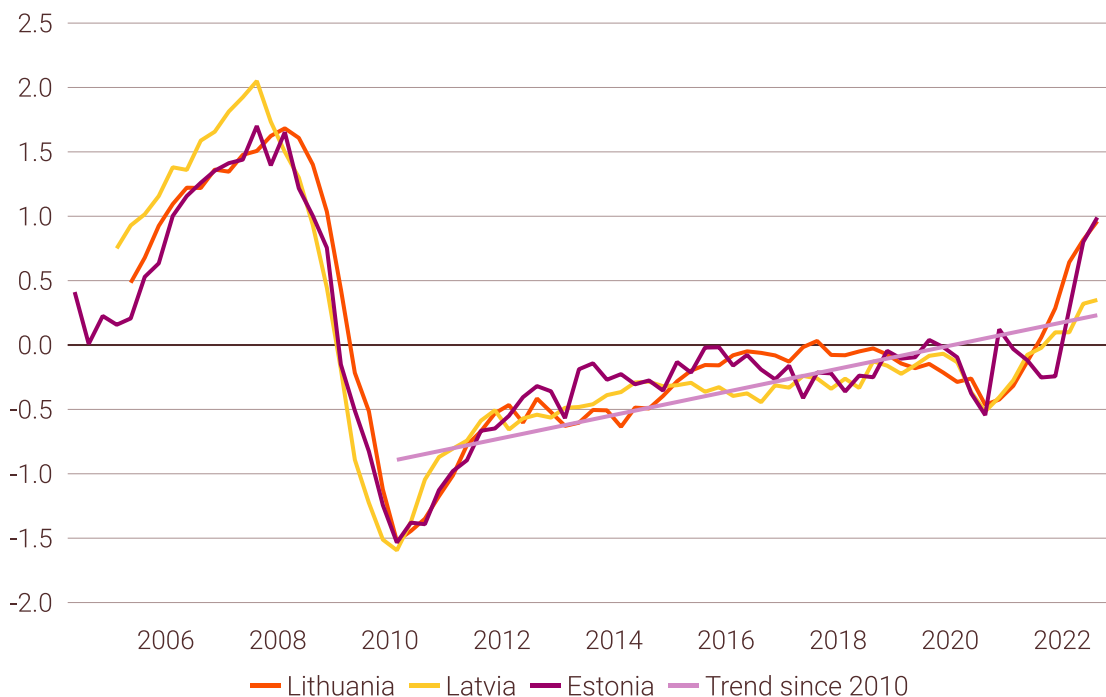


Economy Heat Index: Energy shock turned the heat on the Baltics

Strong demand and tight labour markets signal presence of some excess demand

Economy heat index

Average of underlying indicators z-scores



Sources: Swedbank Research & Macrobond

The economy heat index (EHI) rose rapidly over 2022. Rapid post-pandemic recovery and economic stimulus led to a strong growth in demand and a labour market recovery. Meanwhile, war-induced disruptions and energy shock adversely affected the supply side. Strong demand, combined with disrupted supply, caused the EHI to rise to the highest level in a decade. The weaker recovery in Latvia is reflected in its EHI, which rose to a cyclical high but is far below Estonia's and Lithuania's.

Last year was difficult for the Baltic economies in quite a few ways. Many industries were still affected by post-pandemic supply-chain disruptions, and the war in Ukraine disrupted the economies further. Some sectors had often been reliant on production imports from Russia, Belarus, and Ukraine, and sanctions meant that supply chains had to be rearranged rapidly at high cost. Furthermore, due to the high dependence on energy imports, the energy shock was quite hard on the Baltics

The rise in the EHI was primarily driven by very high inflation, but tight labour markets and widening current account deficits also contributed meaningfully. We are likely seeing the 'peak overheating' of this business cycle. Economic growth is slowing, which will dampen domestic demand; meanwhile, the respite in the ongoing energy crisis will reduce the cost pressures. We expect business cycle dynamics to develop more sustainably over 2023 -2024 and the EHI to return closer to the mean.

Analysts:

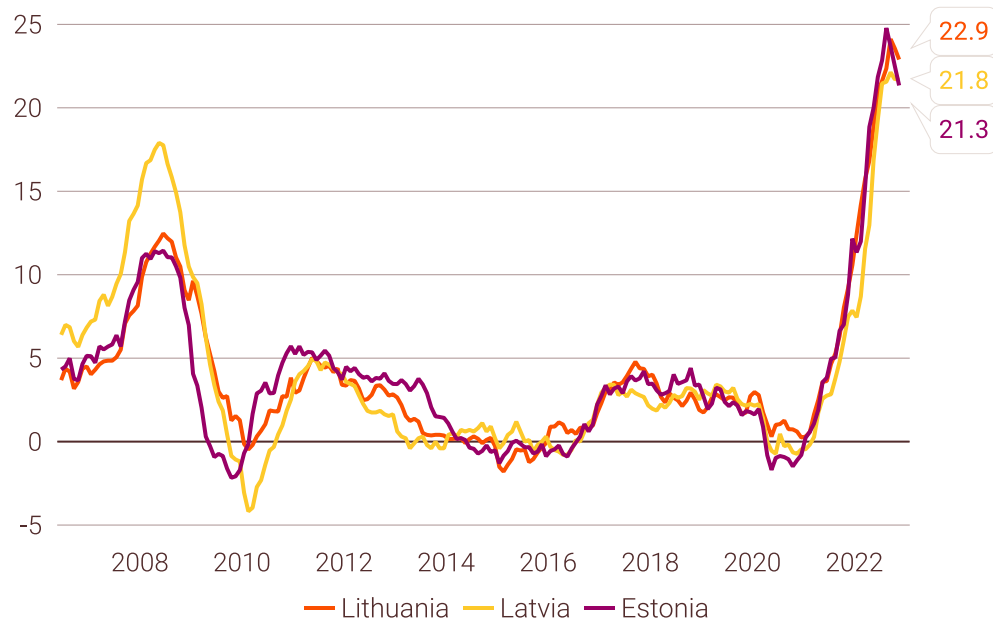
Vytenis Šimkus, vytenis.simkus@swedbank.lt, +370 687 17870

Record inflation caused both by the energy shock and internal factors

The inflation peak seems to be behind

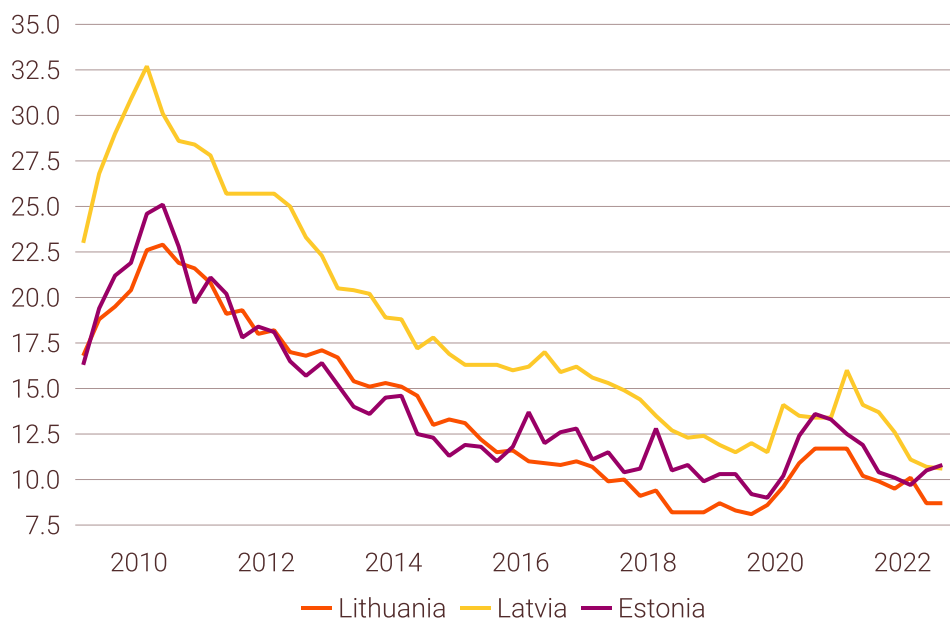
Consumer prices

CPI, y/y %



Labour market slack

% of extended labour force



Sources: Swedbank Research & Macrobond

Sources: Swedbank Research & Macrobond

Inflation is often a sign of demand running ahead of supply. The reasons why inflation in the Baltics is so high are plenty¹. The primary reason is the energy shock, but the rapid recovery, fiscal stimulus, and tight labour markets created some excess demand. Inflation peaked in the end of 2022, reflecting the easing in the energy markets and fiscal measures. Energy price normalisation is easing the pressure on the Baltics, but dependence on energy imports remains a structural weakness, and investments in sustainable and diverse energy are crucial for macroeconomic stability.

Labour markets are quite tight across the Baltic countries; labour shortages were rampant in the past 18 months. High labour demand pushed nominal wages significantly higher, although real wages fell. Weakening economic growth is expected to cause a moderate uptick of unemployment, and some signs of weaker jobs growth can already be observed. On the other hand, generous minimum wage increases will push labour costs higher and could result in stickier core inflation.

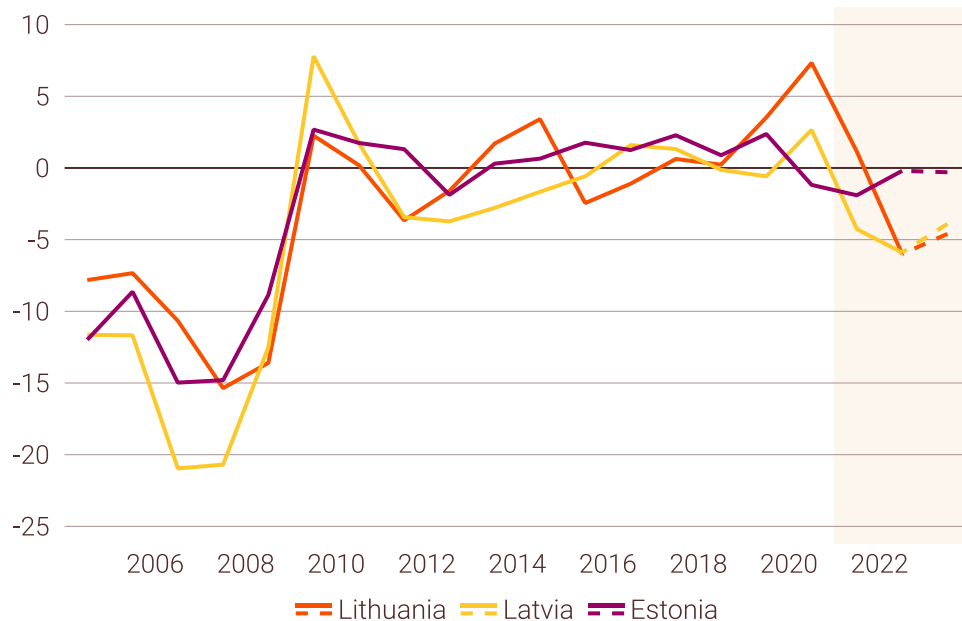
¹ You can read more about inflation in our report: [Inflation in the Baltics – unexpected, excessive, but temporary](#)

Energy shock worsens the trade balance

Credit growth is boosted by inflation but is likely to slow this year

Current account balance

% of GDP

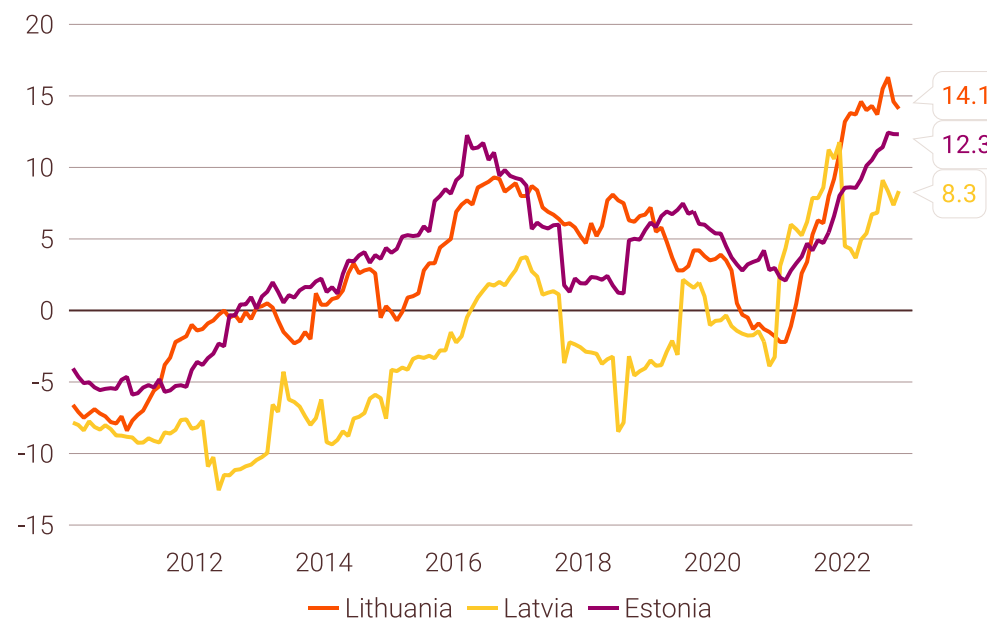


Sources: Swedbank Research & Macrobond

Energy price shock has hit the Baltic terms of trade and current account balance. Exporters in the Baltics experienced decent demand for their products, but expensive energy pulled the trade balance into a deep deficit. However, Estonia, with its local (yet expensive) shale oil supply, managed to keep trade balanced. Investment demand, especially in energy and defence, will keep imports elevated over the medium term and put downward pressure on the current account balances. However, there is an upside risk if energy prices normalise more rapidly than expected.

Credit growth

y/y %



Sources: Swedbank Research & Macrobond

Rapid credit growth contributed to strong demand in the Baltics. Housing markets were still active for most of last year, and mortgage lending was strong. At the same time, rising input costs and working capital needs led companies to more active borrowing and pushed credit creation even higher.

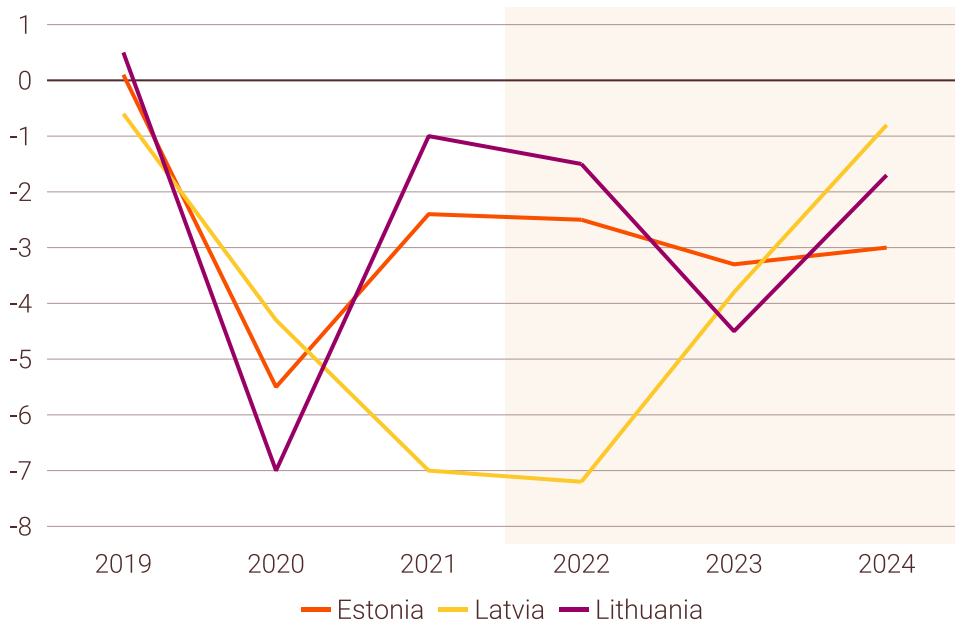
Rapidly rising interest rates and cooling housing markets will likely dampen private credit growth next year, resulting in lower domestic demand.

Economic policy will pull in opposite directions

Hot housing markets will be squeezed by tighter monetary policy

Government budget balance and forecast

% of GDP

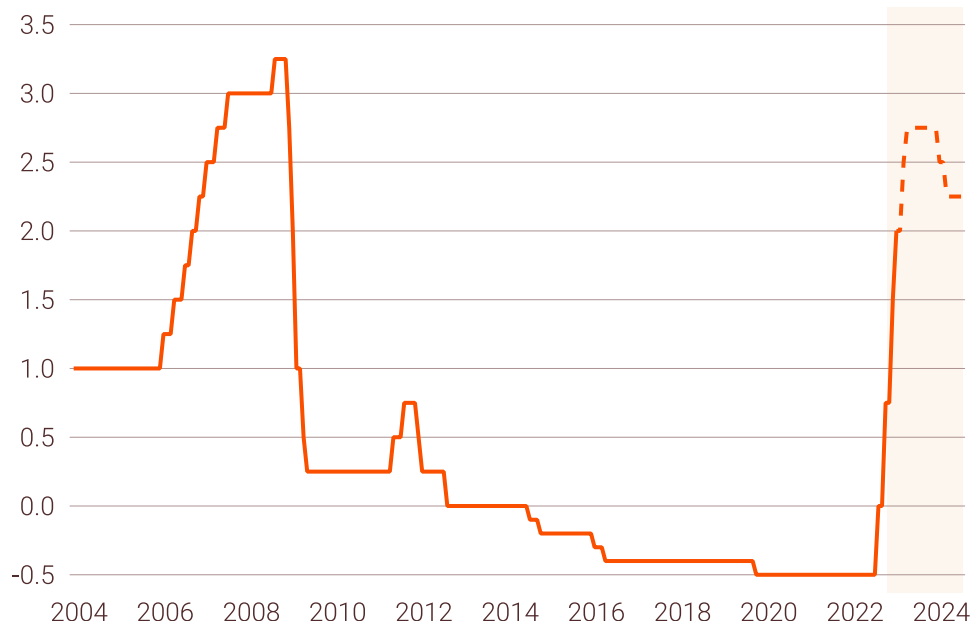


Sources: Swedbank Research & Macrobond

The Baltic economies effectively employed fiscal policy to fuel a post-pandemic recovery. However, in some cases, fiscal support may have been overdone and contributed to excess demand. Latvia had pandemic-related curbs in place longer and experienced a weaker recovery than the others; also, according to the EHI, the Latvian economy is less hot. Currently, energy relief by the governments is keeping demand stronger than it otherwise would be and making demand somewhat more excessive than the disrupted supply. However, with the recent decline in gas prices, public budgets are likely to be less negative this year than currently planned.

ECB Deposit facility rate and forecasts

%



Sources: Swedbank Research & Macrobond

Although household and firm leverage is low in the Baltics and the overall economy is not very sensitive to interest rates, rapid monetary tightening by the ECB will dampen demand over time. The tighter policy will affect consumption quite quickly due to the prevalence of variable interest rates. The rapidly rising rates will also hit the housing market quite quickly. Already, there is a significant decline in apartment sales, likely, a price correction will follow. Admittedly, the situation in the Lithuanian and Estonian housing markets was becoming unsustainable, and a rebalancing is welcome.

Economy heat index: Methodology

Purpose

The purpose is to measure changes in the balance between demand and supply in an economy. The heat index helps to identify potential imbalances and risks in an economy and could be helpful in guiding appropriate macroeconomic policy.

Indicators

- Core HICP (harmonized index of consumer prices) growth – price pressures are an essential indicator of supply shortage in an economy. Core price growth is chosen to exclude volatile food and energy prices, as well as effects of alcohol and tobacco taxation.
- Inverted current account balance as share of GDP – a worsening trade balance indicates excessive demand in an economy.
- Inverted unemployment rate – very low unemployment signals that there is very little spare capacity in the labour market.
- Difference in credit and nominal GDP growth rates – excessive credit growth indicates unsustainable consumption.
- Difference between wage and productivity growth – a widening gap between wages and productivity signifies inflationary pressures and capacity constraints in an economy.
- Ratio of apartment average price to net wage in a capital city – a deteriorating ratio could signal either bubble formation or unbalanced demand and supply in an economy.

Construction of the index

Data are transformed by converting all indicators into so-called Z-scores (see formula below). This means that the average value of each indicator over time is equal to 0, while a value of 1 is equal to one standard deviation. This transformation allows the comparison of indicators with different units of measurement, as their standard deviations are analysed instead. The combined index is constructed by taking the average of underlying indicator Z-scores:

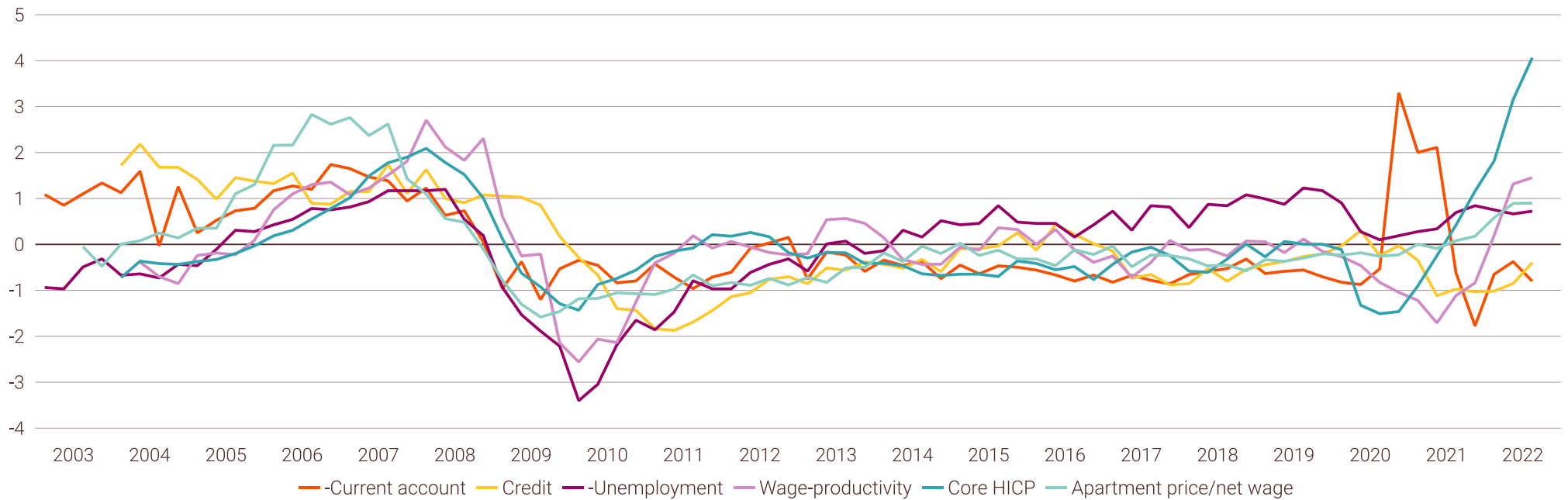
$$Z = \frac{v_i - v_m}{\sigma} \qquad \text{Index} = \sum z_i / n,$$

Z – z-score, v_i – value of indicator at a point in time, v_m – historical average of an indicator, σ – standard deviation, n – number of indicators.

Appendix

Estonia overheating index

Z-score of different factors

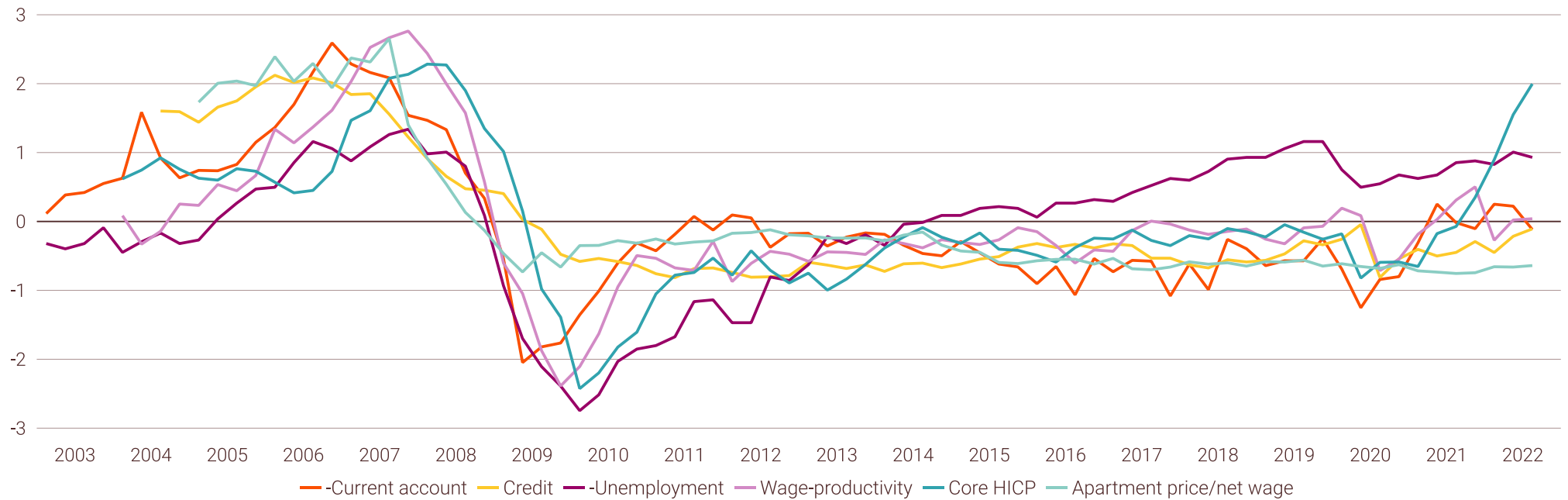


Sources: Swedbank Research & Macrobond

Appendix

Latvia overheating index

Z-score of different factors

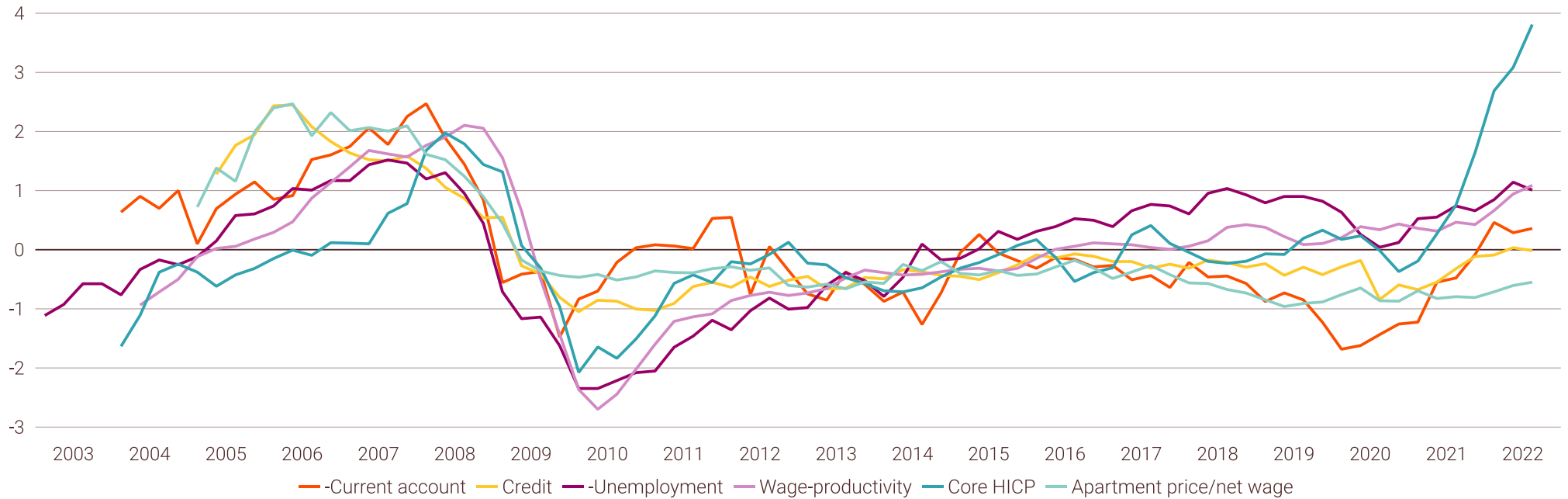


Sources: Swedbank Research & Macrobond

Appendix

Lithuania overheating index

Z-score of different factors



Sources: Swedbank Research & Macrobond

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