Creditreform Sovereign Rating

Creditreform Rating

Rating Object	Rating Information	
REPUBLIC OF ESTONIA	Assigned Ratings/Outlook: **AA- /stable**	Type: Monitoring, unsolicited
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 30-08-2019 "Sovereign Ratings" "Rating Criteria and Definitions"

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Rating Action

Neuss, 30 August 2019

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. Sustained income convergence should be aided by ongoing economic shift towards higher value added activities and favorable medium-term growth prospects; however, downside risk related to cost competitiveness, while adverse demographics represent Estonia's key economic challenge
2. Expectation of moderating but still solid economic growth in 2019/20, buttressed by healthy domestic demand; economy characterized by very high degree of macro-financial volatility due to small size and strong reliance on trade and EU-funding
3. Strong institutional framework unmatched by CEE peers, sovereign enjoys extensive economic and political benefits from its integration in the European Union, EMU and NATO; assumption of broad policy continuity under Estonia's new administration
4. Track record of prudent budget execution and forward-looking policies translate into persistently strong fiscal metrics; government debt set to remain very low, implying sufficient fiscal space to handle shocks
5. Recurrent current account surpluses and high FDI component in external liabilities limit vulnerabilities stemming from improving but still negative net international investment position

Reasons for the Rating Decision

The Republic of Estonia's very high creditworthiness reflects its very strong public finances and high-quality institutional setting, as well as macroeconomic and external risks related to its characteristics as a small catching-up economy.

Macroeconomic Performance

Estonia's macroeconomic performance profile incorporates strong growth, sustained income convergence towards EU-28 levels, and an excellent business environment, balanced by a high degree of macro-financial volatility and elevated risks to cost competitiveness stemming from vigorous wage growth.

To begin with, Estonia's track record of elevated macroeconomic volatility continues to constrain the credit rating. Macro-financial metrics such as national accounts data, credit, and the current account have fluctuated heavily in the past and key drivers contributing to this volatility remain largely in place. Given the small size of its economy (nominal GDP 2018: EUR 25.7bn), Estonia's business model strongly rests on exports (2018: 75.2% of GDP), while at the same time investment is highly reliant on capital flows from European Structural and Investment (ESI) Funds. Adding to this, the Estonian banking sector is dominated by foreign subsidiaries, implying elevated funding risks for the domestic economy in times of economic distress. In general, these characteristics not only render the economy vulnerable to external shocks, they also negatively affect the predictability of macro-financial indicators.

Averaging at 3.4% in 2014-18, Estonia's economic growth not only compares high with the EU-28 as a whole (2.1%), it is also the strongest among the Baltics (LT: 3.1%; LV: 3.3%). Last year, the Estonian economy continued to grow at a robust, albeit less dynamic pace than in 2017. After an extraordinarily strong 2017, when real GDP growth hit a six-year high (+4.9%), real GDP growth edged down to a still high 3.9% in 2018, as a slowdown in investment and external demand was not entirely offset by thriving private consumption.

Private consumption, which has been a cornerstone of Estonia's macroeconomic performance in recent years, accounted for almost two-thirds of the increase in total output (2.4 p.p.) in 2018. On the back of further improving labor market conditions and briskly growing real wages, consumer spending growth leapt from 2.6 (2017) to 4.7%, corresponding to the highest growth rate since 2007 (+9.0%). Persistently high inflationary pressures (HICP inflation: 3.4%), partly due to excise duty hikes and higher energy prices, were more than compensated by increasing disposable household incomes. Apart from the personal income tax reform, which entered into force in 2018, rapidly rising nominal wages translated into purchasing power gains. According to Statistics Estonia, real wages increased by 4.0% in 2018 (2017: 2.7%).

By contrast, weaker investment dynamics in both the private and the public sectors restrained output growth in 2018. Following an outstanding performance in 2017, when gross fixed capital formation contributed 3.1 p.p. to growth, its growth contribution fell to 0.9% last year. Growth in investment fell to 3.3% last year after skyrocketing by 12.5% in 2017, driven by an accelerated absorption of ESI funds and large one-offs in the transport sector. Against this backdrop, it is noteworthy that the sharp deceleration in investment was mainly a result of slackening machinery and equipment, which contracted by 4.6% (2017: +27.7%). Meanwhile, spending on intellectual property (IP) and construction remained unscathed. While IP investment accelerated for the third consecutive year, recording an annual growth rate of 18.9%, capital spending on dwellings and other structures also

continued to recover and came in 6.4% above the previous year's level (2016: -0.2%; 2017: +4.2%).

Alongside slowing investment, trade adversely affected Estonia's economic expansion last year. After net exports had been broadly neutral to growth in 2016/17, its contribution turned negative in 2018 (-1.4 p.p.). To be sure, this was the result of vividly rising imports rather than weaker demand from abroad. Up from 3.6% in 2017, import growth surged to 6.1% in 2018, thereby outpacing exports, which experienced less dynamic but still healthy growth of 4.3% y-o-y (2017: 3.5%). Exports to Finland and Latvia, two of Estonia's key trading partners which together account for a quarter of total exports (25.1%), exhibited double-digit growth rates, expanding by 10.6 and 17.3% in nominal terms respectively.

Thanks to robust economic growth, income convergence towards the EU-28 level further progressed in 2018. Drawing on IMF estimates, GDP per capita stood at USD 34,096 (in PPP terms), equivalent to 79.0% of the EU-28 level last year (2017: 77.6%). Thus, per capita GDP is broadly on par with Lithuania (USD 34,826) but trailing the Czech Republic (USD 37,371) and Slovenia (USD 36,746), which are the most advanced Central and Eastern European (CEE) economies when it comes to income convergence. We also note that Estonia's per capita income remains well below the median of AA-rated peers (USD 46,102). In the medium term, we anticipate the income gap to narrow further, driven by GDP growth approximately twice as high as in the EU-28.

With regard to 2019, we note that Estonia's economy was off to a good start to the year. Primarily thanks to rebounding investment, GDP growth clocked in at 4.6% in the first quarter, up from 4.2% in Q4-18. However, survey-based indicators (see below) suggest that the economy is unlikely to sustain its growth momentum during the remainder of the year. While domestic demand should continue to pull back, we expect no meaningful growth impetus from net exports in the near term. Thus, GDP growth should taper off, prospectively decelerating to 3.2% this year before moderating to 2.5% in 2020.

We assume that sluggish growth in the euro area and in Estonia's main trading partners is likely to dent export growth this year. Amidst the cyclical slowdown in global growth, export expectations in the industrial sector have steadily worsened over the last twelve months, marking a five-year low in Q3-19. Looking ahead into 2020, prospects for exports should brighten somewhat, assuming gradually dissipating policy uncertainty accompanied by a moderate pick-up of economic activity in the euro area.

Notwithstanding the uptick in Q1-19, the near-term outlook for investment has become more clouded recently, as confidence in the industrial sector has evaporated rather quickly since the turn of the year. Apart from external macro-uncertainties related to Brexit fears, rising protectionism and the cyclical downturn in the euro area, we expect several country-specific challenges to hamper Estonian enterprises' propensity to invest going forward. Firstly, rapid wage growth is increasingly squeezing corporate profitability and thereby firms' capacity to invest. Since the beginning of 2017, the corporate profit rate has steadily declined from 4.8 via 4.3% (Q1-18) to 3.6% in Q1-19 – the lowest reading since Q3-09 (3.4%). Secondly, we anticipate subsiding tailwinds from construction investment over the coming years, as the housing market cooled somewhat in 2018. Building permits for dwellings,

which had more than tripled from 2,581 to 7,877 in 2010-17, were down 11.3% y-o-y in 2018. To be sure, capacity utilization, which is still running above its long-term average, as well as the sustained absorption of ESI funds, should help to keep investment on an upward trajectory. As illustrated by EU data on ESIF implementation progress, EU disbursements paid out under the current 2014-20 programming period rose from 34% of total EU allocation (EUR 1.51bn) at the end of 2018 to 43% (EUR 1.88bn) up to August 2019.

In view of persisting uncertainties surrounding the near-term prospects for external demand and investment, we expect private consumption to remain the main growth driver this and next year. Although the pace of expansion should gradually moderate in 2019/20 mirroring weaker employment and wage dynamics, consumer spending should continue to grow at solid rates. Our expectation is underpinned by latest national accounts data according to which private consumption slowed to 3.1% y-o-y in Q1-19 (Q1-18: 4.6%). Still, upbeat consumer sentiment and further increases in disposable household incomes should provide a generally favorable backdrop for private consumption. Alongside a EUR 40 (+8.0%) minimum wage hike (Jan-19), higher supplementary pensions and enduring nominal wage growth in the tight labor market should support consumers' purchasing power.

Estonia's ongoing transformation into a modern service economy should bolster income convergence over the coming years. At the end of 2018, agriculture (2.2% of GVA), construction (7.7%) as well as trade and transport activities (20.9%) still played a greater role in the Estonia than in the EU-28, but the economy is increasingly shifting towards higher value-added activities. Over the last decade, gross value added of professional services grew by 62.9%, while it has more than doubled in the ICT sector (+126.1%), outpacing the overall increase in gross value added (+44.3%) by a wide margin. As a result, ICT services made up for 6.2% of GVA in Q4-18, which compares high to other CEEs and the EU-28 as a whole (4.5%). Looking ahead, we believe that reversing the downward trend in R&D investment is a prerequisite for moving up the value chain. As measured by GDP, spending on R&D steadily declined from 1.7% (2013) to 1.3% in 2017. Concurrently, the high-tech share in Estonian exports fell from 16.3 to 12.0%.

Beyond 2020, growth prospects for Estonia's economy remain generally benign. Drawing on European Commission estimates, Estonia's growth potential has improved notably from 2.2% in 2013 to 3.2% in 2018, and is now among the highest in the EA-19. It has to be emphasized, however, that Estonia is likely to see a lower allocation of ESI funds in the EU's next multiannual budget given the progress that has been made in terms of income convergence. Furthermore, the projected decline in Estonia's labor force may drag on potential output further out. Partly driven by rapidly rising wages and the implementation of migration reforms, we observed positive net migration in each year since 2015, but it appears unlikely that immigration will offset the negative natural change in population going forward. The EU Commission's 2018 Ageing Report corroborates this view. Even under the assumption of moderately positive net migration, the share of Estonia's population at working age (15-64y) should decrease from 64.7% in 2016 to 61.4% in 2030. Against this background, we regard it as a positive that authorities have implemented several reforms to boost labor supply (e.g. Work Ability reform, Zero-bureaucracy reform). Nevertheless,

Estonia's already high labor market participation rate indicates limited room for a further expansion of labor supply. Partly thanks to the aforementioned reforms, Estonia's participation rate climbed from 76.7 (2015) to 79.1% in 2018, the fourth highest level in the EU-28. In general, Estonia's labor market continued to perform well last year. The unemployment rate fell from 5.8 (2017) to 5.4%, driven by broad-based employment growth, which carried over into 2019. Job creation thus accelerated somewhat in the first quarter of the year, edging up to 1.9% from 0.5 and 1.0% in Q3 and Q4-18, respectively.

Strong demand for labor in an increasingly tight labor market drives up wages, with potentially adverse consequences for cost-competiveness. Real wage growth accelerated from 2.9 (2017) to 4.0% in 2018, again outpacing labor productivity, which rose by 2.6%. Hence, real wages outstripped labor productivity for the seventh consecutive year, resulting in a 9% increase in real unit labor costs in 2012-18, which compares unfavorably with a 1.7% decline in ULC's in the euro area over the same period. Although the development of Estonia's global export market share does not point to deteriorating cost competitiveness yet, the trajectory of wages warrants continued attention. Still, wage growth shows no signs of slowing down. In the first quarter of the year nominal wages expanded by 8.0% y-o-y (2017: +6.5%; 2018: +7.3%).

In our view, risks pertaining to cost-competitiveness are somewhat tempered by Estonia's strengths on the non-cost competitiveness side. The World Bank and the World Economic Forum (WEF) have repeatedly confirmed the extraordinarily high quality of Estonia's business environment. The WEF's most recent Global Competitiveness Report ranks Estonia 32nd out of 140 economies. According to the latest WEF-rankings, Estonia is a global frontrunner in ICT adoption (rank 14). Furthermore, the economy's performance continues to be buoyed by a skilled workforce (rank 18), flexible product and labor markets (rank 21 respectively), as well as strong and reliable institutions (rank 22). More importantly, changing governments have constantly made efforts to further improve the business environment. In September 2018, the government approved an amendment to the Vocational Educational Institutions Act aiming to make the education system more flexible and to improve vocational education. Also in September, a new program to support industry digitization and automation was implemented. More recently, the Ministry of Justice announced to draft an amendment to the insolvency code in order to make bankruptcy proceedings faster, more cost-effective and transparent, thereby ensuring higher recovery rates to creditors. The expected entry into force of the changes is the second half of 2020 or the beginning of 2021.

Institutional Structure

Estonia's credit rating continues to reflect the high quality of its institutional framework and significant political and economic benefits associated with the country's integration in multi and supranational structures.

We consider Estonia to benefit extensively from its EU and EMU-membership, which entail access to the Single Market, to structural and cohesion funds, and advantages associated with the euro's reserve currency status. Sharing a border with Russia, the country is also a

major beneficiary of NATO. To deter any potential aggression, the NATO deployed additional troops to Estonia in 2017. Although we consider the probability as low, we note that Estonia still remains exposed to risks of large shocks stemming from an escalation in the Russia-EU conflict, and from cyber-attacks given the very high degree of digitization of Estonia's public services and economy.

Moreover, Estonia displays a high quality of policy formulation and implementation; there is open public debate on policy issues, while the constitution provides extensive checks and balances to power. These characteristics are mirrored by very favorable rankings along all dimensions of the World Bank's World Governance Indicators (WGI). Estonia is ranked 35th, 22th, and 29th out of 209 countries on the indices for "government effectiveness", "voice and accountability" and "rule of law". Thus, the sovereign not only compares well to the respective EU-28 median ranks (37, 33, and 35), it also outperforms CEE peers such as Latvia, Lithuania, Hungary, Poland and the Czech Republic by a large margin. Findings of the EU Commission confirm our view, that pro-active policymaking and reform-friendliness have been characteristic for Estonian governments in recent years. According to the Commission, Estonia has made at least some progress on all of its country-specific recommendations since the start of the European Semester in 2011.

We expect these institutional strengths to persist, although we note that government formation and cohesive policy-making have apparently become more complicated since our last review. As in many European countries, the social climate has become more polarized, and right-wing parties have gained popularity. In the March 2019 parliamentary elections, the far-right Estonian Conservative People's Party (EKRE) more than doubled its share of the votes from 8.1 to 17.8%, while the governing coalition consisting of the Centre Party, the Social Democrats and Isamaa lost its majority. Government formation turned out to be rather difficult. Having emerged as the strongest party from the elections (28.9% of the votes), the liberal Reform Party failed to secure a governing majority and also to form a minority coalition. Eventually, former Prime Minister Juri Ratas, whose Centre Party came in second (23.1%), succeeded in forming a coalition with Isamaa and anti-immigrant and EU-sceptic EKRE. As early as August, the newly-formed government was put to the test, after Minister of Finance Helme (EKRE) attempted to dismiss the country's police chief without prior consent of the prime minister and the cabinet. The Reform Party has asked for a no-confidence vote against PM Ratas, on which the parliament will prospectively debate on an extraordinary session on 30 August. That said, the opposition parties Reform and SDE have 44 seats, while the governing coalition's seats sum up to 56 of the 101 seats in Riigikogu.

A premature break-up of the current coalition followed by snap elections cannot be ruled out. To be sure, we expect policy continuity to remain in place, as a positive attitude towards Estonia's EU and NATO membership, as well as the commitment to stability-oriented fiscal policies and forward-looking economic policies is still widely shared across the political landscape.

Fiscal Sustainability

The government's budgetary position was balanced on average in 2010-18. Last year, Estonia's headline deficit widened slightly to 0.5% of GDP, up from 0.4% in 2017. Thus, the actual fiscal outturn was significantly worse than projected by the government in its 2018 Stability Program (+0.2% of GDP). To be sure, budgetary underperformance has to be seen in the context of the numerous revenue and expenditure measures which entered into effect in 2018, making fiscal forecasting a complex task. As highlighted by Statistics Estonia data, personal income taxes came in higher than initially budgeted, but corporate taxes and excise duties fell short of expectations. As a result, total government revenues totaled 39.1% of GDP in 2018, significantly lower than the 40.9% targeted in the 2018 Stability Program. Last year's revenue shortfall coincided with stronger-than-expected growth on the expenditure side of the budget. Total government outlays increased by 9.4% in nominal terms. Spending on the public wage bill rose by 9.2% (2017: +7.3%), or 0.8% of GDP, partly driven by a wage hike for teachers. Meanwhile, social benefit spending, which accounts for more than a third (34.2%) of total government expenditures, posted double-digit growth, accelerating from 7.1 (2017) to 10.5% in 2018.

As highlighted by Estonia's fiscal council, the large number of tax measures implemented in the recent past may continue to affect the fiscal outcome in 2019/20. Due to potential changes in consumer and corporate behavior in response to the new tax legislation, fiscal forecasting remains subject to an elevated degree of uncertainty. Currently, we anticipate both revenue and expenditure growth to lose some steam this year. Given that solid GDP growth should remain in place and the 2019 budget foresees only minor discretionary fiscal measures, the headline deficit should narrow to 0.3% of GDP in 2019. Authorities expect enterprises to shift some dividend payments into 2019, which should boost income tax receipts by 0.1% of GDP. Also, the sale of greenhouse gas emission allowances within the EU should yield some revenues of about 0.2% of GDP. On the other hand, the government cancelled a further increase in alcohol excise duties (-0.1% of GDP).

On the expenditure side, Estonia continues to ramp up spending on military equipment in order to strengthen its defensive capabilities. The 2019 budget bill directed EUR 594m to the Department of Defense, corresponding to a y-o-y increase of 17.1%. What is more, additional healthcare funding was provided to shorten waiting times and improve the accessibility of healthcare services and the consistency and quality of care. On the whole, health expenditure is set to grow in the double digits this year. By the same token, planned expenses in the field of education should cross the EUR 1.0bn mark for the first time, mirroring higher salaries for teachers, the growth of the school network program, and the increase in the support fund for local governments for education-related expenses.

With regard to 2020, we have limited visibility on the coalition's fiscal plans. A detailed draft budget is currently prepared and to be discussed in parliament in autumn. Generally, we note that the change in government appears not to have led to considerable reprioritizations in public spending. Defense and productivity-enhancing investments continue to rank high on the new administration's agenda. Defense expenditures should remain well above the NATO's target of 2% GDP over the coming years, as the government plan to boost the

country's military capabilities with large-scale procurements. Meanwhile, authorities envisage further upgrades to the country's transport infrastructure and education system, and providing additional state support for R&D activities.

The government's decision to lower excise duties on alcohol by 25%, as well as changes in the area of pensions, should result in lower revenue growth. Effective from 2020, the government intends to increase the tax-free income of pensioners by EUR 50 to keep the average old-age pension income tax-free. Moreover, the coalition concluded on an agreement on 22 August to reform second pillar pensions. The new pension legislation would allow people to opt out of currently subsidized second pillar pensions. This should free up some tax revenues, which could in turn be used by the state to fund an extraordinary pension hike. Minister of Finance Helme has announced to submit the bill to parliament in autumn, but he also stated that savings generated through the proposed reform are unlikely to fully cover the cost of a pension hike. Despite the additional spending items proposed in the 2020-23 state budget strategy approved in May, we believe that the new administration will stick to prudent fiscal policies. According to the budget strategy, authorities aim to balance the budget in 2020 by generating some savings on the departmental level and somewhat lower capital expenditures. We thus expect to see a broadly-balanced budget next year.

To cater for fiscal headroom in 2019/20, authorities intend to modify the State Budget Act, which currently mandates the compensation of past structural deficits with equally-sized surpluses in the future. As the economy should evolve broadly in line with its potential in the near term, the necessity of fiscal easing appears limited, but it would not entail any immediate risk for public finances given the sovereign's extremely low debt levels and excellent affordability metrics. Estonian general government debt remains the lowest in Europe, standing at 7.9% of GDP in 2018, down from 8.7% of GDP a year before. Moreover, the sovereign's debt is highly affordable as its interest expenditure made up for a negligible 0.1% of general government revenue in 2018 – also the lowest reading in Europe.

Estonia's medium-sized banking sector is dominated by subsidiaries of foreign, mainly Nordic banks, and therefore harbors limited contingent liability risks for the sovereign. According to Estonia's regulatory authority FSA, SEB and Swedbank alone accounted for almost half (46.4%) of total banking assets in the first quarter of 2019. Noteworthy is that total assets in Estonia's banking sector rose sharply from 103.4 (Q4-18) to 140.6% of GDP in Q1-19, as Luminor Group's Latvian and Lithuanian subsidiaries became branches with the head office in Estonia. While Luminor's cross-border merger has not generally raised financial stability risks, it has undoubtedly increased the interconnectedness of Estonia's banking sector with its Baltic neighbors, making it more sensitive to economic conditions in Lithuania and Latvia. To be sure, EBA metrics indicate a sound banking sector at the moment. Estonia has one of the lowest NPL-ratios in Europe (Q1-19: 2.0%), the highest CET1 capital ratio (26.8%), and credit is sufficiently covered by deposits (loan-deposit ratio 104.0%).

Recent money laundering scandals carry some reputational risk to Estonia's banking sector. In February 2019, FSA ordered Danske Bank to shut down its operations in Estonia before the end of 2019. Danske's Estonian branch was found to be involved in a large-scale money laundering scandal as suspicious payments amounting to EUR 200bn had been

made through the bank in 2007-15. This led the European Banking Authority to open an investigation into possible breaches of EU law by the financial authorities of Estonia and Denmark, which was, however, closed in April 2019. Responding to these incidents, the governmental AML/CFT Committee presented an analysis of the Danske case and a number of proposals on enhancing the prevention of money laundering in December 2018; however, a draft law containing the aforementioned measures was rejected by Parliament in January.

Foreign Exposure

With regard to Estonia's external position, risks appear limited as we see no major imbalances at the moment. Since 2013, Estonia has run current account surpluses averaging 1.7% of GDP per year, thanks to strong surpluses on the trade in services balance, offsetting negative trade in goods and primary income balances. Last year, Estonia's current account surplus nearly halved from 3.2 to 1.9% of GDP, mainly on account of a lower trade surplus in services, which edged down from 8.0 to 7.3% of GDP. We expect the current account surplus to moderate somewhat due to softening external demand in the near term. However, the current account should remain in positive territory, contributing to a further improvement in the economy's net international investment position (NIIP).

Although remaining in a net borrower position vis-a-vis the rest of the world, Estonia's external position continued to strengthen last year. In 2018, its NIIP came in at -28.2% of GDP, down from -31.4% and -50.1% of GDP in 2017 and 2013, respectively. The improvement in Estonia's NIIP in the recent past was primarily driven by ongoing external deleveraging. We note that Estonia is one of only few CEE countries exhibiting negative net external debt. Since 2013, the economy's net external debt position shifted from -4.9 to -18.1 % of GDP. As of now, we view risks related to Estonia's net external liabilities as mitigated by the composition of the NIIP, as the bulk of it can be attributed to FDI liabilities, with net foreign direct investment amounting to -57.9% of GDP at the end of 2018.

Rating Outlook and Sensitivity

Our Rating outlook on Estonia's sovereign ratings is stable, as we assume that the risk situation underlying the key factors affecting sovereign credit risk – including macroeconomic performance, institutional structure, fiscal sustainability, and foreign exposure – will remain fundamentally unchanged in the next twelve months.

The rating could be downgraded in the event of substantially lower growth which may result from structurally weaker growth in Estonia's key trading partners. Given the economy's elevated vulnerability to external shocks, intensifying geopolitical tensions with regard to Russia could also drag on investment activity and export growth. In the medium term, downward pressure on the rating could arise if we observe a significant setback in income convergence or if adverse demographic developments substantially erode the economy's growth potential. By the same token, a persistent decoupling of wage and productivity

growth could translate into a declining export market share. While we consider this as rather unlikely at this stage, the rating could also be lowered if we observe a significant deterioration in the sovereign's fiscal metrics.

By contrast, factors that could trigger an upgrade include stronger-than-expected GDP growth over an extended period of time, resulting in an acceleration of income convergence; and an improving relationship with Russia, leading to abating geo-political tensions. We could also consider an upgrade to the rating if we conclude that structural reforms are being passed which lead to a sustainable alignment of productivity and wage growth.

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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

Economic Data

	2013	2014	2015	2016	2017	2018	2019e
Real GDP growth	1.9	2.9	1.9	3.5	4.9	3.9	3.2
GDP per capita (PPP, USD)	26,608	27,951	28,786	30,107	32,130	34,096	35,718
HICP inflation rate, y-o-y change	3.2	0.5	0.1	0.8	3.7	3.4	2.6
Default history (years since default)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Life expectancy at birth (years)	77.5	77.4	78.0	78.0	78.4	n.a.	n.a.
Fiscal balance/GDP	-0.2	0.7	0.1	-0.3	-0.4	-0.5	-0.3
Current account balance/GDP	0.5	0.8	1.8	2.0	3.2	1.9	n.a.
External debt/GDP	93.1	94.9	92.8	88.4	82.6	77.4	n.a.

Source: International Monetary Fund, Eurostat, 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

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.

This sovereign rating is an unsolicited credit rating. Neither the rated sovereign nor a related third party participated in the credit rating process. Creditreform Rating AG had no access to the accounts, representatives or other relevant internal documents for the rated entity or a related third party. Between the disclosure of the credit rating to the rated entity and the public disclosure no amendments were made to the credit rating.

The rating was conducted on the basis of CRAG´s "Sovereign Ratings" methodology in conjunction with its basic document "Rating Criteria and Definitions". 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 the following internet page: www.creditreform-rating.de/en/regulatory-requirements/.

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, European Stability Mechanism (ESM), Estonian Ministry of Finance, Eesti Pank, Statistics Estonia, Estonian Fiscal Council (Eelarvenoukogu).

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 case 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".

In accordance with Article 11 (2) EU-Regulation (EC) No 1060/2009 registered or certified credit rating agency shall make available in a central repository established by ESMA information on its historical performance data, including the ratings transition frequency, and information about credit ratings issued in the past and on their changes. Requested data are available on the ESMA website: https://cerep.esma.europa.eu/cerep-web/statistics/defaults.xhtml.

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.

Disclaimer

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