INTERNATIONAL MONETARY FUND

IMF Country Report No. 21/160

REPUBLIC OF ESTONIA

2021 ARTICLE IV CONSULTATION—PRESS RELEASE; AND STAFF REPORT

July 2021

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2021 Article IV consultation with the Republic of Estonia, the following documents have been released and are included in this package:

- A **Press Release**
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on lapse-of-time basis, following discussions that ended on May 14, 2021, with the officials of the Republic of Estonia on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on June 30, 2021.
- An **Informational Annex** prepared by the IMF staff.

The document listed below have been or will be separately released.

Selected Issues

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

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Washington, D.C.

PRESS RELEASE

PR21/220

IMF Executive Board Concludes 2021 Article IV Consultation with Republic of Estonia

FOR IMMEDIATE RELEASE

Washington, DC – **July 21, 2021:** On July 19, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Republic of Estonia.

Estonia has been broadly successful in managing the COVID-19 pandemic, but the second wave has continued to impact economic activity. The lockdown of March 2020 helped contain infections and mitigate negative health outcomes but triggered a deep decline in activity in the second quarter of 2020. The rapid, broad-based, and sizable policy responses and an easing of the restrictions underpinned a strong economic rebound in the second half of the year, and, as a result, Estonia's output fall in 2020 was among the mildest in the EU. The second wave of the virus that started in late-2020 slowed the recovery's momentum and caused another wave of lockdowns in the spring of 2021. However, adaptation of economic activities to the virus and recent solid progress with vaccinations are improving economic and health outcomes and boosting confidence. Inflation was subdued during 2020 but showed signs of acceleration in the first few months of 2021.

Output is expected to recover in the near term, and the projection is subject to substantial two-way risks. A robust recovery is projected for 2021 and 2022, of 3.4 and 4.5 percent growth respectively on the back of continued progress with vaccinations, ongoing policy support, a boost to domestic demand from the expected withdrawal of pension system savings, and EU fund-backed public investment. Over the medium term, growth would ease closer to 3 percent. Inflation is projected to pick up from the very low levels of 2020 and reach 2½ percent by 2022, before easing to a 2 percent pace in the medium-term. There are large two-way risks, including from virus mutations and economic scarring on the downside, and improved global trade, ramped up vaccinations, and enhanced opportunities for digital and green growth on the upside. The pace of recovery in Estonia's EU trading partners has a significant potential for regional spillovers, especially in tourism and manufacturing sectors.

[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

Executive Board Assessment[2]

In concluding the Article IV consultation with Estonia, Executive Directors endorsed the staff's appraisal as follows:

Estonia has been broadly successful in managing the COVID-19 pandemic. The initial and subsequent lockdowns and restrictions on activity helped mitigate negative health outcomes but triggered a decline in economic activity. However, the rapid, broad-based, and sizable policy responses helped contain the economic damage, and the fall in output has been among the mildest in the EU. Vaccination rollout is being expanded and restrictions are being eased, paving the way for an economic rebound. Estonia's external sector is assessed as having been substantially stronger than justified by medium-term fundamentals and desirable policies in 2020.

Output is set to recover, but the outlook is subject to large two-way risks. A robust recovery is expected in the near term on the back of progress with vaccinations, continued policy support, a boost to domestic demand from the expected withdrawal of pension system savings, and EU fund-backed public investment. There are however large two-way risks, including from virus mutations and economic scarring on the downside, and on the upside from increased confidence due to successful vaccinations and enhanced opportunities for digital and green transition.

Fiscal support should continue to be provided until the recovery is firmly entrenched. Estonia has ample policy space, reflecting prudent macroeconomic management and low debt. The fiscal support has been sizable, broad-based, and well-coordinated. While the current fiscal stance is appropriate, as health conditions improve and the economy recovers, the support should be gradually withdrawn. While some support measures have already expired as the economy has shown signs of recovery, they need to be promptly re-deployed should any signs of weakness emerge. In parallel, a plan to return to the medium-term objective should be part of a well-sequenced strategy to rebuild policy buffers and rebalance support toward productive investment. Further improving fiscal transparency and project implementation and maximizing the impact of NGEU grant funding should complement the envisioned scaling up of public investment.

Structural policies should aim to protect and revitalize Estonia's productive and social fabric. Comprehensive monitoring of policy support and evaluation of experience should guide decisions on the costs and benefits of continuing with labor market programs to minimize labor market scarring. In parallel, active labor market policies should be ramped up to enhance training, match workers to good jobs, reduce skill shortages, and incentivize hiring. To manage potential social scarring risks, policies should continue to reduce inequality and gender gaps and further protect the elderly. The recent and planned increases in pension entitlements are welcome, and so is the planned review of the pension system. Further facilitating immigration could help address population aging, low productivity, and scarcity of skilled labor.

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[2] At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: http://www.IMF.org/external/np/sec/misc/qualifiers.htm.

Estonia should further accelerate its green and digital transition. NGEU funds open up opportunities for further progress in the greening and digitalization agenda, where Estonia should supplement its commendable progress in digital public services with improved efficiency in R&D spending to enhance digitalization of private businesses. Drawing on the government's strong commitment to more ambitious climate targets, the authorities should continue their efforts to implement all aspects of their reform agenda. In particular, comprehensive and predictable carbon pricing could be considered to achieve the emissions targets. Further steps should be taken to accelerate the restructuring of the oil-shale sector while managing its social impact.

Financial supervisors and macroprudential policymakers should remain vigilant. Estonia's strong financial sector has weathered the pandemic well and helped support the economy. Financial supervision policies are appropriate, but continued careful monitoring is warranted. Banks' exposures to pandemic-hit sectors seem to be contained, and banks can now more soundly re-assess their borrowers and fully use the potential for credit provision while continuing to provide targeted support to vulnerable segments of the economy. The macroprudential stance is appropriate, though there is a need for a continued reassessment of the policy tools in light of developments in the real estate market. Staff welcomes the authorities' continued progress with legislative and institutional reforms of the AML-CFT framework, which should be further advanced.

Table 1. Estonia: Selected Macroeconomic and Social Indicators, 2018–26

(Units as indicated)

	2018	2019	2020	2021	2022	2023	2024	2025	2026
			Est.			Projections			
National income, prices, and wages									
GDP (nominal; billions of Euro)	25.9	28.1	27.2	29.0	31.1	33.1	35.1	37.2	39.4
Annual change (in percent)	8.7	8.4	-3.4	6.8	7.3	6.2	6.3	5.9	5.9
Real GDP growth (year-on-year in percent) 1/	4.4	5.0	-2.9	3.4	4.5	3.7	3.4	3.2	3.2
Private consumption	4.6	3.1	-2.5	4.5	7.0	3.9	3.2	3.2	3.2
Gross fixed capital formation	3.9	11.0	18.4	-8.0	8.0	8.5	8.0	7.0	6.0
Exports of goods and services	4.0	6.2	-5.4	4.5	7.6	5.2	3.4	3.4	3.0
Imports of goods and services	5.7	3.7	0.7	1.7	8.9	5.8	4.7	4.5	4.0
Average HICP (year-on-year change in percent)	3.4	2.3	-0.6	1.7	2.5	2.1	2.1	2.1	2.1
GDP deflator (year-on-year change in percent)	4.2	3.2	-0.4	3.3	2.7	2.4	2.8	2.6	2.7
Average monthly wage (year-on-year growth in percent)	7.3	7.4	2.9	4.5	4.9	5.1	4.8	4.5	4.5
Unemployment rate (ILO definition, percent, pa)	5.4	4.4	6.8	6.9	6.5	5.5	5.0	4.8	4.8
Average nominal ULC (year-on-year growth in percent)	5.0	5.4	3.1	1.7	1.6	2.1	1.8	1.2	1.1
General government (ESA10 basis; percent of GDP)									
Revenue	38.7	39.4	40.2	40.8	39.8	39.9	40.6	40.8	40.9
Expenditure	39.2	38.9	45.0	47.0	44.1	43.5	43.7	43.3	42.9
Financial surplus (+) / deficit (-)	-0.5	0.5	-4.8	-6.3	-4.2	-3.7	-3.1	-2.5	-2.0
Structural balance	-1.2	-0.5	-4.6	-6.5	-4.2	-3.6	-3.1	-2.5	-2.0
Total general government debt	8.2	8.4	18.2	24.0	27.1	29.8	31.7	33.0	33.6
Net government debt 2/	-1.8	-2.2	2.5	9.3	13.4	16.9	19.6	21.5	22.8
External sector (percent of GDP)									
Merchandise trade balance	-4.7	-3.2	-0.6	-1.3	-2.2	-2.2	-2.3	-2.4	-2.5
Service balance	7.3	7.2	0.8	3.8	4.1	4.2	3.7	3.5	3.4
Primary income balance	-1.9	-2.2	-1.2	-1.9	-1.9	-1.9	-1.9	-1.8	-1.8
Current account	0.9	2.0	-1.0	0.7	0.2	0.2	-0.2	-0.6	-0.8
Gross external debt/GDP (percent) 3/	77.4	73.8	88.7	86.9	83.3	80.7	78.0	75.8	73.6
Exchange rate (US$/Euro - period averages)	1.18	1.12	1.14	...	...	...	...	...	...
Real effective exchange rate (annual changes in percent)	4.5	-0.2	0.7	...	...	...	...	...	...
Nominal effective exchange rate (annual changes in percent)	3.3	-0.3	2.6	...	...	...	...	...	...
Money and credit (year-on-year growth in percent)									
Credit to the economy	6.3	3.9	3.8	...	...	...	...	...	...
Output gap (in percent of potential output)	2.5	3.2	-2.1	-1.7	-0.6	-0.3	-0.1	-0.1	0.0
Growth rate of potential output (in percent)	3.2	4.3	2.3	2.9	3.4	3.3	3.3	3.2	3.1

Social Indicators (reference year):
Population (2019, pa): 1.32 million; Per capita GDP (2017): $32,998; Life expectancy at birth: 82.2 (female) and 73.3 (male);

Poverty rate (share of the population below the established risk-of-poverty line): 22.2 percent; Main exports: machinery and appliances.

Sources: Estonian authorities; Eurostat; and IMF staff estimates and projections.
1/ Statistics Estonia revised National Accounts series in August 2019 inter alia shifting reference year to 2015 and improving the methodology.

2/ Includes the Stabilization Reserve Fund (SRF).

3/ Includes trade credits.

INTERNATIONAL MONETARY FUND

REPUBLIC OF ESTONIA

STAFF REPORT FOR THE 2021 ARTICLE IV CONSULTATION

June 30, 2021

KEY ISSUES

Context. Macroeconomic performance and buffers were strong when the COVID-19 pandemic hit. Economic and social restrictions instituted in March 2020 helped slow new infections and mitigate negative health outcomes but triggered a deep decline in activity in Q2:2020. The slump was followed by a strong rebound in Q3 as the restrictions were eased. With the resurgence of the virus, pressures on the health system peaked in late-March 2021 and eased after a new round of restrictions. Going forward, the outlook is for a near-term economic recovery subject to large two-way risks. The strength and durability of the recovery hinges on the evolution of the health situation and the extent of economic scarring from the pandemic.

Policy response. The authorities' policy response to the pandemic has been rapid, sizable, and well-coordinated. Fiscal support has focused on wage and income transfers, subsidies, and credit facilitation for individuals and businesses. Help was also provided through bank moratoria and the relaxation of the central bank's macroprudential systemic risk buffer. EU and euro area institutions facilitated and leveraged the responses with unprecedented actions within their mandates, including escape clauses from the fiscal rules, upcoming large-scale NextGen funding, and deployment of an arsenal of supportive monetary and prudential tools by the ECB.

Recommendations. Estonia has ample fiscal space for efficient spending-based economic support that prioritizes high-quality, growth-friendly public investment. As the economy transitions to recovery, it is essential to continue to provide targeted fiscal support. To minimize long-term damage to Estonia's productive fabric, fiscal support needs to be maintained until the recovery is entrenched. In particular, while the wage support measures have now expired, targeted sectoral support measures should continue. Developments with inequality and gender wage gaps should continue to be monitored carefully to contain risks of "social scarring." There is an opportunity to reignite digital and green growth, which are critical for dynamic and sustained income convergence. While most financial sector forbearance measures have been withdrawn, targeted support, including loan guarantees, should remain, and the AML/CFT reform agenda should be advanced, drawing on upcoming regional CD on AML/CFT.

Approved by
Philip Gerson and Johannes Wiegand

Discussions took place via video conference during April 26 to May 14, 2021. The staff team comprised Cheikh Gueye (head), Bogdan Lissovolik, Neree Noumon, Sakai Ando, and Jean-Marc Atsebi (all EUR). Shituo Sun and Rafaela Jarin (EUR) assisted the mission. Nils Vaikla (OED) participated in the discussions. The mission met with Finance Minister Keit Pentus-Rosimannus, Bank of Estonia Governor Madis Müller, Economic Affairs and Infrastructure Minister Taavi Aas, Entrepreneurship and Information Technology Minister Andres Sutt, Health and Labor Minister Tanel Kiik, other senior officials from the government and representatives from the fiscal council, parliament, private sector, banks, and the civil society.

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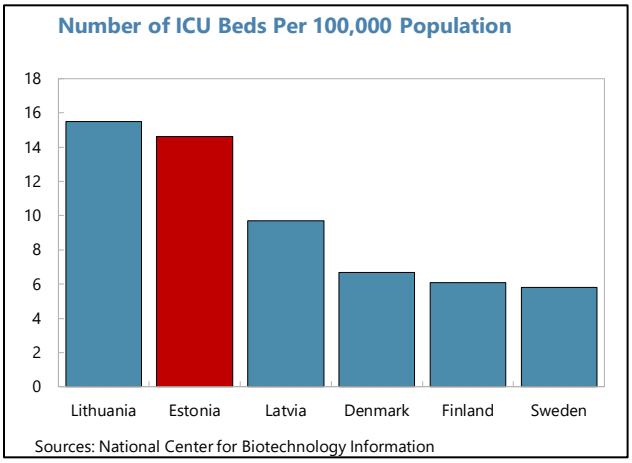
TABLES

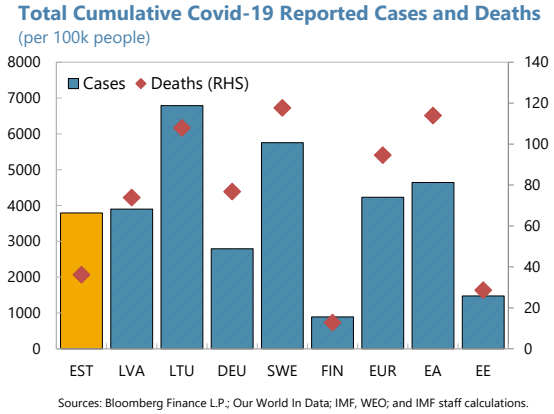
ANNEXES

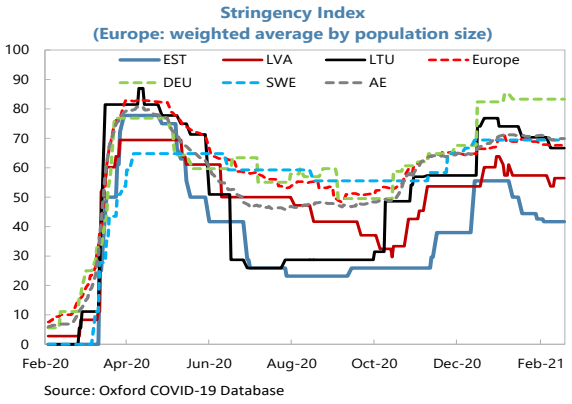
CONTEXT

1. Estonia has been relatively successful in managing the initial impact of the COVID-19 pandemic. Until early-2021, the rate of infections was below that of most European countries, despite milder *de jure* restrictions on activity. Estonia relied on targeted restrictions and its improved medical system, including its relatively high ICU capacity.



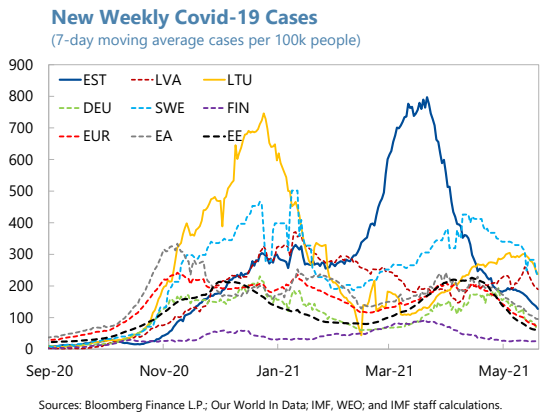
Text Chart 1. COVID-19 Cases and Deaths, February 2020–February 11, 2021



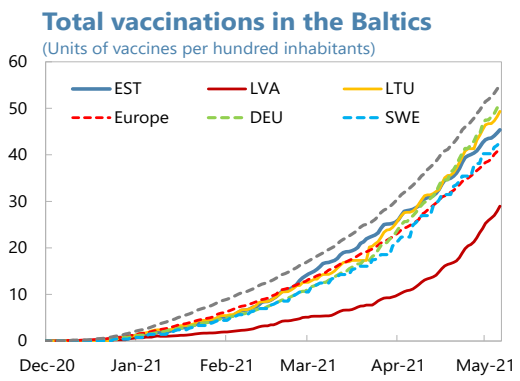


2. However, a much more vicious second wave of the pandemic has tested these achievements. A resurgence in infections since the fall of 2020 drove a return to significant economic restrictions. In early-2021, the rise in cases, which was fueled by new virus strains, was unexpectedly large and sustained. On March 11, 2021, the government introduced a strict quarantine, which lasted until April 25. Vaccinations have progressed in line with the euro-area average, with over 50 doses administered per 100 of the population by end-May, paving the way for a re-opening of the economy. The quarantine and progress with vaccinations led to a sharp decline in infections.

Text Chart 2. COVID-19: Second Wave and Vaccines

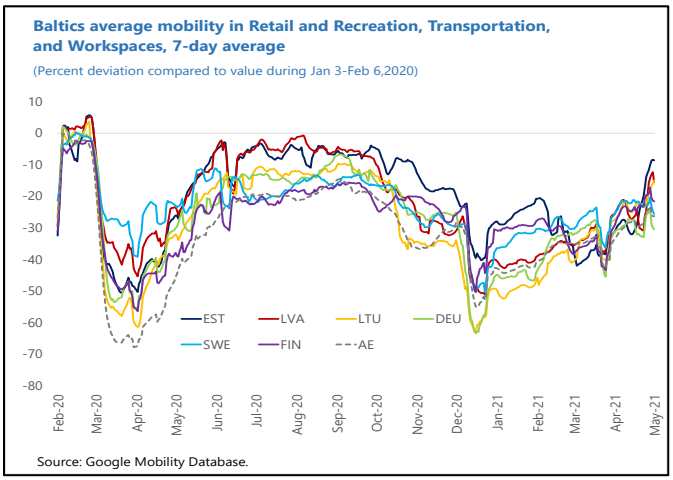


Sources: Bloomberg Finance L.P.; Our World In Data; IMF, WEO; and IMF staff calculations.



Sources: Our World in Data.

3. After promptly rebounding from a historic slump, the economy softened at the turn of 2020–21. As elsewhere**,** GDP imploded in 2020:Q2 due to hard restrictions and decreased mobility from surging health risks. An impressive bounce-back in H2 reflected the reversal of the restrictions, a snap-back in de-facto mobility, and policy support. However, in early-2021, rising infections led to renewed economic restrictions, though many activities have been adapting to the pandemic.



Source: Google Mobility Database.

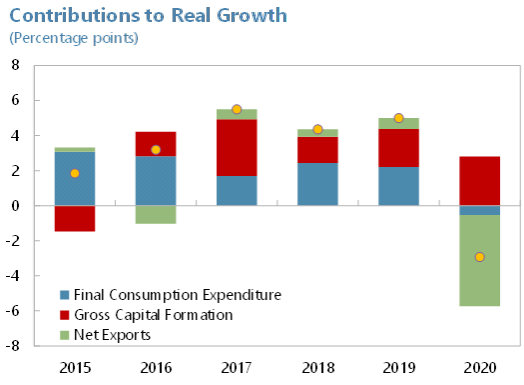
4. There was an unexpected change in government in early-2021, mid-way through the legislative term. Against the backdrop of a strong track record of institutional credibility, an alleged misappropriation of COVID-19 support funds contributed to the government resignation. The new government that took office in January 2021 was formed by a coalition of the Centre and Reform parties and has emphasized fiscal discipline, support to the elderly, and green and digital transition-related agenda among its priorities. Parliamentary elections are due in 2023.

THE ECONOMIC IMPACT OF THE COVID-19 PANDEMIC AND POLICY RESPONSES

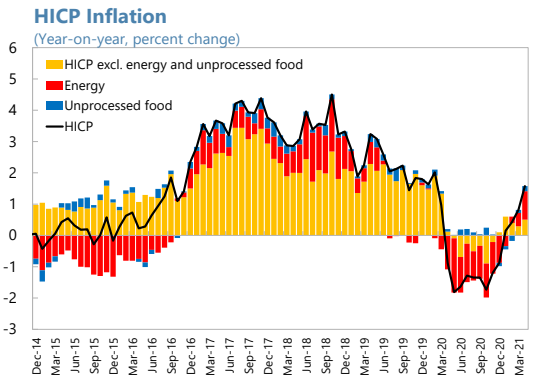
Pre-COVID Landscape

5. Estonia entered the COVID-19 crisis in a strong overall macroeconomic position. Growth was robust, averaging 5 percent in 2017–19, with balanced contributions from consumption, investment, and net exports. Core inflation averaged around 2 percent and unemployment had been declining steadily, dipping below 5 percent in 2019.

Text Chart 3. Growth and Inflation

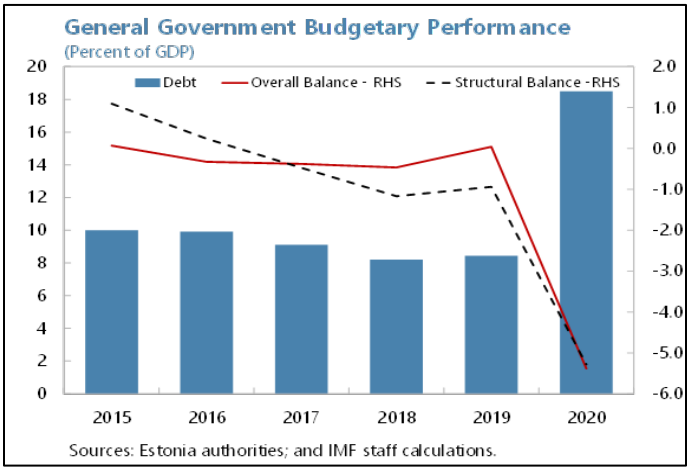


Sources: Statistics Estonia; and IMF Staff Projections



Sources: Statistical Office of Estonia, Haver Analytics, and IMF staff calculations.

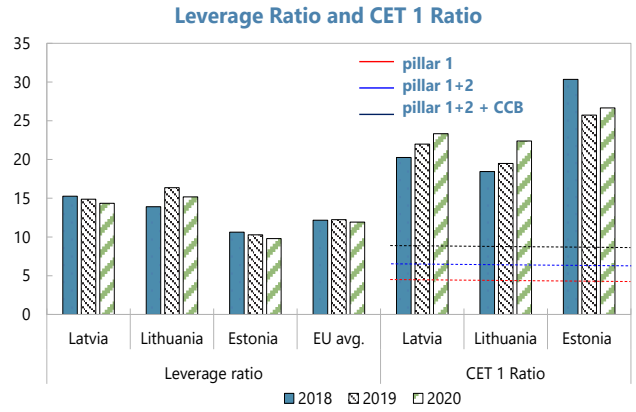
6. Public finances have for many years been sound, with very low public debt, limited fiscal deficits, and a solid asset position. The fiscal position is anchored by Estonia's own structural balance rule. While in 2017–19 the fiscal stance accommodated significant spending increases and was moderately procyclical, fiscal deficits were contained. The gross public debt ratio (8.4 percent of GDP in 2019) has historically been the lowest in the EU, and net public debt has been negative until 2019.



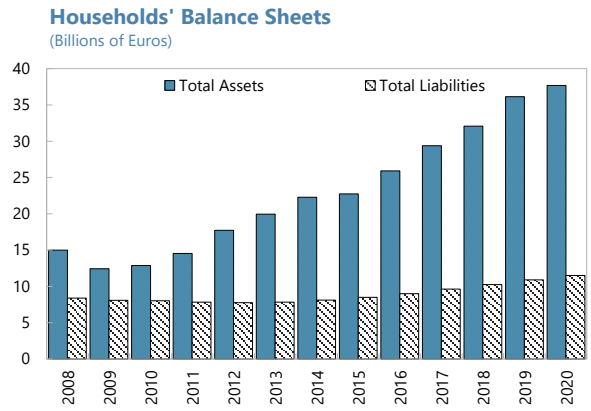
Sources: Estonia authorities; and IMF staff calculations.

7. Financial sector stability metrics were strong, though AML/CFT concerns lingered. The capital adequacy ratio, at 25½ percent in 2019, was among the highest in Europe, liquidity was ample, and the NPL ratio has been very low. Household and corporate balance sheets strengthened over the past decade, with lower leverage and an improved net asset position. The housing market saw sustained growth, but price momentum was aligned with income and other fundamentals. However, allegations of money laundering of non-resident deposits weighed on the financial sector.

Text Chart 4. Bank Prudential Ratio and Household Balance Sheets



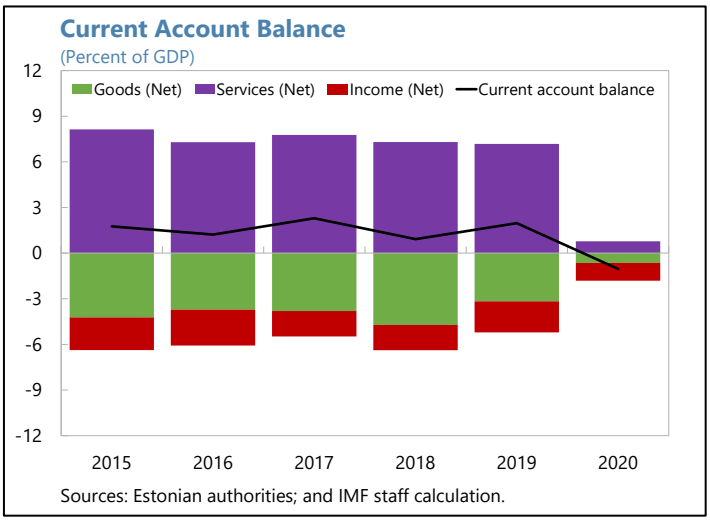
Source: European Central Bank, Haver Analytics



Sources: Haver Analytics, Bank of Estonia.

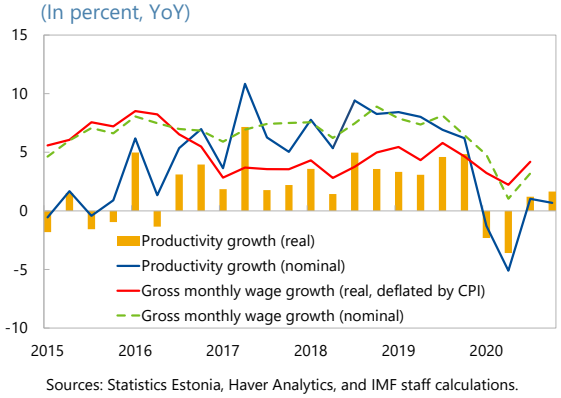
8. The current account was consistently in surplus through 2019. This position was supported by strong services exports. The external performance was underpinned by wide-ranging reforms, including Estonia's notable interrelated advances in private business facilitation and digitalization of government services.

9. However, several structural factors limit Estonia's economic potential. Productivity growth has generally been below wage growth, dragged down by Estonia's relatively small firm size, aging population, and low energy efficiency. Significantly, and unlike its Baltic neighbors, Estonia managed to mitigate population aging by reversing net out-migration since 2015. Despite good progress in reducing several social gaps over time, there remain long-standing challenges related to relative poverty, inequality, and gender pay disparities.

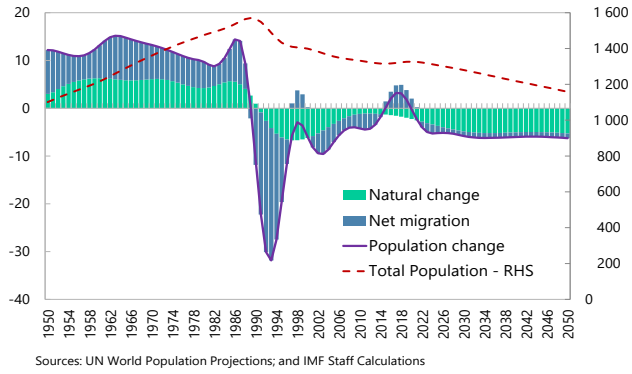


Sources: Estonian authorities; and IMF staff calculation.

Text Chart 5. Productivity and Population Aging



Sources: Statistics Estonia, Haver Analytics, and IMF staff calculations.

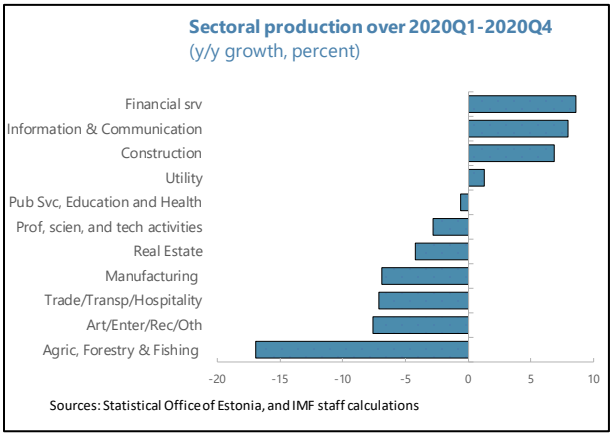


Sources: UN World Population Projections; and IMF Staff Calculations

Real-Economy Crisis Fault Lines

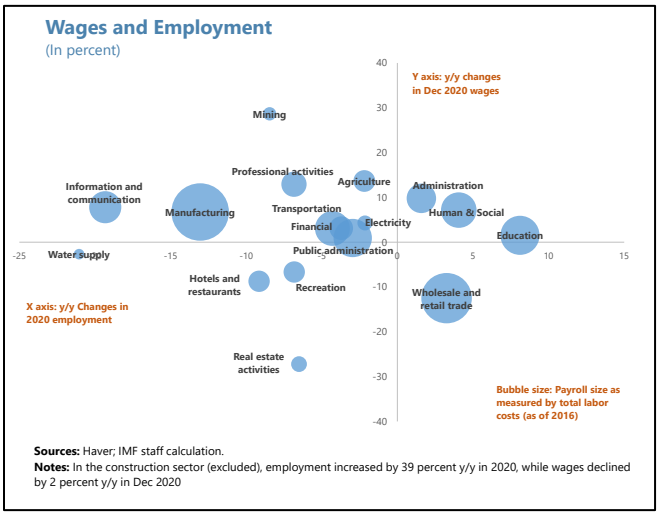
10. The COVID-19 shock caused a decline of economic activity, stressing other aspects of the macroeconomy. For full-year 2020, output fell by around 3 percent and the output gap became negative. Inflation turned into deflation, reflecting the emergence of economic slack, weaker global energy prices, and excise tax cuts. The fiscal deficit widened to 4.8 percent of GDP and the public debt ratio jumped to 18.2 percent of GDP, although this reflects pre-financing from the 2020 EUR 1.5 billion Eurobond whose proceeds were not fully used by year end.

11. Economic developments in 2020 were highly uneven across sectors. Information and communications and financial services sectors were the relative "winners," but hospitality, food, recreation, trade, and transportation services suffered. For these contact-intensive sectors, COVID-19 combined a deep demand contraction with negative productivity shocks as social distancing requirements increased unit production costs. Furthermore, these sectors are dominated by SMEs that have smaller buffers.



Sources: Statistical Office of Estonia, and IMF staff calculations

12. The economic contraction caused substantial aggregate employment losses and reallocation. Given Estonia's relatively flexible labor market, unemployment increased perceptibly between March 2020 (5 percent) and December (to 7.5 percent). From a sectoral perspective, employment losses in the vulnerable food and hospitality, recreation, and real estate sectors were combined with perceptible wage cuts, which also affected domestic trade. However, overall wage growth in 2020 was positive, supported by the wage subsidy scheme and the fact that employment losses were concentrated among lower-wage earners (SIP on Labor Market scarring).



Sources: Haver; IMF staff calculation.
Notes: In the construction sector (excluded), employment increased by 39 percent y/y in 2020, while wages declined by 2 percent y/y in Dec 2020

Policy Response

13. Sizable measures were rapidly deployed to mitigate the effects of the pandemic. Measures centered on government actions and benefited from supranational support (Background Notes I and II). Coordination with EU institutions helped leverage the policy response. Estonia triggered national escape clauses from fiscal rules for 2020–21 in line with EU guidelines, permitting larger support to the recovery. The ECB provided substantial euro-area-wide policy support by easing financial conditions, including through large asset purchase programs.

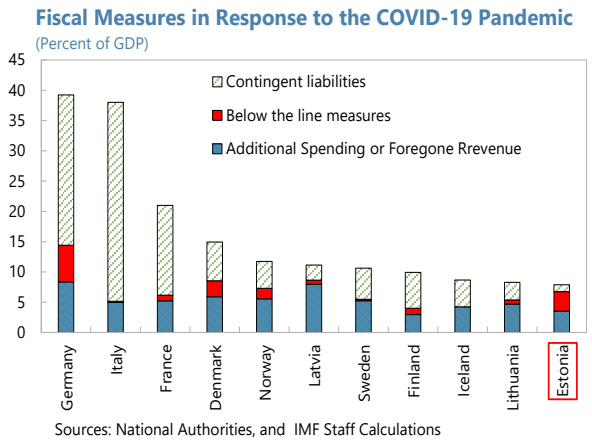
14. Fiscal support was the cornerstone of the crisis response. Estonia promptly enacted a budget support package of 8½ percent of GDP. The execution of spending measures (a key countercyclical and health-sector-focused element) was comparatively high. The support covered many sectors, was implemented through multiple agencies, and scaled up nimbly when needed. The wage support scheme stood out due to its size and take-up in 2020.

Estonia's 2020 COVID-19 Fiscal Response Package

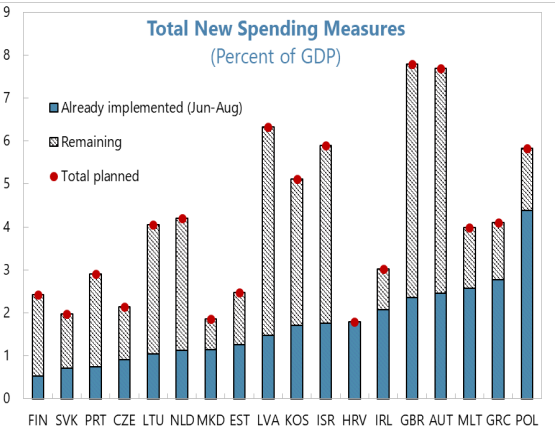
	2020 Suppl. Budget measures 2020-2022		End-2020 Execution		
	Euro Million	Percent of 2020 GDP	Euro Million	Percent of GDP	Percent of planned amount
Total support package	**2323.3**	**8.6**	**1107.5**	**4.1**	**48**
Business support	**1531.7**	**5.6**	**584.4**	**2.2**	**38**
Financing support	1377.0	5.1	436.4	1.6	32
Tranfers/Investment	154.7	0.6	148.0	0.5	96
Employment and households support	**504.4**	**1.9**	**384.2**	**1.4**	**76**
Wage support and transfers	280.5	1.0	287.0	1.1	102
Health-related expenditure	223.9	0.8	97.2	0.4	43
Other targeted supports	**171.0**	**0.6**	**165.6**	**0.6**	**97**
Tax measures	**378.7**	**1.4**	**113.3**	**0.4**	**30**
Suspension of pillar II contributions	**-262.5**	**-1.0**	**-140.0**	**-0.5**	**53**

Sources: Estonian Authorities; and IMF staff calculations.

Text Chart 6. Estonia's COVID-19 Fiscal Response



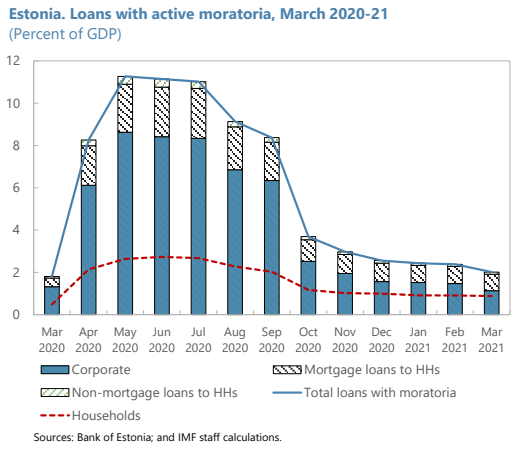
Sources: National Authorities, and IMF Staff Calculations



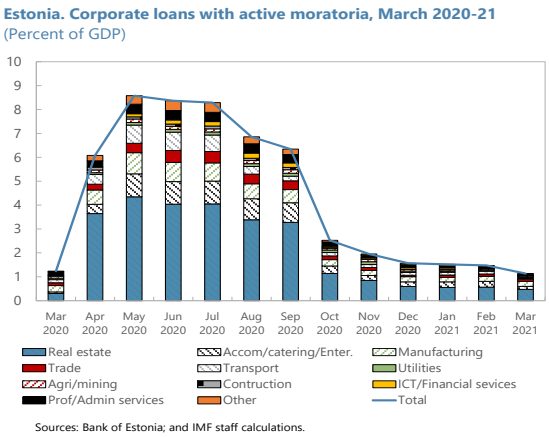
Sources: National Authorities, and IMF Staff Calculations

15. Financial sector support was provided mainly through bank moratoria. Most of Estonia's banks participated in the moratoria that the European Banking Authority (EBA) initiated in March 2020, helping relieve pressure on firms and households. The moratoria were implemented flexibly, taking account of clients' conditions. The coverage of loans peaked at around 10 percent and was concentrated among corporates. As bank exposures to vulnerable sectors proved limited, the coverage of moratoria became negligible by late-2020. Estonia also moved to relax its existing macroprudential systemic risk buffer, reducing it from 1 to 0 percent, while the countercyclical buffer was already at zero.

Text Chart 7. Loans with Active Moratoria



Sources: Bank of Estonia; and IMF staff calculations.



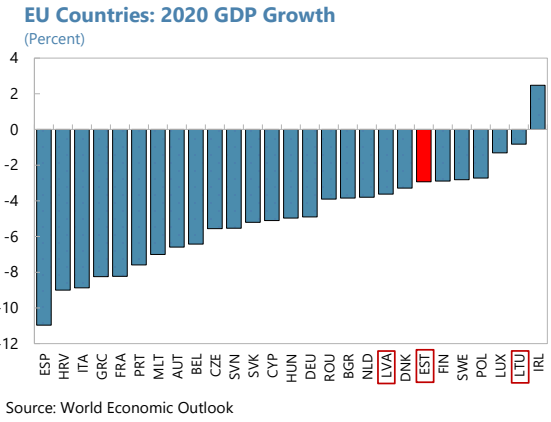
Sources: Bank of Estonia; and IMF staff calculations.

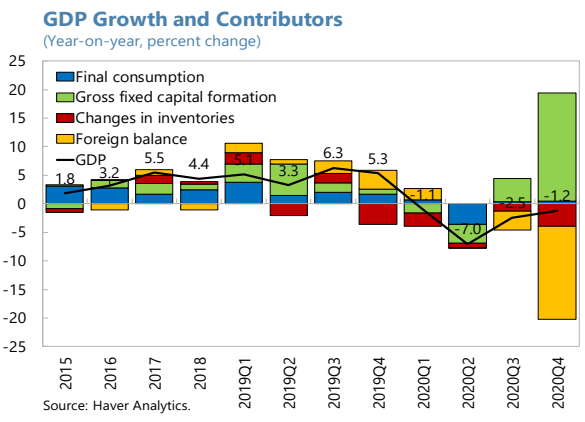
16. Health sector support measures are anchored by a proactive vaccination strategy. Estonia preordered sufficient vaccines from multiple suppliers to cover its population. The phased vaccination plan called for priority categories (e.g., the elderly and frontline workers) to be vaccinated first. The authorities target vaccinating 70 percent of the adult population by the fall of 2021.

Macroeconomic Impact of COVID-19

17. The policy response has greatly mitigated the COVID-19-induced economic decline. Estonia's 2020 GDP contraction was appreciably smaller than in most of its EU peers, significantly reflecting policy support. Public sector consumption and investment were Estonia's points of strength that supported demand. Large one-off transactions in 2020:Q4 complicate an assessment of significance of the unexpected strength in investment.

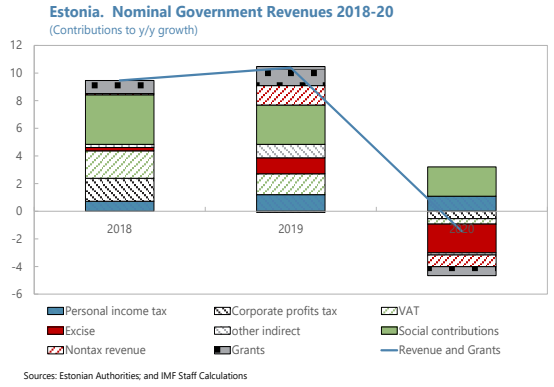
Text Chart 8. GDP Growth by Country and Demand Components

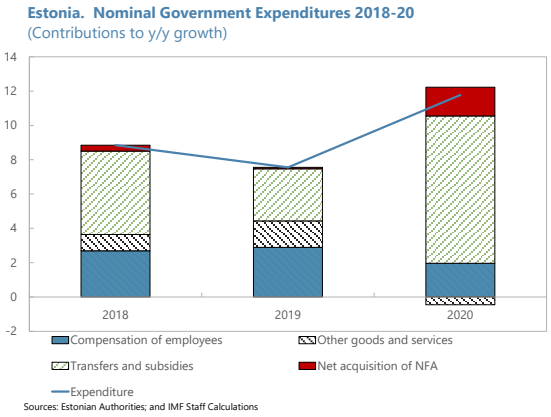




18. The support increased the 2020 budget deficit, but the impact of higher spending was partially offset by its impact on revenues. Total revenues declined by 1.4 percent y/y, as strong social contributions (7.1 percent) and PIT receipts (7.9 percent), which benefited from wage support measures, and EU grants helped offset weakness in CIT (-11.7 percent), excise tax (-20.5 percent), and nontax (-8.8 percent) revenues. Spending increases were heavily concentrated in transfers and subsidies.

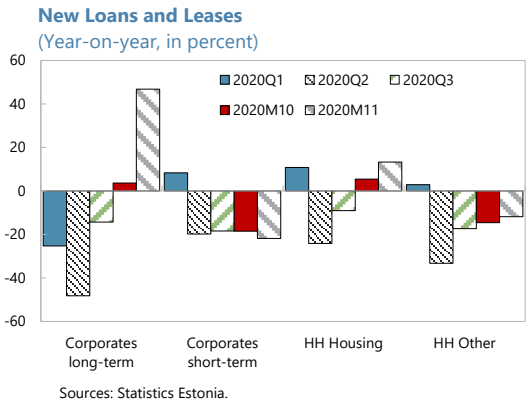
Text Chart 9. Government Revenue and Expenditures

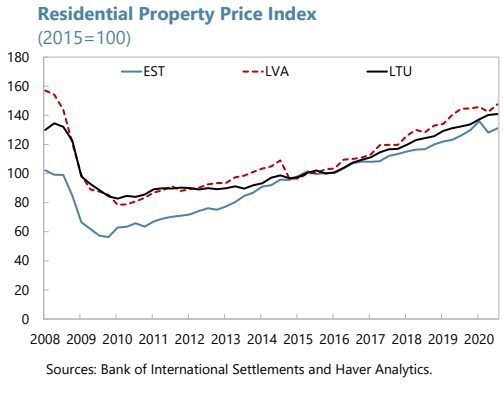




19. The financial sector absorbed the shock well. There was no indication of deteriorating bank solvency or liquidity (which benefited from higher precautionary savings). Estonia's NPL ratios continued to decline through 2021:Q1. As output stabilized and concerns about bank exposures waned, the initial decline in bank lending moderated in the fall of 2020. Lending interest rates have been broadly stable despite the ECB's highly accommodative monetary policy. While the real estate market took a significant hit in 2020:Q2, it recovered quickly, and activity further accelerated in early-2021.

Text Chart 10. Lending and Real Estate Developments





20. Despite the swing of the headline current account into deficit, the external sector is still assessed as having been substantially stronger than justified by medium-term fundamentals and desirable policies in 2020. The deterioration of the current account reflects temporary factors, notably a large FDI-financed exceptional increase in computer services imports. Taking out cyclical and other temporary factors, Estonia's real exchange rate remained substantially undervalued (as in previous consultations). The adjusted current account balance (5.8 percent of GDP) is estimated to be well above its estimated norm (-1.8 percent of GDP), implying a REER gap of 14½ percent in the preferred Current Account (CA) model (see Annex II). Nonetheless, the estimated decline in labor productivity (-0.8 percent) and rising unit labor costs (3.1 percent) in 2020 could chip away at the large undervaluation margin over time.

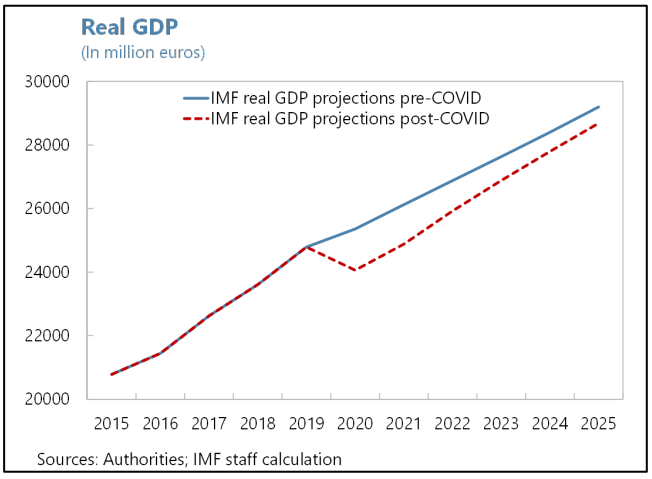
Estonia: Model Estimates for 2020 (in percent of GDP)

	CA model	REER
CA-Actual	**-1.0**	
Cyclical contributions (from model) (-)	-2.2	
COVID-19 adjustor (+) 1/	0.3	
Additional temporary/statistical factors (+)	4.2	
Natural disasters and conflicts (-)	-0.1	
Adjusted CA	**5.8**	
CA Norm (from model) 2/	**-1.8**	
CA Gap	**7.6**	**-1.3**
o/w Relative policy gap	4.0	
Elasticity	-0.52	
REER Gap (in percent)	**-14.6**	**2.5**

1/ Additional cyclical adjustment to account for the temporary impact of the oil trade balances (-0.05 percent of GDP) and tourism (0.34 percent of GDP).
2/ Cyclically adjusted, including multilateral consistency adjustments.

OUTLOOK AND RISKS

21. Output is expected to recover. Staff's projections assume a robust recovery taking place in 2021:H2–22, driven by progress in vaccinations, ongoing policy support, a boost to domestic demand from the expected withdrawal of pension system savings starting from September 2021, and EU fund-backed public investment. Going forward, growth would gradually ease toward a potential of a little above 3 percent. Growth would be uneven across sectors with some permanent re-balancing of activity prompted by changed behavioral patterns and assumed macro-level scarring. Continued moderate bank credit growth will support activity. Other macroeconomic indicators will evolve in line with domestic and external developments:



- **Inflation is projected to increase but remain anchored.** After upticks due to the rise in global commodity prices in 2021 and the expiration of the excise tax cuts in 2022, inflation will settle at around 2 percent over the medium term.

- **The external current account is expected to be moving toward small deficits under the influence of two countervailing forces.** On the one hand, the reversal of the temporary deterioration in the services balance would push the current account toward a surplus in 2021. On the other hand, the expected inflows of EU funds and the broader economic recovery based on drawing down domestic savings will be import-intensive, pushing the current account towards a deficit (see Annex II).

Estonia: Summary Medium-Term Macroframework

	2020	2021	2022	2023	2024	2025	2026
Real GDP growth (percent)	-2.9	3.4	4.5	3.7	3.4	3.2	3.2
Output gap (percent)	-2.1	-1.7	-0.6	-0.3	-0.1	-0.1	0.0
Inflation (percent)	-0.6	1.7	2.5	2.1	2.1	2.1	2.1
Unemployment rate (percent)	6.8	6.9	6.5	5.5	5.0	4.8	4.8
CAB (percent of GDP)	-1.0	0.7	0.2	0.2	-0.2	-0.6	-0.8
Fiscal balance	-4.8	-6.3	-4.2	-3.7	-3.1	-2.5	-2.0
Structural balance (percent of GDP)	-4.6	-6.5	-4.2	-3.6	-3.1	-2.5	-2.0
General government debt (percent of GDP)	18.2	24.0	27.1	29.8	31.7	33.0	33.6

Sources: Estonian authorities; and IMF staff estimates and projections.

22. Risks are balanced. With an unusually large two-way uncertainty, key downside risks include (i) an unexpected mutation of the virus derailing the global/regional recovery; (ii) the emergence of long-term economic scarring; and (iii) setbacks on cybersecurity or AML/CFT. On the upside, there are possibilities of (i) accelerated recovery in confidence due to successful vaccinations; and (ii) higher potential growth from digital and green technologies. The recovery in EU trading partners has a significant potential for regional spillovers, especially in the tourism and manufacturing sectors.

Authorities' Views

23. The authorities broadly agreed with staff's outlook and risk assessment. They thought that an economic recovery was well in sight but, at the time of the consultation, expected slightly slower economic momentum in 2021 compared to staff. At the same time, the authorities expect a faster growth acceleration in 2022 (to around 5 percent) due to the expected drawdown of the pension system and precautionary deposit balances that were accumulated during the pandemic. Despite the still negative output gap, they expressed some concern over risks of overheating in view of the expected sizable withdrawals from pension savings and possible spillovers to the housing market, though they deemed those risks manageable.

Box 1. Risk Assessment Matrix[1]		
Source of Risks, Likelihood, and Time Horizon	**Impact on Estonia**	**Recommended Policy Response**
Medium (short to medium term) **Unexpected shifts in the COVID-19 pandemic.** **Asynchronous progress.** Limited access to, and delayed deployment of, vaccines—combined with dwindling policy space—prompt a reassessment of countries' growth prospects. **Prolonged pandemic.** The disease proves harder to eradicate (e.g., due to new virus strains, short effectiveness of vaccines, or widespread unwillingness to take them), requiring costly containment and prompting persistent behavioral while rendering many activities unviable. For countries with policy space, prolonged support— while needed to cushion the economy—exacerbates stretched asset valuations, fueling financial vulnerabilities. For those with limited space, policy support is insufficient. **Faster containment.** Pandemic is contained faster than expected due to the rapid production of vaccinations, boosting confidence and activity.	High Slow start of vaccinations in Estonia (as in the EU) coupled with the resurgence of the virus in early-2021 that is partly linked to the mutating new variants implies a high impact, especially from the standpoint of downside risks. At the same time, Estonia's significant policy space mitigates the risks. Estonia's significant financial system and macroprudential buffers cushion financial vulnerabilities.	Participate in global and European policy responses. Ramp up implementation of the vaccination strategy. Provide economic support in line with Estonia's significant fiscal and other policy space and do not withdraw the support prematurely. Mitigate "social scarring" through targeted steps to reduce inequality and gender gaps.
Medium (medium term) **Accelerating de-globalization.** Despite renewed efforts to reach multilateral solutions to existing tensions, geopolitical competition leads to further fragmentation. Reshoring and less trade reduce potential growth.	Medium As an open economy, Estonia would be affected through trade (including supply chains), confidence, and FDI channels. Economic growth and employment would suffer.	Participate in global and European policy responses. Provide fiscal support (through automatic stabilizers and discretionary). Manage risk through export diversification.
Medium (short term) **Sharp rise in risk premia exposes financial and fiscal vulnerabilities:** A reassessment of market fundamentals (e.g., in response to adverse COVID-19 developments) triggers a widespread risk-off event. Risk asset prices fall sharply and volatility spikes, leading to significant losses in major non-bank financial institutions. Higher risk premia generate financing difficulties for leveraged firms (including those operating in unviable activities) and households, and a wave of bankruptcies erode banks' capital buffers. Financing difficulties extend to sovereigns with excessive public debt, leading to cascading debt defaults.	Medium The higher risk premia could weaken spending and confidence, especially in Nordic countries of Baltic parent banks where bank funding is strongly linked to global conditions.	Continue to enhance the macroprudential toolkit and rely on ample buffers, including banks' high capitalization and liquidity.
Medium **Overheating in the housing market.** House prices diverge from fundamentals creating a possibility of large price declines that can undermine economic activity and weaken balance sheets.	Medium Estonia's multi-year price growth and easy financing conditions create risks for asset price bubbles.	Pursue vigilant macroprudential policies and financial supervision. Tighten enforcement of housing-related macroprudential tools such as LTV ratios. Review eligibility of government mortgage support programs and their role in circumventing the LTV ratios.
Medium (short to medium term) **Cyber-attacks** on critical infrastructure, institutions, and financial systems trigger systemic financial instability or widespread disruptions in socio-economic activities and remote work arrangements.	Medium Estonia's history of being subjected to cyber-attacks and its significant reliance on ICT processes and innovation, while appropriate per se, make it susceptible to such attacks.	Participate in global and European defenses against cyber-attacks. Continue strong efforts to improve national cyber-security by allocating sufficient fiscal resources and through vigilant regulation.

Box 1. Risk Assessment Matrix[1] (Continued)		
Source of Risks, Likelihood, and Time Horizon	**Impact on Estonia**	**Recommended Policy Response**
Medium (short to medium term) **Risks to cross-border banking including AML/CFT.** Parent banks could come under pressure from financial markets' perceptions of risks to the Nordic economies, AML/CFT concerns, or tighter global financial conditions with lower risk appetite.	**Medium** Curtailed credit supply, confidence loss, pressures on correspondent banking relationships, and AML/CFT setbacks in local affiliates could weigh on the Estonian financial sector.	Further strengthen the AML/CFT framework. Preserve high capitalization and liquidity. Step up cross-border supervision, including cooperation with home-country authorities.

[1] The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path. The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. The conjunctural shocks and scenario highlight risks that may materialize over a shorter horizon (between 12 to 18 months) given the current baseline. Structural risks are those that are likely to remain salient over a longer horizon.

POLICY DISCUSSIONS

Discussions focused on policies to: (i) support the recovery through a growth-friendly fiscal policy; (ii) address potential scarring while re-balancing the economy toward dynamic, inclusive, digital, and climate-friendly growth; and (iii) enhance AML/CFT frameworks while bolstering sound credit provision.

24. Substantial policy space offers unique scope for supporting the recovery and addressing medium-term structural challenges (Annex I). Despite the exceptionally low debt, there is a tension between (i) the need for an expansionary fiscal stance that favors recovery-related spending and transformational public investment, and (ii) Estonia's traditional preference for a conservative fiscal stance. With supportive financial conditions, the suspension of the EU fiscal rules, and the significant grant component of NextGen EU being in train, the key *effective* constraint to the size of Estonia's fiscal support to the economy will be the capacity of the government to spend effectively and efficiently.[1]

A. Right-Sizing Fiscal Policy

Short-to-Medium Term: Supporting the Recovery

25. The 2021 budget appropriately tailors fiscal support to the pace of the expected recovery. The original 2021 budget which incorporated a carry-over of 2020 support measures, was augmented in April 2021 in response to the surging virus risks. The combined support package of 6½ percent of GDP includes:

- ***Support to businesses.*** Provided through KredEx Foundation and Enterprise Estonia, it has targeted businesses that suffered large falls in income, including tourism and aviation sectors. As the economy recovers, staff expects the support —which had already declined—to be further scaled down.

[1] While Estonia's institutional capacity is quite high, it is subject to a few bottlenecks, including skill shortages.

- ***Support to employees and households.*** The support includes unemployment benefits with skill-enhancing training programs and help with health sector contributions. It recorded the highest take-up, reflecting large support needs from COVID-19's impact on households and the labor market.

- ***Tax measures.*** The government extended the cut in excises on several fuels and instituted tax incentives, up to 2022, and deferred tax debt interest payments for 18 months.

Estonia's 2021 COVID-19 Fiscal Response Package

	Carry over 2020 support measures		March 2021 Suppl. Budget		2021 Support measures
	Euro Million	Percent of 2021 GDP	Euro Million	Percent of 2021 GDP	Percent of 2021 GDP
Total support package	**1216**	**4.2**	**640.8**	**2.2**	**6.4**
Business support	**947**	**3.3**	**49.8**	**0.2**	**3.5**
Financing support	941	3.3	0.0	0.0	3.3
Tranfers/Investment	7	0.0	49.8	0.2	0.2
Employment and households support	**120**	**0.4**	**371.2**	**1.3**	**1.7**
Wage support and transfers	0	0.0	159.8	0.6	0.6
Health-related expenditure	127	0.4	211.4	0.7	1.2
Other targeted supports	**5**	**0.0**	**102.7**	**0.4**	**0.4**
Tax measures	**265**	**0.9**	**0.0**	**0.0**	**0.9**
Suspension of pillar II contributions 1/	**-123**	**-0.4**	**117.0**	**0.4**	**0.0**

Sources: Estonian Authorities; and IMF staff calculations.
1/The 2021 suppl. Budget sets aside reserves to compensate for the temporary suspension of state contributions to the second pillar for those who applied to leave the second pillar by 31 March 2021.

- ***Additional support.*** The new government has adopted a supplementary 2021 budget that enhances support by 2.2 percent of GDP, targeted to healthcare expenditure and support for employees and households.

26. The State Budget Strategy (SBS) of 2022–25 aims to tackle the pandemic and its medium-term impact. The SBS puts the priority on a prompt exit from the pandemic through pro-active vaccinations. Other main SBS policy priorities include (i) improving the accessibility and resilience of the health system; (ii) strengthening the social safety net; and (iii) ensuring dynamic digital and green transition through quality public investment and enhanced education and training. The SBS also envisions a gradual fiscal consolidation that would support the return to a rule-based framework.

27. Staff's projections for 2021 (fiscal deficit of 6.3 percent of GDP) incorporate the authorities' support measures and imbed the need for additional support. Support for workers and households should continue until the economy is durably on a sustainable path. Staff's forecasts accommodate additional spending on the social safety net, including wage support. Revenues are expected to be lower (0.2 percent of GDP) than in the 2021 amended budget, mostly reflecting slightly lower private sector wage and personal income revenues. Expenditures are forecasted to be higher by 0.1 percent of GDP, reflecting higher compensation of employees (0.1 percent of GDP) and transfers to households (0.1 percent of GDP), partly offset by lower subsidies and other current transfers (0.1 percent of GDP).

28. Over the medium term, the authorities should use their ample fiscal space to boost capital spending, support the recovery, and increase potential growth.

- **Current expenditures.** They are projected to decline gradually, in terms of GDP, as: (i) COVID-19 related transfers as a share of GDP are forecasted to decrease starting in 2022, while the workability reform aimed at improving labor participation is strengthened; (ii) public wage bill in 2022–23 would grow by 5 percent annually in nominal terms, reflecting the average annual salary increases

and the needs for building skills and capacity in the digital and green sectors; and (iii) social benefits ease as a share of GDP starting from 2022 but remain above pre-pandemic levels, allowing room for the planned support for the elderly and improved social safety net, which is assessed to be low (2018 Article IV consultation SIP on spending efficiency).

- **Investments.** The authorities' new medium-term fiscal framework envisages somewhat lower capital spending ambitions relative to previous plans, while staff projects investments to grow steadily and reach 8 percent of GDP in 2025–26, assuming Estonia's absorptive capacity gradually increases. The productive investment is expected to boost potential growth through projects with large multipliers and digital and green components, supported by EU financing and domestic resources (Table 2).[2]

Longer-Term: Fiscal Policy Re-balancing Toward Transformational Investment

29. The Next Generation EU Funds is an opportunity to tackle medium-term fiscal issues and boost potential growth. (Annex IV). The government has submitted the final Resilience and Recovery Plan (RRP) in early June 2021. The RRP envelope, estimated at EUR 982.5 million (about 3.4 percent of GDP), is allocated over 2021–2026 (0.5 percent of GDP annually). The RRP, 80 percent of which consists of capital expenditure, covers projects aimed at strengthening the resilience of the health sector and easing the digital and green transition. By contributing to boost potential growth, RRP resources will create additional fiscal space to address the long-term challenges of aging population, healthcare, inequality, and gender gaps.

30. In this context, improving the management of public spending and investment is critical. To realize the payoffs from these investments that are envisioned under Estonia's SBS and the new RRF and their multiplier effects, managing investment efficiency and effectiveness will be key (Annex V).[3] Speeding up the implementation of the recommendations of the PIMA report on long-term strategic planning and project implementation would be helpful.[4] Efficient and timely use of available EU funds, including the 2014–20 Cohesion Funds, which would expire in two to three years, and the Just Transition Fund, would require continued improvements in institutional capacities, including in local governments.

31. Fiscal transparency should be further upgraded to increase the effectiveness, and quantify the cost, of policy support. A recent assessment of Estonia's fiscal transparency indicates an advanced stage of practices, though with scope for improvement (Annex VI). Given increased stakes involved in large-scale support, more holistic management of fiscal risks is needed, including quantification of risks from guarantees and potential cost of environmental risks and of quasi-fiscal activities. An integrated Fiscal Risk Statement that discusses the full range of fiscal risks and their

[2] About 75 percent of the EU Fund inflows over 2021–26 (EUR 5.3 billion) is expected to finance investment.

[3] Staff analysis for this consultation suggests that Estonia's public investment multipliers are sizable (0.9–1.2) and that higher public investment has substantial positive spillovers to corporate private investment.

[4] IMF Country Report No. 20/12.

costs would guide fiscal decisions. While the fiscal transparency assessment confirms the strong public procurement and governance procedures, there could be room for further enhancements, drawing on the experience of the pandemic package support management.

32. A robust plan for gradually rebuilding fiscal buffers and managing debt is also needed. Recovering economic activity will lessen the rationale for continued fiscal policy support. The forthcoming review of the EU fiscal architecture will help guide policy withdrawal. Without prejudging the review's conclusions, Estonia's targets should strike a balance between credibly maintaining fiscal discipline and maximizing high-multiplier spending. Quality measures and continued upgrading of asset and liability management should underpin those targets.

Authorities' Views

33. The authorities concurred with the need to support the economy while the pandemic lingers but underscored the case for a balanced approach. In their view, the incipient recovery would justify discontinuing the wage support scheme around mid-2021, but they noted that upcoming deficit-neutral EU fund inflows and withdrawals of the pension savings would continue to stimulate the economy. In addition, the fiscal reserves allocated in the 2021 budget—and Estonia's flexible budget management practices—would backstop deployment of further support, should it be needed. They are closely monitoring the pandemic using a composite indicator of health and vaccine metrics, which would help integrated decision making on re-opening and continued support programs.

34. Over the medium term, the authorities target a more prudent fiscal position, while leaving room to improve the quality of investment. The authorities noted that their new medium-term fiscal framework for 2022–25 aims at a gradual reduction of the fiscal deficit by at least 0.5 percent of GDP per year, in line with the national fiscal rule. The framework envisions generating expenditure savings while expanding elements of the social safety net and productive investment. The ongoing elaboration of RRF will help re-ignite the twin green-digital transition, the REACT Fund will support the labor market and health system, and the Just Transition Fund will help restructure the oil-shale sector. The authorities concurred with recommendations of the recent fiscal transparency TA and the 2019 PIMA and are working on their implementation, as well as further upgrading debt management.

B. Minimizing Scarring and Re-Tooling Growth Engines

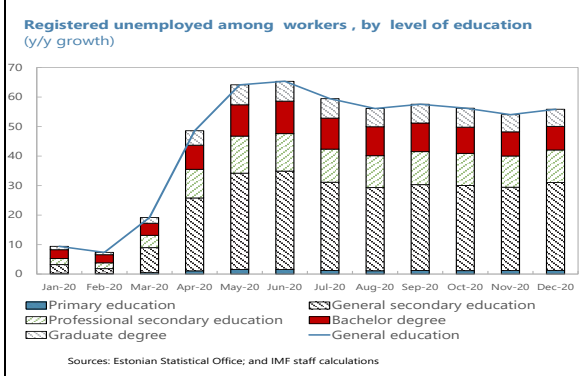
35. As the effects of the pandemic subside, resources should be reallocated to address COVID-19's multifaceted and potentially lasting economic damage. Reflecting its ample fiscal buffers, labor market flexibility, and strong institutions, Estonia is well-placed to repair damage to its productive fabric. However, it is more susceptible to the risks of "social scarring". The COVID-19 crisis could exacerbate social concerns, as they can adversely affect skill accumulation, net migration, and sectoral mismatches, amplifying Estonia's productivity challenge (SIP on Labor Market scarring). Effective and holistic structural reforms should complement fiscal support to labor and the social safety net.

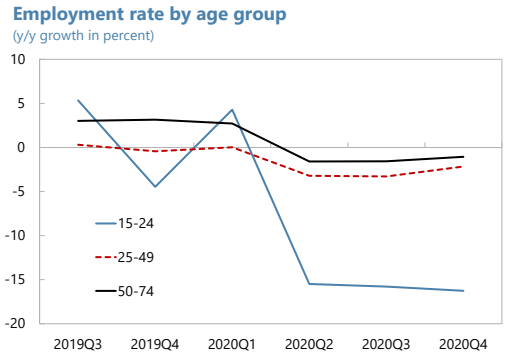
Mending Estonia's Productive Fabric and Fostering Better Jobs

36. Sectoral support programs should be maintained until the recovery is entrenched. While the authorities have recently decided to phase out wage support, staff urged for its prompt re-deployment should the recovery falter. Other forms of support, including loan guarantees, should be continued as needed. Program design and targeting will need to be refined over time. Comprehensive monitoring of all types of support based on a battery of economic indicators and big data should guide decisions on the costs and benefits of different programs and the pace of their withdrawal.

37. Labor market flexibility should be supplemented with ramped-up active labor market policies (ALMP). The fall in Estonia's 2020 employment has been particularly concentrated among the low-skilled and the young. This puts a premium on enhanced education and training that would relieve the long-standing shortage of skilled labor and prevent the atrophy of skills. Implementation of plans to expand retraining is ongoing. Strengthening ALMP and enhancing the workability reform would require expanding the means provided to the Unemployment Insurance Fund.

Text Chart 11. Risk Labor Market Scarring

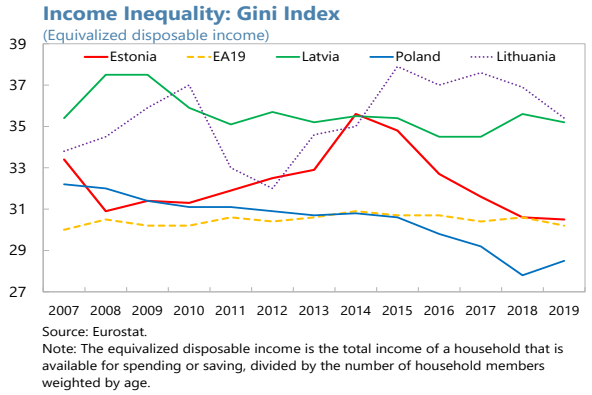




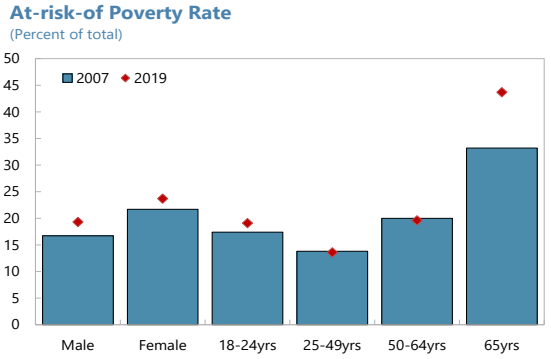
Healing "Pre-Existing" Conditions and Preventing "Social Scarring"

38. Targeted and effective interventions are needed to further reduce inequality, focusing on those most affected by the pandemic. Estonia has made welcome progress in reducing general inequality, with its Gini coefficient moving close to the euro-area average in 2019. However, data on at-risk poverty suggest substantial pockets of relative inequality, particularly among the elderly. These concerns are reinforced by the disproportionate impact of COVID-19 on the youth, people with low education, and the elderly, who could be additionally impacted by the change in the second pillar system. Staff welcomes the recent increase in pension entitlements, given their relatively low levels. A review of the pension system that is planned to be completed by 2022 will help map out the pension system's objectives. Improved access to health services and following through on plans to enact a long-term care program are also important.

Text Chart 12. Inequality and Poverty



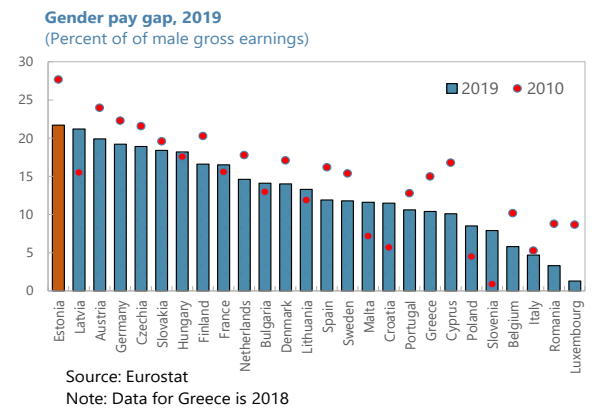
Source: Eurostat.
Note: The equivalized disposable income is the total income of a household that is available for spending or saving, divided by the number of household members weighted by age.



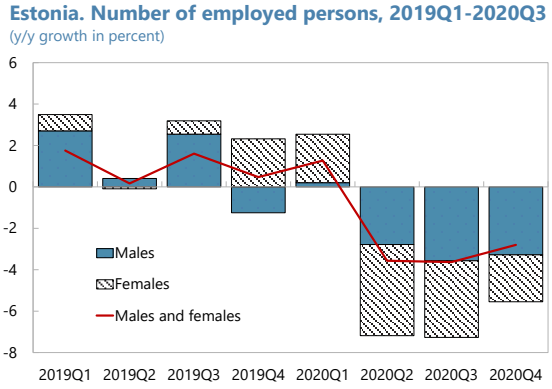
Source: Eurostat

39. Determined actions are critical to addressing Estonia's still-high gender gap. Estonia's pay gap has narrowed in recent years, but it remains among the highest in the EU. The government's Gender Equality Program envisions enhanced gender gap monitoring and evaluation and public awareness through digital tools. Ongoing activities include nudging programs (e.g., to remove gender glass ceilings in the ICT sector) and further measures for a more equitable work-life balance, including an enhanced paternity leave program of mid-2020. Further steps could be made to bolster safe child-care and long-term care services. A proposal for a yet-more far-reaching Welfare Development Plan 2023–30 is being elaborated.

Text Chart 13. Gender Pay Gap



Source: Eurostat
Note: Data for Greece is 2018

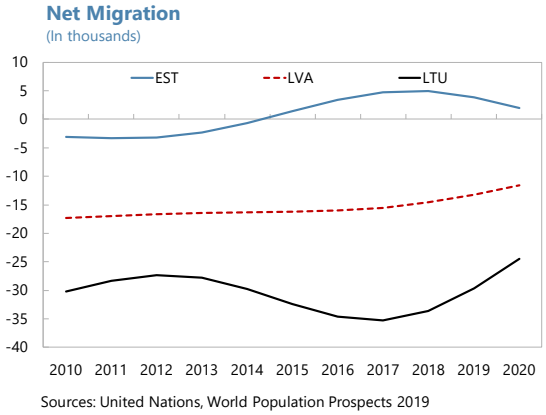


Sources: Haver Analytics, Estonian Statistical Office, IMF staff calculations.

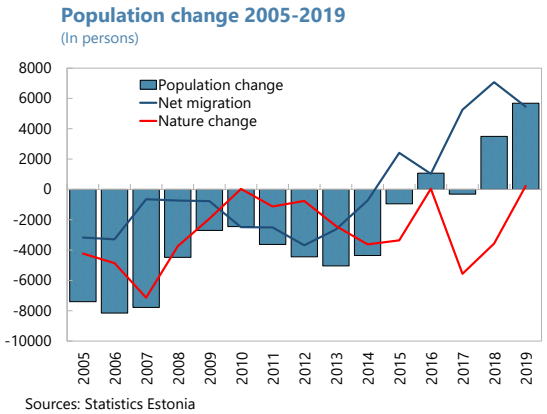
40. Entrenching positive net immigration could help address the nexus between population aging, low-productivity, and lack of skilled labor. The COVID-19 shock, combined with the tight immigration quota, has blunted Estonia's recent progress in attracting immigrants. The government should continue to actively expand business and labor regulations that helped catalyze net immigration, including training and education programs for immigrants, the e-residency

program, and improved business climate, lower restrictions for impacted businesses, and further reduction of constraints to migration.

Text Chart 14. Population Trends and Net Immigration



Sources: United Nations, World Population Prospects 2019



Sources: Statistics Estonia

Seizing the Opportunity to Re-Ignite Digital and Green Growth at Frontier

41. Estonia's advances in digitalization should be proactively strengthened. The COVID-19 shock underscored Estonia's advantages, but it also inspired digitalization catch-up by its peers. The 2030 digigov strategy aims to lock-in Estonia's global leadership in digital public services by boosting data governance and open data, core IT services, and last mile connectivity. Stepped-up digitalization of private businesses should continue to be incentivized through grants, investment support, and digital skills training. Other reforms include: (i) digitalization to speed up legal processes; (ii) support for broadband infrastructure (5G corridors); and (iii) further strengthening cybersecurity. The digitalization agenda will be supported with financial resources of the NGEU (Annex IV).

42. Staff urges the authorities to accelerate climate mitigation and the restructuring of the oil-shale sector. Estonia's climate policy is being re-energized and aligned with the European Green Deal, including the goal of climate neutrality by 2050. The likelihood of reaching the emissions reductions target of 70 percent between 1990 and 2030 has improved, as the ongoing rebalancing of electricity production away from oil-shale is expected to be sustained. Progress hinges on (i) credibly addressing social and labor aspects of the oil shale industry's restructuring (including pathways to alternative "green jobs"), which is supported by the EU's Just Transition Fund, and (ii) implementing Estonia's extensive transport electrification and renewable energy agendas. A comprehensive and predictable carbon pricing strategy, covering also transportation sector and buildings, should help achieve the emissions targets.[5] The Climate Change Adaptation Development plan envisions a range

[5] The EU Emissions Trading System for now excludes transport and buildings. Key EU-wide decisions on amending the coverage of the ETS framework were pending during the consultation.

of additional projects and activities, including climate friendly buildings and infrastructure, land use and planning, bioeconomy, and ecosystems' support.

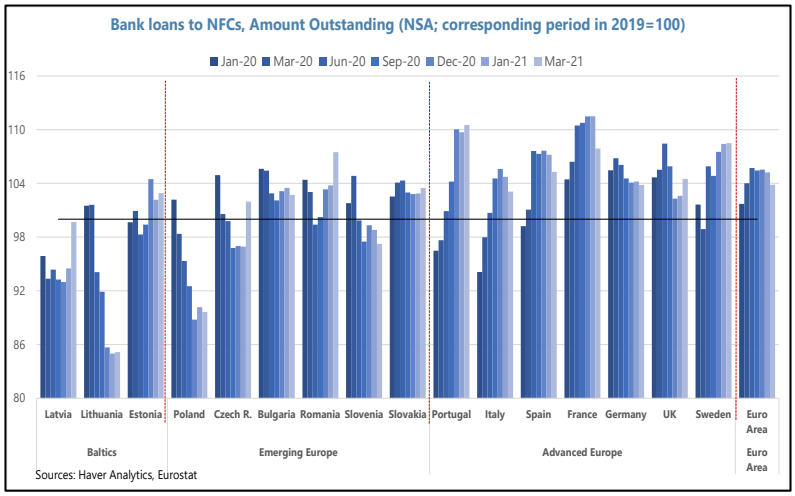
Authorities' Views

43. The authorities emphasized their pro-active structural and social reform agendas. On the wage support scheme, the 2021 budget allocation allows for full-year implementation should this be needed. Some support measures will remain, though they will increasingly take the form of financing or contingent assistance while being targeted to vulnerable sectors. In particular, support to the hard-hit tourism sector would continue beyond 2021. The ongoing revamping of the training curricula will help job reallocation. They stressed that support to the health system and the elderly would continue to be important, with both the pension increase and the minimum tax-exempt income threshold for pensioners planned for 2023. They also emphasized their extensive reforms to further reduce the gender gap, while several new programs would continue to incentivize immigration and skilled labor.

44. The authorities stressed their efforts to re-energize digital and green growth. They were pleased that public R&D spending was increased in the 2021 budget to 1 percent of GDP and planned to maintain this level going forward. They expected to use the RRF projects to spur digitalization and green growth. The authorities stressed their increasingly ambitious climate mitigation objectives, to be achieved through a combination of price and nonprice measures in coordination with the EU regulations. In particular, they have recently committed to achieving carbon neutrality by 2050, with intermediate sub-targets of discontinuing electricity production from oil shale by 2035 and the use of oil shale for the energy industry by 2040.

C. Supporting Financial Stability and Productive Credit

45. The financial sector has been weathering the pandemic well, but there is scope for bank credit to more fully support Estonia's productive transformation. Despite very solid capital and liquidity buffers, Estonian banks' credit to corporates has been relatively weak compared to some other euro area countries. Enterprise surveys indicate that although the availability of credit is improving, Estonian SMEs remain somewhat finance constrained. Bank profitability remained resilient, though it declined in 2020 (Table 8).



46. With bank moratoria and forbearance measures now being largely withdrawn, targeted support to borrowers needs to be retained. The central bank's stress tests confirm the strength of balance sheets and low bank exposures pandemic-hit sectors, showing that, even in an adverse scenario, NPLs would rise significantly less than during the global financial crisis. With the moratoria now largely discontinued, banks can more soundly re-assess their borrowers, recognize losses, and step up the provision of credit to more viable sectors. At the same time, targeted financial support tailored to clients' conditions should be considered by policymakers as needed given the remaining uncertainties and uneven impact of the pandemic.

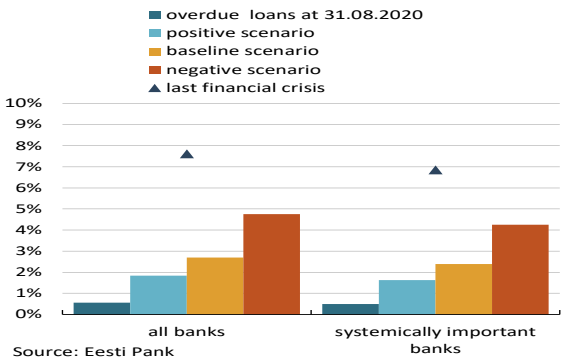
Text Chart 15. Corporate Exposure and Scenario Analysis of NPLs

Corporate Exposures to Non-Essential Sub-Sectors
(2019, In Percent of Tier 1 Capital)

	Construction	Wholesale & Retail Trade	Transport & Storage	Accommodation & Food Services	Real Estate Activities	Arts & Entertainm	Other Services
DE	10	42	28	4	177	2	11
EE	14	59	24	4	86	3	7
FI	20	30	30	4	167	3	10
LU	9	3	2	3	22	0	5
LV	12	33	33	14	72	1	5
NL	15	68	33	7	88	2	21
DK	13	34	20	4	310	5	8
NO	34	21	50	5	99	1	2
SE	17	31	30	6	349	2	7
EA SSM	22	47	23	15	90	3	11
EU	23	46	23	13	99	2	9

Sources: EBA; and IMF staff calculations.
Note: Red means exposure ≥ 100 percent; yellow means exposure ≥ 50 percent.

Potential Share of Non-Performing Loans to Assets



Source: Eesti Pank

47. Supervisors and macroprudential policies should however remain vigilant. The supervisory framework is strong and has served the banking system well, but continued actions are needed:

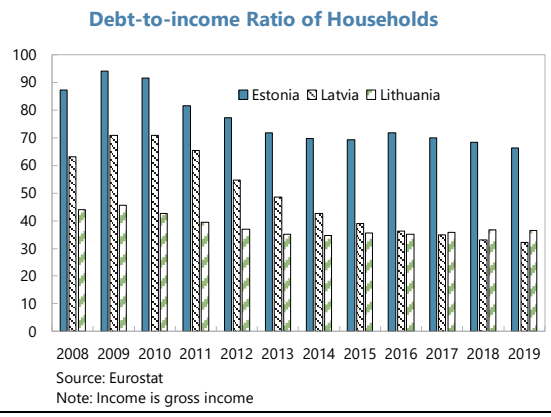
- *Provisioning*. Using flexibility to support borrowers, targeted and temporary interventions could be considered in problematic cases, but classification and provisioning rules should continue to fully apply.

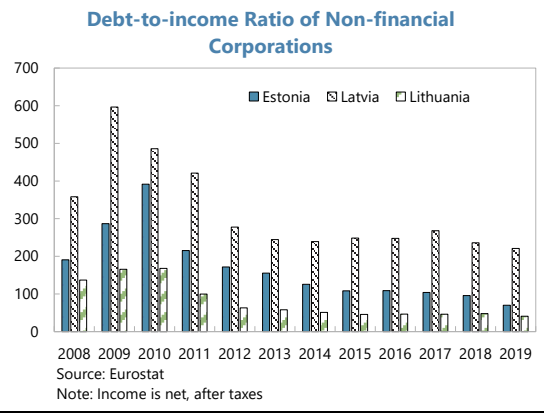
- *Reporting*. Given the difficulties created by the pandemic for some elements of the supervisory process, banks need to continue to conduct portfolio reviews and risk assessments on a regular basis. While some banks are already enhancing their reporting, it should be carefully applied across the industry, and banks' public disclosures should continue to be fully transparent.

- *Housing market and macroprudential policy*. Although the housing market has weathered the crisis well, it is critical as a preventive policy tool that the standard macroprudential instruments (debt to income, loan-to-value, and loan maturity cap requirements and the 15 percent risk weight for mortgage loans), be maintained to help keep the housing prices aligned with fundamentals. The authorities should be ready to re-calibrate tools in light of the risks of housing market overheating that are posed by the pension system withdrawals. As the economy

recovers, the systemic risk and countercyclical capital buffers (both currently at zero) could be re-assessed and macroprudential tools may need to be used more actively if significant divergences with the euro-area's cyclical conditions emerge.

Text Chart 16. Corporate and Household Debt





48. Remaining bottlenecks to resolving insolvencies should be forcefully addressed. The COVID-19 context has increased the importance of the insolvency framework. In January 2021, the authorities enacted amendments to the bankruptcy act that introduce a bankruptcy ombudsman, streamline procedures for accepting and defending claims, and increase specialization of courts. Consultations are underway for legislative changes that align the domestic framework with EU guidelines.

49. The AML-CFT reform agenda should be further advanced. The authorities have continued to make legislative and institutional progress in this area. The AMLTFP act was amended to incorporate the provisions of the EU fifth AML directive and entered into force in July 2020. The authorities' efforts to tighten licensing and practices of virtual currency service providers are ongoing. The forthcoming evaluation by Moneyval in 2022 is an opportunity to assess and showcase progress in the AML/CFT area, and the authorities should mobilize the AML/CFT regime in preparation for this evaluation. As per recommendations of the previous Article IV consultation, the authorities have introduced thematic and targeted inspections of financial institutions, which should be continued. The process of imposing fines for AML/CFT violations should be streamlined. The upcoming regional TA's recommendations on AML/CFT should also inform the reform agenda.

Authorities' Views

50. The authorities broadly shared staff's assessment of the financial sector's health and policies. They stressed that the weak credit growth to corporates is primarily driven by lower demand, while broader financial system's fundamentals for supporting financial stability, growth, and innovation remain good. Despite the strength of the financial system, they saw the need to maintain supervisory vigilance, noting that Estonia's high level of digitalization helped ensure an efficient transition to new supervisory practices during the pandemic. They agreed that the

macroprudential stance is appropriate and committed to further advancing the AML/CFT and insolvency-related reforms.

STAFF APPRAISAL

51. Estonia has been broadly successful in managing the COVID-19 pandemic. The initial and subsequent lockdowns and restrictions on activity helped mitigate negative health outcomes but triggered a decline in economic activity. However, the rapid, broad-based, and sizable policy responses helped contain the economic damage, and the fall in output has been among the mildest in the EU. Vaccination rollout is being expanded and restrictions are being eased, paving the way for an economic rebound. Estonia's external sector is assessed as having been substantially stronger than justified by medium-term fundamentals and desirable policies in 2020.

52. Output is set to recover, but the outlook is subject to large two-way risks. A robust recovery is expected in the near term on the back of progress with vaccinations, continued policy support, a boost to domestic demand from the expected withdrawal of pension system savings, and EU fund-backed public investment. There are however large two-way risks, including from virus mutations and economic scarring on the downside, and on the upside from increased confidence due to successful vaccinations and enhanced opportunities for digital and green transition.

53. Fiscal support should continue to be provided until the recovery is firmly entrenched. Estonia has ample policy space, reflecting prudent macroeconomic management and low debt. The fiscal support has been sizable, broad-based, and well-coordinated. While the current fiscal stance is appropriate, as health conditions improve and the economy recovers, the support should be gradually withdrawn. While some support measures have already expired as the economy has shown signs of recovery, they need to be promptly re-deployed should any signs of weakness emerge. In parallel, a plan to return to the medium-term objective should be part of a well-sequenced strategy to rebuild policy buffers and rebalance support toward productive investment. Further improving fiscal transparency and project implementation and maximizing the impact of NGEU grant funding should complement the envisioned scaling up of public investment.

54. Structural policies should aim to protect and revitalize Estonia's productive and social fabric. Comprehensive monitoring of policy support and evaluation of experience should guide decisions on the costs and benefits of continuing with labor market programs to minimize labor market scarring. In parallel, active labor market policies should be ramped up to enhance training, match workers to good jobs, reduce skill shortages, and incentivize hiring. To manage potential social scarring risks, policies should continue to reduce inequality and gender gaps and further protect the elderly. The recent and planned increases in pension entitlements are welcome, and so is the planned review of the pension system. Further facilitating immigration could help address population aging, low productivity, and scarcity of skilled labor.

55. Estonia should further accelerate its green and digital transition. NGEU funds open up opportunities for further progress in the greening and digitalization agenda, where Estonia should supplement its commendable progress in digital public services with improved efficiency in R&D

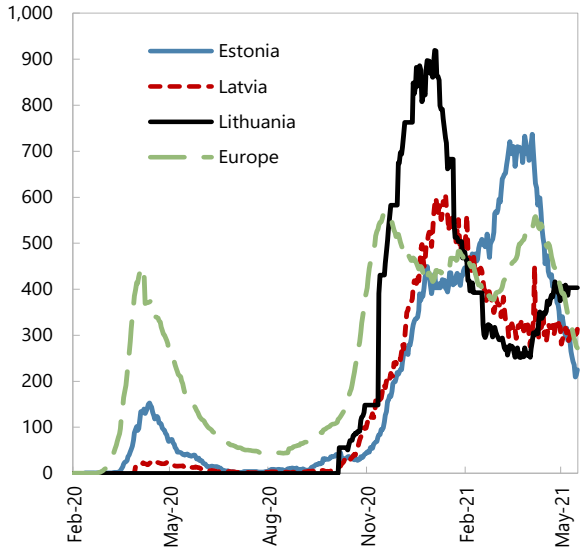
spending to enhance digitalization of private businesses. Drawing on the government's strong commitment to more ambitious climate targets, the authorities should continue their efforts to implement all aspects of their reform agenda. In particular, comprehensive and predictable carbon pricing could be considered to achieve the emissions targets. Further steps should be taken to accelerate the restructuring of the oil-shale sector while managing its social impact.

56. Financial supervisors and macroprudential policymakers should remain vigilant. Estonia's strong financial sector has weathered the pandemic well and helped support the economy. Financial supervision policies are appropriate, but continued careful monitoring is warranted. Banks' exposures to pandemic-hit sectors seem to be contained, and banks can now more soundly re-assess their borrowers and fully use the potential for credit provision while continuing to provide targeted support to vulnerable segments of the economy. The macroprudential stance is appropriate, though there is a need for a continued reassessment of the policy tools in light of developments in the real estate market. Staff welcomes the authorities' continued progress with legislative and institutional reforms of the AML-CFT framework, which should be further advanced.

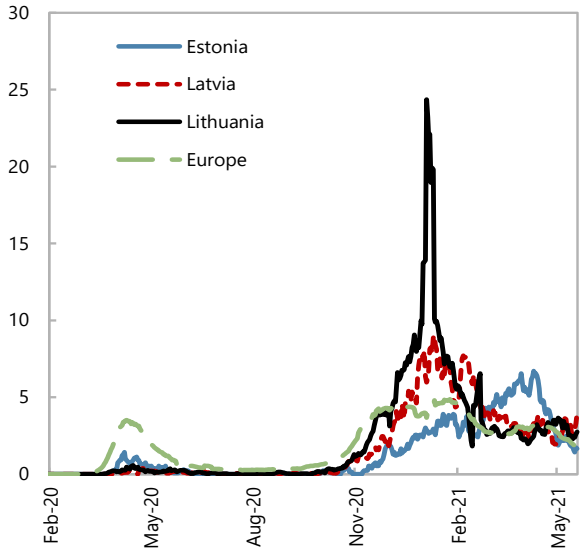
57. It is recommended that the next Article IV consultation be completed on the standard 12-month cycle.

Figure 1. Estonia: COVID-19 Developments, 2020–21

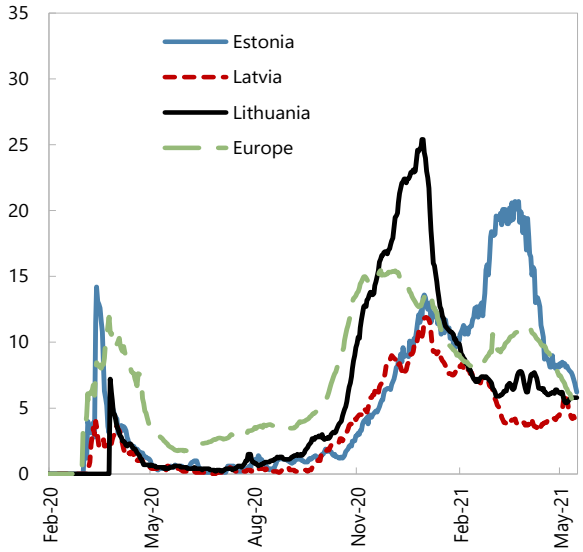
Daily Covid-19 Hospitalizations
(Patients per 1 million people; weighted by population)



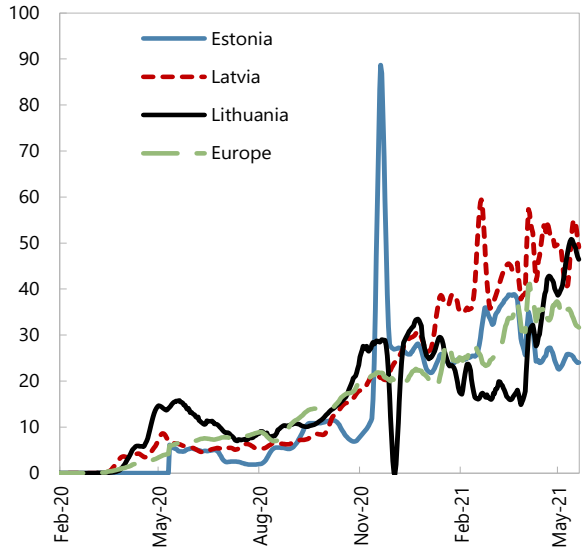
New Weweekly Covid-19 Deaths
(7-day moving average cases per 100k people)



Positive Tests Rate
(7-day average positive tests rates; simple average)

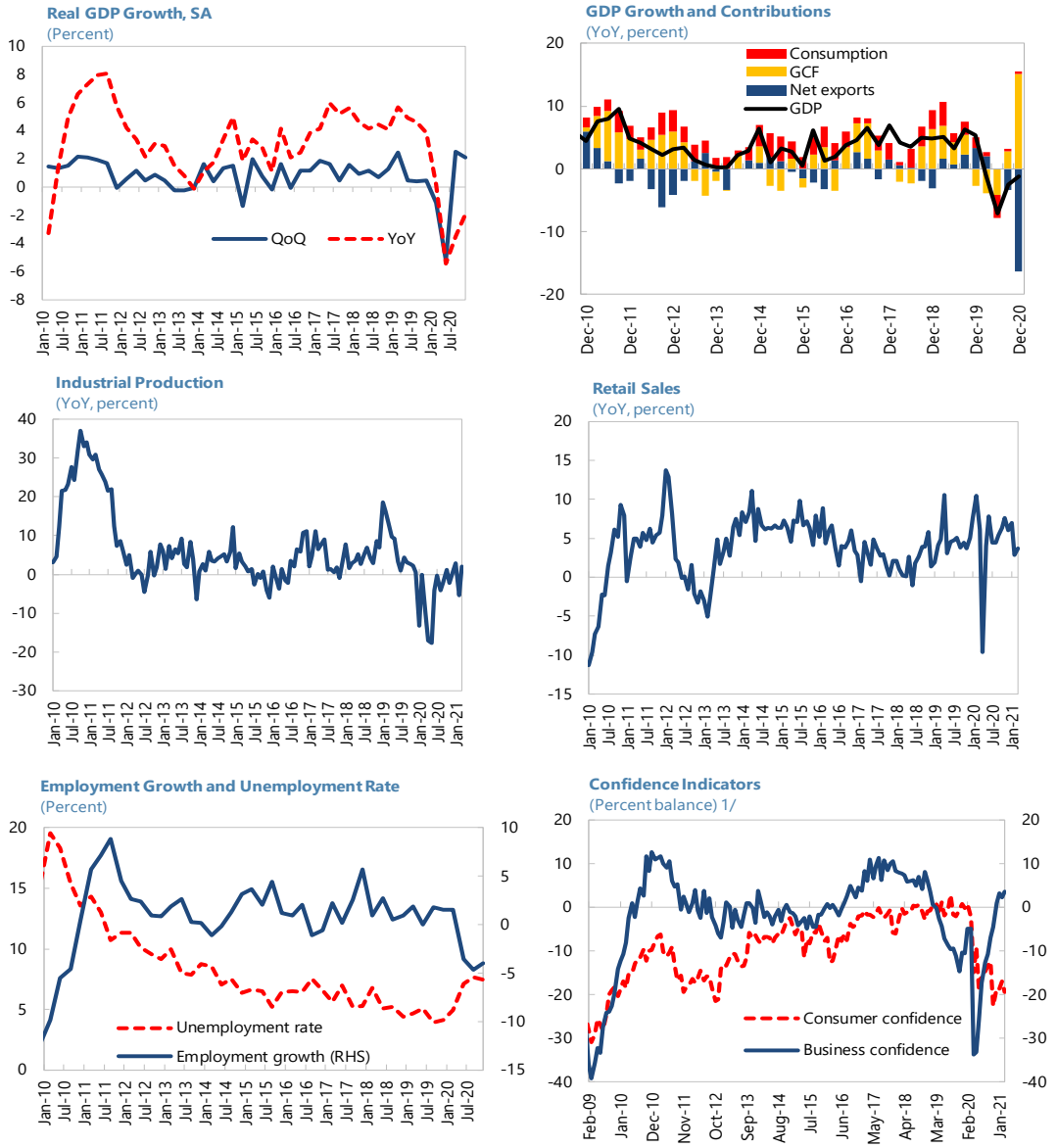


Weekly Covid-19 Tests
(7-day average tests, in thousands per 1 million people)



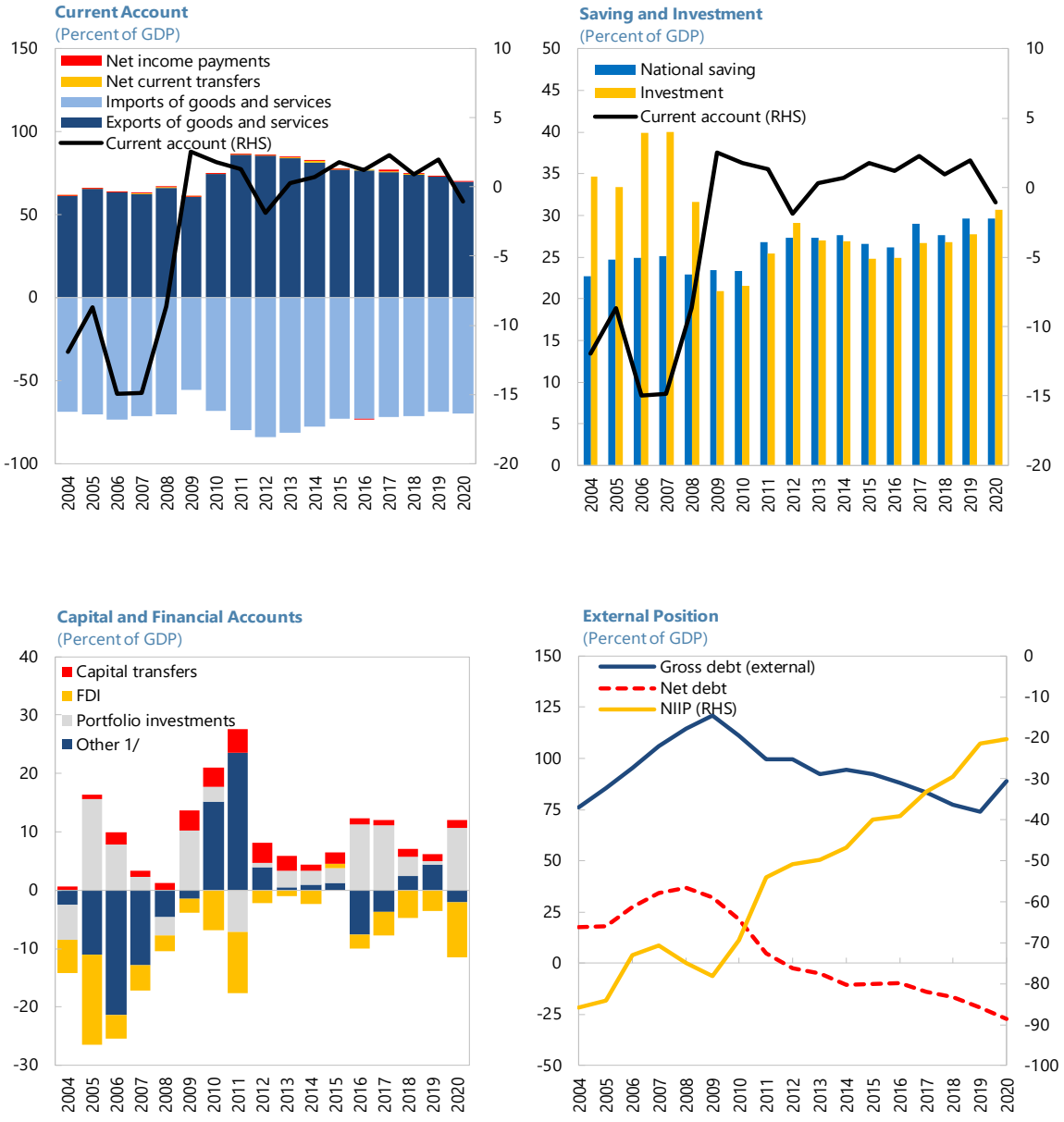
Sources: Bloomberg Finance L.P.; Our World In Data; IMF, WEO; and IMF staff calculations.

Figure 2. Estonia: Real Sector Developments, 2010–20



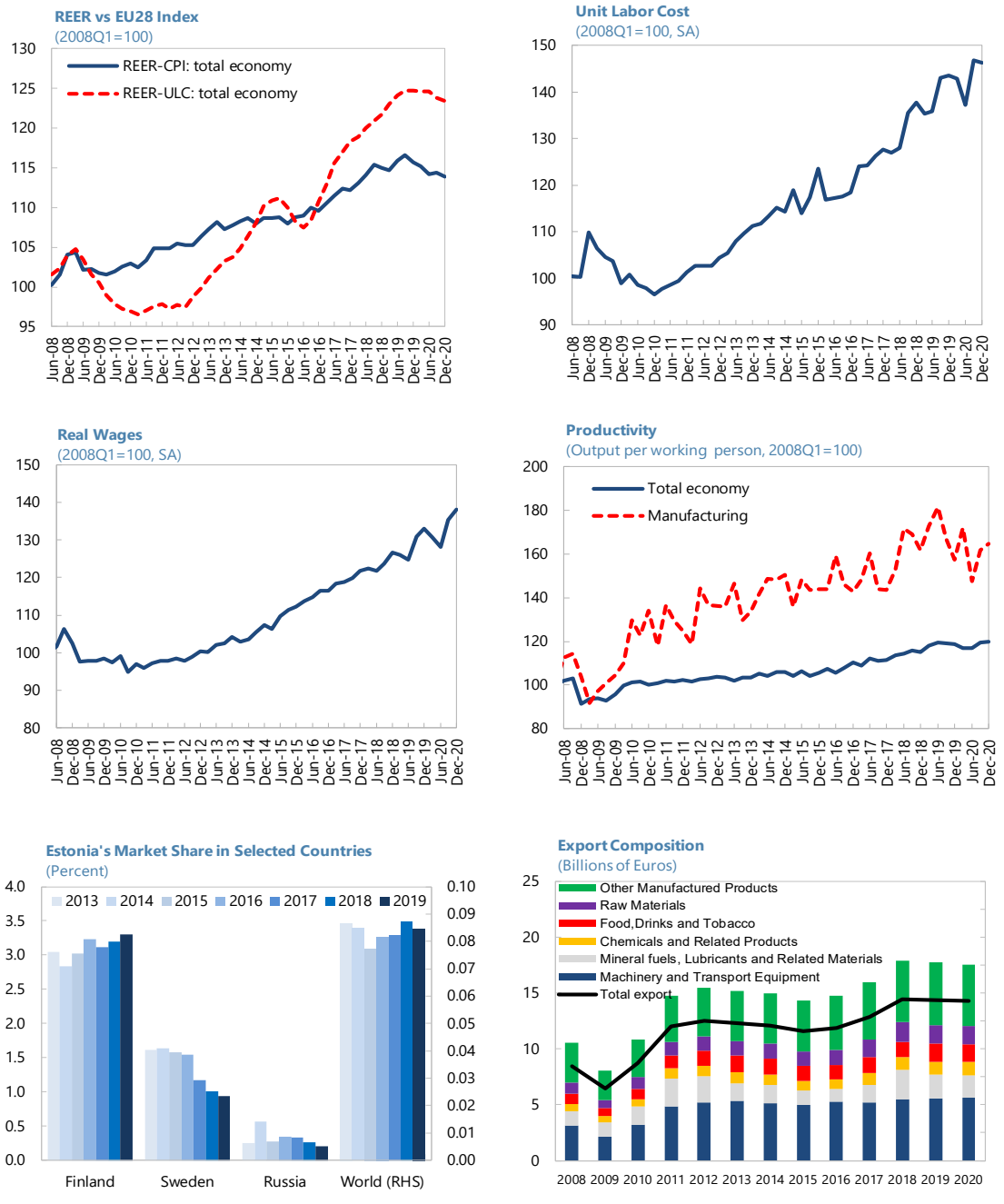
Sources: Haver; and national authorities.
1/ Balance equals percent of respondents reporting an increase minus the percent of respondents reporting a decrease.

Figure 3. Estonia: External Developments, 2004–20



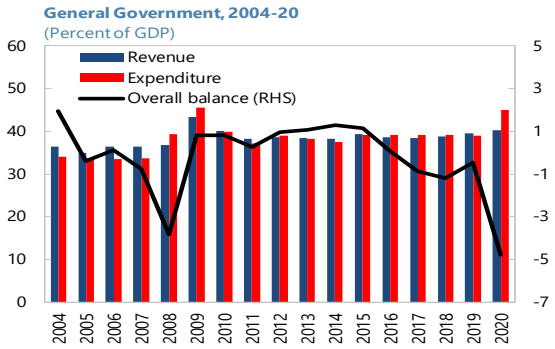
Sources: Haver; Statistics Estonia; and IMF staff calculations.
1/ Other is defined as the sum of financial derivatives, and other investments.

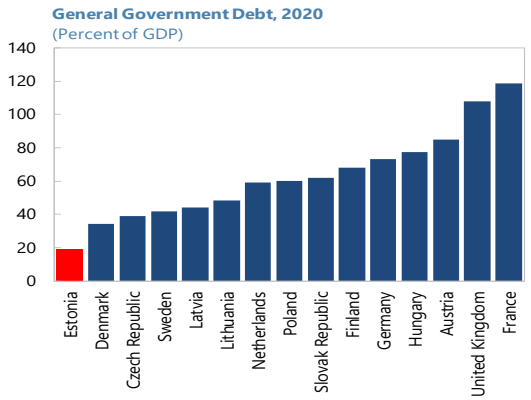
Figure 4. Estonia: External Competitiveness, 2008–20

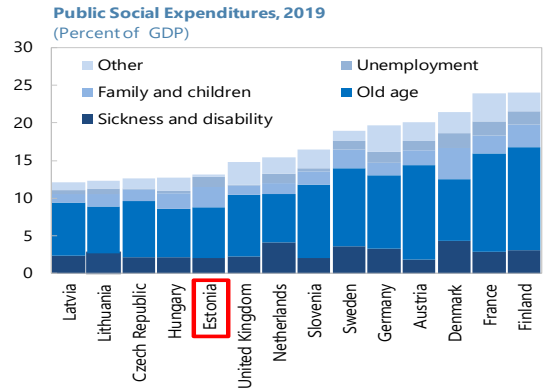


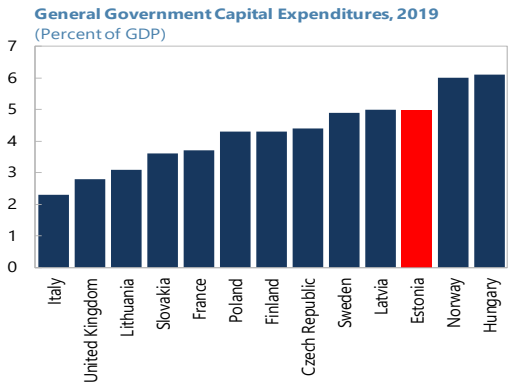
Sources: DOTS; Haver; WEO; and EU Commission.

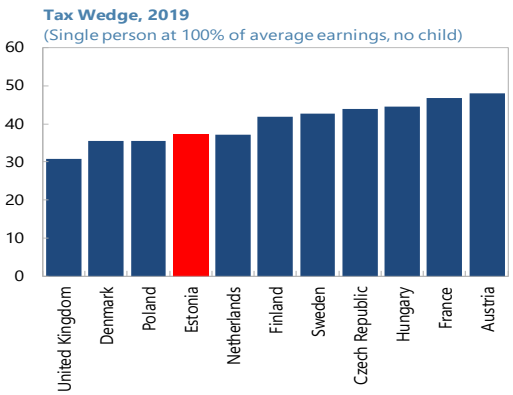
Figure 5. Estonia: Fiscal Developments and Structure, 2004–20

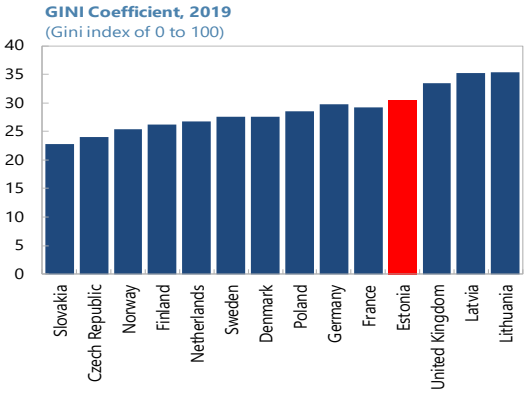






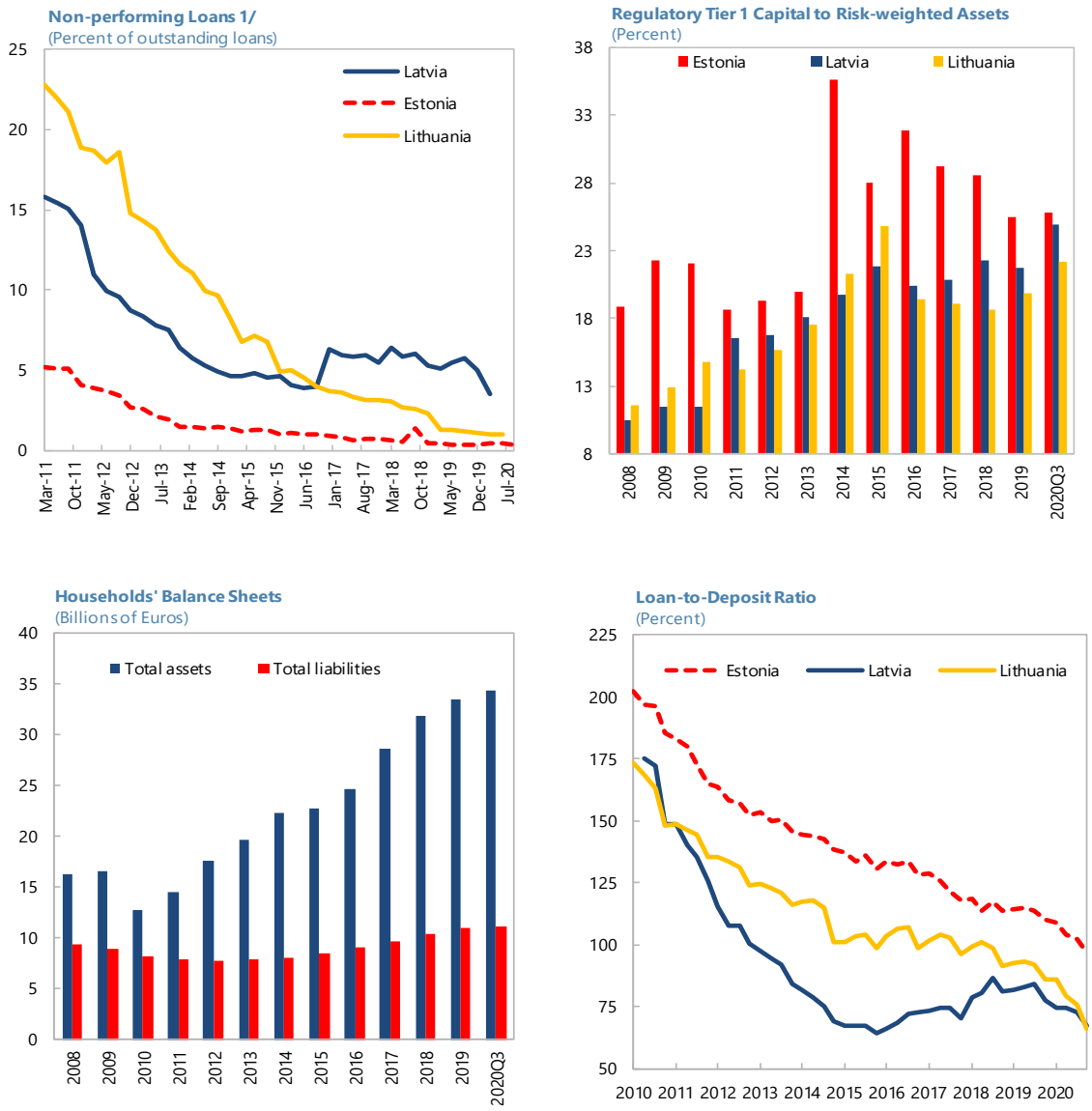






Sources: WEO; Eurostat; and OECD.

Figure 6. Estonia: Financial Sector Developments, 2008–20



Sources: Haver; national authorities; and IMF staff calculations.
1/ In Lithuania, NPLs include impaired loans and loans past due by 60 days but not impaired; in Latvia, NPLs are loans overdue by more than 90 days; in Estonia, they are loans overdue by more than 60 days.

Figure 7. Estonia: Public Sector Debt Sustainability Analysis (DSA)—Baseline Scenario

(in percent of GDP unless otherwise indicated)

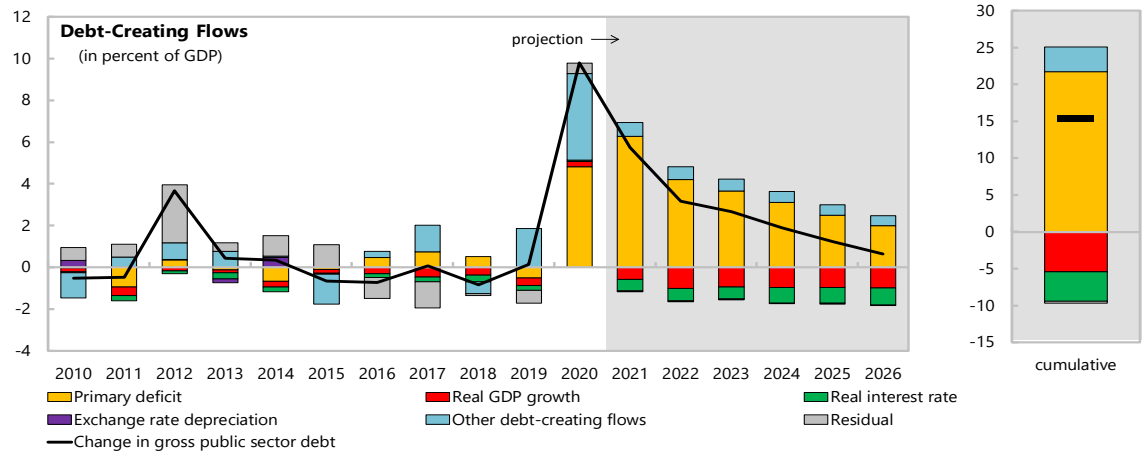
Debt, Economic and Market Indicators [1/]

	Actual			Projections					
	2010-2018 [2/]	2019	2020	2021	2022	2023	2024	2025	2026
Nominal gross public debt	8.8	8.4	18.2	24.0	27.1	29.8	31.7	33.0	33.6
Public gross financing needs	2.0	1.2	9.4	8.0	5.8	3.9	3.5	2.9	2.3
Real GDP growth (in percent)	3.6	5.0	-2.9	3.4	4.5	3.7	3.4	3.2	3.2
Inflation (GDP deflator, in percent)	3.2	3.2	-0.4	3.3	2.7	2.4	2.8	2.6	2.7
Nominal GDP growth (in percent)	7.0	8.4	-3.4	6.8	7.3	6.2	6.3	5.9	5.9
Effective interest rate (in percent) [4/]	0.9	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2

As of May 25, 2021		
Sovereign Spreads		
EMBIG (bp) 3/		42
5Y CDS (bp)		62
Ratings	Foreign	Local
Moody's	A1	A1
S&Ps	AA-	AA-
Fitch	AA-	AA-

Contribution to Changes in Public Debt

	Actual			Projections							
	2010-2018	2019	2020	2021	2022	2023	2024	2025	2026	cumulative	debt-stabilizing primary balance [9/]
Change in gross public sector debt	0.1	0.1	9.8	5.7	3.2	2.7	1.9	1.2	0.6	15.4	
Identified debt-creating flows	-0.3	0.8	9.3	5.8	3.2	2.7	1.9	1.3	0.7	15.6	
Primary deficit	0.0	-0.5	4.8	6.3	4.2	3.7	3.1	2.5	2.0	21.7	-1.3
Primary (noninterest) revenue and gran	38.6	39.4	40.2	40.7	39.8	39.8	40.5	40.7	40.9	242.5	
Primary (noninterest) expenditure	38.6	38.9	45.0	47.0	44.0	43.5	43.6	43.2	42.9	264.2	
Automatic debt dynamics [5/]	-0.4	-0.6	0.3	-1.1	-1.6	-1.5	-1.7	-1.7	-1.8	-9.4	
Interest rate/growth differential [6/]	-0.5	-0.6	0.3	-1.1	-1.6	-1.5	-1.7	-1.7	-1.8	-9.4	
Of which: real interest rate	-0.2	-0.2	0.1	-0.5	-0.6	-0.6	-0.8	-0.8	-0.8	-4.0	
Of which: real GDP growth	-0.3	-0.4	0.3	-0.6	-1.0	-0.9	-1.0	-1.0	-1.0	-5.4	
Exchange rate depreciation [7/]	0.1	0.0	0.0	...	...	...	...	...	...	...	
Other identified debt-creating flows	0.1	1.9	4.1	0.7	0.6	0.6	0.5	0.5	0.5	3.3	
Currency and deposits (negative)	0.0	1.8	4.1	0.6	0.6	0.6	0.5	0.5	0.5	3.3	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Please specify (2) (e.g., ESM and Euroa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual, including asset changes [8/]	0.5	-0.6	0.5	-0.1	0.0	0.0	0.0	0.0	0.0	-0.2	



Source: IMF staff.

1/ Public sector is defined as general government.

2/ Based on available data.

3/ Long-term bond spread over German bonds.

4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.

5/ Derived as [(r - π(1+g) - g + ae(1+r)]/(1+g+π+gπ)) times previous period debt ratio, with r = interest rate; π = growth rate of GDP deflator; g = real GDP growth rate; a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

6/ The real interest rate contribution is derived from the numerator in footnote 5 as r - π (1+g) and the real growth contribution as -g.

7/ The exchange rate contribution is derived from the numerator in footnote 5 as ae(1+r).

8/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

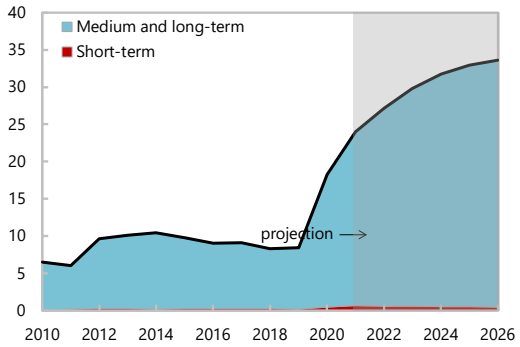
Figure 8. Estonia: Public DSA—Composition of Public Debt and Alternative Scenarios

(in percent of GDP unless otherwise indicated)

Composition of Public Debt

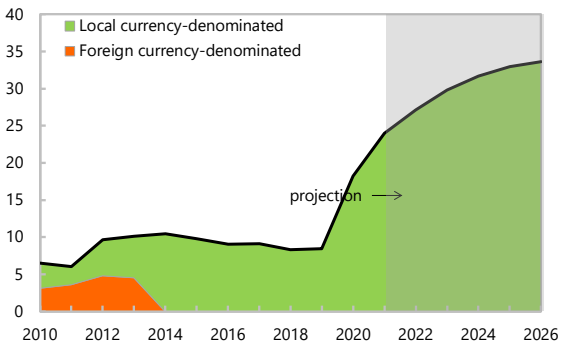
By Maturity

(in percent of GDP)

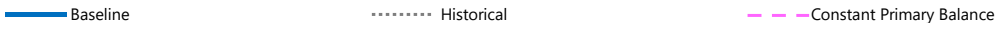


By Currency

(in percent of GDP)

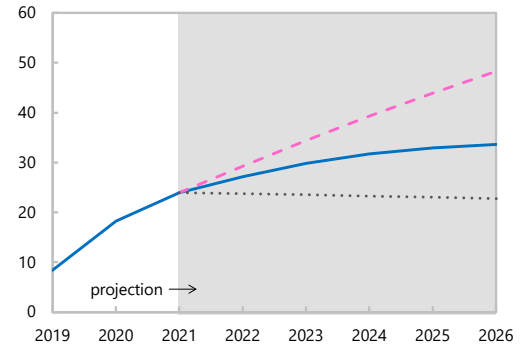


Alternative Scenarios



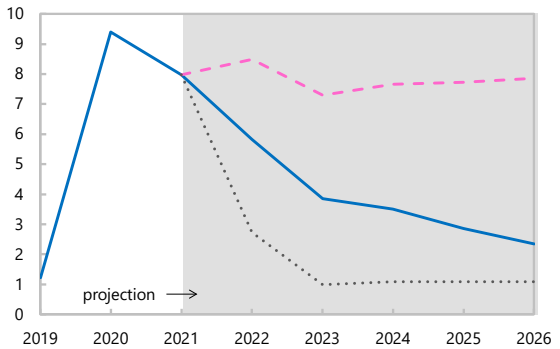
Gross Nominal Public Debt

(in percent of GDP)



Public Gross Financing Needs

(in percent of GDP)



Underlying Assumptions

(in percent)

Baseline Scenario	2021	2022	2023	2024	2025	2026
Real GDP growth	3.4	4.5	3.7	3.4	3.2	3.2
Inflation	3.3	2.7	2.4	2.8	2.6	2.7
Primary Balance	-6.3	-4.2	-3.7	-3.1	-2.5	-2.0
Effective interest rate	0.2	0.2	0.2	0.2	0.2	0.2
Constant Primary Balance Scenario						
Real GDP growth	3.4	4.5	3.7	3.4	3.2	3.2
Inflation	3.3	2.7	2.4	2.8	2.6	2.7
Primary Balance	-6.3	-6.3	-6.3	-6.3	-6.3	-6.3
Effective interest rate	0.2	0.3	0.4	0.4	0.3	0.3

Historical Scenario	2021	2022	2023	2024	2025	2026
Real GDP growth	3.4	3.2	3.2	3.2	3.2	3.2
Inflation	3.3	2.7	2.4	2.8	2.6	2.7
Primary Balance	-6.3	-0.5	-0.5	-0.5	-0.5	-0.5
Effective interest rate	0.2	0.3	0.4	0.4	0.5	0.5

Source: IMF staff Calculations.

Table 1. Estonia: Selected Macroeconomic and Social Indicators, 2018–26

(units as indicated)

	2018	2019	2020	2021	2022	2023	2024	2025	2026
			Est.	Projections					
National income, prices, and wages									
GDP (nominal; billions of Euro)	25.9	28.1	27.2	29.0	31.1	33.1	35.1	37.2	39.4
Annual change (in percent)	8.7	8.4	-3.4	6.8	7.3	6.2	6.3	5.9	5.9
Real GDP growth (year-on-year in percent) 1/	4.4	5.0	-2.9	3.4	4.5	3.7	3.4	3.2	3.2
Private consumption	4.6	3.1	-2.5	4.5	7.0	3.9	3.2	3.2	3.2
Gross fixed capital formation	3.9	11.0	18.4	-8.0	8.0	8.5	8.0	7.0	6.0
Exports of goods and services	4.0	6.2	-5.4	4.5	7.6	5.2	3.4	3.4	3.0
Imports of goods and services	5.7	3.7	0.7	1.7	8.9	5.8	4.7	4.5	4.0
Average HICP (year-on-year change in percent)	3.4	2.3	-0.6	1.7	2.5	2.1	2.1	2.1	2.1
GDP deflator (year-on-year change in percent)	4.2	3.2	-0.4	3.3	2.7	2.4	2.8	2.6	2.7
Average monthly wage (year-on-year growth in percent)	7.3	7.4	2.9	4.5	4.9	5.1	4.8	4.5	4.5
Unemployment rate (ILO definition, percent, pa)	5.4	4.4	6.8	6.9	6.5	5.5	5.0	4.8	4.8
Average nominal ULC (year-on-year growth in percent)	5.0	5.4	3.1	1.7	1.6	2.1	1.8	1.2	1.1
General government (ESA10 basis; percent of GDP)									
Revenue	38.7	39.4	40.2	40.8	39.8	39.9	40.6	40.8	40.9
Expenditure	39.2	38.9	45.0	47.0	44.1	43.5	43.7	43.3	42.9
Financial surplus (+) / deficit (-)	-0.5	0.5	-4.8	-6.3	-4.2	-3.7	-3.1	-2.5	-2.0
Structural balance	-1.2	-0.5	-4.6	-6.5	-4.2	-3.6	-3.1	-2.5	-2.0
Total general government debt	8.2	8.4	18.2	24.0	27.1	29.8	31.7	33.0	33.6
Net government debt 2/	-1.8	-2.2	2.5	9.3	13.4	16.9	19.6	21.5	22.8
External sector (percent of GDP)									
Merchandise trade balance	-4.7	-3.2	-0.6	-1.3	-2.2	-2.2	-2.3	-2.4	-2.5
Service balance	7.3	7.2	0.8	3.8	4.1	4.2	3.7	3.5	3.4
Primary income balance	-1.9	-2.2	-1.2	-1.9	-1.9	-1.9	-1.9	-1.8	-1.8
Current account	0.9	2.0	-1.0	0.7	0.2	0.2	-0.2	-0.6	-0.8
Gross external debt/GDP (percent) 3/	77.4	73.8	88.7	86.9	83.3	80.7	78.0	75.8	73.6
Exchange rate (US$/Euro - period averages)	1.18	1.12	1.14	...	...	...	...	...	...
Real effective exchange rate (annual changes in percent)	4.5	-0.3	0.7	...	...	...	...	...	...
Nominal effective exchange rate (annual changes in percent	3.3	-0.3	2.5	...	...	...	...	...	...
Money and credit (year-on-year growth in percent)									
Credit to the economy	6.3	3.9	3.8	...	...	...	...	...	...
Output gap (in percent of potential output)	2.5	3.2	-2.1	-1.7	-0.6	-0.3	-0.1	-0.1	0.0
Growth rate of potential output (in percent)	3.2	4.3	2.3	2.9	3.4	3.3	3.3	3.2	3.1

Social Indicators (reference year):
Population (2019, pa): 1.32 million; Per capita GDP (2017): $32,998; Life expectancy at birth: 82.2 (female) and 73.3 (male);
Poverty rate (share of the population below the established risk-of-poverty line): 22.2 percent; Main exports: machinery and appliances.

Sources: Estonian authorities; Eurostat; and IMF staff estimates and projections.

1/ Statistics Estonia revised National Accounts series in August 2019 inter alia shifting reference year to 2015 and improving the methodology.

2/ Includes the Stabilization Reserve Fund (SRF).

3/ Includes trade credits.

Table 2. Estonia: Summary of General Government Operations, 2018–26

(In percent of GDP)

	2018	2019	2020	2021	2022	2023	2024	2025	2026
			Est.	Projections					
Revenue and Grants	38.7	39.4	40.2	40.8	39.8	39.9	40.6	40.8	40.9
Revenue	36.5	36.9	37.8	38.0	37.1	37.0	37.7	37.9	38.1
Tax revenue	21.2	21.3	21.2	21.3	21.2	21.3	21.6	21.6	21.7
Direct taxes	7.4	7.3	7.7	8.1	7.6	7.4	7.6	7.6	7.6
Personal income tax	5.4	5.4	6.1	6.7	6.0	5.8	5.8	5.8	5.8
Corporate profits tax	2.0	1.8	1.7	1.4	1.6	1.6	1.7	1.8	1.8
Indirect taxes	13.8	14.0	13.4	13.3	13.6	13.8	14.0	14.0	14.1
VAT	9.0	8.8	9.0	8.8	8.9	8.6	8.7	8.7	8.7
Excises	3.9	4.0	3.3	3.3	3.6	4.1	4.1	4.2	4.2
Other taxes (incl. land tax)	0.9	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Social contributions	11.7	11.8	13.1	13.1	12.2	12.1	12.3	12.4	12.5
Pension insurance (net)	6.0	6.1	6.9	6.9	6.2	6.1	6.2	6.2	6.3
Health insurance	4.7	4.7	5.0	5.0	4.8	4.7	4.8	4.9	4.9
Unemployment insurance tax	0.7	0.7	0.8	0.8	0.9	0.9	0.9	0.9	1.0
Other (incl. self employed)	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3
Nontax revenue	3.5	3.8	3.6	3.6	3.6	3.7	3.8	3.9	3.9
O/w: Interest income	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Grants	2.2	2.6	2.4	2.8	2.8	2.8	2.9	2.9	2.9
O/w: EU	1.9	1.8	2.1	2.4	2.4	2.5	2.7	2.7	2.7
Expenditure	39.2	38.9	45.0	47.0	44.1	43.5	43.7	43.3	42.9
Expense (current expenditure)	34.0	34.1	39.3	40.5	37.5	36.1	35.8	35.3	35.1
Compensation of employees	11.3	11.5	12.7	12.6	12.2	11.8	11.8	11.8	11.6
Wages and salaries	7.8	7.9	8.8	8.8	8.6	8.3	8.3	8.3	8.1
Employers' social contributions	3.5	3.6	3.8	3.8	3.7	3.6	3.6	3.6	3.5
Other goods and services	6.4	6.5	6.5	7.0	6.7	6.5	6.5	6.5	6.5
Transfers and subsidies	16.2	16.1	20.2	20.9	18.5	17.8	17.4	17.0	16.9
Subsidies	0.4	0.5	1.6	1.6	0.8	0.6	0.6	0.6	0.6
Transfers to households	13.4	13.4	15.6	15.7	14.8	14.5	14.4	14.1	14.1
Social benefits	11.5	11.5	13.2	13.3	12.5	12.1	12.0	12.1	12.1
Social transfers in kind	1.9	1.9	2.4	2.4	2.3	2.4	2.3	2.0	2.0
Other transfers	2.4	2.2	3.0	3.6	2.9	2.7	2.4	2.2	2.2
Property income	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
O/w: Interest	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
Other current transfers	1.9	1.7	2.3	2.5	2.0	1.9	1.8	1.7	1.7
Capital transfers	0.5	0.4	0.7	1.1	0.9	0.7	0.6	0.5	0.5
Net acquisition of NFA (capital expenditure)	5.3	4.9	5.7	6.5	6.6	7.4	7.9	8.0	7.9
Acquisition	...	...	...	...	...	...	...	...	...
Disposal	...	...	...	...	...	...	...	...	...
Financial surplus (+) / deficit (-)	-0.5	0.5	-4.8	-6.3	-4.2	-3.7	-3.1	-2.5	-2.0
One-off items	-0.1	-0.1	0.5	0.8	0.2	0.0	0.0	0.0	0.0
Cyclical adjustment	0.8	1.1	-0.7	-0.6	-0.2	-0.1	0.0	0.0	0.0
Structural balance	-1.2	-0.5	-4.6	-6.5	-4.2	-3.6	-3.1	-2.5	-2.0
Financing (accrual basis)	-1.0	-0.5	4.8	6.3	4.2	3.7	3.1	2.5	2.0
Net incurrence of liabilities	0.9	1.5	9.8	6.9	4.8	4.3	3.7	3.0	2.5
Net acquisition of financial assets	1.9	1.5	4.5	0.6	0.6	0.6	0.5	0.5	0.5
Other financial assets	0.6	0.1	0.4						
Other and Errors and Omissions	-1.5	0.5	0.6	0.0	0.0	0.0	0.0	0.0	0.0

Sources: Eurostat; Statistics Estonia; and IMF staff calculations.

Table 3. Estonia: General Government Financial Assets and Liabilities, 2015–20

(In millions of euros)

	2015	2016	2017	2018	2019	2020
Total Assets	**8,737**	**9,059**	**9,400**	**9,590**	**9,657**	**11,303**
Fiscal reserves	2,058	2,144	2,141	2,144	2,548	3,588
Currency and deposits	1,002	1,063	1,363	1,215	1,733	2,654
Securities other than shares, excl. financial derivatives	825	825	527	645	526	655
Short-term securities, excl. financial derivatives	342	470	270	256	242	385
Long-term securities, excl. financial derivatives	483	356	257	389	284	269
Financial derivatives	0	0	0	0	0	0
Other	230	256	252	284	290	280
Loans	668	706	713	724	719	963
Short-term	6	5	4	4	3	3
Long-term	661	701	708	720	716	960
Equity	5,090	5,186	5,539	5,586	5,231	5,633
Other	921	1,023	1,007	1,137	1,159	1,119
Total Liabilities 1/	**2,626**	**2,979**	**3,118**	**3,342**	**3,738**	**6,617**
Securities other than shares, excl. financial derivatives	228	221	264	194	248	2,104
O/W: Long-term securities, excl. financial derivatives	228	221	264	194	148	1,679
Loans	1,767	1,927	1,894	1,931	2,115	2,897
Short-term	6	7	8	5	4	3
Long-term	1,761	1,920	1,885	1,925	2,111	2,894
Other accounts receivable/payable	539	770	898	1,163	1,314	1,546

Source: Statistics Estonia.

1/ Including commitments under the European Financial Stability Fund.

Table 4. Estonia: Summary Balance of Payments, 2018–26

	2018	2019	2020	2021	2022	2023	2024	2025	2026
			Est.			Projections			
				(Millions of Euros)					
Current Account	238	553	-283	202	64	81	-85	-218	-320
Primary Current Account 1/	2,190	2,684	1,433	2,167	2,128	2,248	2,191	2,171	2,188
Trade Balance	669	1,128	36	715	605	650	514	413	344
Exports of goods	12,592	13,316	13,307	14,098	15,007	15,595	16,116	16,602	17,043
Imports of goods	13,816	14,207	13,482	14,474	15,694	16,327	16,919	17,492	18,027
Services Balance	1,894	2,019	211	1,091	1,292	1,381	1,317	1,303	1,327
Exports of services	6,633	7,180	5,660	5,867	6,399	6,809	7,044	7,273	7,475
Imports of services	4,739	5,161	5,449	4,776	5,107	5,428	5,727	5,970	6,148
of witch: imports of computer services	493	574	2,216	...	...	...	...	...	...
Primary Income	-499	-627	-335	-565	-594	-623	-654	-687	-722
Receipts	1,453	1,504	1,380	1,400	1,470	1,543	1,621	1,702	1,787
Payments	1,952	2,131	1,715	1,965	2,064	2,167	2,275	2,389	2,508
Secondary Income	68	52	17	52	53	54	56	57	58
Capital Account	345	342	395	422	453	481	511	541	574
Non-produced non-financial assets	...	...	...	...	...	...	...	...	...
Capital transfers	...	...	...	...	...	...	...	...	...
Of which: General Government	...	...	...	...	...	...	...	...	...
Net lending (+) / borrowing (-) balance	583	895	113	624	517	562	426	324	253
Financial Account	679	1,006	90	624	517	562	426	324	253
Direct investment	-1,219	-986	-2,572	-1,719	-1,753	-1,788	-1,824	-1,923	-1,940
Assets	-197	1,640	264	266	272	277	283	288	294
Liabilities	1,022	2,627	2,836	1,985	2,025	2,065	2,106	2,212	2,234
Portfolio investment	854	143	2,889	1,647	1,807	1,626	1,563	1,501	1,441
Financial derivatives	49	-32	-46	-41	-37	-34	-30	-27	-24
Loans and other investments (net) 2/	585	1,285	-518	390	398	384	369	353	335
Change in reserves	410	596	338	347	103	373	348	420	441
Errors and Omissions	95	111	-22	0	0	0	0	0	0
			(In percent of GDP, unless otherwise specified)						
Current Account	0.9	2.0	-1.0	0.7	0.2	0.2	-0.2	-0.6	-0.8
Trade balance	2.6	4.0	0.1	2.5	1.9	2.0	1.5	1.1	0.9
Service balance	7.3	7.2	0.8	3.8	4.1	4.2	3.7	3.5	3.4
Primary income balance	-1.9	-2.2	-1.2	-1.9	-1.9	-1.9	-1.9	-1.8	-1.8
Secondary income balance	0.3	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1
Net lending (+) / borrowing (-) balance	2.2	3.2	0.4	2.1	1.7	1.7	1.2	0.9	0.6
Exports of goods and services (growth in percent)	6.5	6.6	-7.5	5.3	7.2	4.7	3.4	3.1	2.7
Imports of goods and services (growth in percent)	8.5	4.4	-2.3	1.7	8.1	4.6	4.1	3.6	3.0
Net FDI from abroad	4.7	3.5	9.5	5.9	5.6	5.4	5.2	5.2	4.9
Total external debt 3/									
Gross	77.4	73.8	88.7	86.9	83.3	80.7	78.0	75.8	73.6
Net 4/	...	...	...	...	...	...	...	...	...

Sources: Bank of Estonia; and IMF staff estimates and projections.

1/ Excluding interest payments and reinvested earnings.

2/ Includes operations in debt securities.

3/ Starting in 2000, the definition of external debt was widened to include money market instruments and financial derivatives.

4/ Net of portfolio assets (including money market instruments), financial derivative assets, other investment assets, and reserve assets, other investment assets, and reserve assets held by Estonian residents.

Table 5. Estonia: Macroeconomic Framework, 2018–26

(Percent of GDP, unless otherwise indicated)

	2018	2019	2020	2021	2022	2023	2024	2025	2026
			Est.			Projections			
Real GDP growth (percent)	4.4	5.0	-2.9	3.4	4.5	3.7	3.4	3.2	3.2
Domestic demand real growth (percent)	4.1	4.5	2.4	1.3	5.4	4.1	4.4	4.1	4.0
Final consumption real growth (percent)	3.5	3.2	-0.8	4.4	4.8	2.3	2.7	2.6	2.6
Capital formation real growth (percent)	5.5	7.9	10.0	-5.5	7.1	8.5	8.2	7.0	6.6
Fixed capital formation real growth (percent)	3.9	11.0	18.4	-8.0	8.0	8.5	8.0	7.0	6.0
Net exports contribution to real GDP (ppts)	-1.1	2.0	-4.8	2.1	-0.9	-0.4	-1.1	-0.9	-0.9
Exports real growth (percent)	4.0	6.2	-5.4	4.5	7.6	5.2	3.4	3.4	3.0
Imports real growth (percent)	5.7	3.7	0.7	1.7	8.9	5.8	4.7	4.5	4.0
Statistical discrepancy contribution to real GDP (ppts)	1.5	-1.4	-0.5	0.0	0.0	0.0	0.0	0.0	0.0
Gross saving	27.7	29.7	29.6	28.6	28.3	29.0	29.4	29.6	29.9
Private	22.9	24.3	28.7	28.4	25.9	25.3	24.6	24.1	24.0
Public	4.7	5.4	0.9	0.2	2.4	3.7	4.8	5.5	5.9
Investment	26.7	27.7	30.7	27.9	28.1	28.8	29.6	30.2	30.7
O/w: Fixed investment	24.6	26.2	31.3	27.5	28.0	28.7	29.5	30.0	30.3
Private	19.3	21.3	25.5	21.0	21.4	21.3	21.5	22.0	22.4
Public	5.3	5.0	5.8	6.5	6.6	7.4	7.9	8.0	7.8
Current account	0.9	2.0	-1.0	0.7	0.2	0.2	-0.2	-0.6	-0.8
Memorandum items:									
Fiscal balance 1/	-0.5	0.5	-4.8	-6.3	-4.2	-3.7	-3.1	-2.5	-2.0
Revenues	38.7	39.4	40.2	40.8	39.8	39.9	40.6	40.8	40.9
Expenditure	39.2	38.9	45.0	47.0	44.1	43.5	43.7	43.3	42.9
Structural balance	-1.2	-0.5	-4.6	-6.5	-4.2	-3.6	-3.1	-2.5	-2.0
Total general government debt	8.2	8.4	18.2	24.0	27.1	29.8	31.7	33.0	33.6
Net non-debt creating capital inflows ("+" inflow)	8.6	11.1	22.5	14.0	13.8	12.6	11.9	11.4	10.8
Capital transfers 2/	1.3	1.2	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Portfolio investment (net)	3.3	0.5	10.6	5.7	5.8	4.9	4.4	4.0	3.7
FDI liabilities	3.9	9.3	10.4	6.8	6.5	6.2	6.0	5.9	5.7
	3.4	2.3	-0.6	1.7	2.5	2.1	2.1	2.1	2.1
Unemployment rate (percent)	5.4	4.4	6.8	6.9	6.5	5.5	5.0	4.8	4.8
Average wage growth (percent)	7.3	7.4	2.9	4.5	4.9	5.1	4.8	4.5	4.5
Labor compensation share of GDP	48.1	49.0	50.7	49.9	49.4	49.3	48.8	48.1	47.4
Output gap (in percent of potential output)	2.5	3.2	-2.1	-1.7	-0.6	-0.3	-0.1	-0.1	0.0
Growth rate of potential output (in percent)	3.2	4.3	2.3	2.9	3.4	3.3	3.3	3.2	3.1

Sources: Estonian authorities; and IMF staff estimates and projections.

1/ Public savings minus public investment differs from the fiscal balance by the amount of capital transfers received from abroad.
2/ Mainly EU capital grants, all of which are channelled through the budget.

Table 6. Estonia: Indicators of External Vulnerability, 2015–20

(Percent of GDP, unless otherwise indicated)

	2015	2016	2017	2018	2019	2020
External Indicators						
Exports of goods and services (year-on-year, percent)	-2.7	4.8	7.8	6.5	6.6	-7.5
Imports of goods and services (year-on-year, percent)	-3.5	5.3	7.1	8.5	4.4	-2.3
Current account balance	1.8	1.2	2.3	0.9	2.0	-1.0
Capital and financial account balance	3.8	2.3	3.2	2.2	3.2	0.4
Total external debt 1/	92.2	88.0	83.4	77.4	73.8	88.7
Debt service to exports of GNFS	70.7	69.5	61.3	51.1	45.4	56.7
External interest payments to exports of GNFS (percent)	1.9	1.9	1.7	1.6	1.5	1.7
External amortization payments to exports of GNFS (percent)	69.0	67.7	59.5	49.1	43.5	54.9
Exchange rate (per US$, period average)2/	1.11	1.11	1.13	1.18	1.12	1.14
Financial Market Indicators						
Stock market index 3/	899	1076	1242	1163	1280	1344
Foreign currency debt rating 4/	AA-	AA-	AA-	AA-	AA-	AA-

Sources: Estonian authorities; Bloomberg; and Standard & Poor's.

1/ External debt includes money market instruments and financial derivatives.

2/ For 2008-10, EEKs per US$; starting in 2011, Euros per US$.

3/ Tallinn stock exchange index (OMX Tallinn), end of period.

4/ Standard & Poor's long-term foreign exchange sovereign rating.

Table 7. Estonia: Households, Financial Assets and Liabilities, 2015–20
(In millions of euros)

	2015	2016	2017	2018	2019	2020
Total Assets	**22,702**	**24,646**	**28,587**	**31,816**	**33,506**	**37,674**
Currency and deposits	6,502	7,054	7,925	8,876	8,590	9,761
Securities other than shares	58	65	68	82	115	119
Shares and other equity	12,474	13,330	15,840	17,714	18,653	21,057
Insurance technical reserves	3,143	3,586	4,146	4,458	5,355	5,907
Other	525	611	608	686	793	830
Total Liabilities	**8,485**	**8,994**	**9,630**	**10,310**	**10,906**	**11,504**
Loans	7,931	8,402	8,996	9,591	10,140	10,676
Short-term	193	143	151	252	248	248
Long-term	7,738	8,258	8,845	9,339	9,892	10,428
Other	554	592	634	719	766	828
Net Financial Assets	**14,217**	**15,652**	**18,957**	**21,506**	**22,600**	**26,170**
Memorandum item						
Liabilities to gross wages and salaries ratio	116.2	115.9	114.0	111.7	107.1	112.8

Sources: Eesti Pank; and Statistics Estonia.

Table 8. Estonia: Financial Soundness Indicators, 2015–20:Q3

(Percent)

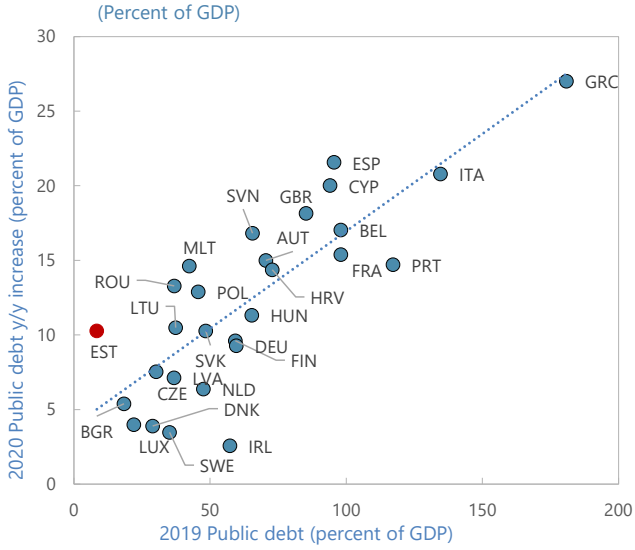
	2015	2016	2017	2018	2019	2020Q3
Capital adequacy						
Regulatory capital to risk-weighted assets	28.0	31.8	29.2	28.5	25.4	25.8
Regulatory Tier I capital to risk-weighted assets	27.7	31.4	28.8	28.1	25.0	25.3
NPLs net of provisions to capital	5.7	4.6	3.5	1.9	1.0	1.1
Asset composition and quality						
NPLs to gross loans (non-financial sector)	1.0	0.9	0.7	0.5	0.4	0.4
Sectoral distribution of loans to non-financial sector:						
Loans to households	44.3	42.5	44.4	44.9	46.2	46.5
Loans to non-financial corporations	41.4	40.8	37.7	37.5	35.9	35.9
Earnings and profitability						
Return on assets	3.7	1.9	1.7	1.8	1.2	1.3
Return on equity	29.9	15.6	13.0	14.0	8.0	5.4
Interest margin to gross income	47.5	56.8	46.0	43.6	51.1	59.6
Noninterest expenses to gross income	53.1	56.2	68.3	47.5	53.7	60.8
Liquidity						
Liquid assets to total short-term liabilities	32.1	29.1	32.5	33.3	29.1	38.9
Loans to deposits	105.4	109.9	107.6	109.1	100.8	91.8

Sources: IFS database, Eesti Pank, and Financial Supervisory Authority.

Annex I. Debt Sustainability Analysis[1]

The COVID-19 shock has led to a significant and sudden rise in Estonia's gross public debt by about 10 percentage points, albeit from a very low level of 8.2 percent of GDP in 2019. Debt accumulation is expected to decelerate over the medium term, while accommodating transformational investment expenditure. Estonia's public debt remains sustainable and among the lowest among European peers. Similarly, net debt remains relatively small (2.5 percent of GDP in 2020), reflecting the government's prudent approach to building reserve buffers. Changes in the State Treasury's asset-liability management approach in June 2020 were well-tailored to the government's increased borrowing needs, while maintaining high standards of risk management. Strong fiscal institutions and sound financial management will help Estonia safely navigate a period of higher borrowing.

1. Estonia's debt sharply increased, following the unprecedented fiscal response to the COVID-19 shock and a drop in tax revenue. Fiscal deficit widened to 4.8 percent in 2020 from a balanced position in 2019. Borrowing to finance the COVID-19 response included in the 2020 supplementary budget led to a sharp increase in nominal debt in 2020:Q2 (Text Chart 1). In 2020, public debt increased by 9.8 percentage points of GDP, with nominal debt growth and GDP contraction contributing 9.2 percentage points and 0.6 percentage points, respectively.[2] At the same time, Estonia's public debt still remains among the lowest in the Europe, and a low scrutiny case.[3] Long-term instruments contributed the most to the debt increase, reflecting: (i) the EUR 1.5 billion 10-year Eurobond issuance (5.5 percent of GDP); and (ii) the 15-year loan from Nordic Investment Bank (2.8 percent of GDP).[4] The government also issued EUR 575 million worth of T-bills in 2020.[5] In parallel, the government's fiscal reserves increased substantially in 2020, with net government debt remaining very low (2.5 percent of GDP), albeit increasing from negative levels in 2019.



Sources: WEO Database; and IMF staff calculations.

[1] Prepared by Neree Noumon.

[2] Estonia's liquidity reserves' size was 1.4 times larger than the amount of outstanding debt obligations at end-2019.

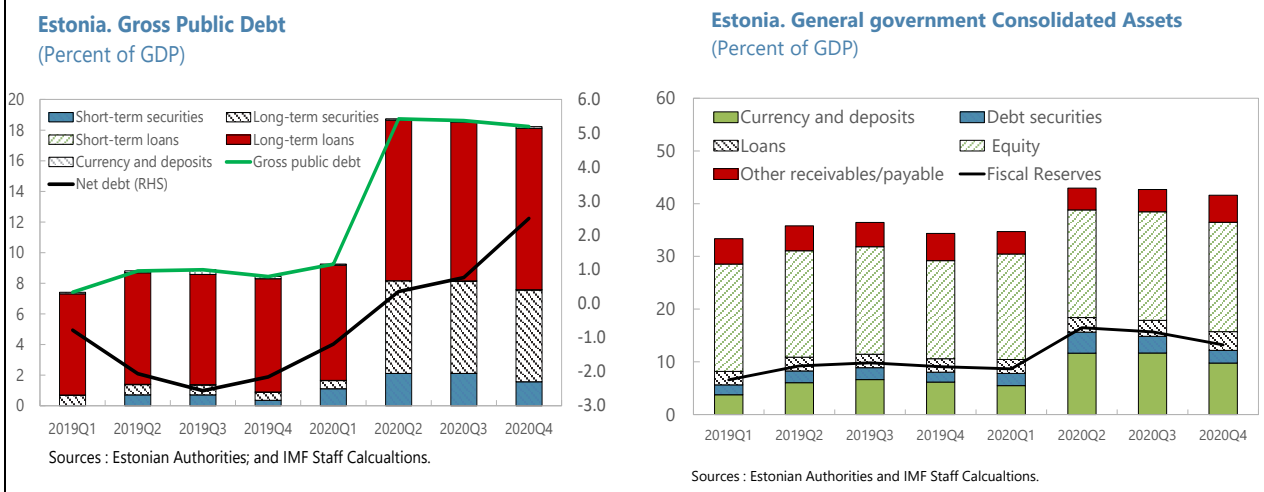
[3] Advanced economies are considered low-scrutiny under the DSA framework if they (i) have a current or projected debt-to-GDP ratio below 60 percent; (ii) have current or projected gross financing needs-to-GDP ratio below 15 percent; and (iii) they are not seeking exceptional access to Fund resources.

[4] The interest rate on the issued Eurobond is 0.235 percent.

[5] EUR 150 million worth of 2020 T-bill issuances was amortized in 2020, and the outstanding amount of T-bill will be amortized in 2021.

2. Estonia's 2021 budget borrowing plans accommodate support measures and essential expenditures. The 2021 budget augmented by the March 2021 supplementary budget envisages a further widening of the deficit to 6.0 percent of GDP, financed by additional borrowing. As of end-April 2021, Estonia's outstanding debt obligations—consisting of two European Investment Bank loans, one loan from Nordic Investment Bank, two Treasury bills, and one Eurobond—were 2.7 times the liquidity reserves.[6] The government borrowing strategy envisions borrowing up to EUR 4.3 billion through T-bills, IFI loans and Eurobond issuances, while ensuring that the refinancing risks and borrowing costs are minimized. For 2021, the average interest cost is expected to reach 0.2 percent per annum, while the average maturity of government debt is projected to further increase to 11 years.

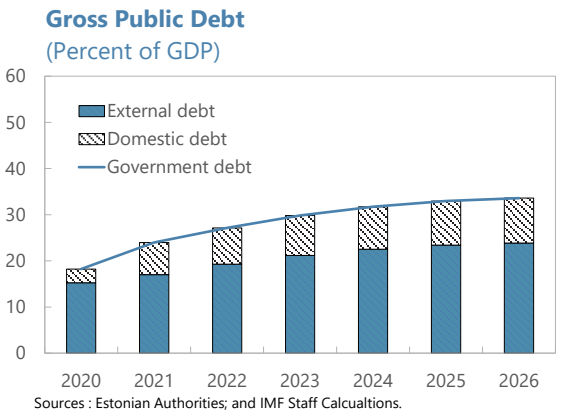
Text Chart 1. Gross Public Debt



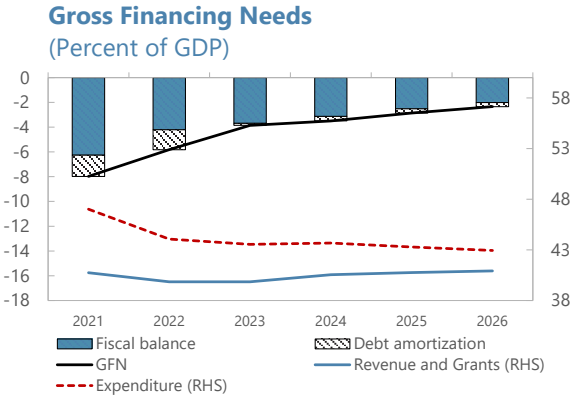
3. The pace of debt accumulation is expected to decelerate over the medium term, reflecting a gradual post-COVID-19 narrowing of fiscal deficits toward debt-stabilizing levels. The fiscal deficit is expected to gradually narrow to 2.0 percent of GDP in 2026, after expanding to accommodate essential spending that is rebalanced toward investment. Accordingly, gross financing needs are expected to narrow to 2.3 percent of GDP in 2026, from 8.0 percent of GDP in 2021. Estonia's debt-to-GDP ratio is expected to increase from 24.0 percent of GDP in 2021 to 33.6 percent of GDP in 2026. There may be notable risks toward a lower debt trajectory should a more robust post-COVID macroeconomy need less fiscal policy support, entailing a faster narrowing of deficits.

[6] The State Treasury also has several committed credit lines with banks representing 21 percent of the government liquidity position in March 2021 that can quickly be drawn upon.

Text Chart 2. Evolution of Gross Public Debt over 2020–26



Sources : Estonian Authorities; and IMF Staff Calcualtions.



Sources : Estonian Authorities; and IMF Staff Calcualtions.

4. Estonia's comprehensive financial risk management suggests low financial risks. The Treasury's primary financial management objective is to be able to meet the State's financial obligations in full and at all times, by maintaining liquidity and preserving the value of financial reserves.[7] Debt management, in particular, aims at keeping the cost of servicing debt as low as possible while maintaining risks (primarily interest rate and refinancing risk) manageable. The principles of risk management in Estonia are underpinned by the asset-liability management approach (ALM), which jointly considers the State's assets and liabilities, thereby improving the overall financial risk management and minimizing costs.[8]

5. Risks to the financial position of the government are limited. Government liquidity is well above the minimum requirements for liquidity management (Text figure 3).[9] Foreign currency exposures are limited and cannot exceed 1 percent of the Liquidity Reserve Fund, while the Stabilization Reserve Fund is fully hedged against exchange rate risks by design.[10] Refinancing risks are minimized, as reflected in the high duration and the requirement for long-term obligation repayments to be spread out to keep annual repayments within 5 percent of projected GDP each year. Credit risk is mitigated by the requirement to invest financial reserves in only highly rated assets. Liquidity and refinancing risks are further minimized by the ALM framework's requirements on the duration and average interest re-fixing period of financial assets and liabilities.

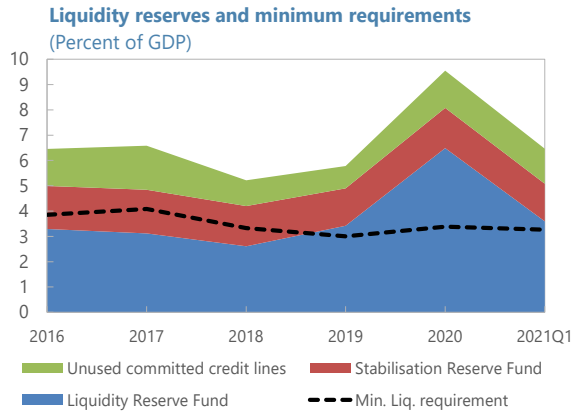
[7] Liquidity Reserves are used for daily cash management while the Stabilization Reserve Fund (SRF) is to be used during crises.

[8] Stabilization Reserves are excluded from the ALM approach.

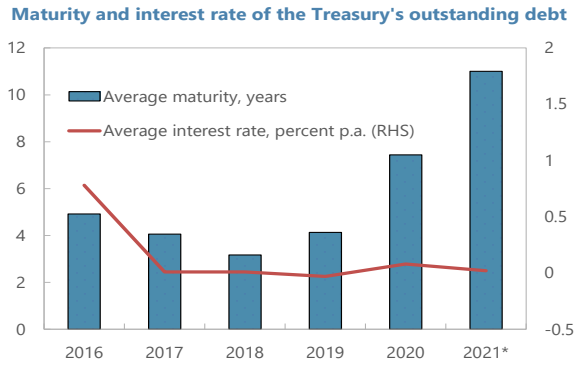
[9] The minimum required level of the liquidity position equals the State's six-month negative net cash flow which includes: (i) transactional requirements and (ii) precautionary requirements.

[10] The State Treasury can do on-lending and also borrow in foreign currency provided that the total foreign currency exposure does not exceed 1 percent of the Liquidity Reserve.

Text Chart 3. Liquidity Position and Duration of Outstanding Debt



Sources : Estonian Authorities; and IMF Staff Calcualtions.



Sources : Estonian Authorities; and IMF Staff Calcualtions.
Notes: 2021 values reflect the treasury borrowing plans.

6. The ALM principles have been modified to fit better the government increased borrowing needs. Following the COVID-19 shock, the size of the Treasury debt portfolio exceeded the size of the liquidity reserves, making obsolete the ALM objective to maintain financial assets in excess of liabilities.[11] The updated ALM principles (June 2020) delink the interest rate risk management for financial assets and liabilities. The interest rate risk management of financial assets (the Liquidity Reserve and the on-lending portfolio) remains unchanged (0.45 years duration limit). Conversely, risk management principles for liabilities are now based on the average interest rate re-fixing period method. As of January 31, 2021, the weighted average interest re-fixing period of the total debt portfolio was 4.60 years.

[11] From 2014 to May 2020 financial assets' duration could not exceed 0.45 years, while outstanding debt duration could not exceed 0.5 years.

Annex II. External Sector Assessment[1]

Estonia's external position in 2020 was substantially stronger than implied by medium-term fundamentals and desirable policies, despite the move of the current account into a deficit position. Over the medium term, the current account balance is expected to converge toward the norm.

1. Estonia's current account (CA) swung from a surplus into a deficit position (1 percent of GDP) in 2020, due to an exceptional surge in software services imports. Exports of goods and services declined (-7.5 percent (y/y)), with the COVID-19 shock driving large differences between subsectors. Goods exports were flat while services exports fell 21 percent. Tourism receipts suffered the brunt of the COVID-19 shock and plummeted by two-thirds, accounting for the bulk of the fall in services exports. On the import side, those of goods declined by 5 percent in line with weaker demand during the pandemic. However, services imports increased by 5.6 percent, reflecting a combined effect of (i) a sharp decrease in underlying services imports from weaker demand and some sector-specific effects of the pandemic,[2] and (ii) an exceptional increase in imports of computer services from a large direct investment operation that acquired intangible fixed assets for the development of software. As a result, the prior large surplus in the services balance declined from over 7 percent of GDP on average in 2016–19 to below 1 percent of GDP in 2020.

2. Both real and nominal effective exchange rates appreciated moderately in 2020. The nominal effective exchange rate appreciated by 2.5 percent, while the real effective exchange rate (REER) appreciated more modestly by 0.7 percent. The nominal appreciation was driven by the strengthening of the euro against the currencies of major trading partners, while Estonia's subdued (e.g., negative) inflation moderated the real appreciation.

3. The CA position in 2020 remained substantially stronger than implied by medium-term fundamentals and desirable policies. The EBA-lite CA methodology suggests that Estonia has a multilaterally consistent CA deficit norm of 1.8 percent of GDP (text table). However, in 2020, its adjusted current account, net of cyclical and one-off factors, was a surplus of 5.8 percent of GDP. This leads to a CA gap of 7.6 percent of GDP, which implies a real effective exchange rate (REER) undervaluation of about 14½ percent, relative to an 8 percent undervaluation estimated during the 2019 Article IV consultation. The estimated policy gap is

Estonia: Model Estimates for 2020 (in percent of GDP)

	CA model	REER
CA-Actual	**-1.0**	
Cyclical contributions (from model) (-)	-2.2	
COVID-19 adjustor (+) 1/	0.3	
Additional temporary/statistical factors (+)	4.2	
Natural disasters and conflicts (-)	-0.1	
Adjusted CA	**5.8**	
CA Norm (from model) 2/	**-1.8**	
CA Gap	**7.6**	**-1.3**
o/w Relative policy gap	4.0	
Elasticity	-0.52	
REER Gap (in percent)	**-14.6**	**2.5**

1/ Additional cyclical adjustment to account for the temporary impact of the oil trade balances (-0.05 percent of GDP) and tourism (0.34 percent of GDP).
2/ Cyclically adjusted, including multilateral consistency adjustments.

[1] Prepared by Bogdan Lissovolik.

[2] In particular, tourism-related imports declined sharpy (62 percent) in line with tourism exports.

4 percent of GDP, mainly explained by the need to achieve structural balance while increasing public health spending. The residual could be explained largely by rising private saving associated with aging and one-off factors, including the temporary increase in EU funds disbursement. Going forward, the current account dynamics would be shaped by two countervailing forces. On the one hand, the temporary factors are expected to unwind and push the current account back into surpluses. On the other hand, there would be an increase in public and private investment catalyzed by continued economic reforms and the planned scaling up of public investment to deal with the aftermath of the COVID-19 shock. Staff expect that in the long term the latter force would prevail, with the current accounts eventually recording deficits that are close to the estimated norm.

4. In line with the previous consultations' assessments, the EBA-lite REER method finds a different result. It suggests an overvaluation that leads to a REER gap of about 2½ percent (which contrasts with an undervaluation of 14½ percent implied by the CA model). This result is supportive of the recent data on unit labor cost and productivity measures that indicate that Estonia is lagging behind the EU average (see Figure 4). However, on balance, this does not suggest a need for exchange rate adjustment. Going forward, structural reforms and public investment catalyzed by EU funds would help safeguard Estonia's external competitiveness while boosting both private and public investment to further support the CA rebalancing.

5. Estonia's net international investment position (NIIP) continued to increase but remained negative at -20.4 percent of GDP in 2020. The NIIP increased by about 9 percent of GDP from 2018. The strong current account positions contributed to this increase, which corresponds to a reduction in external vulnerability. The negative NIIP largely reflects the net inflow of FDI. Meanwhile, gross external debt has reversed its long-term declining trend through 2019 and increased from 73.8 percent of GDP in 2019 to 88.7 percent of GDP in 2020, reflecting the impact of the COVID-19 shock. A key component of this increase was public debt, which rose from 8.4 to 18.2 percent of GDP, including through the issuance of a 10-year EUR 1.5 billion Eurobond in June 2020. Government fiscal reserves remain large (over 13 percent of GDP at end-2020). While Estonia's NIIP compares favorably with many of its European peers, further improvement can enhance its resilience against shocks given aging-related pressures and the volatility of portfolio flows.

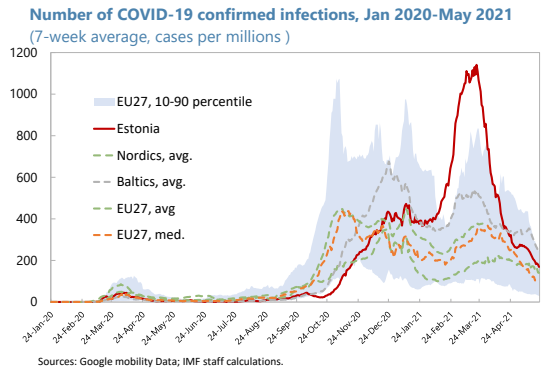
Annex III. Estonia's COVID-19 Policy Response[1]

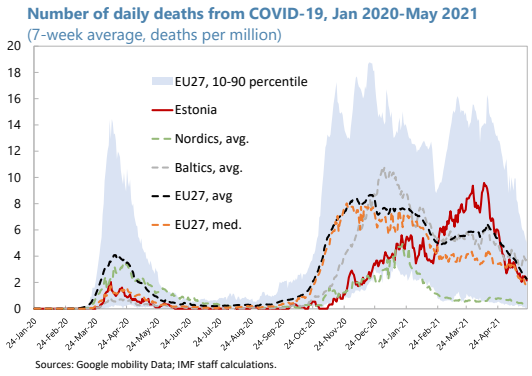
Estonia's relatively good track record in handling the pandemic was tested by the second wave, with the number of cases temporarily reaching the highest level in Europe before falling owing to: (i) the tighter lockdown imposed in March 2021; (ii) progress with vaccine rollout; and (iii) policy support. During the first and second waves, the Estonian authorities' response to the COVID-19 shock was broad-based and balanced, reflecting the wide range of options permitted by strong initial conditions and institutions. Fiscal support measures—largely implemented—were the cornerstone of the COVID-19 relief package.

A. Evolution of the Health Situation and Containment Measures

1. The first COVID-19 wave was relatively mild and tightly contained with swiftly introduced restrictions. Stringent restrictions, including a state of emergency (March 13, 2020) and lockdown measures—swiftly introduced about two weeks after the first case of infection was reported—helped flatten the first wave's curve. Schools and workplace closures, restrictions on movement and gatherings, stay at home restrictions, and the cancelling of public events were among the tightest in the EU (Figure 1). Restrictions started to be loosened on May 18, 2020, two months after the declaration of the state of emergency. The first wave of the pandemic peaked at 45 cases per million inhabitants on April 5, with the reported number of daily infections generally close to the median EU country.[2]

Text Chart 1. COVID-19 Cases and Deaths, First and second COVID waves





2. In the context of relatively less stringent restrictions in the second part of 2020, new virus strains fueled the second wave, contributing to a worse health impact than first wave. The second COVID-19 wave started in November 2020 and accelerated in February 2021, peaking at an average number of daily cases per million of 1,141 cases on March 21, 2021. At its peak, the number of cases was among the highest in Europe and more than 20 times higher than the first

[1] Prepared by Neree Noumon.

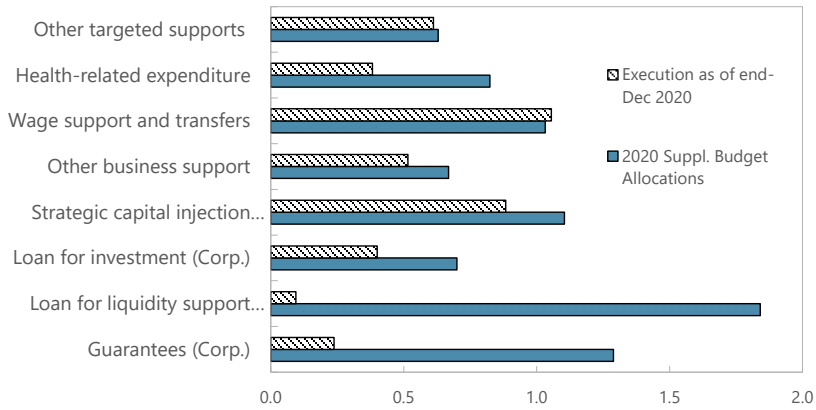
[2] Reported numbers during the first wave are less comparable across countries as the extent of testing varied.

wave's peak, thereby stretching the healthcare system capacity. The rapid worsening of the health situation was mostly attributed to: (i) the relatively less stringent restrictions at the earlier stages of the second wave; and (ii) the rapid spread of more transmissible variants of the virus.[3] A stricter one-month lockdown—imposed on March 11, 2021 and extended to late-April—and good progress with vaccine rollout helped curb the second wave. As of end-June 2021, the number of infections in Estonia fell to levels only seen in September 2020 (around 20 cases/million), being slightly below the Baltic average.

B. Policy Response to the COVID-19

3. The supplementary 2020 budget envisioned a €2.3 billion (8½ percent of GDP) support package to address the health and socio-economic impact of the COVID-19 shock. The bill was passed on April 15, 2020 and included 7.2 percent of GDP in spending support and 1.4 percent of GDP in revenue measures. This largely-executed package led to a widening of the general government fiscal deficit to 4.8 percent of GDP in 2020 (compared to 6.6 percent of GDP originally planned).[4] The successful and swift implementation of the COVID-19 relief package was made possible by an effective coordination of all key public institutions. For example, the measures included: (i) direct support to businesses through the KredEx Foundation, Enterprise Estonia (€1.3 billion), and the Estonian Rural Development Foundation (€200 million); (ii) labor market (wage) support measures through the Estonian Unemployment Insurance Fund and the Health Insurance Fund (€268 million); and (iii) other measures such as excise tax cuts, tax incentives, deferral of tax debt for 18 months, temporary suspension of second pillar pension scheme contribution payments, as well as partial compensation for direct costs of cancelled events.

Estonia: Execution of the 2020 COVID-19 Fiscal Package
(Percent of 2020 GDP)



Sources: Estonian authorities; and IMF staff calculations.

4. The use of financing measures in 2020 was relatively lower compared to other support measures. As of end-December 2020, 38 percent of the financial envelope of the measures was paid out, in contrast to the high level of applications (99.7 percent). Measures to support individuals and

[3] Mobility—especially in retail and recreation, transit stations, and workplaces—reflected the stringency of restrictions.

[4] The COVID-19 package was partly financed through borrowing from the Nordic Investment Bank (€750 million, 15-year loan), a Eurobond (€1.5 billion, 10-year), and Estonian T-bills (€425 million 1-y notes).

operating support measures had the highest uptake, at 99 percent and 92 percent, respectively.[5] Financial instruments and investment measures had lower payment rates, at 18 and 46 percent respectively, in part due to: (i) the large projects involved and complications in the approval process; (ii) initial requirements that were assessed as too strict and subsequently relaxed; and (iii) a greater use of banks' repayment moratoria, which lowered demand for guarantees. Strategic capital injections were the most successful type of financing support (80 percent execution), while the wage compensation scheme's uptake exceeded the budgeted amount.

5. Accommodative monetary policy at the Euro Area level and regulatory forbearance helped support the economy. At the national level, Eesti Pank reduced the systemic risk buffer for commercial banks from 1 percent to 0 percent on March 25, 2020 to free up resources for loan losses or new loans. The measure was expected to free up about €110 million for the banks. Eesti Pank also announced that it would allocate ¾ of its 2019 profits equivalent to €18.9 million, the maximum amount legally allowed, to support the state budget.

6. Additional fiscal support helped mitigate the impact of the second wave. After its expiration in June 2020, the wage support scheme was discontinued to make room for other social insurance measures that aimed to help workers who lost their jobs to upgrade their skills and knowledge and find new jobs. The government approved €28 million in additional measures (in December 2020), mostly for wage support. The measures primarily targeted the areas that were most affected by the additional restrictions (Ida-Viru and Harju Counties).

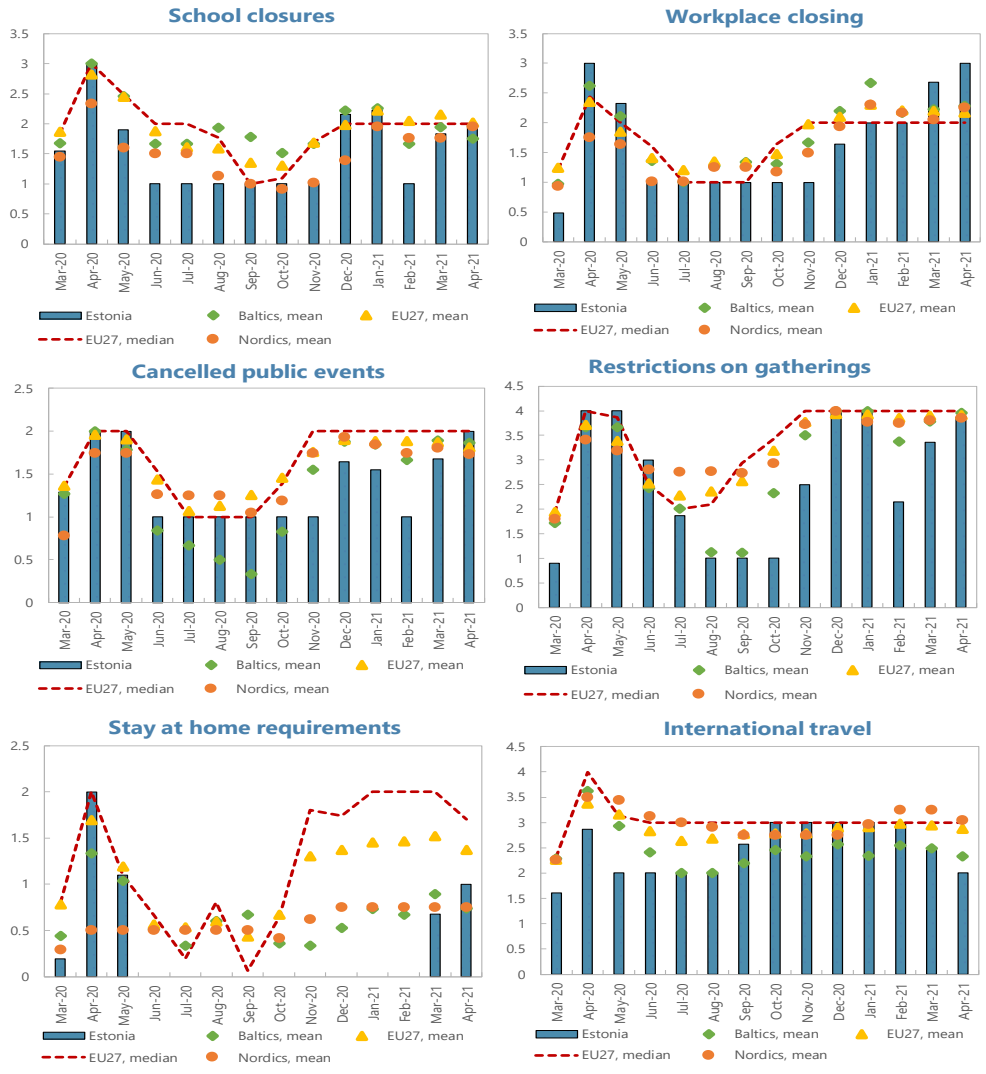
7. The 2021 supplementary budget was introduced to strengthen the healthcare system's capacity and mitigate the social and economic impact of lockdown measures in 2021. The health system capacity came under stress, as the number of cases and hospitalizations increased during the temporary worsening of the second wave in March–April 2021. The 2021 supplementary budget provides further resources to cover (i) extraordinary additional COVID-19-related costs of hospitals, emergency medical care departments, and other medical institutions; (ii) coronavirus testing; and (iii) the purchase of COVID-19 vaccines and the organization of vaccinations.[6] Resources were also allocated in the supplementary budget 2021 to mitigate the social and economic impact of lockdown measures during the second wave. The work support (about EUR 140 million) scheme was extended until May to help households and businesses overcome the temporary difficulties caused by the COVID-19 crisis. Furthermore, the bill includes targeted relief measures (about EUR 152 million) for the most affected sectors, including transport, tourism, culture and sports, education, and research.

[5] About 138,000 people received the wage compensation between March and June 2020. Operating support refers to transfers to the support operating costs of various entities affected by the COVID-19 shock (e.g., schools, local governments, cultures and sports, passengers' ships, churches, and congregations, etc.)

[6] The package aims at enhancing the deployment of vaccine, by boosting vaccine availability and easy access to vaccination facilities.

8. The 2021 Budget uses existing flexibility mechanisms and access to EU funding to address the COVID-19 shock, while laying the foundation for a green and digital recovery. Health expenditures, especially those related to the vaccine deployment are expected to be sustained, including using EU-REACT funds. The balance (4.2 percent of GDP) of unused fiscal support from the 2020 supplementary budget (mostly financing support) was carried over to 2021 budget to help support businesses as the economy starts to recover. Scaling up of public investments including using EU Next Generation Funds is also expected to help create new jobs and promote a green and digital recovery.

Figure 1. Containment Policies at Different Stringency Levels



Sources: Oxford COVID-19 Government Response Tracker; and IMF staff calculations.
Notes: Higher degree of stringency captures greater recommendation or requirement to follow the measures by national authorities.

Table 1. Estonia's COVID-19 Fiscal Response Package 2020–22

	2020 Suppl. Budget measures 2020-2022		End-2020 Execution			Package 2021-22, From 2020 Suppl. Budget		March 2021 Suppl. Budget		2021 Support measures
	Euro Million	Percent of 2020 GDP	Euro Million	Percent of GDP	Percent of planned amount	Euro Million	Percent of 2021 GDP	Euro Million	Percent of 2021 GDP	Percent of 2021 GDP
Total support package	**2323.3**	**8.6**	**1107.5**	**4.1**	**48**	**1216**	**4.2**	**640.8**	**2.2**	**6.4**
Business support	**1531.7**	**5.6**	**584.4**	**2.2**	**38**	**947**	**3.3**	**49.8**	**0.2**	**3.5**
Financing support	**1377.0**	**5.1**	**436.4**	**1.6**	**32**	**941**	**3.3**	**0.0**	**0.0**	**3.3**
Guarantees	350.0	1.3	64.7	0.2	18	285	1.0	0.0	0.0	1.0
Loan for liquidity support	500.0	1.8	25.6	0.1	5	474	1.6	0.0	0.0	1.6
Loan for investment	177.0	0.7	100.4	0.4	57	77	0.3	0.0	0.0	0.3
Strategic capital injection	300.0	1.1	243.4	0.9	81	57	0.2	0.0	0.0	0.2
Land capital financing (rural)	50.0	0.2	2.3	0.0	5	48	0.2	0.0	0.0	0.2
Tranfers/Investment	**154.7**	**0.6**	**148.0**	**0.5**	**96**	**7**	**0.0**	**49.8**	**0.2**	**0.2**
Tourism sector and small businesses	35.0	0.1	32.8	0.1	94	2	0.0	25.0	0.1	0.1
Constructon sector	78.0	0.3	78.0	0.3	100	0	0.0	0.0	0.0	0.0
Emergency and other support1/	41.7	0.2	37.2	0.1	89	5	0.0	24.8	0.1	0.1
										0
Employment and households support	**504.4**	**1.9**	**384.2**	**1.4**	**76**	**120**	**0.4**	**371.2**	**1.3**	**1.7**
Wage support and transfers	**280.5**	**1.0**	**287.0**	**1.1**	**102**	**0**	**0.0**	**159.8**	**0.6**	**0.6**
Wage support measure	250.0	0.9	256.5	0.9	103	0	0.0	159.8	0.6	0.6
Income support in local governments	30.0	0.1	30.0	0.1	100	0	0.0	0.0	0.0	0.0
Replacememt service for farmers	0.5	0.0	0.5	0.0	100	0	0.0	0.0	0.0	0.0
										0
Health-related expenditure	**223.9**	**0.8**	**97.2**	**0.4**	**43**	**127**	**0.4**	**211.4**	**0.7**	**1.2**
Heath expenditure 2/	206.1	0.8	89.0	0.3	43	117	0.4	190.1	0.7	1.1
Sick leaves/healthcare 3/	17.8	0.1	8.2	0.0	46	10	0.0	21.4	0.1	0.1
Other targeted supports	**171.0**	**0.6**	**165.6**	**0.6**	**97**	**5**	**0.0**	**102.7**	**0.4**	**0.4**
Local governments support 4/	70.0	0.3	70.0	0.3	100	0	0.0	46.0	0.2	0.2
Road maintenance	45.0	0.2	45.0	0.2	100	0	0.0	0.0	0.0	0.0
Culture and Sport	25.0	0.1	25.0	0.1	100	0	0.0	41.9	0.1	0.1
Education and science	19.0	0.1	13.7	0.1	72	5	0.0	13.5	0.0	0.1
Investment in sparcely populated areas	10.0	0.0	10.0	0.0	100	0	0.0	0.0	0.0	0.0
Religious activities and others 5/	2.0	0.0	1.9	0.0	95	0	0.0	1.2	0.0	0.0
Tax measures	**378.7**	**1.4**	**113.3**	**0.4**	**30**	**265**	**0.9**	**0.0**	**0.0**	**0.9**
Excise	269.2	1.0	91.6	0.3	34	178	0.6	0.0	0.0	0.6
Tax arrears rescheduling	67.0	0.2	4.8	0.0	7	62	0.2	0.0	0.0	0.2
Other tax measures	42.5	0.2	16.9	0.1	40	26	0.1	0.0	0.0	0.1
Suspension of pillar II contributions 6/	**-262.5**	**-1.0**	**-140.0**	**-0.5**	**53**	**-123**	**-0.4**	**117.0**	**0.4**	0.0

Sources: Estonian authorities; and IMF staff calculations.

1/ Also includes support to maritime tranport, commercial bus/coach, fresh freshwater fish processing companies

2/ Includes healthcare costs (e.g., vaccine, testing, medical equipements) and contingency reserves

3/ Including healthcare related social transfers, support for disable workers, and special needs.

4/ Support for local governments' investment, revenue shortfall, and additional costs.

5/ Includes government communication.

6/The 2021 supplementary budget sets aside reserves to compensate for the temporary suspension of state contributions to the second pillar for those who applied to leave the second pillar by 31 March 2021.

Estonia: Timeline of COVID-19 Containment Measures, February 2020–June 2021

Restrictions to contain the first wave

February 27, 2020. First case of COVID-19 is reported.

March 12, 2020. The government declares a state of emergency until May 1.

March 17, 2020. Full border control is introduced.

March 24, 2020. The 2+2 rule becomes effective; shopping centers close down; restaurants and bars to close at 10 p.m.

April 16, 2020. Parliament passes 2020 state supplementary budget bill.

April 30, 2020. State of emergency is extended until May 18.

Relaxation of the first-wave restrictions

May 18, 2020. Public meetings and venues reopened under the 2+2 rule.

May 20, 2020. Government considers epidemic in Estonia over, bans high-risk destination flights.

June 1, 2020. Indoor venue reopened on condition of maximum 50 percent occupancy rate indoors.

June 18, 2020. Sticking to 2+2 rule is no longer required. Nightclubs are allowed to reopen as of July 1 at 50 percent capacity with maximum of 100 people.

July 1, 2020. Public events are allowed with maximum of 50 percent occupancy rate indoors.

July 06, 2020. Estonia's borders reopen for 14 non-EU low-infection countries under certain conditions.

July 30, 2020. Cabinet advises against international travel amid growing virus cases worldwide.

Restrictions to contain the second wave

November 10, 2020. PM Ratas urges residents to take seriously the resurgence of the COVID and act accordingly.

November 16, 2020. Government reintroduces 2+2 rule and mask wearing in enclosed public spaces.

November 28, 2020. Tightening of restrictions on indoor public meetings, events, and entertainment venues.

December 5, 2020. Additional containment measures: (i) limiting opening hours of public event venues (to 10 p.m.); (ii) a reduction in indoor attendance capacity of shops and service offices to 50 percent occupancy.

December 12, 2020. In Ida-Viru County, entertainment and accommodation facilities, museums, and exhibitions are closed to customers and visitors until January 3, 2021.

December 14, 2020. Tightening of restrictions to only allow contactless indoor sport and activities, while outdoor sports are allowed in groups of smaller than ten.

December 23, 2020. The Government approves extensive restrictions in Harju County and extends the measures already in place in Ida-Viru County, effective from December 28 to January 17.

December 24, 2020. A 50 percent maximum attendance capacity for religious services apply nationally.

February 1, 2021. New coalition confirmed by parliament.

February 3, 2021. Harmonization restrictions to curb the spread of coronavirus nationwide.

February 26, 2021. First round of tightening of containment measures which include a move to remote learning for grades 1–4 and limits on maximum attendance capacity for indoor and outdoor public events.

March 11, 2021. Tighter one-month restrictions imposed and extended to late-April 2021, to curb the acceleration of the number of cases including, tighter occupancy rate, closure of most public indoor venues, and allowing only stores selling essential goods to remain open.

March 18, 2021. Draft Budget approved by the government, mainly to support the healthcare system and employment.

Relaxation of the second-wave restrictions

May 3, 2021. The government has started to gradually ease restrictions, including by allowing eating in outdoor dining areas of catering establishments until 9 p.m., and contact learning for children in grades 1–4 to resume.

May 17, 2021. Relaxation of restrictions on contact learning, outdoor sports events, and outdoor museums visits.

May 24, 2021. Re-opening of entertainment venues and indoor dining at 50 percent capacity.

May 31, 2021. Relaxation of COVID-19 restrictions on mobility (2+2), indoor occupancy requirements, and opening hours.

June 11, 2021. Cancellation of time restrictions on indoor and outdoor events and activities.

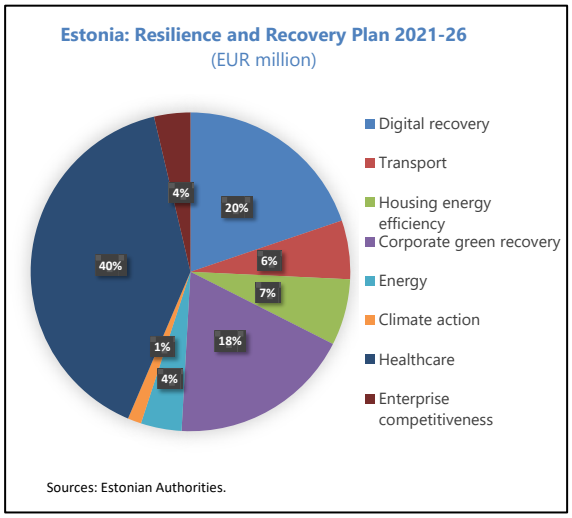
June 21, 2021. Easing of restrictions on travel from third countries.

June 28, 2021. Increasing of the maximum attendance limits to up to 1000 people (resp. 5000 people) for indoor (resp. outdoor) events and activities.

Annex IV. EU Funds Financing for Estonia over 2021–27[1]

The Next Generation EU Funds further enhance Estonia's fiscal space to respond to the COVID-19 shock, support the recovery, and mitigate scarring risks. While the Resilience and Recovery Fund will help finance investments in health sector resilience and the green and digital transition, the REACT Fund would support the tourism sector and health expenditure, and the Just Transition Fund would ensure and smooth transition away from the oil-shale industry. The EU funds from the Multiyear Fiscal Framework—which will continue to support structural transformation over the medium term—are expected to decline as Estonia's income converges to the EU average.

1. The Next Generation EU Funds substantially boost Estonia's available resources to address the COVID-19 shock and further invest in a green and digital transition. The Next Generation EU (NGEU) Funds were designed to support the pandemic response and recovery and include: (i) the Recovery and Resilience Facility (RRF); (ii) the Recovery Assistance for Cohesion and the Territories of Europe (REACT-EU); (iii) The Just Transition Fund; and (iv) the Agricultural Fund for Rural Development. The Recovery and Resilience Facility (RRF), the centerpiece of NGEU, is expected to accelerate the recovery, while reinforcing commitment to the twin green-digital transitions in Europe.[2] As of May 2021, Estonia's Resilience and Recovery Plan (RRP) reached the final stages of consultation with the European Commission (EC) and stakeholders, while the REACT-EU Fund's operational programs were being refined. The final RRP envelope submitted to the EC in June stood at EUR 982.5 million (3.4 percent of GDP), allocated over 2021–2026 fully in terms of grants. Estonia's 2021 allocation under the REACT-EU instrument will provide a quick financing of EUR 173.2 million to support the recovery. The JTF's final plan and allocation (EUR 354 million) are expected to be approved by the government in early fall of 2021 and launched in 2022.



2. Estonia's priorities under its RRP are health sector resilience and digital and green transition. The largest investment of the draft RRP plan is a new Tallinn Hospital construction (EUR 380 million). The plan includes direct support measures for enterprises (EUR 70 million for digitalization; EUR100 million for greening in private sector; and EUR 50 million for hydrogen solutions). The RRP also includes over EUR150 million in investments for public sector digital infrastructure and services and fast internet connection, as well as investments in the regional railway network and Tallinn's tramway. Estonia does not currently plan to borrow through the RRF borrowing facility (EUR 1.9 billion is available), given the current low

[1] Prepared by Neree Noumon.

[2] Access to the RRF requires that national recovery and resilience plans (RRP) have a minimum share (20 percent) of expenditure to foster digital transition and 37 percent of expenditure for climate and investment and reforms.

interest rate environment. The REACT-EU Fund will further support the recovery by: (i) stimulating private sector activity, in particular the tourism sector and energy efficiency; (ii) COVID-resilience (including vaccinations); and (iii) improving of health sector services through renovations and investments.

3. The EU Funds are expected to finance a significant portion of Estonia's 2021 Budget. The 2021 budget envisages EUR 1.1 billion in EU grants, which will help finance a wide range of reforms to support a green and digital recovery. However, 2021 investments from the RRF and REACT-EU Funds are expected to be relatively low, amounting respectively to about 13 percent of RRF (pre-financing) and EUR 40 million. Initial plans for RRF-related expenditures in the 2021 budget included: (i) grants (approximately 30–50 percent of the total investments) to reinforce energy efficiency investments in the housing sector; (ii) gross fixed capital formation towards government sector IT (about EUR 40 million), local government investments in foot- and cycle traffic (about EUR 5 million), Rohuküla railway (EUR 5 million), Tallinn hospital building (EUR 30 million); and (iii) Capital transfers to improve internet connectivity in remote and sparsely populated areas (EUR 10 million) and facilitate investments in hydrogen technology (EUR 5 million).

4. The JTF is designed to help restructure the oil-shale sector, thereby boosting Estonia's efforts to meet its GHG emissions goals. As of 2019, the oil-shale industry—highly concentrated in the Ida-Virumaa—accounted for over 50 percent of Estonia's total GHG emissions. This means restructuring the oil-shale sector would be key to Estonia's climate neutrality goal. The first draft national JTP was submitted to the EC in 2020 and is going through the consultations process, and the final plan is expected to be approved by the government in early fall.[3] Total JTF envelope to be implemented starting from 2022, amounts to EUR 354 million (1.2 percent of GDP) and aims at: (i) restructuring and diversifying the Ida-Viru region's economy and workforce (80 percent of the envelop); and (ii) tackling the social, environmental, and community aspects of the transition (20 percent of the envelop). The JTF's first programming strand includes investment grants, labor mobility allowances, re-profiling services for oil-shale sector employees, and the promotion of knowledge intensity entrepreneurship. The second programming strand includes: decoupling district heating from oil shale, alleviating environmental and health impacts of oil shale mining and processing, and supporting related local government and regional initiatives.

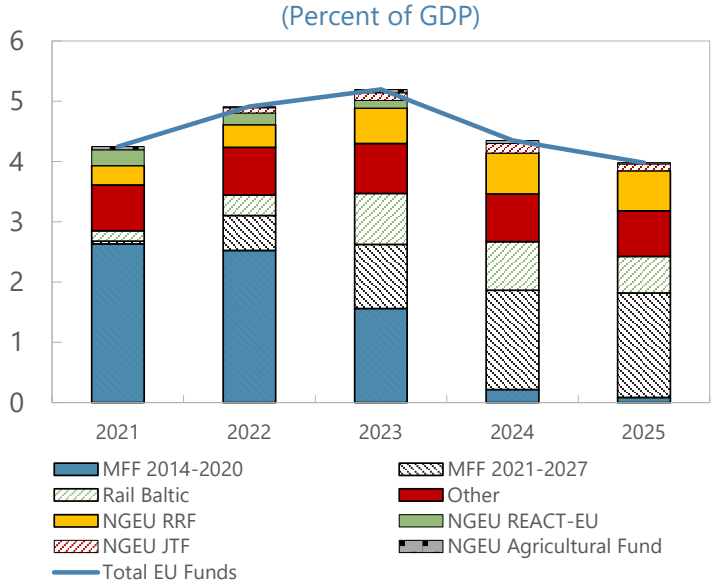
5. The unused portion of the EU MFF 2014-2020 Fund will complement the new 2021–2027 EU MFF Funds. The Cohesion Fund's size is about EUR 3 billion over 2021–2027, out of which: (i) about 25 percent will be allocated to "Smart Estonia" priorities; (ii) 25 percent to green priorities; (iii) 17 percent to transport; and (iv) 23 percent to skills and social infrastructure. The Cohesion Fund is less likely to be disbursed in 2021 or would have a very low disbursement rate that is typical in the first years of the EU budget period. At the same time, 39 percent of 2014–2020 Cohesion Funds were not absorbed as of end-March 2021 and are required to be used within 2.5 years. The lowest rates of absorption were observed in the education, social and employment funds (49 percent still to be paid out) and the urban and public services funds (43 percent to be paid out). Higher absorption (more than

[3] Ida-Viru Vision Week consultations with stakeholders took place in late-April 2021

2/3) was seen in the rural development and transport, and ICT-related Funds. The government is taking measures to accelerate the absorption of the Cohesion Fund by its various agencies.

6. The decline of EU structural funds that is expected in the medium term will be partly offset by the RRF and the Rail Baltica project. The EU funds to be used for next four years amount to about Euro 7.4 billion (State Budget Strategy 2022–25). Cohesion policy funds will contribute to supporting employment, social inclusion, education and research and development, innovation, and enterprise facilitation. On average, 60 percent of EU funds are expected to be used for investments, of which 35 percent as public investments. The share of investment from the RRF is planned to be 80 percent. The declining use of structural funds in the medium will be smoothed by the scaling up of NGEU and Rail Baltica projects. Also, as a major investment, the Rail Baltica project will be actively continued and financed from the EU budget (Connecting Europe Facility), with EUR 938 million expected to be invested over 2021–25, according to the State Budget Strategy.

Estonia: EU Funds Financing, 2021-2025
(Percent of GDP)



Sources: Estonian Authorities; and IMF staff calculations.

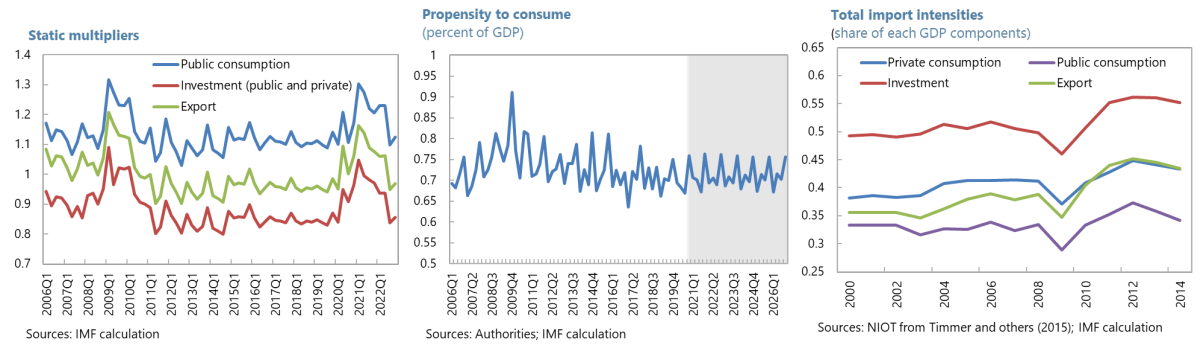
Annex V. Fiscal Multipliers and Public Investment Spillovers to Corporate Investments in Estonia[1]

The COVID-19 crisis has led to a sizable departure from recent close-to-balance budget deficit levels, thereby re-igniting interest in the growth benefits of higher public spending. In particular, the expected growth yield from the Resilience and Recovery Fund (RRF) designed at the EU level, is of interest. Similarly, the divergent impact of COVID-19 also calls for a better understanding of the granular and sectoral impact of fiscal policy. Our analysis suggests that: (i) front-loading well-designed public investments would help foster a stronger recovery; and that (ii) capital expenditure could reinforce the pace of recovery by crowding in corporate investments, while enhancing the digital and green transition.

A. Fiscal Multipliers in Estonia

1. Fiscal multipliers in Estonia are sizable—especially during periods of economic slack. Static public investment multipliers in Estonia—estimated at around 0.94 during 2021–22—are higher when the economic slack is more pronounced. Over the medium term, investment multipliers are expected to gradually decrease to about 0.87 in 2024–26, reflecting the pace of recovery and the narrowing of the output gap. Specifically, higher multipliers in the near-term than in the medium-term are explained by: (i) higher propensity to consume that is expected to decline over time though it would remain elevated around 0.7; and (ii) lower import leakages during periods of economic slack as illustrated by the import intensities observed during the GFC period (Figure 1). Higher propensity to consume in the near-term would be driven by the expected withdrawal of the pension system savings, the use of involuntary savings, as well as higher public transfers and subsidies, which are expected to increase faster than tax revenues (Figure 3). Similarly, dynamic multipliers are estimated at around 1.2 cumulatively over three years and are even larger (around 2) when the public investment shock occurs during recessions (Figure 4).

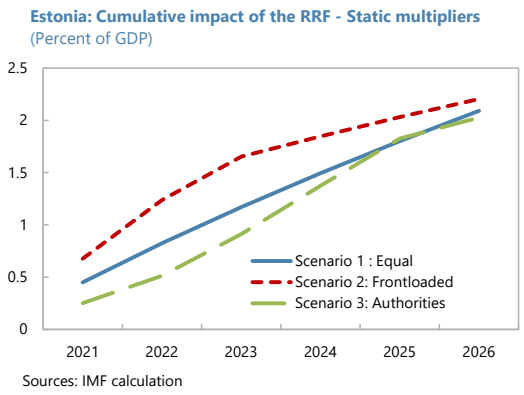
Figure 1. Static Fiscal Multipliers, Propensity to Consume, and Import Intensities

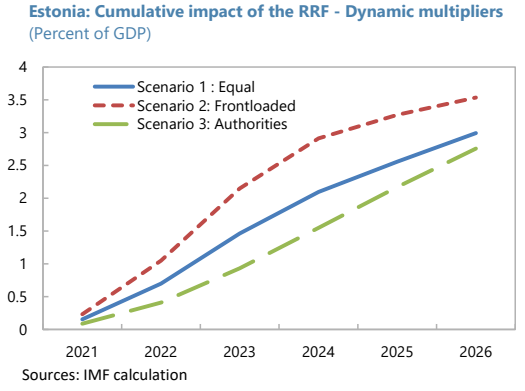


[1] Prepared by Jean-Marc Atsebi and Neree Noumon.

2. Sizable fiscal multipliers suggest that timely, well-designed public investments would help foster a stronger recovery. The timing of public investments in the aftermath of the pandemic is critical. Near-term investments are expected to have a more substantial impact (higher multipliers) in terms of lifting growth and strengthening the fiscal position, in the current environment of low interest rates, high economic slack, and low import leakages. Delaying investments would make the same level of investments less expansionary and possibly crowding out of future private investment as the recovery would be more advanced and interest rates likely higher (above zero lower bound). Indeed, the cumulative benefits of investing EUR 786 million from RRF (80 percent of total amount of EUR 982 million) are more substantial when the investments are frontloaded instead of equally disbursed or backloaded (authorities' planned path): 2.2 against around 2–2.1 pp. of GDP when using the static multipliers, and 3.5 against 2.8–3 pp. of GDP when using dynamic multipliers. (Figure 2, and Tables 2 and 3).

Figure 2. Output Gain from RRF, Static and Dynamic Multipliers





A. Public Investment Spillovers to Firm-Level Corporate Investment

3. Strong balance sheets and a favorable economic environment are associated with higher corporate investments levels. The boxplot analysis of the distributions of net investment suggests that Estonian corporates tend to invest more during expansions and when Zero Lower Bound interest rate level (ZLB) is hit, which are generally associated with greater investment opportunities and better financing terms. As supported by the literature, the quality of the balance sheet also plays a key role in Estonian corporate investment. Consistent with relatively larger room to borrow at low cost, low-leverage and less financially constrained firms—irrespective of their sector—have a higher propensity to invest. Finally, the most leveraged firms on average tend to be firms operating in the accommodation and catering, trade, and transport sectors, which were most affected by the COVID-19 shock. Conversely, sectors that thrived during the crisis (e.g., ICT, financial, professional) also entered the pandemic with relatively stronger balance sheets (Figure 5).

4. Capital expenditure is also found to have significant spillovers to corporate investment, thus reinforcing more targeted spending and enhancing the digital and green transition. One percentage point increase of public investment induces an increase of corporate investment by around 0.35 percentage point on impact, 1.5 percentage points cumulatively after five years, and are larger during recessions. The high spillover effect of capital expenditure in education and health reaffirms its importance to boost productivity and facilitate resource allocation, and thus help limit scarring. Higher multipliers are found for firms in the transport sector, whereby greening is an important component of Estonia's strategy to reduce GHG emissions. Capital expenditure has higher spillovers to small firms' investment and could then complement programs to boost small firms' access to digital technologies (OECD, 2019, 2021, EIB Firm Survey). Findings also highlight the critical role of capital expenditure in supporting firms during the recovery. This is because of the similar and positive spillover size, irrespective of the degree of firms' leverage or cash constraints, and the fact that sectors most affected by lockdowns also entered the crisis with relatively higher leverage and financial constraints. Finally, spillovers are found to be larger around the ZLB, highlighting the importance of accommodative monetary policy at the EU level to support the recovery and the twin transition (Figure 6).

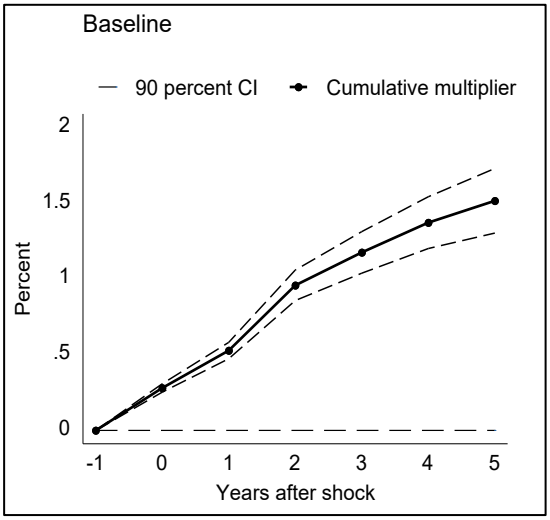


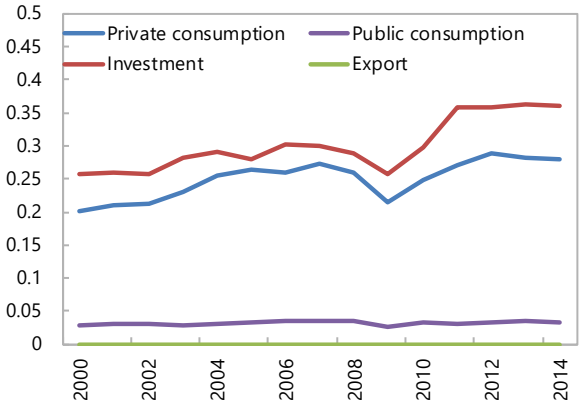
Table 1. Comparison of Fiscal Multipliers from the Literature

	Pusch and others (2011) 1/	Kilponen and other (2019) 2/		Ali and others (2019) 3/			
Methods	IOT	Model		Estimation		DSGE model	
Years	2005			1990-2017	1990-2017		
States / Short run vs. Long run		No ZLB	ZLB	On impact	MT	On impact	MT
Public consumption/spending							
Estonia	***1.34***	***0.83***	***0.98***				
Hungary	1.44						
Poland	1.82						
Sweden	1.40	0.6	1.63				
Finland		0.78	0.78				
Small states				0.27-0.39*	-0.12	0.58*	0.05*
Own estimates - static (2006)	***1.14***	***1.14***	***1.14***				
Own estimates - static GFC	***1.26***	***1.26***	***1.26***				
Own estimates - static No GFC	***1.11***	***1.11***	***1.11***				
Own estimates - dynamic: On impact / Cumulative after 3 years	***1.09***	***1.09***	***1.09***	***0.89****	***1.09****	***0.89****	***1.09****
Public investment							
Small states				0.10-0.26*	0.88-1.06*	0.68*	0.57*
Own estimates - static (2006)	***0.92***	***0.92***	***0.92***				
Own estimates - static GFC	***1.02***	***1.02***	***1.02***				
Own estimates - static No GFC	***0.85***	***0.85***	***0.85***				
Own estimates - dynamic: On impact / Cumulative after 3 years	***1.27****	***1.27****	***1.27****	***0.6****	***1.27****	***0.6****	***1.27****

1/ Fiscal Spending Multiplier Calculations based on Input-Output Tables – with an Application to EU Members
2/ Comparing fiscal consolidations multipliers across models in Europe
3/ Fiscal Policy Multipliers in Small States

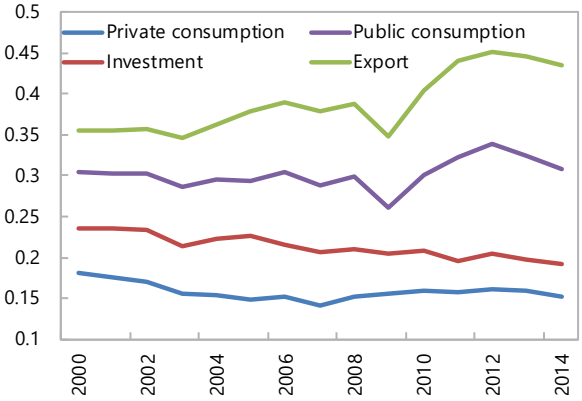
Figure 3. Determinants of Static Fiscal Multipliers and Correlation with the State of the Economy

Direct import intensities



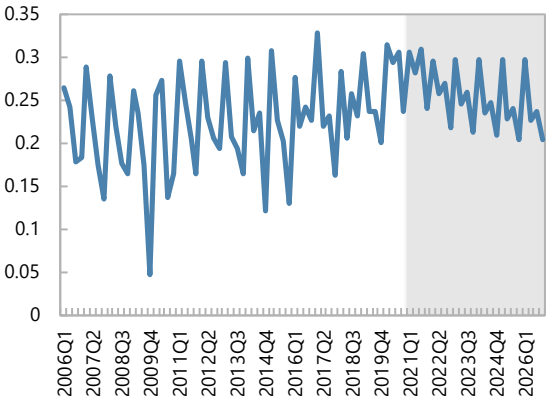
Sources: NIOT from Timmer and others (2015); IMF calculation

Indirect import intensities



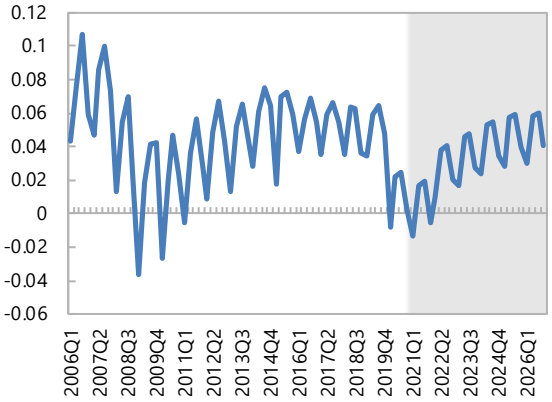
Sources: NIOT from Timmer and others (2015); IMF calculation

Saving rate
(percent of GDP)



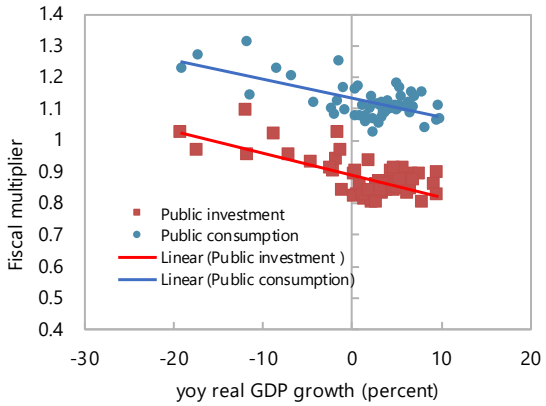
Sources: Authorities; IMF calculation

Net tax rate
(percent of GDP)



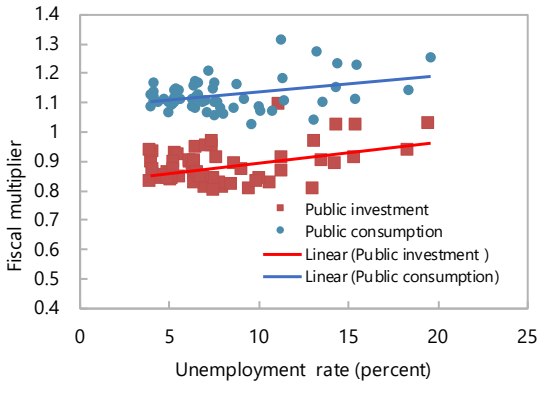
Sources: Authorities; IMF calculation

Fiscal multipliers and economic growth



Sources: Authorities; IMF calculation

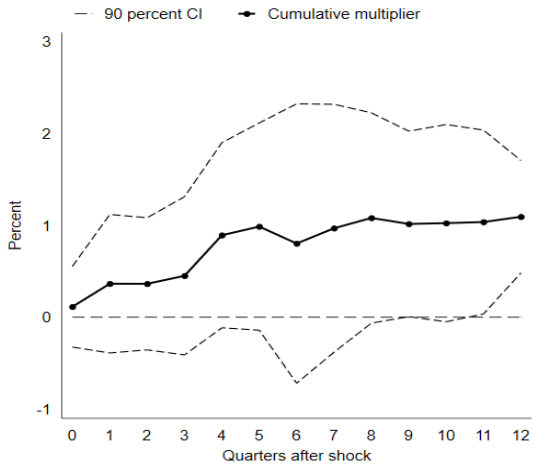
Fiscal multipliers and unemployment

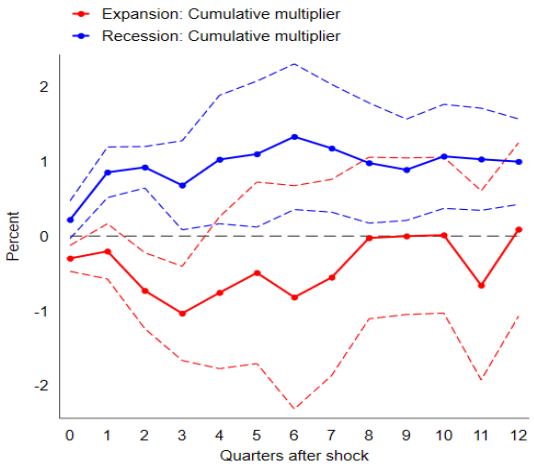


Sources: Authorities; IMF calculation

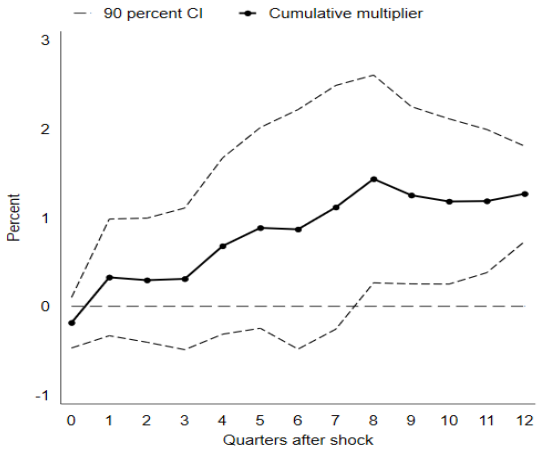
Figure 4. Estimated Cumulative Fiscal Multipliers over Three Years

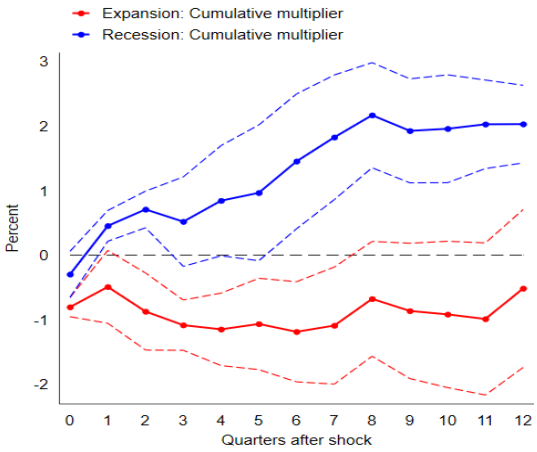
(A) Total public spending





(B) Public investment





Sources: IMF staff calculations.

Table 2. Impact of the Resilience and Recovery Fund, Static Multipliers

Years	Multipliers and Real GDP		S1: Equal 1/			S2: Frontloaded 2/			S3: Authorities 3/		
	Pub. Inv. 4/	Real GDP (mn EUR)	Gain (mn EUR) 5/	Percent of GDP 6/	Cumulative gain 7/	Gain (mn EUR) 5/	Percent of GDP 6/	Cumulative gain 7/	Gain (mn EUR) 5/	Percent of GDP 6/	Cumulative gain 7/
2021	0.999	24,880.2	112.1	0.45	0.45	168.2	0.68	0.68	62.6	0.25	0.25
2022	0.892	25,999.9	97.5	0.37	0.83	146.2	0.56	1.24	68.0	0.26	0.51
2023	0.872	26,961.8	93.1	0.35	1.17	111.7	0.41	1.65	107.4	0.40	0.91
2024	0.871	27,878.6	90.5	0.32	1.50	54.3	0.19	1.85	128.9	0.46	1.37
2025	0.871	28,770.7	88.2	0.31	1.80	52.9	0.18	2.03	130.1	0.45	1.83
2026	0.871	29,691.3	85.9	0.29	2.09	51.5	0.17	2.20	59.2	0.20	2.03
Total			**567.19**			**584.80**			**556.24**		

1/ Equal disbursement of RRF over 2021-26
2/ Frontloaded disbursements of RRF (25, 50, 70, 80, 90, 100 percent for years 2021, 2022, 2023, 2024, 2025, and 2026, respectively)
3/ Authorities' disbursements of RRF (11, 24, 45, 72, 100 percent for years 2021, 2022, 2023, 2024, and 2025, respectively)
4/ Estimated public investment multiplier
5/ Increase of real GDP in millions EUR due to RRF disbursement
6/ Gain due to RRF in percent of GDP
7/ Cumulative gain due to RRF in percent of GDP

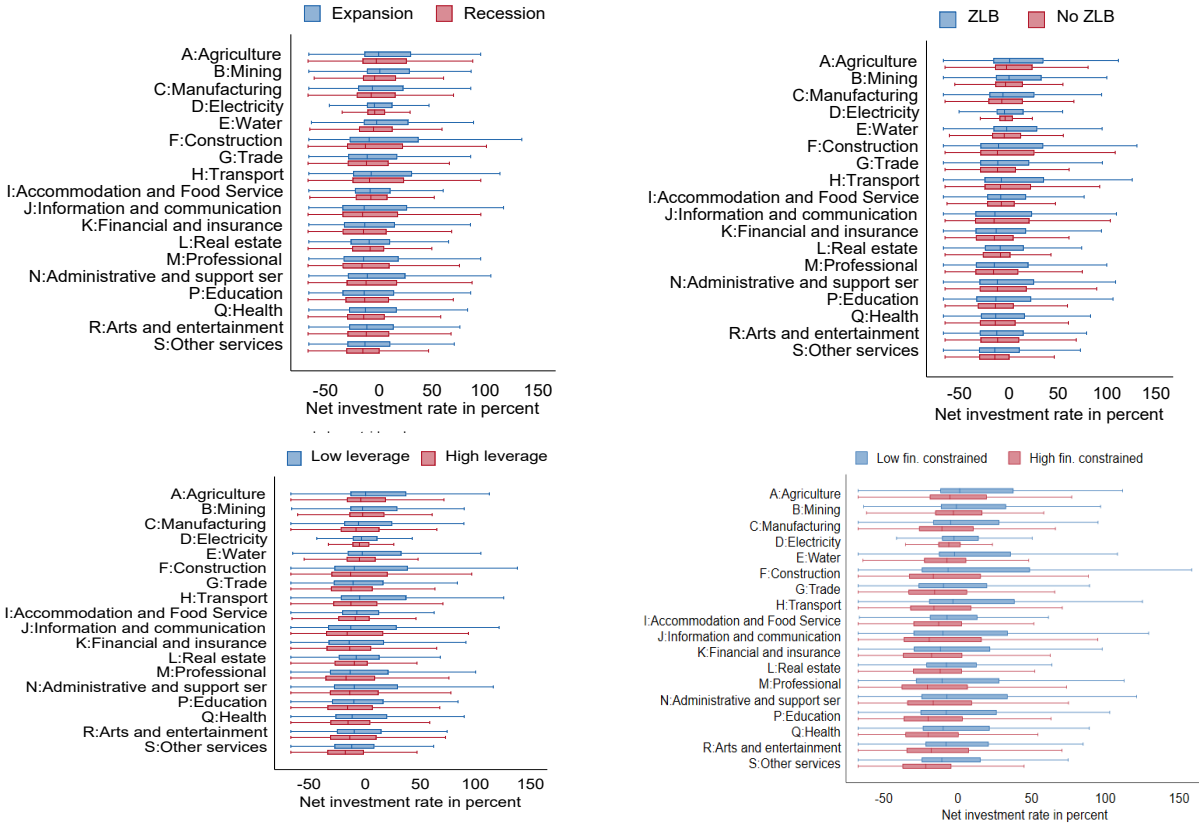
Table 3. Impact of the Resilience and Recovery Fund, Dynamic Multipliers

Years	Real GDP	S1: Equal 1/			S2: Frontloaded 2/			S3: Authorities 3/		
	Real GDP (mn EUR)	Gain (mn EUR) 4/	Percent of GDP 5/	Cumulative gain 6/	Gain (mn EUR) 4/	Percent of GDP 5/	Cumulative gain 6/	Gain (mn EUR) 4/	Percent of GDP 5/	Cumulative gain 6/
2021	24,880.2	38.6	0.16	0.16	57.9	0.23	0.23	21.6	0.09	0.09
2022	25,999.9	141.5	0.54	0.70	212.4	0.82	1.05	84.2	0.32	0.41
2023	26,961.8	205.7	0.76	1.46	296.0	1.10	2.15	140.6	0.52	0.93
2024	27,878.6	177.0	0.63	2.10	213.3	0.77	2.91	171.7	0.62	1.55
2025	28,770.7	132.6	0.46	2.56	103.3	0.36	3.27	178.9	0.62	2.17
2026	29,691.3	129.0	0.43	2.99	77.6	0.26	3.53	174.1	0.59	2.76
Total		**824.27**			**960.55**			**771.13**		

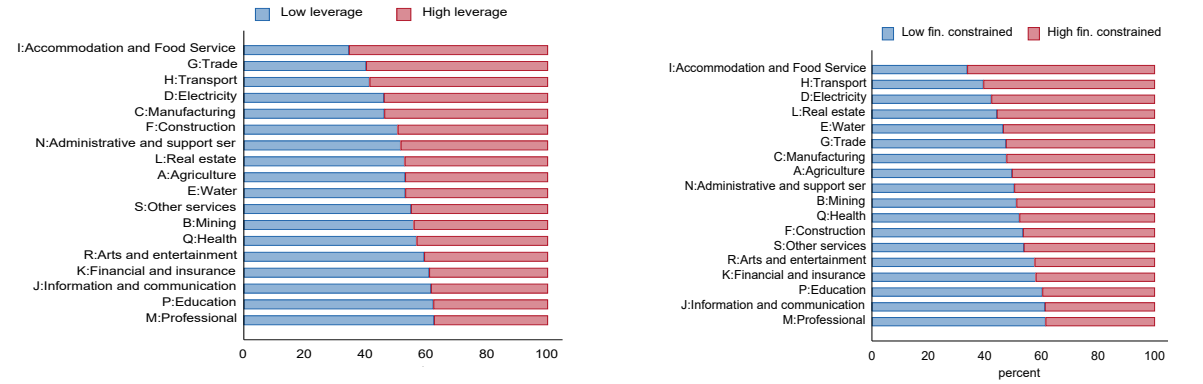
1/ Equal disbursement of RRF over 2021-26
2/ Frontloaded disbursements of RRF (25, 50, 70, 80, 90, 100 percent for years 2021, 2022, 2023, 2024, 2025, and 2026, respectively)
3/ Authorities' disbursements of RRF (11, 24, 45, 72, 100 percent for years 2021, 2022, 2023, 2024, and 2025, respectively)
4/ Increase of real GDP in millions EUR due to RRF disbursement
5/ Gain due to RRF in percent of GDP
6/ Cumulative gain due to RRF in percent of GDP

Figure 5. Net Corporate Investment, 2002–19

(A) Distributions of net corporate investment

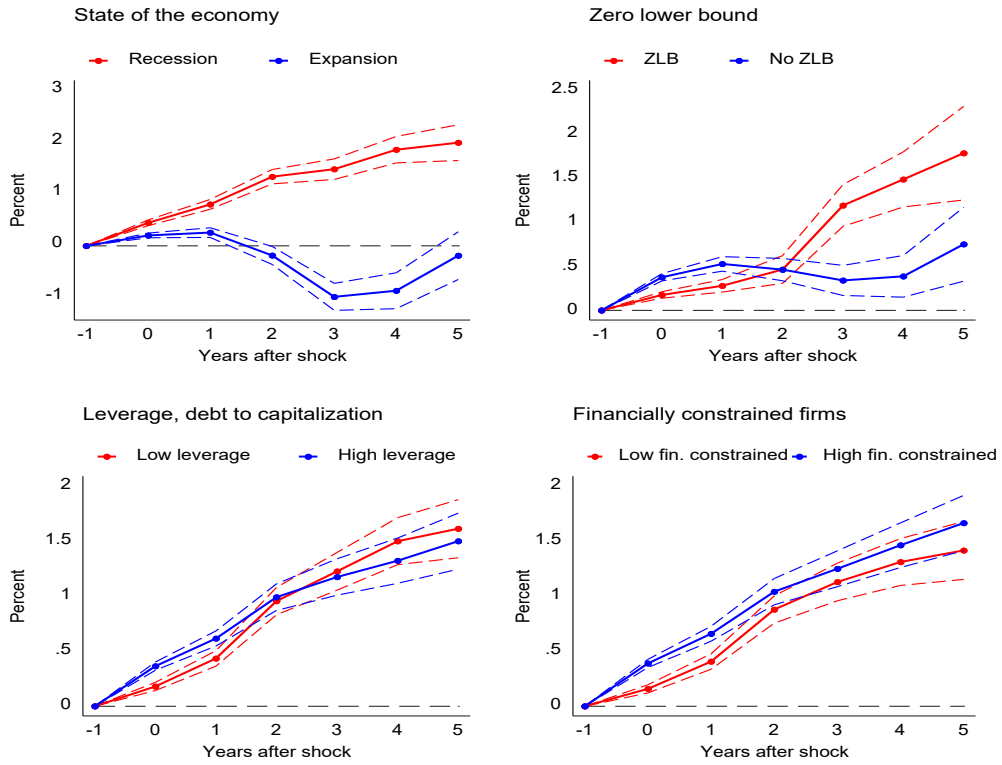


(B) Proportion by leverage and financial

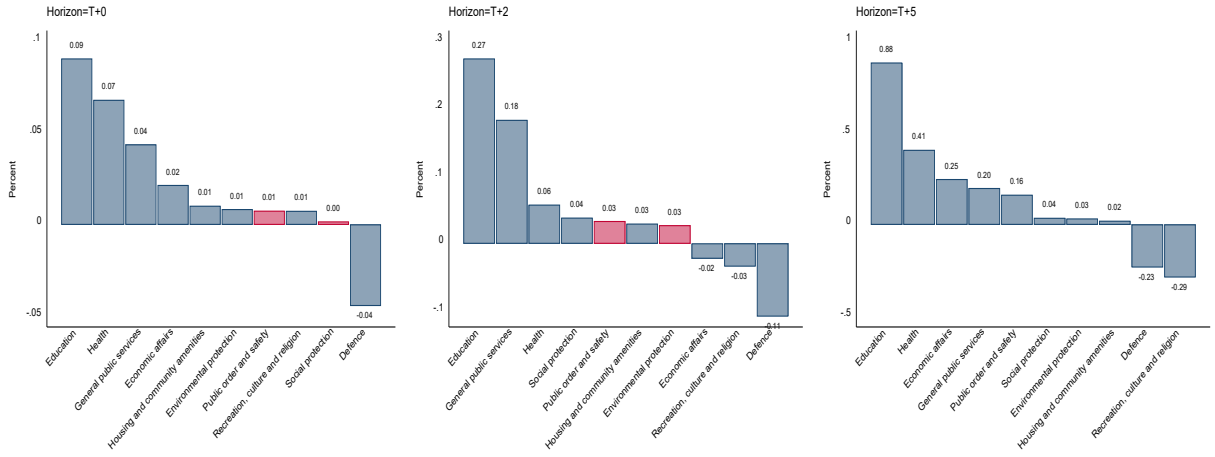


Sources: Orbis; and IMF staff estimates.

Figure 6. Public Investment Spillovers to Corporate Investment, 2002–19



Public investment spillovers by type of capital spending

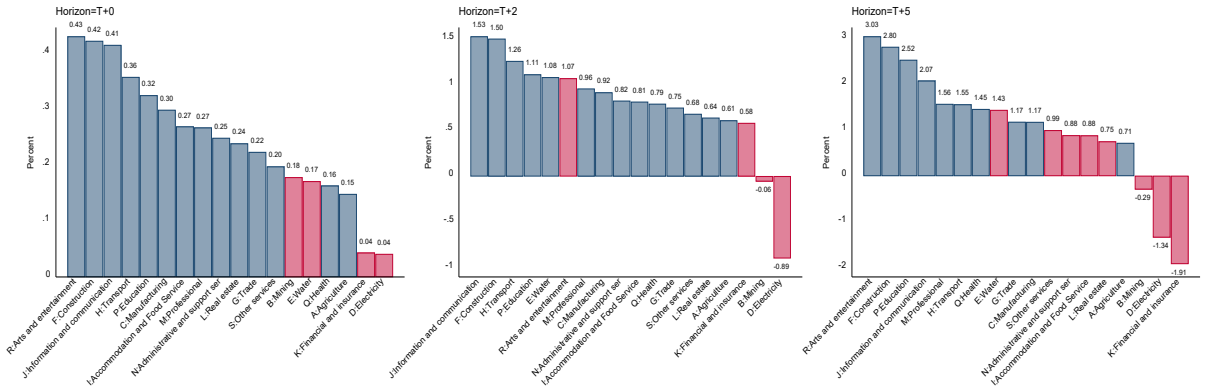


Sources: Orbis and IMF staff estimates.

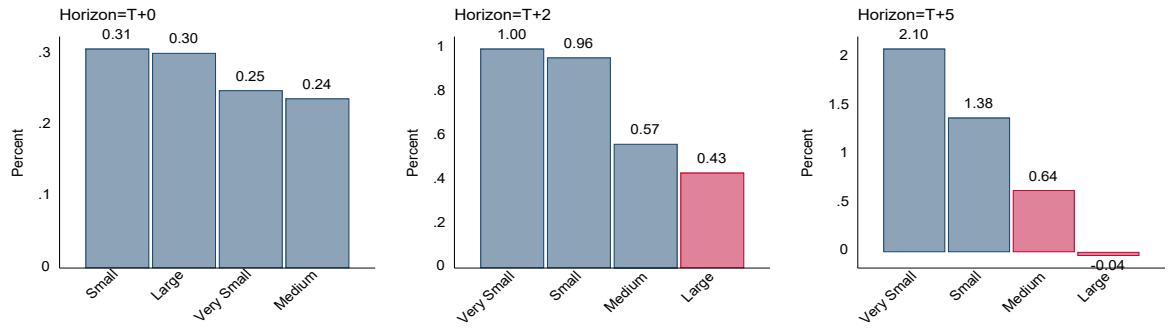
Notes: Spillover refers to the cumulative effects of public investment to corporate investment.

Figure 7. Public investment spillovers by sectors, firm size, and ownership, 2002–19

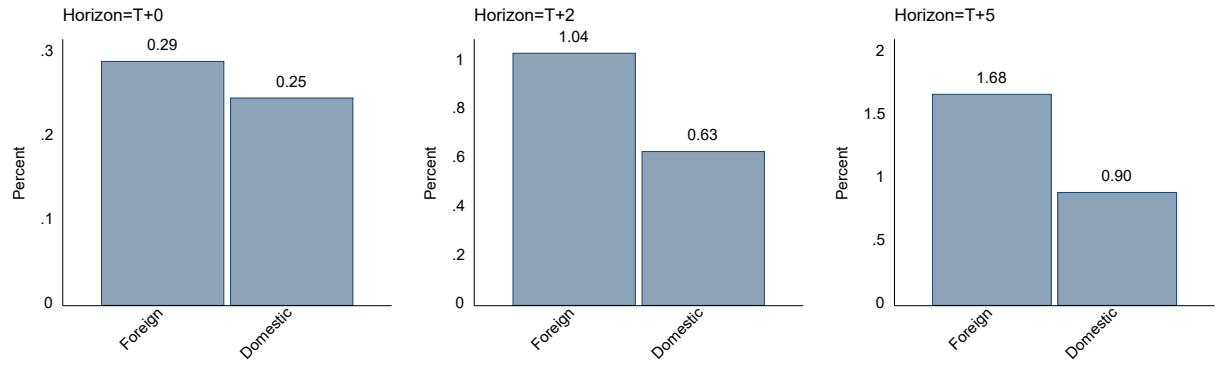
Spillovers by sectors



Spillovers by firm size



Spillovers by ownership



Sources: Orbis and IMF staff estimates.

Notes: Spillovers refer to the cumulative effects of public investment to corporate investment.

Summary Methodology and Data

Data

We use data from the IMF and several other sources to estimate fiscal multipliers in Estonia, simulate the effects of the RRF, and analyze the spillover effects from public investment to corporate investment. Annual National Input-Output Tables (NIOT) are from Timmer and others (2015) and available until 2014. They are estimated based on data provided by the authorities every five years. Macroeconomic and conditioning variables are from World Economic Outlook (WEO). EU RRF Fund data is from the Estonian authorities. Public capital expenditure data by function are from Eurostat. Firm-level data (36,415 firms) are obtained from the Orbis database and cover the period 2002–19.

Static Multipliers

Static multipliers of public consumption, investments (public and private), and exports are derived from the demand equation of GDP as functions of the propensity to consume (which is in turn dependent on the saving rate and net tax rate), the import intensity of private consumption (CP), and the respective import intensity of public consumption (CG), investments (I), and exports (X). Multipliers are increasing with the propensity to consume (decreasing with the saving rate and net tax rate) and decreasing with the respective import intensity of each expenditure CG, I and X, and import intensity of private consumption. The import intensity of each type of expenditure represents the share of the expenditure category that is used for imports, directly (matrix F^m) or indirectly through the consumption of domestically goods and services (matrix Z^d and Z^m); they represent the leakages through imports and are computed using the NIOT (see, illustrated table from Bussière and others, 2013).

$$\frac{\Delta Y}{\Delta A^i} = \frac{1 - m_{A^i}}{1 - cp\,(1 - m_{CP})} = \frac{1 - m_{A^i}}{1 - (1 - tn - sn)\,(1 - m_{CP})}$$

- where A^i = CG, IG, IP or X
- m_{A^i} is the import intensity of the autonomous expenditure A^i
- m_{CP} is the import intensity of the private consumption CP
- $cp = 1 - tn - sn$ is the propensity to consume, tn, sn are net tax rate and saving rate, respectively.

Input-Output tables from Bussière and others (2013)

Domestic	Intermediate		Final demand				
	Ind 1	Ind 2	PC	GC	GFCF	Exports	Imports
Ind 1	Z^d		F^d				
Ind 2							
Imports							
VA							
Output							

Import	Intermediate		Final demand				
	Ind 1	Ind 2	PC	GC	GFCF	Exports	Imports
Ind 1	Z^m		F^m				
Ind 2							

Dynamic Multipliers

The methodology employed to estimate our dynamic multipliers follows closely Ramey and Zubairy (2018) and is based on the Blanchard and Perotti (2002) structural VAR identification. Blanchard and Perotti shock is based on institutional features of fiscal policymaking and detailed information on the automatic effects of GDP on tax revenues and public spending: decision and implementation lags in fiscal policy imply that, within a quarter, there is no discretionary response of fiscal policy to unexpected contemporaneous movements in economic activities. Thus, the fiscal policy shocks can be derived after identifying the automatic effects of unexpected movements in activity on fiscal variables.

The cumulative and dynamic fiscal multipliers measure the cumulative real GDP gain relative to the cumulative public spending/investment exogenous shock during a given period (we choose three years in this analysis). The following Jordà's (2005) local projections models are estimated to obtain conditional cumulative multipliers depending on the state of the economy:

$$\sum_{j=0}^{h} y_{t+j} = I_{t-1}\left[\gamma_{E,h} + m_{E,h}\sum_{j=0}^{h} g_{t+j} + \emptyset_{E,h}(L)z_{t-l}\right] + (1 - I_{t-1})\left[\gamma_{R,h} + m_{R,h}\sum_{j=0}^{h} g_{t+j} + \emptyset_{R,h}(L)z_{t-l}\right] + \varepsilon_{t+h}$$

where I_{t-1} is a dummy that describes the state of the economy (expansion or recession) one year before the shock. The unconditional cumulative multipliers can be estimated if I_{t-1} is ignored. y_{t+j} is the real GDP at horizon $t+j$ after the shock, scaled by real GDP trend. g_{t+j} is either total public spending or public investment at horizon $t+j$ after the shock, scaled by trend real GDP. The cumulative public spending/investment is instrumented by their shock identified at time t, therefore the cumulative multipliers of public spending/investment at each horizon h is given by $m_{E,h}$ or $m_{R,h}$ depending on whether the shock occurred in expansion and recession, respectively (see Figure 4). z_{t-l} is a vector of lagged control variables including real GDP, public spending/investment, and net tax rate prior to the shock, scaled by Real GDP trend. $\emptyset_{E,h}(L)$ and $\emptyset_{E,h}(L)$ are polynomial in the lag operator. We choose $L = 4$. $\gamma_{E,h}$ and $\gamma_{R,h}$ are constant terms, and $\varepsilon_{t+h}$is the idiosyncratic term.

Estimating Public Investment Spillovers to Corporate Investment

The cumulative effects of public investment on corporate investment are estimated at different horizon h using the Jorda's (2005) local projections method as follows:

$$\sum_{j=0}^{h}(y_{j,t+h} - y_{j,t-1}) = \alpha_{j,h} + \delta_h \Delta I_t + \beta_1 \Delta y_{j,t-1} + \beta_2 \Delta y_{j,t-2} + \theta_h X_{j,t-1} + \varepsilon_{j,t+h}$$

where $y_{j,t+h} - y_{j,t-1}$ is the percentage change of net corporate investment rate for firm j between horizon $t+h$ and $t-1$. Net corporate investment rate is computed as the annual change of real fixed tangible assets over lagged tangible assets. ΔI_t is our variable of interest and stands for either growth of total public investment or growth of public investment by function. $\Delta y_{j,t-1}$ and $\Delta y_{j,t-2}$ are

one- and two-year lags annual growth of net corporate investment, respectively. X_{t-1} is a set of one-year lag control variables including growth of sales, growth of earnings before interest, taxes, depreciation, and amortization (EBIDTA), and real GDP growth. $\alpha_{j,h}$ and $\varepsilon_{j,t+h}$ are firm-fixed effects and idiosyncratic term, respectively. We estimate this model by sector (based on NACE classification), size of firms (very small–less than 4 employees, small–between 4 and 50 employees, Medium– between 51 and 250 employees, and Large–above 250 employees), and domestic and foreign ownership (Figure 7). We also use different types of investment (from Eurostat) and estimate their crowding-in effects on corporate investment (Figure 6).

To capture the spillovers of public investment conditional on the state of the economy, whether the ZLB is hit, firms' leverage or financial constraints (Figure 6), we augmented the previous equation as follows:

$$\sum_{j=0}^{h}(y_{j,t+h}-y_{j,t-1}) = I_{t-1}\left[\alpha_{j,h}+\delta_h\Delta I_t+\beta_1\Delta y_{j,t-1}+\beta_2\Delta y_{j,t-2}+\theta_h X_{j,t-1}+\varepsilon_{j,t+h}\right]+ (1-I_{t-1})\left[\alpha_{j,h}+\delta_h\Delta I_t+\right.$$

$$\left.\beta_1\Delta y_{j,t-1}+\beta_2\Delta y_{j,t-2}+\theta_h X_{j,t-1}+\varepsilon_{j,t+h}\right]$$

Where I_{t-1} is a dummy that takes the value 1 if either the economy is in expansion, the ZLB is hit, the firm j is highly leveraged, or the firm j is financially constrained. Leverage is defined using the median of either firm debt-to-equity ratio or debt-to-capitalization ratio. Firms with a value of indicators below the mean are considered low leveraged, and those with a value above the median high leveraged firms. Financial constraint is defined using the median of a composite index built using principal components analysis on total assets, return on assets, current assets to current liabilities ratio, and cash flows to liabilities ratio. Firms with a composite index of indicators above the mean are considered less financially constrained, and those with a value above the median highly financially constrained.

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Timmer, M. P., Dietzenbacher, E., Los, B., Stehrer, R., & De Vries, G. J. (2015). An Illustrated User Guide to the World Input–Output Database: The Case of Global Automotive Production. Review of International Economics, 23(3), 575–605.

Annex VI. Estonia's Fiscal Transparency Evaluation[1]

Estonia has very strong fiscal transparency institutions and practices. Based on the IMF's Fiscal Transparency Code (FTC), Estonia is at the forefront of public sector reporting, with the strongest performance on Fiscal Reporting (Pillar I). Scope for improvement remains in the area of Fiscal Forecasting and Budgeting (Pillar II) and Fiscal Risk Analysis and Management (Pillar III). Most of the underlying systems, knowledge, and capacity for improving Pillar II and III already exist.

- **Estonia scores high in fiscal transparency** (Table 1)**.** Measured against of the 36 principles of Fiscal Transparency Code (FTC), Estonia scores (i) good or advanced practices for 27 principles; and (ii) basic practices on six principles. Conversely, Estonia does not meet three principles of: (i) public participation in the budget; (ii) assessing specific fiscal risks; and (iii) Public-Private Partnerships.

- **A comprehensive overview of fiscal risks in Estonia is missing.** Such holistic approach to risk should include the quantification of the likelihood of risk materialization and potential costs (e.g., the likelihood that guarantees will be called, and the potential cost of environmental and natural resources risks). The PPP oversight framework has limited disclosure of total obligations and fiscal risk. The costs of SOEs' quasi-fiscal activities are also not quantified and reported on (Table 2).

FTE Recommendations

The fiscal transparency evaluation recommends improving current practices and enhancing fiscal transparency in each of the Pillars:

- Further improve the integrated fiscal reporting in the consolidated public sector financial statements and fiscal statistics by including stocks of mineral resources, using market/fair valuations of assets, and reporting on other economic flows.

- Consolidate the information, which is already available internally or is fragmented in various reports, into more user-friendly disseminated reports—particularly disseminate detailed monthly and quarterly budget comparable execution reports that allow for a clear assessment of all fiscal aggregates against budgeted amounts.

- Improve budget unity by including extrabudgetary funds and social security funds' financial plans in budget annexes.

- Improve fiscal forecasting by presenting previous two years' outturns and current year estimated outturn and four-year budget strategy projections together with forecast reconciliation and improved sensitivity analysis.

[1] Prepared by Neree Noumon. The background note briefly summarizes the findings and recommendations of the 2020 FTE TA report for Estonia. An FAD virtual mission was conducted during November 18 to December 9, 2020, to undertake a Fiscal Transparency Evaluation (FTE).

- Improve the transparency and effectiveness of investment decisions by implementing the recommendations of the PIMA report.
- Facilitate improved citizen understanding of, and involvement in, the budget process; and
- Coordinate the publication of an annual Fiscal Risk Statement that discusses the size and nature of the full range of specific fiscal risks and their costs.

Table 1. Summary Assessment Against the Fiscal Transparency Code

I. Fiscal Reporting	II. Fiscal Forecasting & Budgeting	III. Fiscal Risk Analysis & Management
Coverage of Institutions	Budget Unity	Macroeconomic Risks
Coverage of Stocks	Macroeconomic Forecasts	Specific Fiscal Risks
Coverage of Flows	Medium-term Budget Framework	Long-term Fiscal Sustainability
Coverage of Tax Expenditure	Investment Projects	Budgetary Contingencies
Frequency of In-Year Reporting	Fiscal Legislation	Asset and Liability Management
Timeliness of Annual Accounts	Timeliness of Budget Documentation	Guarantees
Classification	Fiscal Policy Objectives	Public-Private Partnerships
Internal Consistency	Performance Information	Financial Sector
Historical Revisions	Public Participation	Natural Resources
Statistical Integrity	Independent Evaluation	Environmental Risks
External Audit	Supplementary Budget	Subnational Governments
Comparability of Fiscal Data	Forecast Reconciliation	Public Corporations

Source: IMF Fiscal Transparency Report, December 2020.

LEVEL OF PRACTICE	RATING			
	Not Met	Basic	Good	Advanced

LEVEL OF IMPORTANCE	RATING		
	High	Medium	Low

Table 2. Summary Evaluation: Fiscal Risks

Principle	Rating	Importance
Macroeconomic Risks	**Good:** Twice-yearly forecasts contain detailed discussion of factors affecting the macroeconomic and fiscal aggregates, alongside a basic alternative risk scenario**.**	**High:** Macroeconomic volatility is relatively high and the impact of COVID-19 has brought additional uncertainty
Specific Fiscal Risks	**Not met:** There is no single summary report setting out all major risks to the public finances	**Medium:** The relevant information already exists in various forms
Long-term Fiscal Sustainability	**Good:** Long-term fiscal and age-related expenditure forecasts are regularly published with some consideration of risk scenarios, alongside periodic detailed analysis of pensions sustainability – although health sustainability analysis is not published.	**Medium:** The long-term fiscal impact from future health and pensions demand will rise with an ageing population.
Budgetary Contingencies	**Good:** The budget includes an allocation for contingencies with access criteria; however, no comprehensive report on these spending is produced.	**Low:** At 0.5 percent of total expenditure in 2017, the size is in the mid-range compared to selected EU countries.
Asset and Liability Management	**Good:** Liability and asset management is authorized by law and government's financial position is analyzed and disclosed; but there is no comprehensive asset management strategy	**Medium:** Overall public sector wealth is not managed holistically in the context of rising debt and a volatile macroeconomic situation.
Guarantees	**Good:** All government guarantees, their beneficiaries, and the gross exposure created by them are published quarterly. The maximum value of new guarantees or their stock is authorized by law. However, the probability of guarantees being called is not published	**Low:** The stock of guarantees is low, and the last time a guarantee was called was over 10 years ago.
Public-Private Partnerships	**Not met:** Obligations under public-private partnerships are not regularly disclosed.	**Medium:** The existing stock of PPPs is small but plans to increase their use increase importance to monitor and report on risks and performance.
Financial Sector Exposure	**Advanced:** Government support to the financial sector is quantified and managed; financial sector stability is regularly assessed	**Low:** Direct and indirect risks to the public finances from the financial sector are low.
Natural Resources	**Basic:** The government publishes annual estimates of the volume of major natural resource assets, as well as the volume and value of the previous year's sales and fiscal revenue. However, the value of shale oil stocks is not comprehensively estimated.	**Medium:** Natural resources are important for Estonia. Monitoring the value of their stocks is important given the volatility of their prices
Environmental Risks	**Basic:** The government identifies and discusses the main risks from natural disasters in qualitative terms, but there is little quantification of potential fiscal impacts.	**Low**: Natural disaster occurrences have historically been low
Sub-national Governments	**Advanced**: Financial reports of subnational governments are consolidated monthly and closely monitored by MoF; there is a strict legal limit on their borrowing.	**Low:** Consolidated subnational government sector is financially sound, but a few have high debt and significant deficit.
Public Corporations	**Good:** All transfers between the government and public corporations are disclosed and based on a published ownership policy; a report on the overall financial performance of the public corporation sector is published annually. However, quasi-fiscal activities are not quantified.	**Low:** Assets cover liabilities of SOEs, and the sector is broadly profitable

INTERNATIONAL MONETARY FUND

REPUBLIC OF ESTONIA

STAFF REPORT FOR THE 2021 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

June 30, 2021

Prepared by European Department

CONTENTS

FUND RELATIONS

(As of April 30, 2021)

Membership Status: Joined: May 26, 1992; Article VIII

General Resources Account

	SDR Million	Percent Quota
Quota	243.6	100.00
Fund holdings of currency	188.89	77.54
Reserve Tranche Position	54.73	22.47

SDR Department

	SDR Million	Percent Allocation
Net cumulative allocation	61.97	100.00
Holdings	24.63	39.74

Outstanding Purchases and Loans: None

Latest Financial Arrangements

In millions of SDR

Type	Approval Date	Expiration Date	Amount Approved	Amount Drawn
Stand-by	03/01/2000	08/31/2001	29.34	0.00
Stand-By	12/17/1997	03/16/1999	16.10	0.00
EFF	07/29/1996	08/28/1997	13.95	0.00

Projected Payments to Fund: None

Implementation of HIPC Initiative: Not applicable.

Implementation of MDRI Assistance: Not applicable.

Implementation of CCR Assistance: Not applicable.

Exchange Arrangements: As of January 1, 2011, Estonia's currency is the euro, which floats freely and independently against other currencies.

Estonia has accepted the obligations under Article VIII, Sections 2(a), 3 and 4 of the Fund's Articles of Agreement, and maintains an exchange system free of multiple currency practices and restrictions on the making of payments and transfers for current international transactions, except for those measures imposed for security reasons in accordance with Regulations of the Council of the European Union, as notified to the Executive Board in accordance with Decision No. 144-(52/51). An updated and comprehensive list of all EU restrictions can be found at:
http://ec.europa.eu/external_relations/cfsp/sanctions/measures.htm

Article IV Consultation: Estonia is on the 12-month consultation cycle. The last Article IV consultation was concluded on January 22, 2020. The Executive Board assessment is available at: http://www.imf.org/external/country/EST/index.htm

FSAP Participation and ROSCs: A review under the Financial Sector Assessment Program (FSAP) was completed at the time of the 2000 Article IV Consultation. Further Reports on Observance of Standards and Codes (ROSC) modules were discussed in the 2001 Article IV Consultations and updated during the 2002 Consultation. A FAD mission concluded a fiscal transparency ROSC in January 2009 and an FSAP update was completed in February 2009.

Anti-Money Laundering (AML) and Combating Financing of Terrorism (CFT): MONEYVAL's report on the 4th round assessment of Estonia adopted in September 2014, which is a follow-up round on the 2003 Financial Action Task Force (FATF) standard, highlighted the authorities' progress in strengthening the AML/CFT legal and supervisory frameworks, specifically development of a risk-based approach to determine priorities for AML/CFT activities, amendments to the financing of terrorism offence, and the establishment of the Economic Crime Bureau. The report notes some remaining deficiencies, in particular with respect to the sanctioning regime for AML/CFT breaches and the beneficial ownership identification of legal persons. The authorities are addressing these issues, including by preparing amendments to the penal code to allow for "administrative sanctions." They are also working on ensuring compatibility of the widespread use of information technology and AML/CFT requirements. Regulation has been issued with respect to the e-Residency program, namely with regards to customers' identification for non-face-to-face opening of bank accounts. As the e-residency program is in its early stages, it will be important to follow up on appropriate safeguards that should be put in place to ensure integrity of the program and limit the potential for abuse. Estonia issued its first regular follow-up report to MONEYVAL in September 2016 and was invited to seek removal from the follow-up process not later than September 2018. The next MONEYVAL's assessment is expected in early 2022.

Technical Assistance: The following table summarizes the technical assistance missions provided by the Fund to Estonia since 2000.

Republic of Estonia: Technical Assistance from the Fund, 2000–21

Department	Issue	Action	Date	Counterpart
FAD	Pension reform	Mission	April 2000	Ministries of Finance and Social Affairs
MAE	Banking Supervision	Staff Visit	December 2000	Bank of Estonia
FAD	Tax Policy	Mission	March 2001	Ministry of Finance
INS	Financial Markets	Training	September 2002	Bank of Estonia
FAD	Medium-term Budget	Technical Assistance	December 2003	Ministry of Finance
FAD	Tax Reform	Technical Assistance	February 2005	Ministry of Finance
FAD	Revenue Administration	Technical Assistance	December 2013	Ministry of Finance
FAD	Public Investment Management	Technical Assistance	December 2018	Ministry of Finance

Republic of Estonia: Technical Assistance from the Fund, 2000–21 (concluded)				
Department	Issue	Action	Date	Counterpart
FAD	Fiscal Transparency Evaluation	Technical Assistance	December 2020	Ministry of Finance
LEG	Corporate Insolvency Law	Technical Assistance	May 2018 -April 2021	Ministry of Justice
STA	BOP and Prices statistics	Regional training	May 2017- April 2023	Bank of Estonia
LEG	AML/CFT	Regional TA	November 2022-September 2021	Bank of Estonia

STATISTICAL ISSUES

(As of May 6, 2021)

I. Assessment of Data Adequacy for Surveillance
General: Estonia's data provision to the Fund is adequate for surveillance purposes.
National Accounts Statistics: The national accounts are compiled by Statistics Estonia (SE) in accordance with the guidelines of *the European System of Accounts 2010 (ESA 2010)*. Quarterly GDP estimates at current and at constant prices are compiled using the production, income and expenditure approaches. The annual and the quarterly national accounts are compiled at previous year prices and chain-linked to 2010, using double deflation. As of September 2011, data are compiled on the basis of the new version of classification of activities EMTAK 2008. The authorities revised the national accounts time series from 1995 in August 2019. The revision took place in the context of recommendations made during the Eurostat's gross national income (GNI) verification cycle. It constituted reviewing previous calculations, introducing new source data , and improving the methodology. The methodology for benchmarking the quarterly estimates to the annual estimates has been improved thereby addressing the problem where revisions in the annual estimates were reflected in the estimates for the first quarter (a step problem). Also, the reference year for the chain-linked series was shifted from 2010 to 2015.
Government Finance Statistics: Fiscal data are published by the Ministry of Finance (MoF), while historical data are also available on SE's website. Monthly central government data are disseminated with a lag of up to 25 days after the end of the month. This data provides detailed revenue breakdown, but expenditure breakdown is not available. Quarterly data on foreign loans and guarantees by the central government are published in Estonian with a monthly lag. The Ministry is using SDDS flexibility options on the timeliness of monthly central government operations data and central government debt data . Comprehensive annual data on central and general government operations (accrual basis) are compiled according to the ESA2010 methodology. They are also reported in the IMF's *GFS* database. These data include the general government's statement of operations and the financial balance sheet, including data on financial assets and liabilities, both domestic and foreign. Quarterly data for the general government are included in the *International Finance Statistics*, and quarterly debt data are reported to the joint World Bank and IMF's Public Sector Debt Statistics database.
Monetary and Financial Statistics: The Bank of Estonia (BoE) compiles and reports monetary and financial statistics consistent with the IMF's *Monetary and Financial Statistics Manual*. Aggregate financial data are compiled by the BoE and reported on a monthly basis. The majority of statistics are disseminated on the Bank of Estonia's webpage on the 17th banking day after the end of the reporting period. Data for individual banks are also available on a quarterly basis since 2008Q1 on the Financial Supervision Authority's webpage. **Financial Soundness Indicators (FSIs):** The BoE reports quarterly data for 11 of the 12 core FSIs and 9 of the 13 encouraged FSIs for deposit-takers for dissemination on the IMF's FSI website.

Estonia reports data on several indicators in the **Financial Access Survey (FAS)**, including two indicators (commercial bank branches per 100,000 adults and ATMs per 100,000 adults) adopted by the UN to monitor Target 8.10 of the Sustainable Development Goals (SDGs).
External Sector Statistics: Quarterly balance of payments, external debt, and international investment position (IIP) data are compiled by the BoE consistent with the *Balance of Payments Manual* sixth edition (BMP6). Daily exchange rate data are available with a one working day lag. Monthly import/export data are available with a two-month lag. The Data Template on International Reserves and Foreign Currency Liquidity is disseminated monthly according to the operational guidelines and is hyperlinked to the Fund's DSBB.

II. Data Standards and Quality	
Estonia subscribed to the SDDS on September 30, 1998, with metadata published on the DSBB on January 27, 1999. Estonia met SDDS specifications on March 30, 2000. The latest annual observance report for Estonia for the SDDS is available here. Estonia is currently in a process to adhere to SDDS Plus.	A data ROSC report was published in November 2001 and updated in June 2002. The 2009 fiscal transparency ROSC indicated that Estonia now meets nearly all of the requirements of the transparency code and approached best international practice in some areas.

Estonia: Table of Common Indicators Required for Surveillance

As of May 6, 2021

	Date of latest observation	Date received	Frequency of Data[8]	Frequency of Reporting[8]	Frequency of publication[8]
Exchange Rates[1]	May 6, 2021	May 6, 2021	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[2]	March 2021	April 7, 2021	M	M	M
Reserve/Base Money	March 2021	April 14, 2021	M	M	M
Broad Money	March 2021	April 29, 2021	M	M	M
Central Bank Balance Sheet	March 2021	April 14, 2021	M	M	M
Consolidated Balance Sheet of the Banking System	March 2021	April 29, 2021	M	M	M
Interest Rates[3]	March 2021	April 29, 2021	M	M	M
Consumer Price Index	March 2021	April 9, 2021	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[4]—General Government[5]	Q1/2021	May 3, 2021	Q	Q	Q
Revenue, Expenditure, Balance and Composition of Financing[4]—Central Government	Q1/2021	May 3, 2021	M	M	M
Stocks of Central Government and Central Government-Guaranteed Debt[6]	Q4/2020	March 25, 2021	Q	Q	Q
External Current Account Balance	Q4/2020	March 10, 2021	Q	Q	Q
Exports and Imports of Goods and Services	Q4/2020	March 10, 2021	M	M	M
GDP/GNP	Q4/2020	March 1, 2021	Q	Q	Q
Gross External Debt	Q4/2020	March 10, 2021	Q	Q	Q
International Investment Position[7]	Q4/2020	March 10, 2021	Q	Q	Q

[1] With the adoption of the euro as from 1 January 2011, the Bank of Estonia has ceased to quote and publish the daily official exchange rates since the determination of the exchange rate of the euro against third currencies is the responsibility of the European Central Bank.
[2] Any reserve assets that are pledged of otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.
[3] Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.
[4] Foreign, domestic bank and domestic nonbank financing.
[5] The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.
[6] Including currency and maturity composition.
[7] Includes external gross financial asset and liability positions vis-à-vis nonresidents.
[8] Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A); Not Available (NA).