

Rating Object	Rating Information	
REPUBLIC OF ESTONIA	Assigned Ratings/Outlook: AA- /stable	Type: Monitoring, Unsolicited with participation
Long-term sovereign rating Foreign currency senior unsecured long-term debt Local currency senior unsecured long-term debt	Initial Rating Publication Date: Rating Renewal: Rating Methodologies:	23-12-2016 21-07-2023 "Sovereign Ratings" "Rating Criteria and Definitions"

Rating Action

Neuss, 21 July 2023

Creditreform Rating has affirmed the unsolicited long-term sovereign rating of "AA-" for the Republic of Estonia. Creditreform Rating has also affirmed Estonia's unsolicited ratings for foreign and local currency senior unsecured long-term debt of "AA-". The outlook is stable.

Key Rating Drivers

1. While subdued domestic and foreign demand amid inflationary pressures, financial tightening, and high geopolitical uncertainty will weigh on output this year, we expect economic growth to recover in 2024 as adverse effects from the energy price shock abate gradually and as diversification away from Russia progresses; Estonia's recently interrupted convergence process towards the EU income level should thus resume going forward
2. Medium-term economic prospects remain constructive on the back of the advancing roll-out of the Recovery and Resilience Plan (RRP), and are supported by Estonia's welcoming business environment; structural challenges such as skills shortages and a shrinking workforce could pose downside risks, although integration of displaced people from Ukraine may temporarily bring some respite; risks to price competitiveness stem from misalignments of wage and productivity growth which may intensify in view of high inflationary pressures in the near term
3. High institutional quality, as reflected by strong performance regarding the World Bank's Worldwide Governance Indicators, an efficiently operating justice system featuring advanced digitalization and continued reform progress; extensive benefits from EU/EMU and NATO membership, acting as stabilizing factors to geopolitical risks emanating from Russia's military aggression against Ukraine; relatively swift formation of new government under the leadership of the former prime minister strengthens confidence with regard to continuation of coherent and responsive policy-making
4. In light of the partly permanent spending increase related to energy, security, education and refugees from Ukraine, we expect the headline deficit to widen materially this year; however, tax reforms envisaged by the new governing coalition could alleviate pressure on public finances from next year; while debt-servicing costs and the public debt ratio are set to rise over the medium term, we expect them to remain at relatively low levels; the authorities' credible commitment to fiscal discipline, based on a track record of prudent fiscal policies, strengthens our assessment of low fiscal risks to prevail

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5. Notwithstanding the recent deterioration in Estonia's current account balance, we view risks concerning foreign exposure as limited, as reflected by a moderately negative and FDI-heavy net international investment position (NIIP); following normalizing energy markets, we expect the current account deficit to narrow, aided by relatively robust service exports, and the NIIP to improve over the medium term

Reasons for the Rating Decision and Latest Developments¹

Macroeconomic Performance

We view the sovereign's macroeconomic profile as underpinned by comparatively high GDP per capita levels and an overall well-diversified economy, providing resilience to exogenous shocks. As a small, open economy, macro-financial volatility balances these strengths somewhat. The economic impact of the energy crisis will continue to be felt in the near term before fading over the course of 2024 and beyond. While Estonia experienced a setback regarding income convergence towards the EU level in light of the recent succession of crises, we expect it to resume its convergence process, having reduced energy dependency on Russia significantly over recent years. Reforms and investments related to the RRP should assist in this process, and also bode well for medium-term potential growth. On the other hand, potentially reinforced by demographic developments, skills shortages could slow down productivity growth and act as a drag to cost competitiveness and economic expansion over the medium term, while Estonia's welcoming business environment offsets these risks somewhat.

Following the strong recovery from the pandemic-induced dent, Estonia's economy shrank by 1.3% in 2022. The contraction of real GDP was largely driven by gross fixed capital formation (-3.5 p.p.), chiefly by the decline in intellectual property investment on the back of basis effects, which shaved 3.8 p.p. off real GDP growth alone last year. Net exports contributed negatively to economic expansion as well (-0.8 p.p.), mainly due to strongly rising imports amid unfavorable terms of trade.

Inventory changes (+1.5 p.p.) and private consumption (+1.1 p.p.) cushioned the impact of weak investment and exports to a significant extent, while government consumption was roughly neutral to last year's economic outturn (-0.1 p.p.). That said, the positive contribution from private consumption masks three consecutive declines following robust growth in Q1-22, mirroring the heavy burden on private households from soaring energy and food prices in particular, and the associated erosion of their purchasing power. Although last year's decline in overall output represented the weakest result among all euro area (EA) economies in 2022 (EA average: 3.5%), Estonia boasts an average annual growth rate well above that of the euro area in 2018-22 (2.7% vs. 1.2%).

Against the backdrop of the developments described above, income convergence was interrupted in 2022. According to IMF estimates, Estonia's GDP per capita (PPP terms) increased by 5.6% to USD 45,206. However, the income gap towards the weighted EU-27 average widened as Estonia's GDP per capita income accounted for 83% of the EU-27 level, down 4 p.p. compared to 2021.

¹ This rating update takes into account information available until 14 July 2023.

Looking at the current year, Estonia's economic output fell by another 0.6% q-o-q, deepening the recessionary trend observed throughout 2022, with negative contributions from private consumption (-0.5 p.p.) and net exports (-0.2 p.p.). A substantial drag via the investment component (-4.7 p.p.) occurred largely on the back of steep declines in investment in machinery and transport equipment.

For the remainder of the year, high inflation, further tightening financing conditions, and an only gradual economic recovery of Estonia's main trading partners are set to curb domestic as well as foreign demand. Recent developments in economic sentiment support our cautious forecast for 2023. In June 2023, the Estonian economic sentiment indicator recorded its lowest level since Russia invaded Ukraine (European Commission, EC data), illustrating ongoing high uncertainty surrounding our projections, predominantly due to risks related to the war in Ukraine and surging energy and food prices.

Private household disposable income will continue to be squeezed by high consumer prices this year. Therefore, despite robust wage growth, consumers will likely cut back on spending in 2023. Nevertheless, while not as far-reaching as in other euro area economies in terms of GDP, government support measures should somewhat soften the blow of the price shock to household balance sheets. One of the latest adopted policies was the introduction of a subsidized, fixed electricity price.

Despite its recent decline, Estonia's HICP inflation rate was the highest in the euro area, posting at 11.2% in May 2023 after peaking at 25.2% last August, outpacing wage growth, which registered 8.9% in 2022 and is set to continue this year. As of 1 January 2023, the monthly minimum wage was raised from EUR 654 to EUR 725 (+10.9%). Core inflation remains sticky as well, having lingered in double-digit territory for a twelfth consecutive month (May-23: 10.7%).

As inflation rates are likely to recede from high levels, rising wages should lead to a substantial increase in real disposable income. We thus expect household expenditure to recover noticeably in 2024. That said, announced increases to VAT and income tax rates as well as cuts to benefits for 2024 (see below) could pose limits to this. For the time being, consumer confidence thus remains downbeat.

The impact of the energy crisis on private consumption could have been much worse, had the Estonian labor market not proved as resilient, having shown great flexibility in successfully integrating Ukrainian refugees. Drawing on Eesti Pank intelligence, we note that labor supply increased by 2.7% due to displaced persons from Ukraine last year. At 5.2% in Q1-23 (Q1-22: 5.4%, LFS-adjusted, Eurostat), Estonia's unemployment rate stood well below the level of the euro area as a whole (6.6%), and of its Baltic peers (LV: 6.3%, LT: 7.7%).

Meanwhile, employment grew by a strong 4.6% in 2022 (NA data, domestic concept), exceeding the pre-pandemic level of total employment. The first quarter of 2023 saw employment expand by another 5.0% y-o-y. Nevertheless, we expect employment growth to slow down over the course of 2023 in light of the assumed economic contraction and related restraints on hiring.

After mounting to 81.7% in Q4-22, labor participation fell to 80.6% in this year's first quarter, but continues to compare favorably against Baltic peers and the euro area as a whole. Regarding the EC's social scoreboard, Estonia performs particularly well when it comes to 'fair working conditions', whereas some indicators display more scope to improve in terms of 'social protection and inclusion' as well as 'equal opportunities'.

We expect investment activity to be hampered by a sharp increase in financing costs (see also below), as well as high energy and material costs, likely causing businesses to hold back on investment and postpone plans into the future. Whilst construction and industrial confidence indicators reflect a higher degree of skepticism, weak sentiment in the industrial sector is also mirrored by the overall poor development of new orders over the last three quarters. Capacity utilization in the industrial sector decreased to 70.7% in Q2-23, standing below its long-run average. Estonia's manufacturing sector was hit hard following import restrictions on raw materials from Russia and Belarus, as well as waning demand from Nordic trading partners.

Gross fixed capital formation will, in our view, be buttressed by public investment related to EU cohesion policy funds of the 2014-2020 as well as the following (2021-2027) cycle, the implementation of RRP reforms, and the long-term infrastructure project Rail Baltica. As regards the MFF 2014-2020, which the Estonian government can draw on until the end of this year, Estonia's absorption rate stood at 89% as at the end of May-23. A full utilization of the funds would correspond to spending more than EUR 55mn monthly in the remaining period (Ministry of Finance, MoF intelligence).

With a view to NGEU, Estonia submitted its first payment request this June, combining the first and second instalments, amounting EUR 286mn in grants under the RRF. The disbursement, which is currently being assessed by the EC, is contingent on the fulfillment of 28 milestones and one target in a variety of areas, including green investment and investment into IT infrastructure. In the meantime, the EC endorsed an amendment to Estonia's RRP, resulting in a financial envelope of EUR 953.3mn for the RRP, of which 71% is to be allocated to the twin transition (green and digital). Furthermore, the modified RRP contains a chapter on REPowerEU, aiming to further reduce dependence on Russian fossil fuels and foster energy production from renewable sources.

As a small and open economy, Estonia is sensitive to disruptions to global economic activity. Consequently, subdued economic growth of key trading partners, partly compounded by imposed sanctions on Russia and disruptions to supply chains, weighs on Estonia's export performance. Exports fell for a fifth consecutive quarter in Q1-23 (-1.7% q-o-q). The energy and wood industries were among those hardest hit. That said, service exports fared comparatively well.

While we assume inflation rates to ease and expect progress in Estonia's adaptation to a new normal on energy markets, economic growth in its main trading partners should gather pace over the coming quarters, boding well for Estonian exports. Nevertheless, export expectations in the industry sector remained downbeat in Q2-23, highlighting a fragile environment at this stage. Overall, we expect net exports to pose a drag on GDP growth this year, before turning broadly neutral in 2024.

Highlighting progress in shifting trade away from Russia, the share of exports to Russia in total exports declined from 4.2% in 2021 to 3.6% in 2022. Similarly, imports from Russia as a percentage of total imports dropped to 8.1% in 2022 from 11.2% in 2021. At the same time, foreign overnight stays by Russian tourists stood 74% below the 2019 value in 2022 (Visit Estonia data).

On the whole, we currently expect Estonian real GDP to decline by 1.1% in 2023, followed by an expansion by 2.9% in 2024. Amid receding inflation and the easing of supply chain problems, both domestic and external demand should gain some traction next year.

The medium-term growth outlook remains backed by the further roll-out of initiatives and reforms included in the RRP. With regard to diversifying its energy supply away from Russia, Estonia has undertaken major efforts over recent years, also prior to the war in Ukraine. Large oil shale reserves facilitate these steps. Drawing on Eurostat data, oil shale and oil sands constituted 59.2% of Estonia's energy mix in 2021. Natural gas, on the other hand, accounted for 8.6% in 2021 (EU: 23.9%). While natural gas imports from Russia accounted for 46.2% in 2020, they shrank to 11.5% in 2021 (EA: 37.1%) and ceased completely in April 2022, replaced by domestic shale oil and LNG imports via the Finnish Inkoo LNG terminal. As an alternative LNG source, Estonia decided to construct an LNG terminal, located in Paldiski.

Moreover, to hedge against risks related to energy security, harmonization of the electricity grids in the Baltic states with the Continental European Network is underway. With a volume of EUR 1.8bn, the Baltic Synchronization Project desynchronizes Estonia's power grid from the Russian and Belarusian electricity network systems and harmonizes the Baltic grid with the Continental European Network. Current expectations are for the project to be finalized in 2025, whilst two electricity connections from Estonia to Latvia were completed this June.

We would reiterate that years of vivid wage growth exceeding productivity gains pose downside risks to Estonia's cost competitiveness, and in turn, medium-term growth. Estonia's position compared unfavorably against its Baltic peers and Sweden in 2022, but favorably against the euro area as a whole. Real labor productivity per person and real compensation per employee recorded sharp declines last year, resulting in slightly falling real unit labor costs. Rising by 0.2% in 2022, Estonia's global export market share in terms of volume showed little change from the prior year, while we note that 2021 had seen strong expansion. We will continue to monitor further developments vigilantly.

Medium-term productivity growth could be impeded by the weaker macro backdrop, but also by the projected decline in the working-age population. However, on a positive note, Estonia recorded a highly positive net migration of 39,757 people (Statistics Estonia) in 2022, mainly due to the influx of Ukrainian refugees. It remains to be seen, whether or to what extent, displaced people from Ukraine will contribute to easing structural labor market challenges such as filling vacant jobs on a more permanent basis.

While the expected decrease in working-age population could weigh on potential growth, investment related to the RRP and reforms implemented under the 'Estonia 2035' development strategy should, in our view, act as supporting pillars to underlying growth. Given estimates for potential growth of 1.8% in 2023 and 2024, respectively, Estonia remains above the euro area average (2023: 1.3%, 2024: 1.5%), but well below Estonia's 2017-22 average (3.5%).

Adding to a constructive medium-term view, Estonia continues to feature a solid non-cost competitiveness position and welcoming business environment, as also suggested by its 26th rank out of 64 economies in the 2023 IMD Global Competitiveness Index, which puts it well ahead of its Baltic peers (LV: 51st, LT: 32nd).

Moreover, and paying testament to its large innovation capacity, Estonia ranked 18th out of 132 countries in the UN's Global Innovation Index 2022. Key strengths relate to the innovation pillars 'market sophistication', 'infrastructure' and 'institutions'. This outcome partly reflects Estonia's characteristic of being an attractive location for tech start-ups. According to the State of Euro-

pean Tech 2022 report published by Atomico, Estonia retained its top position as regards venture capital raised as a share of GDP in 2022. We note that Estonia leads the OECD's tax competitiveness ranking.

Institutional Structure

The sovereign's credit rating is buttressed by the high quality of its institutional framework, reflecting good governance and a track record of coherent policy making. As a small, open economy, Estonia draws significant advantages from its EU/EMU membership. Moreover, sharing a direct border with Russia, we view Estonia's NATO membership as credit positive, representing a counterweight to geopolitical risks arising from tensions in light of the war in Ukraine. The efficiency and quality of the Estonian judiciary continues to be high, and is persistently strengthened by policy measures. Supported by reforms and investments related to the modified RRP, Estonia remains committed to driving the green transition forward, while having increased the share of renewable energy sources in its energy mix successfully over recent years.

The latest update of the World Bank's Worldwide Governance Indicators (WGIs) corroborates our view that Estonia boasts a high institutional quality. Referring to the base year 2021, Estonia remains well in line with sovereigns in our AA-rated universe and above the euro area median regarding 'voice and accountability' (EE rank 23 out of 208 countries, 'AA' median rank: 21), rule of law (EE rank 22 out of 209 countries, 'AA' median: 23) and control of corruption (EE rank 22 out of 209 countries, 'AA' median: 23). As concerns government effectiveness, Estonia achieved a more favorable result than the AA median (EE rank 23 out of 209 countries, 'AA' median: 29), reflecting the high quality of policy formulation and implementation.

That said, the improving trend of the WGI control of corruption, which measures the perceived extent to which public power is exercised for private gain, deteriorated by five places in 2021. Still, progress is being made in terms of the 2021-2025 Anti-Corruption Action Plan, implementing the scheduled measures as intended, with the exception of the adoption of laws on whistleblower protection. More generally, corruption cases are pursued and concluded efficiently.

As regards the overall efficiency and the degree of digitalization, the Estonian justice system can be considered as well-advanced, as also emphasized by the EC's Rule of Law report. Two systems were integrated into a new portal, facilitating document access. Judging by the 2023 EU Justice Scoreboard 2023, the length of proceedings is below the EU average. Adopted in February 2023, amendments to the Court Act entail changes to the structure of courts, increasing the degree of specialization by establishing separate departments.

GRECO's second compliance report of the fifth evaluation round (Jun-23), which focuses on the prevention of corruption and promotion of integrity in central governments and law enforcement agencies, pays testament to the authorities' high degree of responsiveness and reform ownership. Eleven out of fifteen recommendations were satisfactorily dealt with, whilst a partial implementation was noted for the remaining four recommendations.

Turning to the domestic political environment, the center-right Reform party won the parliamentary election held on 5 March 2023 by a comfortable margin, receiving 31.2% of votes. Led by prime minister Kallas, a new coalition consisting of the Reform party, Estonia 2022 and Social Democrats was formed, accounting for 60 out of 101 seats in the Riigikogu. With defense and security being the top priorities on the policy agenda, and the new government agreeing that tax reforms are necessary to stabilize public finances, we expect broad policy continuity.

We assess NATO's commitment to providing for the security of the Baltic countries, and Estonia's effort to improve its defense capabilities, as credit positive. As a deterrent, NATO decided to increase its military presence by stationing 2,200 troops in Estonia, enhancing in our view the sovereign's security. Moreover, Estonia plans to step up defense spending well beyond the 2% of GDP guideline. The security of NATO's eastern flank and Estonia in particular has been further strengthened by Finland's accession and Sweden's imminent accession to NATO.

With a view to environmental issues, we would reiterate that Estonia's ambition to become a carbon-neutral economy by 2050 should be significantly facilitated by the NGEU funds, with the modified RRP allocating 59.4% of the total financial envelope to climate objectives. At the current stage, Estonia counts as one of Europe's most energy-intensive economies. In 2021, greenhouse gas (GHG) emissions per capita were at 8.6 tons per capita, standing above the EU-27 average (7.9 tons).

While it occupies a middle-range position regarding the EC's Eco-Innovation Index 2022 (rank 13), Estonia exceeds the EU average quite significantly in terms of the share of energy from renewable sources, which in 2021 amounted to 38.0% (EU-27: 21.8%), representing one of the highest levels among the EU-27 countries. Considering the target for renewable energy to account for 65% of energy consumption by 2030, Estonia may thus well be on track.

Fiscal Sustainability

Boasting the lowest public debt ratio in the EU-27, Estonia's creditworthiness is decisively underpinned by low fiscal sustainability risks. The sovereign's track record of fiscal prudence and sound debt management serve as additional risk-mitigating factors. Debt affordability remains very high, notwithstanding rising debt servicing costs in light of the ongoing monetary policy tightening. Permanent spending increases related to energy support and defense are to drive up the headline deficit, alongside weaker economic activity in the near term, while envisaged revenue measures could, if enacted accordingly, help to lower the deficit from 2024. We expect the debt-to-GDP ratio to edge up over the medium term, but the overall level would remain low by European standards. Financial stability risks appear limited, given the overall sound condition of the Estonian banking sector, with risks stemming from the credit cycle being addressed by macroprudential measures.

Estonia's headline deficit narrowed from -2.4% of GDP in 2021 to -0.9% of GDP in 2022, coming in substantially lower than we had estimated in our last review (August 2022: -4.0% of GDP). Notwithstanding the recent accumulation of crises, Estonia thus continues to outperform fiscal targets. Moreover, an average general government balance of -0.9% of GDP (EU: -2.5% of GDP) over the period 2013-2022 highlights its track record of fiscal prudence.

The decline in last year's general government deficit was driven by substantially higher general government revenue (+13.5%), resulting from mounting tax receipts related to high inflation and strong employment growth, including increased intake of VAT (+15.0%), taxes on production and imports (+13.9%), current taxes on income and wealth (+9.5%), but also from a sharp rise in net social contributions (+12.9%). In this context, we stress as positive that Estonia further increased VAT compliance. According to the EC's VAT gap report 2022, Estonia's VAT gap as a percentage of the VTTL fell to 1.8% in 2020, representing one of the lowest in the EU-27 (EU: 9.1%). Total general government expenditure rose at a faster rate than in 2021 (2022: 9.4%, 2021: 5.8%), largely driven by intermediate consumption (+19.0%), public investment (+12.4%), and public wages (+9.3%).

The fiscal deficit is set to widen significantly in the current year. Increased spending related to defense, education, pensions, family allowance and public sector wages will additionally weigh on the expenditure side. Defense spending is envisaged to total 2.87% of GDP this year and to increase to 3.25% of GDP in 2024. Moreover, costs incurred for accommodating refugees from Ukraine (SP23: EUR 304.1mn in 2023 or 0.8% of our estimated 2023 GDP) add to the burden on public finances.

As concerns energy measures, the take-up of support turned out lower than assumed during the winter period 2022-2023, with the actual cost accounting for only 54% of the budgeted EUR 201mn (MoF data). Overall, energy-related spending could amount to about 0.3% of GDP for the full year 2023 (EC intelligence), down from 0.7% in the preceding year, but significantly higher than envisaged in the Draft Budgetary Plan 2023 (2023: 0.04% of GDP).

We emphasize that fiscal measures of the new governing coalition could be key in reining in next year's headline deficit, including the lifting of the VAT rate from January 2024 by 2 p.p., which should increase government revenues in light of assumed higher economic activity. In addition, a car tax is to be introduced and environmental fees increased. Among other items, excise duty rates for alcohol, tobacco and specially labeled diesel will be changed as well. At the same time, expenditure will be reduced by cutting child benefits. Drawing on the SP23, these measures should have a positive impact on the headline balance to the tune of roughly EUR 482mn or 1.1% of our estimated 2024 GDP, if implemented as planned.

We expect the headline deficit to widen to about -3.6% of GDP in 2023 and to narrow to roughly -3.0% of GDP in 2024, acknowledging that these projections continue to be subject to elevated uncertainty, not least due to unpredictable events related to the war in Ukraine.

Against the backdrop of the economic contraction, costs related to war refugees from Ukraine, and the adopted energy support measures, Estonia's general government debt-to-GDP ratio saw an increase from 17.6% of GDP in 2021 to a still low 18.4% of GDP in 2022. Hence, the sovereign continues to display the lowest public debt ratio among the EU-27 countries, creating substantial fiscal leeway and constituting a key strength of its overall credit profile. In light of our assumed deficits for the general government balance and developments of nominal GDP, we project the debt-to-GDP ratio to rise to 19.7% in 2023 and to 22.0% in 2024.

Fiscal risks are also mitigated by the sovereign's favorable maturity profile and extremely affordable debt. Last year, the average term to maturity remained on a high level, amounting to 7.3 years (7.4 years in 2021). The sovereign features no FX risks and its financial reserves remain high, totaling EUR 1.9bn in April 2023 (~5% of GDP, MoF). Interest payments have more than tripled in 2022, but from a very low base level. Although the interest-to-revenue ratio thus increased to 0.2% in Q4-22, at this level, it still represents the lowest value among the EU-27 countries (EU 2022: 2.8%).

Bond yields have risen sharply since our last review. Posting at 3.9% as of May 2023, the yield on long term government bonds had climbed by approximately 1.6 p.p. as compared to August 2022 (Eurostat data). At the same time, the Bund spread has appeared to stabilize more recently, amounting to 160bp in May 2023 (August 2022: 135bp). In this context, we note that Estonia issued a Eurobond worth EUR 1bn with a maturity of 10 years and a yield to maturity of 4.023% last October.

Adding to a less favorable capital market environment, the ECB decided to raise its key policy rates by a further 25bp in its June monetary policy meeting. Furthermore, the ECB announced

that it will discontinue reinvestments under the APP from July 2023, following the previous winding down of the portfolio at a monthly pace of EUR 15mn, and reinvest principal payments of maturing government bonds under the PEPP until at least the end of 2024. We expect the ECB to conduct two more 25bp hikes by the end of this year. The authorities' commitment to keep short-term government debt as a percentage of total government debt below 25% adds to low refinancing risks.

We will monitor the effects of rising interest rates on banks' funding costs given the reliance on foreign parent banks and bond issuance as funding sources. Risks pertaining to the credit cycle have also increased somewhat, as rising interest rates imply higher debt-servicing costs for households and businesses. Against the background of weakening economic activity, a larger share of borrowers may find it difficult to meet their financial obligations. As a result, loan losses may rise and asset quality could deteriorate, although from a very low level.

The cumulative effects of monetary policy tightening and the challenging macroeconomic environment are starting to show on the housing market. Drawing on OECD affordability indicators, we observe that some misalignments had persisted in Q3-22, with the price-to-income ratio exceeding its long-term average (Q1-05-Q3-22) by 10.9%. That said, house prices are currently decelerating, although still posting at a relatively high 16.9% y-o-y in Q4-22. We will follow closely the development of mortgage loans, which account for slightly more than half of outstanding loans to the private sector (Apr-23: 50.9%), while mortgage lending grew by a fast 9.5% y-o-y in Apr-23.

Estonia's highly concentrated banking sector has hitherto weathered the succession of crises well, as underscored by strongly performing financial stability metrics. Judging by the CET-1 ratio posting at 22.6% in Q1-23 (EU average: 15.8%, EBA data), Estonian banks were among the EU's highest-capitalized. Asset quality remains high, with the NPL ratio amounting to only 0.5%, as opposed to an average value of 1.8% on the EU level. The profitability of banks has benefited from the higher interest rate environment. Return on assets rose to 2.3% in this year's first quarter, exceeding the EU reading of 0.7% by a considerable margin.

At the same time, authorities are aware of the risks elaborated above. Thus, macroprudential measures have been seized to prevent risks linked to higher loan dynamics from materializing and weakening the banking sector's resilience. In response to cyclical risks emanating from loan dynamics in the private sector, in November 2022 Eesti Pank set the countercyclical capital buffer rate (CCyB) to 1.5% with effect from 1 December 2023.

Foreign Exposure

Despite a deterioration of the Estonian current account balance and NIIP last year, we assess external risks as limited. While Estonia was heavily exposed to trade disruptions with Russia, Belarus and Ukraine, as well as to the shock on the energy markets, adverse effects emanating from the geopolitical crisis are about to subside. As a result, Estonia's external position should, in our view, improve over the medium term. Moreover, external risks typically associated with a net external debtor position remain mitigated by the composition of the NIIP.

Concluding 2022 with a deficit of 2.9% of GDP, Estonia's current account balance position came in markedly less favorable than in the preceding year and as compared with the average current account balance over 2017-2021 (+0.6 % GDP). The widening of the current account deficit was mainly due to a deterioration in the goods balance, reflecting more costly imports as well as the

struggling wood and metal industries in light of rapidly rising energy prices and supply chain frictions. At the same time, the service surplus widened on the back of the robust ICT and tourism sectors, balancing the fall in the goods balance to some degree.

Judging by the four-quarter average, Estonia's current account deficit narrowed to 2.2% of GDP in Q1-23, thanks to improvements in the goods and services balances, as well as the secondary income account. As energy prices are set to drop further, Estonia's export industries should gradually recover from the war-related shock, causing us to expect a shrinking current account deficit in 2023 overall and a broadly balanced position over the medium term.

Following ten successive years of continuous improvements, Estonia's NIIP deteriorated from -13.0% of GDP in 2021 to -20.1% of GDP in 2022, but remained above its pre-pandemic reading. More recently, in terms of quarterly data, the NIIP declined slightly to -21.3% of GDP in Q1-23. The drop in the NIIP was explained by declining net portfolio investment, while the negative NIIP largely mirrors net FDI inflows. Excluding non-defaultable instruments (NENDI), the position was highly positive, amounting to 27.5% of GDP in 2022, adding to our assessment of external risks being largely contained.

Rating Outlook and Sensitivity

Our rating outlook for the Republic of Estonia's long-term credit ratings is stable, reflecting our view that downside risks to its macroeconomic performance are balanced by the sovereign's substantial fiscal scope, as well as by its ongoing strong institutional set-up.

A negative rating action could be prompted by significantly lower-than-expected medium-term economic growth, possibly linked to a further escalation of the geopolitical conflict, potentially leading to a more protracted reversal of Estonia's convergence process towards EU levels. A substantial erosion of Estonia's competitiveness could add to such a scenario. We could also contemplate a downgrade of our ratings or the outlook if the sovereign's debt-to-GDP ratio increases significantly and over a sustained period.

Conversely, we could consider raising the rating or outlook if the adverse repercussions from the current crisis subside without significant scarring effects, laying the foundations for a resumption and possibly acceleration of the convergence process, supported by progressing implementation of the RRP, which would prove conducive to underlying growth and the medium-term outlook. A sustainable reversal of the public debt ratio below levels prior to the recent accumulation of crises could also result in a positive rating action.

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Ratings*

Long-term sovereign rating	AA- /stable
Foreign currency senior unsecured long-term debt	AA- /stable
Local currency senior unsecured long-term debt	AA- /stable

*) Unsolicited

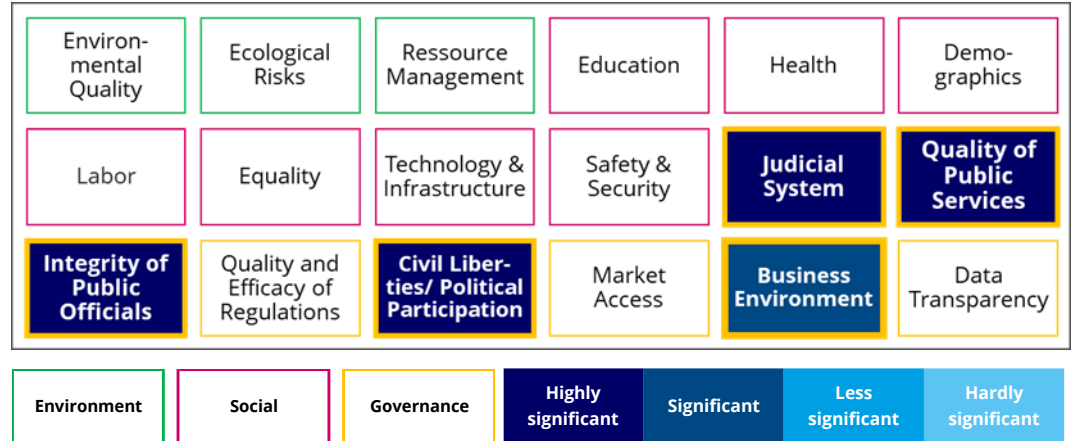
ESG Factors

Creditreform Rating has signed the ESG in credit risk and ratings statement formulated within the framework of the UN Principles for Responsible Investment (UN PRI). The rating agency is thus committed to taking environmental and social factors as well as aspects of corporate governance into account in a targeted manner when assessing creditworthiness.

While there is no universal and commonly agreed typology or definition of environment, social, and governance (ESG) criteria, Creditreform Rating views ESG factors as an essential yardstick for assessing the sustainability of a state. Creditreform Rating thus takes account of ESG factors in its decision-making process before arriving at a sovereign credit rating. In the following, we explain how and to what degree any of the key drivers behind the credit rating or the related outlook is associated with what we understand to be an ESG factor, and outline why these ESG factors were material to the credit rating or rating outlook.

For further information on the conceptual approach pertaining to ESG factors in public finance and the relevance of ESG factors to sovereign credit ratings and to Creditreform Rating credit ratings more generally, we refer to the basic documentation, which lays down [key principles of the impact of ESG factors on credit ratings](#).

ESG Factor Box



The governance dimension plays a pivotal role in forming our opinion on the creditworthiness of the sovereign. As the World Bank’s Worldwide Governance Indicators Rule of Law, Government Effectiveness, Voice and Accountability, and Control of corruption have a material impact on Creditreform Rating’s assessment of the sovereign’s institutional set-up, which we regard as a key rating driver, we consider the ESG factors ‘Judicial System and Property Rights’, ‘Quality of Public Services and Policies’, ‘Civil Liberties and Political Participation’, and ‘Integrity of Public Officials’ as highly significant to the credit rating.

Since indicators relating to the assessment of an economy’s competitive stance by e.g. the World Bank, the World Economic Forum, the European Commission, and IMD Business School and the World Intellectual Property Organization (UN) add further input to our rating or adjustments thereof, we judge the ESG factor ‘Business Environment’ as significant.

While Covid-19 may exert adverse effects on several components in our ESG factor framework in the medium to long term, it has not been visible in the relevant metrics we consider in the context of ESG factors – though it has a significant bearing on public finances. To be sure, we will follow ESG dynamics closely in this regard.

Economic Data

[in %, otherwise noted]	2017	2018	2019	2020	2021	2022e	2023e
Macroeconomic Performance							
Real GDP growth	5.8	3.8	3.7	-0.6	8.0	-1.3	-1.1
GDP per capita (PPP, USD)	33,903	35,907	37,777	37,984	42,826	45,206	46,385
Credit to the private sector/GDP	72.9	70.6	68.8	72.4	68.3	66.2	n/a
Unemployment rate	5.8	5.4	4.5	6.9	6.2	5.6	n/a
Real unit labor costs (index 2015=100)	101.4	102.9	104.4	109.0	104.7	103.1	103.8
World Competitiveness Ranking (rank)	30	31	35	28	26	22	26
Life expectancy at birth (years)	78.4	78.5	79.0	78.9	77.2	n/a	n/a
Institutional Structure							
WGI Rule of Law (score)	1.3	1.2	1.3	1.4	1.4	n/a	n/a
WGI Control of Corruption (score)	1.2	1.5	1.6	1.6	1.5	n/a	n/a
WGI Voice and Accountability (score)	1.2	1.2	1.2	1.2	1.2	n/a	n/a
WGI Government Effectiveness (score)	1.1	1.2	1.2	1.3	1.4	n/a	n/a
HICP inflation rate, y-o-y change	3.7	3.4	2.3	-0.6	4.5	19.4	9.3
GHG emissions (tons of CO2 equivalent p.c.)	16.0	15.3	11.1	8.6	9.6	n/a	n/a
Default history (years since default)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fiscal Sustainability							
Fiscal balance/GDP	-0.5	-0.6	0.1	-5.5	-2.4	-0.9	-3.6
General government gross debt/GDP	9.1	8.2	8.5	18.5	17.6	18.4	19.7
Interest/revenue	0.1	0.1	0.1	0.1	0.1	0.2	n/a
Debt/revenue	23.5	21.2	21.6	47.1	45.1	47.8	n/a
Total residual maturity of debt securities (years)	4.1	3.2	4.1	7.3	7.4	7.3	n/a
Foreign exposure							
Current account balance/GDP	2.3	0.9	2.4	-1.0	-1.8	-2.9	n/a
International reserves/imports	2.1	3.9	7.9	11.5	10.0	8.5	n/a
NIIP/GDP	-33.0	-29.9	-22.6	-21.9	-13.0	-20.1	n/a
External debt/GDP	83.4	77.9	76.1	88.8	84.7	84.3	n/a

Sources: IMF, World Bank, Eurostat, IMD Business School, AMECO, ECB, Statistics Estonia, own estimates

Appendix

Rating History

Event	Publication Date	Rating /Outlook
Initial Rating	23.12.2016	AA- /stable
Monitoring	27.10.2017	AA- /stable
Monitoring	31.08.2018	AA- /stable
Monitoring	30.08.2019	AA- /stable
Monitoring	21.08.2020	AA- /stable
Monitoring	13.08.2021	AA- /stable
Monitoring	12.08.2022	AA- /stable
Monitoring	21.07.2023	AA- /stable

Regulatory Requirements

In 2011 Creditreform Rating AG (CRAG) was registered within the European Union according to EU Regulation 1060/2009 (CRA-Regulation). Based on the registration Creditreform Rating AG is allowed to issue credit ratings within the EU and is bound to comply with the provisions of the CRA-Regulation. The rating was not endorsed by Creditreform Rating AG from a third country as defined in Article 4 (3) of the CRA-Regulation.

This sovereign rating is an unsolicited credit rating. The Ministry of Finance of the Republic of Estonia participated in the credit rating process as it provided additional information. Between the disclosure of the credit rating to the rated entity and the public disclosure no amendments were made to the credit rating.

Unsolicited Credit Rating	
With Rated Entity or Related Third Party Participation	YES
With Access to Internal Documents	YES
With Access to Management	NO

The rating was conducted on the basis of CRAG's ["Sovereign Ratings" methodology](#) (v1.2, July 2016) in conjunction with its basic document ["Rating Criteria and Definitions"](#) (v1.3, January 2018). CRAG ensures that methodologies, models and key rating assumptions for determining sovereign credit ratings are properly maintained, up-to-date, and subject to a comprehensive review on a periodic basis. A complete description of CRAG's rating methodologies and basic document "Rating Criteria and Definitions" is published on our [website](#).

To prepare this credit rating, CRAG has used the following substantially material sources: International Monetary Fund, World Bank, Organization for Economic Co-operation and Development, Eurostat, European Commission, European Banking Authority, European Central Bank, World Economic Forum, IMD Business School, National Bank of Estonia, Republic of Estonia – Ministry of Finance, Statistics Estonia, Stockholm School of Economics.

A Rating Committee was called consisting of highly qualified analysts of CRAG. The quality and extent of information available on the rated entity was considered satisfactory. The analysts and committee members declared that the rules of the Code of Conduct were complied with. No conflicts of interest were identified during the rating process that might influence the analyses and judgements of the rating analysts involved or any other natural person whose services are placed at the disposal or under the control of Creditreform Rating AG and who are directly involved in credit rating activities or approving credit ratings and rating outlooks. The analysts presented the results of the quantitative and qualitative analyses and provided the Committee with a recommendation for the rating decision. After the discussion of the relevant quantitative and qualitative risk factors, the Rating Committee arrived at a unanimous rating decision. The weighting of all risk factors is described in CRAG's "Sovereign Ratings" methodology. The main arguments that were raised in the discussion are summarized in the "Reasons for the Rating Decision".

As regards the rating outlook, the time horizon is provided during which a change in the credit rating is expected. This information is available within the credit rating report. There are no other attributes and limitations of the credit rating or rating outlook other than displayed on the CRAG website. In the event of providing ancillary services to the rated entity, CRAG will disclose all ancillary services in the credit rating report.

The date at which the credit rating was released for distribution for the first time and when it was last updated including any rating outlooks is indicated clearly and prominently in the rating

report; the first release is indicated as “initial rating”; other updates are indicated as an “update”, “upgrade or downgrade”, “not rated”, “affirmed”, “selective default” or “default”.

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An explanatory statement of the meaning of each rating category and the definition of default are available in the credit rating methodologies disclosed on the website.

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